

AGREEMENT

between

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

and

PORT NEWARK CONTAINER TERMINAL LLC

Dated as of December 1, 2000

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CONFORMED COPY *eme*

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THIS AGREEMENT OF LEASE, made as of the 1st day of December, 2000, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority"), a body corporate and politic created by Compact between the States of New Jersey and New York, with the consent of the Congress of the United States of America, and having an office and place of business at One World Trade Center, New York, New York 10048; and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"), a limited liability company organized and existing under the laws of the State of Delaware and having an office and place of business at One Evertrust Plaza, Jersey City, New Jersey 07302, whose representative is: Thomas J. Simmers.

WITNESSETH, THAT:

The Port Authority and the Lessee, for and in consideration of the covenants and agreements hereinafter contained, hereby agree as follows:

Section 1. Letting

The Port Authority hereby lets to the Lessee and the Lessee hereby hires and takes from the Port Authority, at Port Newark (sometimes hereinafter called the "the Facility" or "marine terminal"), in the City of Newark, in the County of Essex and the State of New Jersey, the open area shown in diagonal crosshatching and diagonal hatching and the water area shown in diagonal hatching, all as so shown on the sketches hereto attached, hereby made a part hereof, and marked "Exhibit A, Sheets 1, 2 and 3", together with the buildings, structures, fixtures, improvements and other property, if any, of the Port Authority located or to be located or constructed therein or thereon, the said open area and water area, buildings, structures, fixtures, improvements and other property of the Port Authority being hereinafter collectively called "the premises", and the water area shown in diagonal hatching being hereinafter sometimes called "the berthing area". The parties agree that the premises constitute non-residential property.

Section 2. Term

The term of the letting under this Agreement shall commence at 12:01 o'clock A.M. on December 1, 2000 and, unless sooner terminated, shall expire at 11:59 o'clock P.M. on November 30, 2030.

Section 3. Basic Rental

The Lessee shall pay a basic rental to the Port Authority during the term of the letting as follows: (a) during the period from December 1, 2000 through November 30, 2001, at

the annual rate of Two Million Five Hundred Seventy-three Thousand Seventy-seven Dollars and Fifty Cents (\$2,573,077.50) payable in advance in equal monthly installments of Two Hundred Fourteen Thousand Four Hundred Twenty-three Dollars and Thirteen Cents (\$214,423.13) on December 1, 2000 and on the first day of each calendar month thereafter occurring during such period; (b) during the period from December 1, 2001 through November 30, 2002, at the annual rate of Seven Million Seven Hundred Nineteen Thousand Two Hundred Thirty-two Dollars and Fifty Cents (\$7,719,232.50) payable in advance in equal monthly installments of Six Hundred Forty-three Thousand Two Hundred Sixty-nine Dollars and Thirty-eight Cents (\$643,269.38) on December 1, 2001 and on the first day of each calendar month thereafter occurring during such period; and (c) during the period from December 1, 2002 through November 30, 2030, at the annual rate of Ten Million Two Hundred Ninety-two Thousand Three Hundred Ten Dollars and No Cents (\$10,292,310.00) payable in advance in equal monthly installments of Eight Hundred Fifty-seven Thousand Six Hundred Ninety-two Dollars and Fifty Cents (\$857,692.50) on December 1, 2002 and on the first day of each calendar month thereafter occurring during such period. The basic rental set forth in paragraph (c) of this Section shall be adjusted during the term of the letting in accordance with the provisions of Section 4 of this Agreement.

Section 4. Escalation of Basic Rental

(a) As used in paragraph (b) of this Section:

(1) "Index" shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(2) "Base Period" shall mean, as the context requires, the calendar month of November, 2001 and the calendar month of November (excluding November, 2029 and 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(3) "Adjustment Period" shall mean, as the context requires, the calendar month of November, 2002 and the calendar month of November (excluding November, 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(4) "Anniversary Date" shall mean, as the context requires, December 1, 2002 and each anniversary of such date which thereafter occurs during the term of the letting under this Agreement.

(5) "Percentage Increase" shall mean the percentage of increase in the Index on each Anniversary Date equal to a fraction the numerator of which shall be the Index for the Adjustment Period immediately preceding such Anniversary Date less the Index for the Base Period preceding such Adjustment Period by one year and the denominator of which shall be the Index for the Base Period preceding such Adjustment Period by one year.

(b) Commencing on each Anniversary Date and for the period commencing with such Anniversary Date and continuing through to the day preceding the next Anniversary Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, in lieu of the basic rental set forth in paragraph (c) of Section 3 hereof the Lessee shall pay a basic rental at a rate per annum equal to the greater of:

(1) the sum obtained by adding to the basic rental payable immediately prior to such Anniversary Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) the product obtained by multiplying such basic rental by one hundred percent (100%) of the Percentage Increase for such Anniversary Date; provided, however, that for purposes of the calculation of the basic rental payable for the one-year period commencing on December 1, 2002, the basic rental payable immediately prior to such Anniversary Date shall be deemed to be the basic rental set forth in paragraph (c) of Section 3 hereof; or

(2) the product obtained by multiplying the basic rental payable immediately prior to such Anniversary Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred two and five one-hundredths percent (102.5%); provided, however, that for purposes of the calculation of the basic rental payable for the one-year period commencing on December 1, 2002, the basic rental payable immediately prior to such Anniversary Date shall be deemed to be the basic rental set forth in paragraph (c) of Section 3 hereof.

Notwithstanding any other provision of this Agreement, the basic annual rental that shall be payable pursuant to Section 3 hereof and this Section commencing with each Anniversary Date and continuing through to the day preceding the following Anniversary Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, shall in no event exceed the product obtained by multiplying the basic rental payable immediately prior to such Anniversary Date

(including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred four percent (104%); provided, however, that for purposes of the calculation of the basic rental payable for the one-year period commencing on December 1, 2002, the basic rental payable immediately prior to such Anniversary Date shall be deemed to be the basic rental set forth in paragraph (c) of Section 3 hereof. For example, if the Percentage Increase for the calendar month of November, 2002 is shown to be three percent (3%) then the basic annual rental payable under paragraph (c) of Section 3 hereof and this Section for the one-year period commencing December 1, 2002 shall be \$10,292,310.00 plus three percent (3%) thereof or \$10,601,079.30, but if (1) said increase is shown to be two percent (2%) or less then the basic annual rental for that one-year period shall be \$10,549,617.75, and if (2) said increase is shown to be five percent (5%) or more then the basic annual rental for that one-year period shall be \$10,704,002.40.

(c) In the event the Index to be used in computing any adjustment referred to in paragraph (b) of this Section is not available on the effective date of such adjustment, the Lessee shall continue to pay the basic rental at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

If after an adjustment in basic rental shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in the basic rental due for such period as recomputed over amounts theretofore actually paid on account of the basic rental for such period. If such change or adjustment results in a reduction in the basic rental due for any period



prior to notification, the Port Authority will credit the Lessee with the difference between the basic rental as recomputed for that period and amounts of basic rental actually paid.

If any adjustment of basic rental referred to in paragraph (b) of this Section is effective on a day other than the first day of a calendar month, there shall be payable in advance on the effective date of rental adjustment an installment of basic rental equal to 1/12th of the increment of annual basic rental as adjusted multiplied by a fraction, the numerator of which shall be the number of days from the effective date of the rental adjustment to the end of the calendar month in which the rental adjustment was effective and the denominator of which shall be the number of days in that calendar month.

Section 5. Container Throughput Rental

(a) For purposes of this Agreement, the following terms shall have the meanings set forth below:

(1) "Lease Year" shall mean each twelve-month period commencing on December 1st and ending on November 30th to occur during the term of the letting under this Agreement;

(2) "Qualified Containers" shall mean cargo containers loaded onto or discharged from vessels berthing at the premises (whether or not stuffed or stripped at the premises, whether or not so loaded or discharged by means of container cranes, and whether or not empty or containing cargo), including without limitation any specialized cargo containers such as flat-racks (flat-racks when empty and bundled together as one unit shall be counted as one container), and shall also be deemed to mean mafis and trailers, and vehicles (every five vehicles shall be counted as one container); but shall not mean containers arriving on shipboard and departing on the same ship and the same voyage if such containers are merely unloaded from the ship at the premises and reloaded in the course of a restowing operation or are merely moved from one location to another location on the same ship in the course of a shifting operation. Containers discharged from vessels berthing at the premises and loaded onto vessels berthing at the premises in the course of a transshipment operation shall be deemed to have been both discharged from such vessels and loaded onto such vessels in one movement for each container for purposes of the computation of the rental payable under this Section. Every eighteen (18) Revenue Tons (as defined in subparagraph 4 hereof) of Non-container Cargo (as defined in subparagraph 3 hereof) shall be counted as one container for purposes of the computation of the rental payable under this Section. Military Cargo and Preference Cargo shall be counted for purposes of the computation of the rental payable under this

Section as set forth above in this subparagraph, but shall not be counted as cargo for purposes of Section 40 of this Agreement;

(3) "Non-container Cargo" shall mean cargo, including without limitation breakbulk cargo but excluding vehicles, not in cargo containers loaded onto or discharged from vessels berthing at the premises;

(4) "Revenue Ton" shall mean one long ton (a weight of 2,240 pounds);

(5) "Exemption Number" shall mean the sum of three hundred thousand (300,000);

Whenever reference is made to the Exemption Number, it shall mean the Exemption Number reduced by operation of the proration provisions hereof.

(6) "Throughput Rental Rate" shall mean Seventeen Dollars and No Cents (\$17.00). The Throughput Rental Rate shall be adjusted during the term of the letting in accordance with the provisions of Section 6 of this Agreement.

(b) The Lessee shall pay to the Port Authority a container throughput rental (hereinafter called the "Container Throughput Rental") for each Lease Year occurring during the term of the letting under this Agreement equal to the product obtained by multiplying (1) the Throughput Rental Rate for such Lease Year by (2) the number of Qualified Containers in excess of the Exemption Number loaded onto or discharged from vessels berthing at the premises during such Lease Year. The computation of the Container Throughput Rental for each Lease Year, or a portion of a Lease Year, shall be individual to such Lease Year, or such portion of a Lease Year, and without relation to any other Lease Year, or any other portion of any Lease Year. The time for making payment of the Container Throughput Rental, and the method of calculation thereof, shall be as set forth in paragraph (c) of this Section. The Container Throughput Rental shall be payable on a monthly basis, as set forth in paragraph (c) of this Section, based on the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during the month.

(c) The Lessee shall pay the Container Throughput Rental as follows: on January 30, 2001, and on the 30th day of each and every month thereafter occurring during the first Lease Year and each subsequent Lease Year occurring during the term of the letting (or the 28<sup>th</sup> day if a February and the 29<sup>th</sup> of February if a leap year), including the month following the end of each such Lease Year, the Lessee shall render to the Port Authority a statement certified by a responsible officer of the

Lessee showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during the preceding month and the cumulative number of Qualified Containers loaded onto or discharged from vessels berthing at the premises from the date of the commencement of the Lease Year for which the report is made through the last day of the preceding month; each monthly statement shall be accompanied by monthly vessel activity reports to substantiate the statement, showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during the month for which the report is made, and such statement shall also include terminal statistics and measures relating to containers handled at and discharged to and from the premises as detailed and reasonably required from time to time by the Port Authority. Whenever any monthly statement shall show that the cumulative number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during the Lease Year for which the report is made is in excess of the Exemption Number, the Lessee shall pay to the Port Authority at the time of rendering such statement and at the time of rendering each subsequent monthly statement for such Lease Year, and the month following such Lease Year, an amount equal to the product obtained by multiplying (1) the Throughput Rental Rate for such Lease Year by (2) the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during the month for which such report is made. For purposes of the reporting requirements under the provisions of this paragraph and paragraph (d) of this Section and the payment of the Container Throughput Rental under the provisions of this Section, the monthly statements provided by the Lessee to the Port Authority shall include and shall state separately the aforesaid required information with respect to cargo counted as containers under the provisions of subparagraph (2) of paragraph (a) of this Section, and the payments of the Container Throughput Rental made pursuant to the provisions of this paragraph and paragraph (d) of this Section shall include payment of the Container Throughput Rental for said cargo counted as containers.

(d) Upon any termination of the letting hereunder (even if stated to have the same effect as expiration), the number of Qualified Containers shall be reported and the Container Throughput Rental shall be paid on the 30th day of the first month following the month in which the effective date of such termination occurs, as follows: the Lessee shall render to the Port Authority a statement certified by a responsible officer of the Lessee showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during the Lease Year in which the effective date of termination falls; the payment then due on account of all Container Throughput Rental for the Lease Year in which the effective date of termination falls shall be the excess of the Container

Throughput Rental for such Lease Year, computed as follows, over the total of all Container Throughput Rental payments previously made by the Lessee for such Lease Year: an amount equal to the product obtained by multiplying (1) the Throughput Rental Rate for such Lease Year by (2) the number of Qualified Containers in excess of the Exemption Number loaded onto or discharged from vessels berthing at the premises during such Lease Year, with the Exemption Number to be multiplied by a fraction, the numerator of which shall be the number of days from the commencement of such Lease Year to the effective date of termination and the denominator of which shall be 365. Any amount of the Container Throughput Rental determined to be owed to the Port Authority pursuant to such calculation shall be paid by the Lessee at the time of rendering the statement.

(e) In the event that the Lessee shall at any time by the provisions of this Agreement become entitled to an abatement of basic rental, then the Exemption Number shall be reduced proportionately to the reduction of the basic rental.

(f) Except for the reduction of the Exemption Number as set forth in paragraph (e) of this Section, the rentals payable under this Section shall not be subject to abatement or suspension or reduction for any reason whatsoever.

(g) Notwithstanding any provision of this Section, and without limiting the generality of any provision of Section 7 hereof, the Lessee shall not be permitted to handle bulk cargo at the premises without the prior and continuing written consent of the Port Authority, with the giving, withholding and withdrawing of such consent to be within the sole discretion of the Port Authority. Any such written consent shall be provided by the Port Authority to the Lessee, if at all, prior to the commencement of the Lease Year and shall be effective solely for said Lease Year, except that the Port Authority may revoke such permission at any time during said Lease Year by written notice to the Lessee.

#### Section 6. Escalation of Throughput Rental Rate

(a) As used in paragraph (b) of this Section:

(1) "Index" shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(2) "Base Period" shall mean, as the context requires, the calendar month of November, 2001 and the calendar month of November (excluding November, 2029 and

2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(3) "Adjustment Period" shall mean, as the context requires, the calendar month of November, 2002 and the calendar month of November (excluding November, 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(4) "Anniversary Date" shall mean, as the context requires, December 1, 2002 and each anniversary of such date which thereafter occurs during the term of the letting under this Agreement.

(5) "Percentage Increase" shall mean the percentage of increase in the Index on each Anniversary Date equal to a fraction the numerator of which shall be the Index for the Adjustment Period immediately preceding such Anniversary Date less the Index for the Base Period preceding such Adjustment Period by one year and the denominator of which shall be the Index for the Base Period preceding such Adjustment Period by one year.

(b) Commencing on each Anniversary Date and for the period commencing with such Anniversary Date and continuing through to the day preceding the next Anniversary Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, in lieu of the Throughput Rental Rate of Seventeen Dollars and No Cents (\$17.00) as defined in subparagraph (6) of paragraph (a) of Section 5 of this Agreement, the Lessee shall pay a Throughput Rental Rate at a rate per annum equal to the greater of:

(1) the sum obtained by adding to the Throughput Rental Rate payable immediately prior to such Anniversary Date including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph the product obtained by multiplying such Throughput Rental Rate by one hundred percent (100%) of the Percentage Increase for such Anniversary Date, or

(2) the product obtained by multiplying the Throughput Rental Rate payable immediately prior to such Anniversary Date including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph by one hundred two and five one-hundredths percent (102.5%).

Notwithstanding any other provision of this Agreement, the Throughput Rental Rate that shall be payable pursuant to Section

5 hereof and this Section commencing with each Anniversary Date and continuing through to the day preceding the following Anniversary Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, shall in no event exceed the product obtained by multiplying the Throughput Rental Rate payable immediately prior to such Anniversary Date including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph by one hundred four percent (104%). For example, if the Percentage Increase for the calendar month of November, 2002 is shown to be three percent (3%) then the Throughput Rental Rate payable under Section 5 hereof and this Section for the one-year period commencing December 1, 2002 shall be Seventeen Dollars and No Cents (\$17.00) plus three percent (3%) thereof or Seventeen Dollars and Fifty-one Cents (\$17.51), but if (1) said increase is shown to be two percent (2%) or less then the Throughput Rental Rate for that one-year period shall be Seventeen Dollars and Forty-three Cents (\$17.43), and if (2) said increase is shown to be five percent (5%) or more then the Throughput Rental Rate for that one-year period shall be Seventeen Dollars and Sixty-eight Cents (\$17.68).

(c) In the event the Index to be used in computing any adjustment referred to in paragraph (b) of this Section is not available on the effective date of such adjustment, the Lessee shall continue to pay the Throughput Rental Rate at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

If after an adjustment in the Throughput Rental Rate shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the Throughput Rental Rate adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the

recomputed Throughput Rental Rate and upon demand shall pay any excess in the Container Throughput Rental due for such period as recomputed over amounts theretofore actually paid on account of the Throughput Rental Rate for such period. If such change or adjustment results in a reduction in the Container Throughput Rental due for any period prior to notification, the Port Authority will credit the Lessee with the difference between the Container Throughput Rental as recomputed for that period and amounts of Container Throughput Rental actually paid.

Section 7. Rights of User

(a) The Lessee shall use the premises for the following purposes only, and for no other purpose whatsoever: (1) the loading and unloading predominately of cargo housed in containers, and also of non-containerized cargo, such bulk cargo as shall have the prior and continuing consent of the Port Authority, and ships' stores, supplies and gear on or from seagoing vessels and other craft permitted to be berthed in the berthing area; (2) the receipt, handling, delivery, and storage incidental to the transportation of cargo (whether or not in cargo containers) transported or to be transported by seagoing vessels permitted to be berthed in the berthing area, and of ships' stores, supplies and gear for such vessels; (3) the parking of motor vehicles owned or operated by the Lessee or by the employees of the Lessee or by persons doing business with it at the Facility for the purposes set forth in this Section; (4) the storage of cargo-handling equipment and necessary amounts of dunnage, used in the operations of the Lessee under this Agreement; and (5) the maintenance of office space solely for purposes incidental to the operations of the Lessee set forth in this Section.

(b) The Lessee shall have the right to berth in the berthing area seagoing vessels for which the Lessee acts as stevedore or terminal operator, carrying or about to carry general cargo, and tugboats, barges, lighters and other harbor craft serving such seagoing vessels, for loading or discharge of cargo, ships' stores, supplies and gear. Such loading and discharge from seagoing vessels may be accomplished in the berthing area through the medium of barges, lighters, and other harbor craft moored inshore or offshore. The Lessee shall have the exclusive right to collect dockage and wharf usage charges from seagoing vessels and all other craft, subject to all the terms and provisions of this Agreement. The Lessee shall not use or permit the use of the berthing area except as hereinabove provided.

Section 8. Construction by Lessee

(a) (1) The Lessee understands that construction and installation work is required with respect to its occupancy of and operations on the premises, and the Lessee agrees to and shall perform the following items of work with respect to the premises (which work is hereinafter called "the Lessee's Construction Work" and each specific item thereof as described respectively in the following subdivisions (i) through (ix) is hereinafter called the "Specific Work Item"): (i) the upgrading of approximately one thousand eight hundred seventy-five (1,875) linear feet of the waterside crane rail on Berths 57 through 61 to a load bearing capacity of twenty-four thousand (24,000) pounds per foot, (ii) the extension of the one hundred foot (100') gauge crane rail onto Berths 59 and 61 by approximately one thousand three hundred eighty (1,380) linear feet, (iii) the repair and/or upgrading of the existing pavement where necessary, (iv) the construction of a gatehouse and pre check facility, (v) the removal of buildings and other structures not required by the Lessee, (vi) the construction or renovation of administration buildings and maintenance and repair facilities, (vii) the reinforcement of approximately one thousand eight hundred seventy-five (1,875) linear feet of the berth eastward from Station 31+50 to allow the dredging of the berthing area to fifty-two (52) feet below mean low water, (viii) the dredging of approximately one thousand eight hundred seventy-five (1,875) linear feet of the berthing area eastward from Station 31+50 to forty-nine (49) feet below mean low water, and (ix) the dredging of approximately one thousand eight hundred seventy-five (1,875) linear feet of the berthing area eastward from Station 31+50 to fifty-two (52) feet below mean low water. Except as set forth in subparagraphs (3) and (4) of this paragraph, the Lessee shall perform the Lessee's Construction Work at its sole cost and expense and the Port Authority shall have no obligation to pay for any of the Lessee's Construction Work.

(2) The Lessee agrees that it will expend no less than Sixty-three Million Dollars and No Cents (\$63,000,000.00) on the Lessee's Construction Work during the period from December 1, 2000 through November 30, 2005, with such sum to include the costs of engineering services, consulting services, surveys, and construction management fees, but not to include the costs of container cranes and other equipment or of trade fixtures removable without material damage to the premises. The Lessee further agrees to complete the Lessee's Construction Work by November 30, 2005, subject to the provisions of subparagraph (4) of this paragraph. On or about January 10, 2002 and on or about each anniversary of such date which thereafter occurs through the January 10<sup>th</sup> next following the Lease Year in which the Lessee's Construction Work is completed, the Lessee shall certify to the Port Authority by written certification subscribed by a



responsible officer of the Lessee: (i) the amount of the Lessee's Construction Work performed by the Lessee during the immediately preceding full Lease Year; (ii) the cost of such work for each Specific Work Item and the total payments made by the Lessee on account of such cost during such Lease Year on each Specific Work Item; (iii) that except for the amount, if any, stated in such certificate to be due for services and materials, there is no outstanding indebtedness known to the person signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures described in the certificate or for labor, wages, materials, supplies or services in connection with the Lessee's Construction Work which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialmen statutory or similar lien or alleged lien upon such work or upon the premises or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment or fixtures described in such certificate (but not including container cranes, straddle carriers, yard hustlers and other mobile cargo handling equipment) secured by any liens, mortgages, security interests or other encumbrances. Nothing contained herein shall be deemed or construed as a submission by the Port Authority to the application to itself of any such lien; and (iv) the work for which payment has been made as set forth in the certificate has been performed in accordance with the Lessee's approved plans and specifications and the provisions of this Agreement. Such certificate shall also contain a certification by the architect or engineer who sealed the Lessee's plans and specifications pursuant to the provisions of paragraph (c) of this Section certifying that all of the work described in the Lessee's certificate has been performed in accordance with the approved plans and specifications. The Lessee shall also supply to the Port Authority such supporting documents and records as the Port Authority shall deem necessary to substantiate the matters set forth in the Lessee's certificate. In addition, the Port Authority shall have all of the rights of audit with respect to the Lessee's Construction Work as are set forth in Section 43 of this Agreement.

(3) The Lessee shall be entitled to a credit against the basic rental payable under Section 3 of this Agreement in the amount of Five Hundred Thousand Dollars and No Cents (\$500,000.00) (which amount is hereinafter called "the Qualifying Dredging Cost") on account of the Lessee's performance of the dredging of the berthing area to forty-nine (49) feet below mean low water, as set forth in subdivision (viii) of subparagraph (1) of this paragraph (which Specific Work Item is hereinafter in this Agreement called "the Dredging"). On and after the first day of the first full calendar month following the delivery to the Lessee by the Port Authority of the certificate of final completion under paragraph (c) of this Section covering the Dredging, the Port Authority shall credit

against the installments of basic rental payable by the Lessee under Section 3 hereof an amount equivalent to the Qualifying Dredging Cost until such amount is exhausted. Neither the whole nor any part of the Qualifying Dredging Cost shall be or become or shall constitute a debt due and owing from the Port Authority to the Lessee nor shall said amount be recoverable or applicable in any manner other than as specifically provided for in this subparagraph, including but not limited to a set-off or counterclaim in any action by the Port Authority against the Lessee for rental or other claims.

(4) The Lessee agrees that it will complete the Dredging by November 30, 2005, and that it will complete the dredging of the berthing area to fifty-two (52) feet below mean low water, as set forth in subdivision (ix) of subparagraph (1) of this paragraph (hereinafter in this Agreement called the "Fifty-two Foot Dredging"), within one year of the date of the completion of the Fifty Foot Deepening (as defined in Section 40(d) hereof). The Port Authority shall not be obligated to provide any rental credit with respect any portion of the Qualifying Dredging Cost for any item constituting a portion of the Dredging which has been constructed or installed subsequent to November 30, 2005. Notwithstanding any provision of this Section, the Lessee's respective obligation to perform the Dredging and the Fifty-two Foot Dredging shall be conditioned upon all necessary permits and governmental authorizations for the respective dredging having been obtained and said obligation shall be postponed for any such period as the obtaining of said permits and governmental authorizations for the respective dredging shall be delayed; provided, however, that the Lessee shall have made timely, diligent and continuous efforts to obtain any such permits and governmental authorizations and upon obtaining them shall have proceeded to the completion of the respective dredging as expeditiously as possible. In addition, the Lessee's obligation to complete the Dredging shall be postponed for one day for each day past December 31, 2004 that the completion of the Forty-five Foot Deepening (as defined in Section 42(d) hereof) is delayed; provided, however, that no postponement under the provisions of this sentence shall postpone the date upon which the Lessee is obligated to complete the expenditure of Sixty-three Million Dollars and No Cents (\$63,000,000.00) on the Lessee's Construction Work.

(5) The Port Authority has entered into a Project Cooperation Agreement with the United States Department of Army for the construction of the Kill Van Kull and Newark Bay Channels, New York and New Jersey, dated as of January 13, 1999 (hereinafter, as the same has been or may hereinafter be amended or supplemented, called the "Cooperation Agreement"). In the event that the Port Authority shall enter into a subsequent agreement regarding any additional construction of the Kill Van

Kull and Newark Bay Channels of a similar nature to the Cooperation Agreement, the provisions of this subparagraph shall apply with respect to said subsequent agreement and the Lessee's obligations hereunder as if it were the Cooperation Agreement. In connection with the Cooperation Agreement, the Port Authority (i) has undertaken or may in the future undertake certain obligations respecting the operation and maintenance of the "local service facilities" in a manner compatible with the authorized purposes of the "Project" (as such quoted terms are defined in the Cooperation Agreement); and (ii) has authorized the "Government" to enter upon property that the Port Authority now or hereafter owns or controls for access to the "general navigation features" (as such quoted terms are defined in the Cooperation Agreement) for the purpose of inspection and, if necessary, for the purpose of operating and maintaining the general navigation features. The performance by the Lessee of the Dredging and Fifty-two Foot Dredging as required in this paragraph is therefore a special consideration and inducement to the making of this Agreement by the Port Authority, and the Lessee further covenants and agrees that if the United States Corps of Engineers or any other governmental office or body having jurisdiction over the enforcement of the obligations of the Port Authority in connection with the Cooperation Agreement shall make orders, recommendations or suggestions respecting the performance of dredging of any portion or portions of the berthing area in addition to the Dredging and the Fifty-two Foot Dredging, the Lessee will promptly comply therewith at its sole cost and expense, at the time or times, when and to the extent that the Port Authority may direct; provided, however, that the Port Authority agrees with the Lessee that the Port Authority will treat the Lessee in the same manner that the Port Authority treats other marine terminal operators in the Port (as defined in Section 40(a)(3)) hereof under its jurisdiction; and further provided, that, nothing stated above in this proviso shall grant to any third party any rights against the Port Authority or create any obligations on the part of the Port Authority with respect to any third party. Notwithstanding any provision to the contrary set forth above in this paragraph, the Lessee shall have no obligation under the provisions of this paragraph to dredge the approximately one thousand three hundred fifty-eight (1,358) linear feet of the berthing area immediately east of Station 6+42.

(6) If the Lessee obtains any funding with respect to the Lessee's Construction Work from a third party or parties, the Lessee agrees that in no event shall such third party or parties obtain, directly or indirectly, in connection with such funding any security or other financial interest, lien or other rights in or to this Agreement, the Lessee's interest in the leasehold estate created hereunder or the premises hereunder or any portion thereof.

(7) In addition to the Lessee's Construction Work, as defined in paragraph (a) (1) of this Section, the Lessee shall have the right but shall not be required to perform the following work (which work is hereinafter called "the Lessee's Additional Work" and each specific item thereof as described respectively in the following subdivisions (aa) through (ee) is hereinafter called the "Additional Specific Work Item"): (aa) the upgrading of approximately four hundred twenty-five (425) linear feet of the waterside crane rail on Berth 63 to a load bearing capacity of twenty-four thousand (24,000) pounds per foot, (bb) the extension of the one hundred foot (100') gauge crane rail onto Berth 63 by approximately four hundred twenty-five (425) linear feet, (cc) the reinforcement of approximately four hundred twenty-five (425) linear feet of the berth eastward from Station 50.75 to allow the dredging of the berthing area to fifty-two (52) feet below mean low water, (dd) the dredging of approximately four hundred twenty-five (425) linear feet of the berthing area eastward from Station 50.75 to forty-nine (49) feet below mean low water, and (ee) the dredging of approximately four hundred twenty-five (425) linear feet of the berthing area eastward from Station 50.75 to fifty-two (52) feet below mean low water. The Lessee shall perform the Lessee's Additional Work at its sole cost and expense and the Port Authority shall have no obligation to pay for the performance of any of the Lessee's Additional Work. The Lessee's right to perform the Lessee's Additional Work shall be conditioned upon the addition to the premises of the Added Space, as such term is defined in Section 44 hereof, pursuant to the provisions of said Section 44, and none of the Lessee's Additional Work shall be performed unless and until the Added Space shall be so added to the premises under this Agreement. Except as set forth below, the Lessee's Additional Work shall be and be deemed part of the Lessee's Construction Work for all purposes of this Agreement, including, but not limited to, the provisions of this Section. Without limiting the generality of the provisions of the immediately preceding sentence, the Lessee's expenditures on the Lessee's Additional Work shall be credited toward the obligation of the Lessee under paragraph (a) (2) of this Section to expend Sixty-three Million Dollars and No Cents (\$63,000,000.00) only in the event that the Lessee shall give the Port Authority written notice prior to the commencement of any Additional Specific Work Item that the Lessee elects to have the cost of said Additional Specific Work Item credited against said Sixty-three Million Dollars and No Cents (\$63,000,000.00) (which Additional Specific Work Item so elected by the Lessee is hereinafter called the "Elected Work Item"); each Elected Work Item, if any, shall be subject to the Contracts of Guaranty described in Section 49 hereof; the Lessee's Additional Work shall not have to be completed within any specific time period; the Lessee's Additional Work and each Additional Specific Work Item thereof shall be subject to the reporting and certification requirements

of paragraph (a) (2) of this Section, and to the Port Authority's right of audit set forth in Section 43 hereof; the Lessee's Additional Work and each Additional Specific Work Item thereof shall be subject to the provisions of paragraph (o) of this Section; and no part of the Additional Work shall be deemed part of the Dredging or the Fifty-two Foot Dredging for purposes of paragraph (e) of Section 40 hereof or paragraphs (d) and (g) of Section 41 hereof.

(8) The Lessee acknowledges that the Dredging, as defined in paragraph (a) (3) of this Section, is being incurred by the Lessee to allow the improvements being constructed as part of the Lessee's Construction Work to be used for the Lessee's intended business purposes under this Agreement, and the Lessee understands that maintenance dredging will be required on a regular basis, as contemplated under this Agreement, in order to maintain the depth of the berthing area so dredged.

(9) The Port Authority shall not take any position in its financial statements that is inconsistent with the Lessee's claims for federal, state and local income tax purposes (or any such claims made by the members of the Lessee) of items of deduction, depreciation, amortization and tax credit with respect to the Lessee's Construction Work and the Lessee's Additional Work, and any repairs or improvements made thereto by the Lessee, throughout the term of the letting under this Agreement.

(b) With respect to the Lessee's Construction Work the Lessee shall indemnify and save harmless the Port Authority, and its Commissioners, officers, agents and employees against the following distinct and several risks, whether they arise from acts or omissions of the Lessee, any contractors of the Lessee, the Port Authority, third persons, or from acts of God or the public enemy, or otherwise, excepting only risks which result solely from affirmative wilful acts done by the Port Authority, its Commissioners, officers, agents or employees subsequent to commencement of the work:

(1) The risk of loss or damage to all such construction prior to the completion thereof. In the event of such loss or damage, the Lessee shall forthwith repair, replace and make good the work without cost to the Port Authority;

(2) The risk of death, injury or damage, direct or consequential, to the Port Authority, and its Commissioners, officers, agents and employees, and to its or their property, arising out of or in connection with the performance of the Lessee's Construction Work. The Lessee shall indemnify the Port Authority, and its

Commissioners, officers, agents and employees, for all such injuries and damages, and for all loss suffered by reason thereof;

(3) The risk of claims and demands, just or unjust, by third persons against the Port Authority, and its Commissioners, officers, agents and employees, arising or alleged to arise out of the performance of the Lessee's Construction Work. The Lessee shall indemnify the Port Authority, and its Commissioners, officers, agents and employees, against and from all such claims and demands, and for all loss and expense incurred by it and by them in the defense, settlement or satisfaction thereof including without limitation thereto, claims and demands for death, for personal injury or for property damage, direct or consequential.

(c) Prior to the commencement of any Specific Work Item, the Lessee shall submit to the Port Authority for its approval a Construction Application in the form supplied by the Port Authority, and containing such terms and conditions as the Port Authority may include, setting forth in detail by appropriate plans and specifications the work the Lessee proposes to perform and the manner of and time periods for performing the same, including without limitation a schedule listing each contract proposed to be entered into for the performance of the work and the estimated cost of the work to be performed under each such contract. The data to be supplied by the Lessee shall identify the Specific Work Item, and shall describe in detail the systems, improvements, fixtures and equipment to be installed by the Lessee. The Lessee shall be responsible at its sole expense for retaining all architectural, engineering and other technical consultants and services as may be directed by the Port Authority and for developing, completing and submitting detailed plans and specifications for the Specific Work Item. The plans and specifications to be submitted by the Lessee shall be in sufficient detail for a contractor to perform the work and shall bear the seal of a qualified architect or professional engineer who shall be responsible for the administration of the work in accordance with the Port Authority's requirements. In connection with review by the Port Authority of the Lessee's submissions under this Section, the Lessee shall submit to the Port Authority, at the Port Authority's request, such additional data, detail or information as the Port Authority may find necessary. Following the Port Authority's receipt of the Lessee's Construction Application and complete plans and specifications, the Port Authority shall give its written approval or rejection thereof, or shall request such revisions or modifications thereto as the Port Authority may find necessary. The Port Authority shall endeavor to complete its initial review of the Construction Application and plans and specifications within thirty (30)

business days after the Port Authority's receipt of a Construction Application and plans and specifications deemed by the Port Authority to be complete, and shall endeavor to complete its review of each revision or modification thereof within twenty (20) business days of the Port Authority's receipt of a revision or modification deemed by the Port Authority to be complete; provided, that, each such Construction Application and plans and specifications and/or revision or modification thereof shall be prepared in accordance with the highest professional standards, of uniformly high quality and well coordinated with respect to all engineering and architectural disciplines. The Lessee shall not engage any contractor or permit the use of any subcontractor unless and until each such contractor or subcontractor, and the contract such contractor is operating under, have been approved by the Port Authority. The Lessee shall include in any such contract or subcontract such provisions as are required in accordance with the provisions of this Agreement and the Construction Application approved by the Port Authority. The Lessee shall obtain and maintain or cause each contractor to obtain and maintain in force such insurance coverage as is described in paragraphs (i) and (j) of this Section and such performance bonds as the Port Authority may specify. All of the Specific Work Items of the Lessee's Construction Work shall be performed by the Lessee in accordance with the Construction Application and final plans and specifications approved by the Port Authority, shall be subject to inspection by the Port Authority during the progress of the work and after the completion thereof, and the Lessee shall redo or replace at its own expense any work not done in accordance therewith. Upon final completion of each Specific Work Item the Lessee shall deliver to the Port Authority a certificate to such effect signed by a responsible officer of the Lessee and by the architect or engineer who sealed the Lessee's plans pursuant to the provisions of this paragraph with respect to the Specific Work Item certifying that all of the work has been performed in accordance with the approved plans and specifications and the provisions of this Agreement, and the Lessee shall supply the Port Authority with one (1) set of as-built drawings of the Specific Work Item in such form as the Port Authority shall determine. The Lessee shall keep said drawings current during the term of the letting under this Agreement. No changes or modifications to the Lessee's Construction Work shall be made without prior Port Authority consent. Following its receipt of the Lessee's certificate, the Port Authority shall promptly inspect the Specific Work Item and unless such certification is not correct, or the Port Authority determines that the premises is unsuitable for occupancy and use by the Lessee, a certificate of final completion as to such Specific Work Item shall be delivered to the Lessee by the Port Authority.

(d) Except as set forth in paragraph (e) of this Section, the Lessee shall not commence any portion of the Lessee's Construction Work until the Construction Application and plans and specifications covering such work, referred to in paragraph (c) of this Section, have been finally approved by the Port Authority.

(e) If the Lessee desires to commence construction of portions of any Specific Work Item of the Lessee's Construction Work prior to the approval by the Port Authority of the complete Construction Application and plans and specifications covering all of such Specific Work Item pursuant to paragraph (c) of this Section, the Lessee shall submit to the Port Authority a separate Construction Application for each portion of such Specific Work Item the Lessee so desires to commence (each such portion of such Specific Work Item being hereinafter designated as "Partial Approval Work") which shall be executed by an authorized officer of the Lessee and shall be accompanied by final and complete plans, specifications, drawings, and data with respect to such portion of such Specific Work Item (the final and complete plans, specifications, drawings, and data covering each such portion of such Specific Work Item are hereinafter referred to as "the Partial Approval Work Plans" with respect to such portion of such Specific Work Item) setting forth in detail the work to be performed in connection with each such portion of such Specific Work Item. The Port Authority shall have full and complete discretion as to whether to permit the Lessee to proceed with the performance of any Partial Approval Work. If the Port Authority consents to the performance of any Partial Approval Work, the Port Authority shall review the Construction Application covering such work and shall give its written approval or rejection of the Partial Approval Work Plans with respect thereto or shall request such revisions or modifications thereto as the Port Authority may find necessary. Upon the Port Authority's approval of the Construction Application covering an item of Partial Approval Work and its approval of the Partial Approval Work Plans with respect thereto, the Lessee may proceed to perform such item of Partial Approval Work subject to and in accordance with the following terms and conditions:

(1) The performance by the Lessee of any item of Partial Approval Work in accordance with the Port Authority's approval will be at its sole risk and if for any reason the plans and specifications for the balance of such Specific Work Item or, any part thereof, are not approved by the Port Authority or if the approval thereof calls for modifications or changes in any item of Partial Approval Work undertaken by the Lessee under any approval granted by the Port Authority pursuant to this paragraph, the Lessee will, as directed by the Port Authority, and at the Lessee's sole cost and expense, either restore the area affected to the condition existing prior to the commencement



of such item of Partial Approval Work or make such modifications and changes to such work as may be required by the Port Authority.

(2) Nothing contained in any approval given pursuant to this paragraph shall constitute a determination or indication by the Port Authority that the Lessee has complied with any laws, rules, orders, ordinances, enactments, resolutions, regulations, statutes, requirements, codes, directions, and executive orders, including but not limited to those of the City of Newark, which may pertain to the Partial Approval Work to be performed and which the Lessee is required to comply with pursuant to this Agreement.

(3) Each item of Partial Approval Work shall be performed in accordance with and subject to the terms and provisions of this Agreement covering the Specific Work Item and in accordance with the approved Construction Application covering such item of Partial Approval Work and in accordance with the approved Partial Approval Work Plans constituting a part of such Construction Application, and subject to any requirements, stipulations, and provisions which the Port Authority may impose in its approval of the performance of such item of Partial Approval Work.

(4) No Partial Approval Work performed by the Lessee pursuant to the provisions of this paragraph shall affect or limit the obligations of the Lessee under any prior approvals it may have obtained with respect to any Specific Work Item.

(5) The fact that the Lessee has performed any item of Partial Approval Work and that the Port Authority has consented to the performance thereof shall not affect or limit the obligations of the Lessee under this Agreement with respect to any Specific Work Item. The Lessee specifically understands that neither the Port Authority's approval of any Construction Application and Partial Approval Work Plans covering any item of Partial Approval Work nor the performance by the Lessee of any item of Partial Approval Work pursuant to such approval shall obligate the Port Authority to approve the Construction Application and plans and specifications submitted by the Lessee for the balance of any Specific Work Item or shall create or be deemed to create any obligation on the part of the Port Authority to permit subsequent Partial Approval Work to be performed. Without limiting the generality of the provisions of this paragraph, it is specifically understood that the Port Authority may withhold its approval of a Construction Application and Partial Approval Work Plans covering any item of Partial Approval Work if the Port Authority determines that review of subsequent items of Partial Approval Work is required before the Port

Authority can approve, reject, or comment upon such Partial Approval Work Plans.

(6) In the event that in the opinion of the Port Authority the Lessee at any time during the performance of any portion of any item of Partial Approval Work under the approval granted by the Port Authority pursuant to this paragraph shall fail to comply with all of the provisions of this Agreement with respect to such work or shall fail to comply with the provisions of the Construction Application covering such work and the plans and specifications forming a part thereof, or shall fail to comply with any requirements, stipulations, or provisions imposed by the Port Authority in its approval of the performance of such item of Partial Approval Work, or if in the Port Authority's opinion the Lessee shall be in breach of any of the provisions of this Agreement covering such work or shall be in breach of any of the provisions of the Construction Application and plans and specifications covering the performance of such work, or shall be in breach of any requirements, stipulations, or provisions imposed by the Port Authority in its approval of the work, the Port Authority shall have the right to cause the Lessee to cease all or such part of such item of the Partial Approval Work as is being performed in violation of this Agreement, the Construction Application and plans and specifications, or the conditions of the Port Authority's approval. Upon written direction from the Port Authority, the Lessee shall promptly cease performance of the portion of the Partial Approval Work specified. The Lessee shall thereupon submit to the Port Authority for its written approval the Lessee's proposal for making modifications, corrections or changes in or to the item of Partial Approval Work that has been or is to be performed so that the same will comply with the provisions of this Agreement, the Construction Application and plans and specifications, or the conditions of the Port Authority's approval covering such work. The Lessee shall not commence construction of the portion of the Partial Approval Work that has been halted until it has received written approval of the proposed modifications, corrections or changes.

(7) It is hereby expressly understood and agreed that the Port Authority has no duty or obligation of any kind whatsoever to inspect or police the performance of any Partial Approval Work by the Lessee and the rights granted to the Port Authority hereunder shall not create or be deemed to create such a duty or obligation. Accordingly, the fact that the Port Authority has not exercised its right to require the Lessee to cease performance of all or any part of the Partial Approval Work shall not be or be deemed to be an agreement or acknowledgment on the part of the Port Authority that the Lessee has in fact performed such work in accordance with the terms of this Agreement, the Construction Application and plans and specifications covering such work, or the conditions of the Port

Authority's approval of such work, nor shall such fact be or be deemed to be a waiver by the Port Authority of any of the requirements of this Agreement with respect to such work, or any of the requirements of the Construction Application and plans and specifications covering such work, or any of the conditions of the Port Authority's approval of such work.

(f) Without limiting the generality of any of the provisions of this Agreement, each Specific Work Item of the Lessee's Construction Work (including any Partial Approval Work performed by the Lessee) shall be performed in such a manner that there will be at all times during construction a minimum of air pollution, water pollution or any other type of pollution, and a minimum of noise emanating from, arising out of, or resulting from construction. Subject to the provisions of this Agreement, the Lessee shall construct such reasonable structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the objectives set forth in this paragraph, and, without limiting the generality of the foregoing, such construction shall be subject to the Port Authority's review and approval in accordance with the provisions of this Section.

(g) Without limiting the generality of paragraph (c) of this Section the Lessee shall be solely responsible for the plans and specifications used by it and for the adequacy or sufficiency of such plans, specifications and all the improvements, fixtures, and equipment depicted thereon or covered thereby, regardless of the consent thereto or approval thereof by the Port Authority or the incorporation therein of any Port Authority requirements or recommendations. The Port Authority shall have no obligation or liability in connection with the performance of any Specific Work Item of the Lessee's Construction Work or for the contracts for the performance thereof entered into by the Lessee. Any warranties extended or available to the Lessee in connection with any Specific Work Item of the Lessee's Construction Work shall be for the benefit of the Port Authority as well as the Lessee. The Lessee shall conduct no public operations in the premises with respect to any improvements, fixtures or equipment constituting the Lessee's Construction Work or a portion thereof until the Port Authority shall have notified the Lessee in writing that the Lessee's Construction Work or such portion thereof has been completed or substantially completed to its satisfaction, which notice shall be promptly delivered to the Lessee by the Port Authority after completion of such construction work. In the event of any inconsistency between the provisions of this Agreement and those of the Construction Application referred to in paragraph (c) of this Section the provisions of this Agreement shall control.

(h) The Lessee shall pay all claims lawfully made against it by its contractors, subcontractors, materialmen and

workmen, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of any Specific Work Item of the Lessee's Construction Work, and shall use reasonable efforts to cause its contractors and subcontractors to pay all such claims lawfully made against them. Nothing herein contained shall be deemed to constitute consent to the creation of any lien or claim against the premises or any part thereof, nor to prevent the Lessee from contesting any such liens or claims in good faith. No contractor or third party shall or shall be deemed to have acquired any rights against the Port Authority by virtue of the execution of this Agreement and nothing contained herein shall operate or give to any such contractor or third party any claim or right of action against the Port Authority and its Commissioners, officers, agents and employees.

(i) In addition to all policies of insurance otherwise required by this Agreement, the Lessee shall procure and maintain or cause to be procured and maintained in effect during the performance of the Lessee's Construction Work:

(1) Commercial General Liability Insurance including but not limited to coverage for Products Liability-Completed Operations and for Broad Form Property Damage and Independent Contractor coverage, with a contractual liability endorsement covering the obligations assumed by the Lessee under paragraph (b) of this Section, which coverage shall not exclude claims arising out of or in connection with work performed within fifty feet of railroad property, and which are customarily insured under such a policy, with a minimum combined single limit coverage for bodily injury and property damage of \$25 million. Said insurance shall also include coverage for explosion, collapse and underground property damage hazards.

(2) Protection and Indemnity Insurance, if the Lessee's work involves the ownership, maintenance, operation, use, loading or unloading of watercraft, with a minimum combined single limit coverage for bodily injury and property damage of \$25 million.

(3) Commercial Automobile Liability Insurance covering all owned, non-owned or hired vehicles used in connection with said construction with a minimum combined single limit coverage for bodily injury and property damage of \$3 million.

(4) Environmental Liability Insurance, with a minimum combined single limit coverage for bodily injury and property damage for both gradual and sudden occurrences of \$5 million.

(5) Workers' Compensation and Employers' Liability Insurance in accordance with the requirements of law. The Workers' Compensation Policy shall be specially endorsed to include coverage afforded by (i) the U.S. Longshoremen's and Harbor Workers' Compensation Act and Coverage B - "Jones Act, maritime (including coverage for Masters or Members of the Crew of Vessels) and (ii) Coverage - B under the Federal Employers' Liability Act.

(j) In addition to the insurance required pursuant to the provisions of paragraph (i) of this Section, the Lessee shall procure or cause to be procured prior to the commencement of any Specific Work Item of the Lessee's Construction Work Builder's Risk Insurance (All Risk) covering loss or damage (including any loss or damage resulting from flood or earthquake) to any structures, improvements, fixtures and equipment and furnishing and materials on the premises during said construction, whether or not attached to the land, in an amount equal to the full replacement cost. Such insurance shall name the Port Authority as an insured and such policy shall provide that the loss shall be adjusted with the Port Authority, and that the proceeds thereof shall be paid to the Port Authority and shall be made available to the Lessee for and applied strictly and solely to the payment of the cost of the repair, replacement, rebuilding or other performance of any Specific Work Item of the Lessee's Construction Work.

(k) With the exception of the Workers' Compensation and Employers' Liability Insurance policy each policy of insurance described in paragraph (i) of this Section shall include the Port Authority as an additional insured (including, without limitation, for purposes of premises operations and completed-operation), and no such policy shall contain any care, custody or control exclusions, or any exclusion for bodily injury to or sickness, disease or death of any employee of the Lessee or of any of its contractors which would conflict with or in any way impair the coverages resulting from the Port Authority's status as an additional insured or the coverage under the contractual liability endorsement described in subdivision (1) of paragraph (i) of this Section. Such insurance shall also contain an endorsement providing that the protection afforded the Lessee thereunder with respect to any claim or action against the Lessee by a third party shall pertain and apply with like effect with respect to any claim or action against the Lessee by the Port Authority and against the Port Authority by the Lessee, but said endorsement shall not limit, vary, change or affect the protections afforded the Port Authority as an additional insured. Such insurance shall contain a provision that the insurer shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense

involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority.

(l) Unless otherwise set forth herein, each policy of insurance described in paragraphs (i) and (j) of this Section shall be subject to the applicable provisions of Section 15(e) of this Agreement.

(m) Title to and property in all improvements and fixtures placed, constructed or installed in or on the premises constituting the Lessee's Construction Work shall vest in the Port Authority upon placement, construction or installation thereof and title to and property in any and all equipment and trade fixtures removable without substantial injury to the premises placed in or installed upon the premises shall vest in the Lessee upon the installation thereof. No equipment or trade fixtures shall be removed by the Lessee prior to the expiration date of the letting under this Agreement unless replaced with substantially similar property. Without limiting any other term of this Agreement, and notwithstanding the foregoing provisions, upon notice given by the Port Authority prior to the expiration or earlier termination of the letting of the premises under this Agreement the Lessee shall remove from the premises any improvements, fixtures, trade fixtures, or equipment as the Port Authority may specify in its notice, and shall repair any damage to the premises caused by such removal.

(n) In the performance of any Specific Work Item of the Lessee's Construction Work the Lessee shall not create nor permit to continue any situation or condition that may cause or be conducive to any labor troubles at the Facility which interferes with the progress of other construction work at the Facility. The determinations of the Port Authority shall be conclusive on the Lessee and, upon notice from the Port Authority, the Lessee shall or shall cause its contractor to rectify as soon as possible any condition specified in the notice. In the event of failure by the Lessee or any of its contractors to comply with the requirements of this paragraph (whether or not such failure is due to the Lessee's fault) the Port Authority by notice shall have the right to suspend the Port Authority's permission to the Lessee to proceed with any portion of any Specific Work Item of the Lessee's Construction Work being performed by or on behalf of the Lessee, and the Lessee shall thereupon immediately cease the same. When labor troubles shall be so settled that such interference or the danger thereof no longer exists, the Port Authority by notice to the Lessee shall promptly reinstate the permission to the Lessee to perform the Specific Work Item of the Lessee's Construction Work on all the

same terms and conditions as before the suspension. "Labor troubles" shall mean and include strikes, boycotts, picketing, work-stoppages, slowdowns, complaints, disputes, controversies or any other type of labor trouble, regardless of the employer of the person involved or their employment status, if any.

(o) The Lessee shall pay to the Port Authority a fee as compensation for its review and oversight of the Lessee's Construction Work (which fee is hereinafter called "the Review Fee"). The Review Fee shall be an amount equal to three percent (3%) of the actual cost of the Lessee's Construction Work; provided, however, that for purposes of this paragraph the Lessee's Construction Work shall not be deemed to include the costs of engineering services, consulting services, surveys, construction management fees, and insurance and performance bonds purchased directly by the Lessee and not by its contractors or subcontractors. Upon final completion of all of the work on each Specific Work Item to be performed by the Lessee as set forth in the Lessee's approved plans and specifications, the Lessee shall submit to the Port Authority a certification signed by a responsible officer thereof certifying that all such work has been completed and the final cost of such Specific Work Item. The Lessee shall also supply to the Port Authority such supporting documents and records as the Port Authority shall deem necessary to substantiate the matters set forth in the Lessee's certificate. The Port Authority shall have the right (but shall not be obliged) to conduct an interim inspection and audit in connection with the Specific Work Item certified as completed, and shall have the rights in the conduct of such interim inspection and audit as are set forth below in this paragraph in regard to the final inspection and audit. Upon receipt of the Lessee's certification, or following the aforesaid audit by the Port Authority, the Port Authority shall render a bill to the Lessee setting forth the Review Fee for said Specific Work Item, and the Lessee shall pay the Review Fee to the Port Authority within fifteen (15) days of receipt of said bill. No payment made by the Lessee on account of the cost of a Specific Work Item as set forth in the immediately preceding sentence shall be considered final until the final determination of the cost of the Lessee's Construction Work as set forth below in this paragraph. Upon final completion of all of the Lessee's Construction Work to be performed by the Lessee as set forth in the Lessee's approved plans and specifications, the Lessee shall certify to the Port Authority by final written certification signed by a responsible officer of the Lessee certifying that all of the Lessee's Construction Work has been completed and the final cost of such work for each Specific Work Item. Upon receipt of the Lessee's certification, the Port Authority shall render a bill to the Lessee setting forth the Review Fee for each Specific Work Item for which the Lessee has not previously made payment under the provisions of this paragraph, and the Lessee shall pay the Review

Fee for each such Specific Work Item to the Port Authority within fifteen (15) days of receipt of said bill. No payment made by the Lessee to the Port Authority pursuant to the provisions of this paragraph, including, without limitation, any payment made to the Lessee following the Port Authority's receipt of the Lessee's final certification of cost, shall be deemed final until the cost of the Lessee's Construction Work has been finally determined by the Port Authority. Any payment made to the Lessee following the Port Authority's receipt of the Lessee's final certification of cost shall not be deemed a final determination of the cost of the Lessee's Construction Work. Such final determination shall occur only after the Port Authority has examined and approved the Lessee's final certificate of cost and such records and other documentation of the Lessee as the Port Authority shall deem necessary to substantiate such cost. The Lessee shall permit the Port Authority by its agents, employees and representatives at all reasonable times prior to a final determination of the cost of the Lessee's Construction Work to examine and audit the records and other documentation of the Lessee which pertain to and will substantiate such cost.

(p) No contractor or third party shall or shall be deemed to have acquired any rights against the Port Authority by virtue of the execution of this Agreement and nothing contained herein shall operate or give to any such contractor or third party any claim or right of action against the Port Authority and its Commissioners, officers, agents and employees.

(q) Without limiting any of the terms and conditions hereof, the Lessee understands and agrees that it shall put into effect prior to the commencement of the Lessee's Construction Work an affirmative action program and Minority Business Enterprise (MBE) program and Women-owned Business Enterprise (WBE) program in accordance with the provisions of Schedule F, attached hereto and hereby made a part hereof. The provisions of Schedule F shall be applicable to the Lessee's contractor or contractors and subcontractors at any tier of construction as well as to the Lessee, and the Lessee agrees to include the provisions of Schedule F in all of its construction contracts so as to make the provisions and undertakings set forth in Schedule F the direct obligation of the construction contractor or contractors and subcontractors at any tier of construction. The Lessee agrees to and shall require its contractors and subcontractors to furnish to the Port Authority such data, including but not limited to compliance reports, relating to the operation and implementation of the affirmative action, MBE, and WBE programs of the Lessee and its contractor, contractors, and subcontractors at any tier of construction called for under the provisions of this paragraph and Schedule F annexed hereto as the Port Authority may request at any time and from time to time and the Lessee agrees to and shall also require that its contractors



and subcontractors at any tier of construction make and put into effect such modifications and additions thereto as may be directed by the Port Authority pursuant to the provisions of this paragraph and Schedule F annexed hereto to effectuate the goals of affirmative action, MBE, and WBE programs. The obligations imposed on the Lessee under this paragraph and Schedule F annexed hereto shall not be construed to impose any greater requirements on the Lessee than those which may be imposed on the Lessee under applicable law.

(r) In addition to and without limiting any terms and provisions hereof, the Lessee shall provide in all of its contracts and subcontracts covering the Lessee's Construction Work, or any portion thereof, that:

(1) The contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeships and on-the-job training;

(2) At the request of either the Port Authority or the Lessee, the contractor shall request such employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Lessee to furnish a written statement that such employment agency, labor union or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will cooperate in the implementation of the contractor's obligations hereunder;

(3) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor in the performance of the contract, that all qualified applicants will be afforded equal employment opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status;

(4) The contractor will include the provisions of subdivisions (1) through (3) of this paragraph in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract;

(5) "Contractor" as used in paragraph (q) and in this paragraph shall include each contractor and subcontractor at any tier of construction.

#### Section 8A. Equipment

The Lessee agrees to install and/or maintain on the premises initially and continuously throughout the term of the letting all such equipment, including container cranes, necessary to operate the premises as an efficient cargo container handling facility and, subject to the reasonable phasing-in of the installation of equipment, to allow for the full utilization of the premises at all times for said purpose. With respect to container cranes and associated container crane equipment, the Lessee shall give the Port Authority not less than one hundred eighty (180) days' notice of the manufacturer and specifications of such container cranes prior to the installation thereof, and shall submit to the Port Authority a construction or tenant alteration application under Section 20 of this Agreement covering any installation or construction work required in connection with any such container crane or associated crane equipment, including, without limitation, any such work required for its attachment, connection to, or integration with any mechanical, electrical or other system or any structure at the premises.

#### Section 8B. Wharf Rehabilitation

The Port Authority and the Lessee acknowledge and agree that portions of the wharf constituting part of the premises are in need of the following rehabilitation work (which work is hereinafter called "the Wharf Rehabilitation Work"): (i) replacement and repair of timber piles; (ii) installation and repair of concrete pile extensions; (iii) repair of the seawall, expansion joints in the waterside crane rail beam, bracing and/or repair of the timber piles under the crane rail beam of the waterside crane rail; and (iv) repair of concrete pile caps and shear keys in the waterside crane rail beam. Notwithstanding any provision to the contrary contained in Section 35 of this Agreement, and without otherwise limiting the generality of the provisions thereof, the Lessee shall perform the Wharf Rehabilitation Work, and the Port Authority shall reimburse the Lessee on account of the performance by the Lessee of the Wharf Rehabilitation Work in an amount in no event to exceed Two Million Dollars and No Cents (\$2,000,000.00) (hereinafter called "the Wharf Rehabilitation Reimbursement Amount"). Although the Wharf Rehabilitation Work shall not be deemed part of the Lessee's Construction Work or the Lessee's Additional Work for any purposes of this Agreement, including without limitation Section 42 hereof, the Lessee shall perform the Wharf Rehabilitation Work in accordance with all of the provisions of

Section 8 hereof, with the exception of paragraphs (a) and (o) thereof. In addition, the Lessee agrees to complete the Wharf Rehabilitation Work by November 30, 2002. The Port Authority shall have the rights of audit set forth in Section 43 hereof with respect to the cost of the Wharf Rehabilitation Work. Following the delivery to the Lessee by the Port Authority of the certificate of final completion under paragraph (c) of Section 8 hereof covering the Wharf Rehabilitation Work, and the delivery to the Port Authority by the Lessee of the actual certified cash expenditures covering the Wharf Rehabilitation Work, and the Port Authority's examination to its satisfaction of such certified cash expenditures, the Port Authority shall pay to the Lessee the Wharf Rehabilitation Reimbursement Amount, subject to final determination of said amount in accordance with the Port Authority's aforesaid audit rights.

Section 8C. Additional Demolition Work

The Port Authority and the Lessee acknowledge and agree that certain of the buildings to be demolished as part of the Lessee's Construction Work require additional work constituting environmental remediation (hereinafter called "the Additional Demolition Work"). Notwithstanding any provision to the contrary contained in Section 35 of this Agreement, and without otherwise limiting the generality of the provisions thereof, the Lessee shall perform the Additional Demolition Work, and the Port Authority shall grant the Lessee a credit against the basic rental payable under Section 3 of this Agreement on account of the performance by the Lessee of the Additional Demolition Work in the amount of Seven Hundred Fifty Thousand Dollars and No Cents (\$750,000.00) (hereinafter called "the Additional Demolition Reimbursement Amount"). The Additional Demolition Work shall be performed in accordance with all of the provisions of Section 8 hereof, excepting paragraph (a) thereof, as if it were part of the Lessee's Construction Work. Without limiting the generality of the provisions of Section 8 hereof, the Port Authority shall have the rights of audit set forth in Section 43 hereof with respect to the cost of the Additional Demolition Work. On and after the first day of the first full calendar month following the delivery to the Lessee by the Port Authority of the certificate of final completion under paragraph (c) of Section 8 hereof covering the Additional Demolition Work, and the delivery to the Port Authority by the Lessee of the actual certified cash expenditures covering the Additional Demolition Work, and the Port Authority's examination to its satisfaction of such certified cash expenditures, the Port Authority shall credit against the installments of basic rental payable by the Lessee under Section 3 hereof an amount equivalent to the Additional Demolition Reimbursement Amount until such amount is exhausted, subject to final determination of said amount in accordance with the Port Authority's aforesaid audit rights. Neither the whole

nor any part of the Additional Demolition Reimbursement Amount shall be or become or shall constitute a debt due and owing from the Port Authority to the Lessee nor shall said amount be recoverable or applicable in any manner other than as specifically provided for in this Section, including but not limited to a set-off or counterclaim in any action by the Port Authority against the Lessee for rental or other claims.

Section 9. Environmental Responsibilities

(a) For purposes of this Agreement, the following terms shall have the respective meanings provided below:

(1) "Added Environmental Survey" shall have the meaning set forth in Section 44 hereof.

(2) "Added Space" shall have the meaning set forth in Section 44 hereof.

(3) "Additional Sampling Report" shall have the meaning set forth in paragraph (m)(1) of this Section.

(4) "Analyzed Item" shall mean with respect to the ground water each of and "Analyzed Items" shall mean with respect to the ground water all of the constituents for which the ground water samples described in the Initial Environmental Survey were tested and "Analyzed Item" shall mean with respect to soil each of and "Analyzed Items" shall mean with respect to soil all of the constituents for which the soil samples described in the Initial Environmental Survey were tested.

(5) "Condition Exceptions" shall mean the following:

(i) Migrated Hazardous Substances;

(ii) The remediation or removal of the Existing Condition;

(iii) The remediation or removal of Hazardous Substances in the soil or ground water in, on and under the premises caused by the sole acts or omissions of the Port Authority on or after December 1, 2000 with respect to the Initial Space and on or after the Effective Date, if any, with respect to the Added Space;

(iv) Underground storage tanks located on the premises on December 1, 2000 and which the Lessee

never uses, and only such tanks, and contamination resulting from the use of such tanks; and

(v) Fines and penalties arising out of the Existing Condition if the fines and penalties are imposed due to the failure to have remediated or removed the Existing Condition or due to the failure to have a Deed Notice recorded with respect to the Existing Condition.

(6) "Effective Date" shall have the meaning set forth in Section 44 hereof.

(7) "Environmental Damages" shall mean any one or more of the following:

(i) the presence in, on, or under the premises of any Hazardous Substance, except for a Migrated Hazardous Substance, whether such presence occurred prior to or during the term of the letting under this Agreement or resulted from any act or omission of the Lessee or others, and/or

(ii) the disposal, discharge, release or threatened release of any Hazardous Substance from the premises or of any Hazardous Substance from under the premises, and/or

(iii) the presence of any Hazardous Substance in, on or under other property at the Facility as a result of (a) the Lessee's use and occupancy of the premises or the performance of the Lessee's Construction Work, the Lessee's Additional Work, the Wharf Rehabilitation Work and the Additional Demolition Work or (b) a migration of a Hazardous Substance, except for a Migrated Hazardous Substance, from the premises or from under the premises, and/or

(iv) any personal injury including wrongful death or property damage occurring from and after December 1, 2000 arising out of or related to any Hazardous Substance described in (i), (ii) or (iii) above (except for a Migrated Hazardous Substance), and/or

(v) the violation of any Environmental Requirement pertaining to any Hazardous Substance described in (i), (ii) or (iii) above (except for

a Migrated Hazardous Substance), the premises and/or the activities thereon.

(8) "Environmental Requirements" shall mean in the plural and "Environmental Requirement" shall mean in the singular all applicable, common law and past, present and future laws, statutes, enactments, resolutions, regulations, rules, directives, ordinances, codes, licenses, permits, orders, memoranda of understanding and memoranda of agreement, guidances, approvals, plans, authorizations, concessions, franchises, requirements and similar items of all governmental agencies, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, all pollution prevention programs, "best management practices plans", and other voluntary programs adopted and agreements made by the Port Authority with any governmental agencies, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, and all judicial, administrative, voluntary and regulatory decrees, judgments, orders and agreements relating to the protection of human health or the environment, the foregoing to include without limitation:

(i) All requirements pertaining to reporting, licensing, permitting, investigation and remediation of emissions, discharges, releases or threatened releases of Hazardous Substances into the air, surface water, groundwater or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Substances, or the transfer of property on which Hazardous Substances exist; and

(ii) All requirements pertaining to the protection of the health and safety of employees or the public.

(9) "Estimated Soil Remediation Amount" shall mean if there is no Effective Date, an amount equal to the sum of (i) the Estimated Ground Area A Non-Mandatory Soil Remediation Costs and (ii) the Estimated Ground Area A Mandatory Soil Remediation Costs and, if there is an Effective Date, shall mean an amount equal to the sum of (i) the Estimated Ground Area A Non-Mandatory Soil Remediation Costs, (ii) the Estimated Ground Area A Mandatory Soil Remediation Costs, (iii) the Estimated Ground Area B Mandatory Soil

Remediation Costs and (iv) the Estimated Ground Area B Non-Mandatory Soil Remediation Costs.

(10) "Estimated Ground Area A Mandatory Soil Remediation Costs" shall mean at a particular time the total Project Costs to perform all Ground Area A Mandatory Soil Remediation as such Project Costs shall be estimated by the Port Authority at such particular time.

(11) "Estimated Ground Area A Non-Mandatory Soil Remediation Costs" shall mean at a particular time the total Project Costs to perform all Ground Area A Non-Mandatory Soil Remediation as such Project Costs shall be estimated by the Port Authority at such particular time.

(12) "Estimated Ground Area B Mandatory Soil Remediation Costs" shall mean at a particular time the total Project Costs to perform all Ground Area B Mandatory Soil Remediation as such Project Costs shall be estimated by the Port Authority at such particular time.

(13) "Estimated Ground Area B Non-Mandatory Soil Remediation Costs" shall mean at a particular time the total Project Costs to perform all Ground Area B Non-Mandatory Soil Remediation as such Project Costs shall be estimated by the Port Authority at such particular time.

(14) "Exhibit I" shall mean the Initial Environmental Survey, all Additional Sampling Reports, all Remediation Completion Reports, if any, and from and after the Effective Date, if any, the Added Environmental Survey.

(15) "Existing Condition" shall mean if there is no Effective Date, the levels of Analyzed Items in the soil and ground water for all portions of the premises as derived by applying the methodology set forth in paragraph (j) below to the test results in the Initial Environmental Survey, as such test results may be superceded and supplemented by the test results in each Additional Sampling Report and in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section and from and after the Effective Date, if any, shall mean the levels of Analyzed Items in the soil and ground water for all portions of the premises as derived by applying the methodology set forth in paragraph (j) below to the

test results in the Initial Environmental Survey and the Added Environmental Survey, as such test results may be superceded and supplemented by the test results in each Additional Sampling Report and in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section.

(16) "Governmental Authority" and "Governmental Authorities" shall mean all governmental agencies, authorities, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, except that it shall not be construed to include The Port Authority of New York and New Jersey, the lessor under this Agreement.

(17) "Ground Area A" shall mean the ground area (but not the water area) shown in crosshatching and diagonal on Exhibit A attached hereto.

(18) "Ground Area A Mandatory Soil Remediation" shall mean Soil Remediation of the Existing Condition in the Ground Area A Surface Soil Remediation Area required to be performed by the Port Authority pursuant to paragraph (w) of this Section.

(19) "Ground Area A Non-Mandatory Soil Remediation" shall mean Soil Remediation of the top three (3) feet of soil in Ground Area A performed or to be performed by the Port Authority after the execution of this Agreement and which Soil Remediation is not Ground Area A Mandatory Soil Remediation.

(20) "Ground Area A Surface Soil Remediation Area" shall mean the top three (3) feet of any portion of Ground Area A which is contiguous to that soil boring identified in the Initial Environmental Survey as "MW-14" for which the Existing Condition with respect to soil does not meet the New Jersey Department of Environmental Protection's soil cleanup criteria for unrestricted use on December 1, 2000 and at any time thereafter.

(21) "Ground Area B" shall mean the ground area shown in stipple on Exhibit A.

(22) "Ground Area B Mandatory Soil Remediation" shall mean Soil Remediation of the Existing Condition in the Ground Area B Surface Soil Remediation Area required to be performed by the Port Authority pursuant to paragraph (w) of this Section.



(23) "Ground Area B Non-Mandatory Soil Remediation" shall mean Soil Remediation of the top two (2) feet of soil in Ground Area B performed or to be performed by the Port Authority (whether or not performed prior to or after the Effective Date) and which soil remediation is not Ground Area B Mandatory Soil Remediation.

(24) "Ground Area B Surface Soil Remediation Area" shall mean the top two (2) feet of Ground Area B for which the Existing Condition with respect to soil does not meet the New Jersey Department of Environmental Protection's soil cleanup criteria for unrestricted use on the Effective Date (if any) and at any time thereafter.

(25) "Ground Area C" shall mean the ground area shown in crosshatching on Exhibit A-1 attached hereto.

(26) "Hazardous Substances" shall mean and include in the plural and "Hazardous Substance" shall mean and include in the singular any pollutant, contaminant, toxic or hazardous waste, dangerous substance, potentially dangerous substance, noxious substance, toxic substance, flammable, explosive or radioactive material, urea formaldehyde foam insulation, asbestos, polychlorinated biphenyls ("PCBs"), chemicals known to cause cancer, endocrine disruption or reproductive toxicity, petroleum and petroleum products and other substances which have been or in the future shall be declared to be hazardous or toxic, or the removal, containment or restriction of which have been or in the future shall be required, or the manufacture, preparation, production, generation, use, maintenance, treatment, storage, transfer, handling or ownership of which have been or in the future shall be restricted, prohibited, regulated or penalized by any federal, state, county, or municipal or other local statute or law now or at any time hereafter in effect as amended or supplemented and by the regulations adopted and publications promulgated pursuant thereto.

(27) "Initial Environmental Survey" shall mean the report attached hereto, hereby made a part hereof and marked "Exhibit I" entitled "Surface Baseline Report Port Newark Container Terminal, LLC" and dated October 2000.

(28) "Initial Space" shall mean the premises under this Agreement on December 1, 2000 as described in Section 1 hereof.

(29) "Limited Use Areas" shall mean (i) Ground Area B and Ground Area C, (ii) the Ground Area A Surface Soil Remediation Area, (iii) the area within a radius of fifty (50) feet from Soil Boring MW-2 as identified in the Initial Environmental Survey and (iv) the area within a radius of one hundred (100) feet from Soil Boring MW-13 as identified in the Initial Environmental Survey.

(30) "Migrated Hazardous Substance" shall mean (i) any Hazardous Substance which is an Analyzed Item and which is a part of the Existing Condition which has migrated from or from under the premises in, on, or under property at the Facility other than the premises if and only if such migration was not a result in whole or in part from the use and occupancy of the premises by the Lessee or by any affiliated company of the Lessee, or the performance of the Lessee's Construction Work, or the acts or omissions of the Lessee, its officers, agents or employees, or the acts or omissions of any affiliated company of the Lessee or of any sublessees or others who occupied the premises with the permission of the Lessee or with the permission of an affiliated company of the Lessee or of their officers, agents or employees and (ii) any Hazardous Substance which has migrated in, on, or under the premises from outside of the premises if and only if such migration was not a result in whole or in part from the use and occupancy of the premises by the Lessee or by any affiliated company of the Lessee, or the performance of the Lessee's Construction Work, or the acts or omissions of the Lessee, its officers, agents or employees, or the acts or omissions of any affiliated company of the Lessee or of any sublessees or others who occupied the premises with the permission of the Lessee or with the permission of an affiliated company of the Lessee or of their officers, agents or employees.

(31) "Project Costs" shall mean the Port Authority's project costs, as such project costs are determined in accordance with the Port Authority's normal accounting practices, which project costs shall include but not be limited to the following:

(i) On-the-job payroll costs of employees and supervisory personnel (including supervisors, foremen and clerks) including but not limited to, contributions to any retirement system or the cost of or participation in any pension plans or the like, social security, old age, survivor's, disability and unemployment insurance and other insurance costs, sick leave pay, holiday, vacation, authorized absence and severance pay,

other employee fringe benefits and any other payments made or costs incurred whether pursuant to law or by Port Authority policy to or with respect to said employees and personnel;

(ii) The cost (including rental charges) of materials, supplies, equipment and utilities (including but not limited to electricity, water and phone);

(iii) Payments to contractors and any other third persons, firms or corporations for work performed or services rendered;

(iv) The cost of any performance bond or bonds;

(v) The cost of any insurance;

(vi) Payments to independent consultants, architects and engineers engaged or retained by the Port Authority, including without limitation, payments of damages and penalties;

(vii) Any other direct costs as charged under the Port Authority's normal accounting practice; and

(viii) Financial expense on the foregoing computed in accordance with Port Authority accounting practice.

(32) "Remediation Completion Report" shall have the meaning set forth in paragraph (m) (2) of this Section.

(33) "Soil Remediation" shall mean the remediation of soil and the installation of environmental engineering controls in connection with contaminated soil, the foregoing to include without limitation, the installation of pavement, soil investigation and testing and preparation of reports, the design, implementation and preparation of remedial action work plans, soil remediation and disposal (including transportation), and the removal, disposal and restoration of pavement to its condition existing prior to remediation.

(b) (1) Without limiting the generality of any of the other terms and provisions of this Agreement and without limiting the obligations of the Port Authority set forth in Section 8(a) (3), Section 8(B), Section 8(C), Section 16(e) and Section 16(f) and in this Section 9(w) and, further, subject to the terms

and provisions of paragraph (b) (2) below, the Lessee, except with respect to the abatement of basic rental provided for in Section 9(1), hereby expressly agrees to assume all responsibility for and relieve the Port Authority from and reimburse the Port Authority for any and all risks, claims, penalties, costs and expenses of any kind whatsoever relating to, caused by, arising out of or in connection with the conditions of the premises whether any such conditions existed prior to, on or after the effective date of the letting of the premises to the Lessee hereunder, including without limitation, all Environmental Requirements which the Lessee or the Port Authority is obligated to comply with pursuant to this Agreement and all Environmental Damages.

(2) It is hereby agreed and understood that except as set forth in paragraphs (k), (q) and (r) of this Section the Lessee shall not be responsible for the Condition Exceptions.

(c) Without limiting the Lessee's obligations elsewhere under this Agreement to comply with all laws, ordinances, governmental rules, regulations and orders which were or at any time are in effect during the term of the letting under this Agreement, the Lessee understands and agrees that, except with respect to the Condition Exceptions which the Lessee is not responsible for pursuant to paragraph (b) (2) of this Section, it shall be obligated, at its cost and expense, to comply with and relieve the Port Authority from compliance with all Environmental Requirements which are applicable to or which affect (i) the premises, (ii) the operations of the Lessee or others with the consent of the Lessee at the premises or the Lessee's operations at the Facility, (iii) the occupancy and use of the premises by the Lessee or by others with its consent or (iv) any Hazardous Substance which has migrated from the premises. Nothing in the foregoing shall be construed as a submission by the Port Authority to the application to itself of any Environmental Requirements; provided, however, that no immunity or exemption of the Port Authority from any Environmental Requirements shall excuse compliance or be grounds for noncompliance on the part of the Lessee. Without limiting the generality of the foregoing and as part of the Lessee's fulfillment of the foregoing obligations, the Lessee shall be responsible, at its sole cost and expense and subject to the direction of the Port Authority, for:

(1) the preparation of and submission to all applicable Governmental Authorities of any notice, negative declaration, remedial action workplan, no further action letter, remediation agreement or any other documentation or information;

(2) the obtaining of any surety bond or the giving of any other financial assurances; and

(3) complying with the provisions of all Environmental Requirements becoming effective on or relating to the termination, expiration or surrender of the letting of the premises or of any portion thereof under this Agreement, or on the closure or transfer of the Lessee's operations at the premises.

(d) In addition to and without limiting the generality of the obligations of the Lessee set forth above and elsewhere in this Agreement, the Lessee shall, at its sole cost and expense and in accordance with and subject to the provisions of Section 20 of this Agreement, upon notice from the Port Authority, promptly take all actions to:

(1) completely remove and remediate all Hazardous Substances in, on or under the premises and at the Facility resulting from or in connection with the use and occupancy of the premises by the Lessee or any affiliated company of the Lessee or which have been or permitted to be disposed of, released, discharged or otherwise placed in, on or under the Facility by the Lessee or any affiliated company of the Lessee or which have been disposed of, released, discharged or otherwise placed in, on or under the premises during the term of the letting of the premises under this Agreement or during the term of any previous agreement between the Lessee or any affiliated company of the Lessee and the Port Authority covering the Lessee's or any such affiliated company's use and/or occupancy of the premises or any portion thereof;

(2) except with respect to the Condition Exceptions which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, remove and remediate all Hazardous Substances in, on or under the premises or which have migrated from or from under the premises to any other property which any Governmental Authority or any Environmental Requirement or any violation thereof required to be remediated or removed; and

(3) except with respect to the Condition Exceptions which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, remove and remediate all Hazardous Substances in, on or under the premises or which have migrated from or from under the premises necessary to mitigate any Environmental Damages.

(e) The obligations set forth in paragraph (d) of this Section shall include but not be limited to the investigation of the environmental condition of the area to be remediated, the preparation of feasibility studies, reports and remedial plans and the performance of any removal, remediation, containment, operation, maintenance, monitoring or restoration work and shall be performed in a good, safe and workmanlike manner. The Lessee shall promptly provide the Port Authority with copies of all test results and reports generated in connection with such obligations.

(f) Without limiting the Port Authority's remedies under this Agreement or at law or in equity the Port Authority shall have the right during and after the term of the letting of the premises under this Agreement to such equitable relief, including restraining injunctions and declaratory judgments, to enforce compliance by the Lessee of its environmental obligations under this Agreement including without limitation all the Lessee's obligations under this Section. In the event that the Lessee fails to comply with or perform any of such obligations, the Port Authority (subject to the application of the provisions of Section 25(a)(11) to the extent such application would not result in the violation of any Environmental Requirement by the Port Authority or by the Lessee) at any time during or subsequent to the termination, expiration or surrender of the letting of the premises or any portion thereof may elect (but shall not be required) to perform such obligations and upon demand the Lessee shall pay to the Port Authority as additional rent its costs thereof, including all overhead costs as determined by the Port Authority. For the purposes of this paragraph, the term "cost" shall be as defined in Section 21 of this Agreement.

(g) Without limiting any other of the Lessee's obligations under this Agreement and except with respect to the Condition Exceptions which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, the Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Facility, at the cost and expense of the Lessee and at any time during or subsequent to the term of the letting of the premises under this Agreement, with such information, documentation, records, correspondence, notices, reports, test results, certifications and any other information as the Port Authority shall request in connection any Environmental Damages or as shall be required to comply with or discharge any Environmental Requirement which the Lessee is obligated to comply with under this Agreement, and the Lessee shall promptly acknowledge, swear to, sign or otherwise fully execute the same when and as directed by the Port Authority. The Lessee agrees that any of the foregoing may be filed by the Port Authority with the appropriate Governmental Authority on behalf of the

Lessee at the Lessee's cost and expense. Further, the Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Facility with copies of all information, documentation, records, correspondence, notices, certifications, reports, test results and all other submissions provided by the Lessee to a Governmental Authority and by a Governmental Authority to the Lessee within five (5) business days that the same are made available to or received by the Lessee with respect to any Environmental Damages and any Environmental Requirement which the Lessee is obligated to comply with pursuant to this Agreement.

(h) Without limiting the generality of any other provision contained in this Agreement and except with respect to Condition Exceptions which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, the Lessee shall indemnify, hold harmless and reimburse the Port Authority, its Commissioners, officers, employees and representatives from all claims, demands, penalties, fines, liabilities (including strict liability), settlements, attorney and consultant fees, investigation and laboratory fees, removal and remediation costs, court costs and litigation expenses, damages, judgments, losses, costs and expenses of whatsoever kind or nature and whether known or unknown, contingent or otherwise, just or unjust, groundless, unforeseeable or otherwise, arising or alleged to arise out of or in any way related to any Environmental Damages or any Environmental Requirement which the Lessee is obligated to comply with pursuant to this Agreement, or the risks and responsibilities assumed hereunder by the Lessee for the condition of the premises or a breach or default of the Lessee's obligations under this Section. If so directed, the Lessee shall at its own expense defend any suit based upon the foregoing, and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority.

(i) (1) Without limiting the generality of any provision of this Agreement, in the event that Environmental Requirements set forth more than one compliance standard, the Lessee agrees that the standard or standards to be applied in connection with any obligation it may have under this Agreement with respect to any Environmental Requirement shall be that which requires or permits the lowest level of a Hazardous Substance; provided, however, in the event such lowest level of a Hazardous Substance requires or allows the imposition of any restriction of any nature whatsoever upon the use or occupancy

of the premises or any other portion of the Facility or upon any operations or activities conducted or to be conducted on the premises or the Facility or upon the transfer of the premises or the Facility, then the Lessee shall remediate to such a level so that there is no such restriction placed upon the use and occupancy of the premises or the Facility or upon any operations or activities conducted or to be conducted on the premises or the Facility.

(2) The Lessee further agrees that, notwithstanding the terms and conditions of subparagraph (i)(1) above, the Port Authority shall have the right at any time and from time to time, acting in its sole discretion and without any obligation whatsoever to the Lessee or otherwise to do so, to designate any level or levels or standard or standards of remediation permitted or required under any Environmental Requirement, and such designation shall be binding upon the Lessee with respect to its obligations under this Agreement with respect to Environmental Requirements.

(3) Nothing in this paragraph (i) shall require or be construed to require the Lessee to remediate any Analyzed Item below the Existing Condition except as otherwise required by or as set forth in this Agreement including without limitation as required by or as set forth in paragraphs (k), (q) and (r) of this Section 9.

(j) The methodology to be used for the purpose of this Section to determine for any Existing Condition the level of an Analyzed Item at any location in, on or under the premises shall be for ground water straight line interpolation methodology utilizing principles of hydrogeologic interpretation, and for soil, the EPA geostatistical software system applicable at any particular time and, notwithstanding any other evidence to the contrary including without limitation anything contained in the reports constituting a part of Exhibit I, the Existing Condition as so determined shall set forth and constitute for all purposes as between the Lessee and the Port Authority the levels of the Analyzed Items in the soil and ground water in, on and under the premises, except, however, for each location from which soil and/or water samples have been taken and the tests results thereof constitute a part of the Existing Condition, for each Analyzed Item that was tested at such location and the test result for such Analyzed Item is a part of the Existing Condition, the level of such Analyzed Item at such location shall be the test result of such Analyzed Item at such location.

(k) (1) It is expressly understood and agreed that the proper handling, delivery, treatment, storage, transportation, disposal and depositing (all of the foregoing being hereinafter collectively called "Disposal"), whether on or



off the Facility, of any soil, dirt, sand, silt, dredged material, water, asbestos, lead, PCB's, demolition or construction debris or other matter (hereinafter collectively called the "Matter") excavated, disturbed or removed by the Lessee (or by any contractor or contractors of the Lessee) at, from or under the premises (or any other area of the Facility) at any time or times and regardless of the nature or composition of such Matter, including without limitation, any and all Disposal of said Matter in connection with the performance of the Lessee's Construction Work or of the Lessee's Additional Work, if any, (as defined Section 8(a)(7) of this Agreement) or the performance of the Wharf Rehabilitation Work (as defined in Section 8B of this Agreement) or the performance of the Additional Demolition Work (as defined in Section 8C of this Agreement) or the repair, replacement or rebuilding of the premises as required under Section 17 of this Agreement, and any and all remediation and Disposal of said Matter and any and all other remediation and Disposal (whether soil, upper aquifer or otherwise) necessary, required or appropriate as a result of, caused by, incidental to or triggered by such excavation, disturbance or removal of the Matter or arising therefrom, and the taking or doing of any and all other action or actions necessary, required or appropriate in connection therewith, shall be, except as set forth in paragraph (k)(2) below, the sole and complete responsibility of the Lessee including, without limitation, all costs and expenses thereof and any and all Environmental Damages, Environmental Requirements, claims, penalties and other expenses relating thereto. The foregoing obligations of the Lessee shall obtain and apply with full force and effect irrespective of the nature or source of any contaminant, pollutant, chemical, waste or other substance or whether any of the same is Hazardous Substance or whether any of the same is at a level or levels above or below the level or levels of any of the Analyzed Items constituting the Existing Condition or whether there has or has not been any increase in such level or levels. The Lessee shall perform all of the foregoing in accordance with and subject to all the terms, provisions, covenants and conditions of this Agreement.

(2) Notwithstanding the foregoing set forth in paragraph (k)(1) above, although the Lessee shall pay all costs and expenses for the Disposal of all Matter performed as part of the Wharf Rehabilitation Work (as defined in Section 8B hereof), the costs and expenses of the Disposal of such Matter shall be included towards the Wharf Rehabilitation Reimbursement Amount to the extent and in the manner set forth in Section 8B hereof, provided, however, the costs and expenses of the Disposal of any Matter disposed of, released, discharged or otherwise placed on, under or about the Facility by the Lessee or any affiliates of the Lessee shall not be included in the Wharf Rehabilitation Reimbursement Amount. The terms and conditions set forth in the

foregoing paragraph (k) (1) above shall not relieve the Port Authority from the payment of and the Port Authority shall pay all costs and expenses for the Disposal of Matter dredged in fulfillment of the Port Authority's obligations pursuant to Section 16(e) and Section 16(f) hereof and all of the costs and expenses of the Disposal of such dredged Matter shall be included in the "Estimated Cubic Yard Cost" as defined in said Section 16(e).

(3) Without limiting the generality of any other term or condition of this Agreement, title to any Matter on the premises or the Facility excavated or removed by the Lessee and not used at the premises shall vest in the Lessee upon the excavation or removal thereof and all such Material shall be delivered and deposited by the Lessee at the Lessee's sole cost and expense to a location off the Facility in accordance with the terms and conditions of this Agreement and all Environmental Requirements. The entire proceeds, if any, of the sale or other disposition of the Material shall belong to the Lessee.

(4) In the event the Lessee discovers any Hazardous Substance in, on or under the premises, the Lessee in reporting such Hazardous Substance shall direct such report to the attention of such individual at the subject governmental authority as the Facility Manager shall require in order to assure consistency in the environmental management of the Facility, provided, however, notwithstanding the foregoing in no event shall the Lessee be required by this paragraph (k) (4) to violate any Environmental Requirement.

(5) Promptly upon final disposition of any Hazardous Substance from the premises or the Facility, the Lessee shall submit to the Port Authority a "Certification of Final Disposal" stating the type and amount of material disposed, the method of disposal and the owner and location of the disposal facility. The format of such certification shall follow the requirements, if any, of governmental agencies having jurisdiction as if the Port Authority were a private organization and the name of the Port Authority shall not appear on any certificate or other document as a generator or owner of such material.

(1) Without limiting the generality of the provisions of Section 22 of this Agreement, the Port Authority and its designees shall have the right but not the obligation to enter upon the premises upon forty-eight (48) hours' notice to the Lessee to conduct testing and related activities from the existing wells made by the borings referred to in Exhibit I, to make additional wells and borings and to conduct testing and related activities therefrom and to perform such activities as shall be necessary to remediate the Existing Condition and to

remove any underground storage tanks existing on the premises after December 1, 2000 and in the exercise of the foregoing rights the Port Authority and its designees shall minimize to the extent practicable the interference with the Lessee's use and occupancy of the premises. In the event that as a result of the performance of such remediation of the Existing Condition the Lessee shall be denied the use of the open area constituting a part of the premises then in such event the Lessee shall be entitled to an abatement of basic rental as set forth in Section 50 hereof.

(m) (1) The parties hereto acknowledge that some of the test results of soil samples set forth in the Initial Environmental Survey exceed the State of New Jersey limits for unrestricted use and that some of the test results of water samples set forth in the Initial Environmental Survey exceed the New Jersey Department of Environmental Protection's Groundwater Quality Standards set forth in N.J.A.C.7:9-6. The Port Authority has taken additional ground water samples from MW-12 and MW-14 as identified in the Initial Environmental Survey and is having them tested for thallium, antimony and lead and has taken additional soil samples within the vicinity of MW-2, MW-13, MW-14 as identified in the Initial Environmental Survey and is having them tested for specified Analyzed Items and, further, it is anticipated that the Port Authority may take additional soil and water samples from the premises to further delineate the extent of these exceedances. The Port Authority shall set forth the results of such tests performed on such additional soil and water samples in a report (it being understood however that the Port Authority shall not have any obligation hereunder to perform any additional sampling and testing) and shall deliver such test results and report to the Lessee. Any such report and test results shall be referred to for the purposes of this Agreement as an "Additional Sampling Report". Upon delivery to the Lessee of an Additional Sampling Report, the test results set forth in such Additional Sampling Report shall (A) supersede and replace the existing Exhibit I or the applicable portions thereof if such test or tests results and report are of samples of Analyzed Items taken from the same well or boring or a new well or boring which is immediately adjacent to such well or boring and shall (B) supplement the existing Exhibit I or the applicable portions thereof if the test or tests results and reports would not supersede any test or tests results and reports in the existing Exhibit I as aforesaid.

(2) After any person performs any remediation on the premises (whether or not with respect to the Initial Space such remediation is performed prior to December 1, 2000 and with respect the Added Space whether or not such remediation is performed prior to the Effective Date, if any), such person, the Lessee (subject to the terms and provisions Section 20 hereof)

or the Port Authority may but shall not be obligated to, sample and test the soil and/or aquifer of the premises or portions thereof and set forth the results of such samplings and tests in a report. Any such report and test results shall be referred to for purposes of this Agreement as a "Remediation Completion Report". Upon delivery of a Remediation Completion Report to the Lessee and the Port Authority, such Remediation Completion Report shall (A) supersede and replace the existing Exhibit I or the applicable portions thereof if such test or tests results and report are of samples of Analyzed Items taken from the same well or boring or a new well or boring which is immediately adjacent to such well or boring and shall (B) supplement the existing Exhibit I or the applicable portions thereof if the test or tests results and report would not supersede any test or tests results and reports in the existing Exhibit I as aforesaid.

(n) Without limiting the generality of the provisions of Section 16 of this Agreement, the Lessee agrees to protect and maintain the wells made by the borings referred to in Exhibit I and paragraph (m) of this Section and shall repair any damage thereto not caused by the activities of the Port Authority or its designees, if any, pursuant to paragraphs (l), (m), (u) and (w) of this Section.

(o) Without limiting the generality of any other term or provision of this Agreement, all of the obligations of the Lessee under this Section shall survive the expiration or earlier termination of the letting of the premises or any portion thereof.

(p) The terms and conditions of this Section are intended to allocate obligations and responsibilities between the Lessee and the Port Authority, and nothing in this Section shall limit, modify or otherwise alter the rights and remedies which the Port Authority or the Lessee may have against third parties at law, equity or otherwise.

(q) Notwithstanding any other term or provision of this Agreement, the Existing Condition shall in no event include any Hazardous Substance whose presence in, on or under the premises was caused by or resulted from the use and occupancy of the premises by the Lessee or by any affiliated company of the Lessee, or the performance of any work by any of them, or the acts or omissions of the Lessee, its officers, agents or employees, or the acts or omissions of any affiliated company of the Lessee or of any sublessees or others who occupied the premises with the permission of the Lessee or with the permission of an affiliated company of the Lessee or their officers, agents or employees.

(r) Notwithstanding any other term or condition of this Agreement, it is hereby understood and agreed that the Lessee's obligations under this Agreement, including without limitation paragraphs (b), (c), (d), (e), (g), (h), (i), (k), (q) and (t) of this Section, shall not be nor be deemed to be affected in any way whatsoever if the Existing Condition or any portion thereof, is or will be remediated or removed by the Lessee in whole or in part in the fulfillment of any of the Lessee's obligations under this Agreement, whether due to the fact the Lessee cannot remediate or remove one or more Hazardous Substances for which it is responsible to remediate or remove without remediating or removing one or more Analyzed Items for which it is not responsible for remediating or removing or due to cost or expedience or for any other reason, and in no event shall the Port Authority have any responsibility for such remediation or removal, including without limitation, any obligation to share in the cost of such remediation or removal.

(s) The Port Authority has advised the Lessee that it is the intention of the Port Authority with respect to the application of pollution prevention programs, "best management practices plans" and other voluntary programs adopted and agreements made by the Port Authority with any governmental agencies, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof constituting Environmental Requirements that the Port Authority will treat the Lessee in a similar manner as similarly situated persons at the Facility.

(t) Upon the cessation of the letting hereunder or any portion thereof, whether such cessation be by termination, expiration or otherwise, no level of any Analyzed Item shall exceed the level of such Analyzed Item as set forth in the Existing Condition (the amount of the increase, if any, of each and every Analyzed Item above the Existing Condition being hereinafter collectively called "Analyzed Item Increases"). The Lessee covenants and agrees on or before the cessation of the letting or any portion thereof and subject to the provisions of Section 20 hereof, to remove and/or remediate all Analyzed Item Increases down to the Existing Condition.

(u) (i) It is hereby acknowledged that because of the levels of one or more Hazardous Substances in the soil of the premises, a Governmental Authority and/or an Environmental Requirement may require that a Deed Notice (formerly a Declaration of Environmental Restriction) be recorded with respect to the premises by the fee owner of the premises and that the recording of such Deed Notice may further require that the Basic Lease be amended to permit the recording of such Deed Notice. Further, the Lessee acknowledges the fee owner of the premises is the City of Newark and that the Port Authority has

advised the Lessee that the City of Newark may never record any Deed Notice with respect to the premises or execute a supplement to the Basic Lease permitting the recording of such Deed Notice. The Lessee, in executing this Agreement, agrees that neither the Port Authority nor the City of Newark shall have any obligation to the Lessee under this Agreement or otherwise with respect to the recording of or failure to record such Deed Notice or to the entering into or failure to enter into any amendment to the Basic Lease, except, however, the Port Authority shall not object to the Lessee making a petition to the municipal council of the City of Newark to adopt an ordinance which would authorize appropriate officials to execute on behalf of the City of Newark a Supplemental Agreement to the Basic Lease and to record a Deed Notice which has the approval of the New Jersey Department of Environmental Protection and if required the approval of the United States Environmental Protection Agency, relating to the premises and no other portion of the Facility, to implement the provisions of the New Jersey Brownfields and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1 et. seq., provided, however, the Lessee shall have consulted with the Port Authority on the content and requirements of such proposed Deed Notice and shall have given the Port Authority an opportunity to provide the Lessee, the New Jersey State Department of Environmental Protection, the United States Environmental Protection Agency and the City of Newark the Port Authority's comments on such proposed Deed Notice and that the terms, provisions and requirements of any such proposed Supplemental Agreement and Deed Notice shall be acceptable to the Port Authority, provided, further, however, that such Deed Notice shall not permit the presence on, include or be required by any Hazardous Substance whose presence in, on or under the premises was caused by or resulted from the use and occupancy of the premises by the Lessee or by any affiliated company of the Lessee, or the performance of any work by any of them, or the acts or omissions of the Lessee, its officers, agents or employees, or the acts or omissions of any affiliated company of the Lessee or of any sublessees or others who occupied the premises with the permission of the Lessee or with the permission of an affiliated company of the Lessee or their officers, agents or employees, or whose presence in, on or under the Initial Space occurred after December 1, 2000 and whose presence in, on or under the Added Space occurred after the Effective Date, if any. The Lessee further agrees that neither the recording of any Deed Notice or the execution of a supplement to the Basic Lease permitting such recording or failure of such Deed Notice to be recorded or failure of the Basic Lease to be supplemented to permit such recording, shall be or shall be deemed to be a breach of this Agreement by the Port Authority, including without limitation, any breach of any implied or express covenant of quiet enjoyment.

(ii) It is contemplated that the installation and maintenance of engineering controls may be required and other conditions imposed in connection with any permission to record and the recording of a Deed Notice. Without limiting any other term or provision of this Agreement, the Port Authority shall have the right to enter upon the premises for the purpose of installing any such engineering controls or for the taking of any other action necessary to record, as a condition of or required by, such Deed Notice, provided, however, nothing in this paragraph (u) is intended to nor shall relieve the Lessee of any of its obligations under this Agreement, including without limitation, its obligations pursuant to Sections 8, 16 and 17 hereof. Further, it is hereby agreed that this Agreement and the Lessee's letting and use and occupancy of the premises shall be subject to the requirements of any Deed Notice recorded with respect to the premises and the Lessee shall comply with all the requirements of any such Deed Notice to the extent of the Lessee's obligations set forth elsewhere in this Agreement other than in this subparagraph (u) (ii).

(iii) Without limiting the obligations of the Lessee set forth elsewhere in this Agreement, including but not limited to Sections 11 and 16 hereof and subject to the provisions of Sections 8 and 20 hereof, in addition to the obligations set forth in subparagraph (ii) above, the Lessee agrees that it shall, at its sole cost and expense, install and maintain in good condition pavement or such other protective cap as shall have the prior written approval of the Port Authority and other engineering controls as may be required by the Port Authority on all portions of the premises where the level or levels of any Analyzed Item or Hazardous Substance would preclude unrestricted or unlimited use of such portions of the premises by any Environmental Requirement.

(v) The Lessee agrees that it shall not use any underground storage tanks which were located in, on or under the premises on December 1, 2000.

(w) In the event on or after December 1, 2000 a Governmental Authority shall require that Soil Remediation of the Existing Condition in the Ground Area A Surface Soil Remediation Area be performed then the Port Authority shall perform such Soil Remediation of the Existing Condition in the Ground Area A Surface Soil Remediation Area as required by such Governmental Authority and, further, in the event that on or after the Effective Date, if any, a Governmental Authority shall require that the Existing Condition in either or both the Ground Area A Surface Soil Remediation Area or in the Ground Area B Surface Soil Remediation Area be performed, then the Port Authority shall perform such Soil Remediation of the Existing Condition in the Ground Area A Surface Soil Remediation Area

and/or the Ground Area B Surface Soil Remediation Area as the case shall be and as required by such Governmental Authority, provided, however, if there is no Effective Date and the Estimated Soil Remediation Amount shall exceed Two Million Five Hundred Thousand Dollars and No Cents (\$2,500,000.00) and, in the event there is an Effective Date, then from and after the Effective Date, if the Estimated Soil Remediation Amount shall exceed Four Million Dollars and No Cents (\$4,000,000.00), then in either such event the Port Authority shall have no obligation to the Lessee under this paragraph (w) to perform any Soil Remediation of the Existing Condition or any portion thereof unless the performance by the Port Authority such Soil Remediation of the Existing Condition shall have been expressly approved by the Board of Commissioners of the Port Authority, which approval shall be subject to the gubernatorial veto of the States of New York and New Jersey, and provided, further, however, the Port Authority shall not be obligated pursuant to this paragraph (w) to remediate or remove any material below the top three feet of soil in Ground Area A or below the top two feet of soil in Ground Area B.

(x) Notwithstanding any other term or provision of this Agreement including without limitation Sections 7 and 8 and thereof, the Lessee shall only use the Limited Use Areas for such purposes which do not require the construction on such Limited Use Areas of any improvements other than crane rail, pavement, utilities and/or drainage (except for sewers) and, notwithstanding any other term or provision of this Agreement or any approval granted by the Port Authority pursuant to this Agreement including without limitation any approval given by the Port Authority pursuant to Sections 8 or 20 hereof or otherwise, the Lessee is prohibited from constructing any improvements on the Limited Use Areas other than crane rail, pavement, utilities and drainage (except for sewers).

(y) In the event that the Lessee's use or permitted use of the premises set forth in this Agreement including without limitation Section 7 hereof shall require that any portion of the premises be remediated and such remediation is in addition to that set forth in paragraph (w) above, then in addition to any other rights of termination of the Port Authority under this Agreement, the Port Authority may terminate this Agreement and the letting thereunder with respect to such portion of the premises on sixty (60) days' prior written notice to the Lessee and on the effective date of termination the letting hereunder with respect to such portion of the premises covered by such notice shall cease and expire as if the effective date of termination was the date originally stated herein for the expiration of this Agreement.



Section 10. Ingress and Egress

The Lessee shall have the right of ingress and egress between the premises and the city streets outside the Facility. Such right shall be exercised by means of such pedestrian or vehicular ways, to be used in common with others having rights of passage within the Facility, as may from time to time be designated by the Port Authority for the use of the public. The use of any such way shall be subject to the rules and regulations of the Port Authority which are now in effect or which may hereafter be promulgated for the safe and efficient operation of the Facility. The Port Authority may at any time temporarily or permanently close, or consent to or request the closing of, any such way or any other area at, in or near the Facility presently or hereafter used as such, so long as a means of ingress and egress as provided above remains available to the Lessee. The Lessee hereby releases and discharges the Port Authority and its successors and assigns, of and from any and all claims, demands, or causes of action which the Lessee may now or at any time hereafter have against any of the foregoing, arising or alleged to arise out of the closing of any way or other area whether within or outside the Facility; provided, that, a reasonably equivalent means of ingress and egress remains available. The Lessee shall not do or permit anything to be done which will interfere with the free access and passage of others to space adjacent to the premises or in, along, across or through any streets, ways and walks near the premises.

Section 11. Governmental and Other Requirements

(a) The Lessee shall procure from all governmental authorities having jurisdiction over the operations of the Lessee hereunder, all licenses, certificates, permits and other authorization which may be necessary for the conduct of such operations.

(b) The Lessee shall promptly observe, comply with and execute all laws and ordinances and governmental rules, regulations, requirements, orders and similar items, including without limitation all Environmental Requirements, now or at any time during the occupancy of the premises by the Lessee which as a matter of law are applicable to or which affect (i) the premises, (ii) the operations of the Lessee at the premises or the Facility, (iii) the use and occupancy of the premises and/or (iv) any Hazardous Substance which has migrated from the premises. The Lessee, at its sole cost and expense, shall make any and all structural and non-structural improvements, repairs or alterations of the premises and perform all remediation work and clean up of Hazardous Substances required in order to fully satisfy the compliance obligations set forth in this Agreement.

(c) The obligation of the Lessee to comply with governmental requirements is provided herein for the purpose of assuring proper safeguards for the protection of persons and property in or near the Facility, and proper operation by the Lessee. Such provision herein is not to be construed as a submission by the Port Authority to the application to itself of such requirements or any of them.

#### Section 12. Rules and Regulations

(a) The Lessee covenants and agrees to observe and obey (and to compel its officers, employees and others on the premises with its consent to observe and obey) the Rules and Regulations of the Port Authority now in effect, and such further reasonable rules and regulations (including amendments and supplements thereto) for the government of the conduct and operations of the Lessee as may from time to time during the letting be promulgated by the Port Authority for reasons of safety, health, or preservation of property, or for the maintenance of the good and orderly appearance of the premises, or for the safe or efficient operation of the Facility. The Port Authority agrees that, except in cases of emergency, it will give notice to the Lessee of every such further rule or regulation at least ten (10) days before the Lessee shall be required to comply therewith.

(b) For purposes of this Agreement, the Rules and Regulations now in effect are set forth in the Port Authority's tariff, as incorporated in FMC SCHEDULE PA-10, as the same or any successor tariff may be amended from time to time ("the Tariff"). If a copy of the Tariff is not attached as Exhibit R to this Agreement, then the Port Authority will notify the Lessee thereof either by delivery of a copy, or by publication in a newspaper published in the Port of New York District, or by making a copy available at the office of the Secretary of the Port Authority.

(c) No statement or provision in the Rules and Regulations shall be deemed a representation or promise by the Port Authority that the services or privileges described shall be or remain available, or that the charges, prices, rates or fees stated therein shall be or remain in effect throughout the letting, all of the same being subject to change by the Port Authority from time to time whenever it deems a change advisable.

#### Section 13. Method of Operation

(a) In the performance of its obligations hereunder and in the use of the premises, the Lessee shall conduct its operations in an orderly and proper manner, so as not to annoy disturb or be offensive to others near the premises or at the Facility, and as soon as reasonably possible the Lessee shall

remove the cause of any objection made by the Port Authority relative to the demeanor, conduct or appearance of any of the employees of the Lessee or of any others on the premises with the consent of the Lessee.

(b) The Lessee shall not allow any garbage, debris or other waste materials (whether solid or liquid) to collect or accumulate on the premises and the Lessee shall remove from the premises and from the Facility all garbage, debris and other waste materials (whether solid or liquid) arising out of its operations hereunder. Any such material which may be temporarily stored shall be kept in suitable waste receptacles, the same to be made of metal and equipped with tight-fitting covers, and in any case to be designed and constructed to contain safely the waste material placed by the Lessee therein. Said receptacles shall be provided and maintained by the Lessee and shall be kept covered except when being filled or emptied. The Lessee shall use extreme care when effecting removal of all such material, and shall in no event make use of any facilities or equipment of the Port Authority for the removal of such material except with the prior consent of the Port Authority.

(c) The Lessee shall not do or permit to be done anything which may interfere with the effectiveness or accessibility of the utility, mechanical, electrical and other systems installed or located anywhere at the Facility.

(d) The Lessee shall not commit any nuisance or permit its employees or others on the premises with its consent to commit or create or continue or tend to create any nuisance in or near the Facility.

(e) The Lessee shall take all reasonable measures to eliminate vibrations tending to damage the premises or the Facility or any part thereof.

(f) The Lessee shall not cause or permit to be caused or produced upon the premises, to permeate the same or to emanate therefrom, any unusual, noxious or objectionable smokes, gases, vapors or odors.

(g) The Lessee shall not do or permit to be done any act or thing at the Facility which shall or may subject the Port Authority to any liability or responsibility for injury to any person or persons or damage to any property.

(h) The Lessee shall not overload any floor, roof, land surface, bulkhead, pavement, landing, pier or wharf at the Facility and shall repair, replace or rebuild any such, including but not limited to supporting members, damaged by overloading.

(i) The Lessee shall permit the use of the premises (not excluding the berthing area) at any time and from time to time for the installation, maintenance and operation of such navigation lights as may be required by the United States Coast Guard or other governmental authority having jurisdiction, and the Lessee shall furnish such electricity as may be required for use by navigation lights which may be so installed.

(j) The Lessee shall not do or permit to be done any act or thing on the premises or at the Facility which (i) will invalidate or conflict with any fire insurance policies covering the premises or any part thereof, or the Facility, or any part thereof, or (ii) which, in the opinion of the Port Authority, may constitute an extra-hazardous condition, so as to increase the risks normally attendant upon the operations permitted by this Agreement, or (iii) which will increase the rate of any fire insurance, extended coverage or rental insurance on the Facility or any part thereof or upon the contents of any building thereon. The Lessee shall promptly observe, comply with and execute the provisions of any and all present and future rules and regulations, requirements, orders and directions of the Insurance Services office of New Jersey, or of any other board or organization exercising or which may exercise similar functions, which may pertain or apply to the operations of the Lessee on the premises, and the Lessee shall, subject to and in accordance with the provisions of this Agreement relating to construction by the Lessee, make all improvements, alterations and repairs of the premises that may be required at any time hereafter by any such present or future rule, regulation, requirement, order or direction. If by reason of any failure on the part of the Lessee to comply with the provisions of this paragraph, any rate for fire insurance, extended coverage or rental insurance on the premises or any part thereof, or on the Facility or any part thereof, shall at any time be higher than it otherwise would be, then the Lessee shall pay to the Port Authority that part of all premiums paid by the Port Authority which shall have been charged because of such violation or failure by the Lessee.

(k) From time to time and as often as required by the Port Authority, the Lessee shall conduct pressure, water-flow and other appropriate tests of the fire-extinguishing system and fire-fighting equipment on the premises, whether furnished by the Port Authority or by the Lessee. The Lessee shall keep all fire-fighting and fire-extinguishing equipment well supplied with a fresh stock of chemicals and with sand, water or other materials as the case may be, for the use of which such equipment is designed, and shall train the appropriate number of its employees in the use of all such, equipment, including in such training periodic drills.

(1) The Lessee shall promptly raise and remove or cause to be raised and removed any and all objects of any kind, including vessels or other floating structures and equipment (whether or not intended to be floating), owned or operated by the Lessee, or by a corporation, company or other organization or person associated, affiliated or connected with the Lessee or for which the Lessee acts as agent, stevedore or terminal operator, (or of others going to or from the premises on business with the Lessee) which shall have sunk, settled or become partially or wholly submerged at the Facility. In addition, the Lessee shall promptly raise and remove or cause to be raised and removed any and all objects of any kind, including vessels or other floating structures and equipment (whether or not intended to be floating), which shall have sunk, settled or become partially or wholly submerged in the berthing area. The provisions of the immediately preceding sentence shall be applicable whether or not the aforesaid object is owned by the Lessee or is connected in any way with the Lessee or its occupancy of or operations at the premises, and the Port Authority shall have no obligation to raise or remove any such object unless its presence in the berthing area predates the effective date of this Agreement or is the result of the sole negligence or willful act of the Port Authority.

(m) The Lessee shall not throw, discharge or deposit or permit to be thrown, discharged or deposited any cargo, refuse, ashes or any material whatsoever, into or upon the waters of or about the Facility.

#### Section 14. Signs

(a) Except with the prior consent of the Port Authority, the Lessee shall not erect, maintain or display any advertising, signs, posters or similar devices at or on the premises or elsewhere at the Facility.

(b) Upon demand by the Port Authority, the Lessee shall remove, obliterate, or paint out any and all advertising, signs, posters, and similar devices placed by the Lessee on the premises or elsewhere at the Facility and in connection therewith at the expiration or earlier termination of the letting, shall restore the premises and the Facility to the condition thereof prior to the placement of such advertising, sign, poster or device. In the event of a failure on the part of the Lessee so to remove, obliterate or paint out each and every such piece of advertising, sign, poster or device and so to restore the premises and the Facility after receipt of written notice from the Port Authority, the Port Authority may perform the necessary work and the Lessee shall pay the costs thereof to the Port Authority on demand.

Section 15. Indemnity and Liability Insurance

(a) The Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees and representatives, from all claims and demands of third persons including but not limited to claims and demands for death, claims and demands for personal injuries, and claims and demands for property damages, arising out of the use or occupancy of the premises by the Lessee or by its officers, agents, employees, or representatives, contractors, subcontractors or their employees, or by others on the premises with the consent of any of the foregoing persons, or out of any other acts or omissions of the Lessee, its officers, agents or employees on the premises or elsewhere at the Facility, or out of the acts or omissions of others on the premises with the consent of the Lessee, including claims and demands of the party, if any, from which the Port Authority derives its rights in the Facility for indemnification arising by operation of law or through agreement of the Port Authority with such party, excepting only claims and demands which result solely from the negligent or wilful acts of the Port Authority.

(b) If so directed by the Port Authority, the Lessee shall at its own expense defend any suit based upon any such claim or demand (even if such suit, claim or demand is groundless, false or fraudulent) in which event it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or its provisions of any statutes respecting suits against the Port Authority.

(c) The Lessee, in its own name as assured, shall maintain and pay the premiums on the following described policies of liability insurance:

(1) Commercial General Liability Insurance including but not limited to coverage for Premises-Operations and Products Liability-Completed Operations, which coverage shall not exclude claims arising out of or in connection with operations conducted within fifty feet of railroad property, with a minimum combined single limit coverage for bodily injury and property damage of \$ 5,000,000.00. Said insurance shall also include coverage for explosion, collapse and underground property damage hazards. If the Lessee's operations entail the ownership, maintenance, operation, or use of any watercraft, whether owned, non-owned, or hired, the Lessee shall have any

exclusion for such watercraft deleted or shall purchase equivalent coverage under a policy of Protection and Indemnity Insurance and shall provide the Port Authority with a certificate of insurance evidencing such coverage.

(2) Commercial Automobile Liability Insurance covering all owned, non-owned or hired vehicles used in connection with its operations hereunder with a minimum combined single limit coverage for bodily injury and property damage of \$2,000,000.00.

(3) Environmental Liability Insurance, with a minimum combined single limit coverage for bodily injury and property damage for both gradual and sudden occurrences of \$5,000,000.00.

(4) Workers' Compensation and Employers' Liability Insurance in accordance with the requirements of law. The Workers' Compensation Policy shall be specially endorsed to include coverage afforded by (i) the U.S. Longshoremen's and Harbor Workers' Compensation Act and Coverage B - "Jones Act, maritime (including coverage for Masters or Members of the Crew of Vessels) and (ii) Coverage - B under the Federal Employers' Liability Act.

(d) With the exception of the Workers' Compensation and Employers' Liability Insurance Policy, each policy of insurance described in paragraph (c) of this Section shall include the Port Authority as an additional insured (including, without limitation, for purposes of premises operations and completed-operations) and each such policy shall contain a provision that the insurer shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority. Each such policy shall contain a contractual liability endorsement covering the indemnity obligations of the Lessee under this Section and such policies shall not contain any care, custody or control exclusions. Such insurance shall also contain an endorsement providing that the protection afforded the Lessee thereunder with respect to any claim or action against the Lessee by a third party shall pertain and apply with like effect with respect to any claim or action against the Lessee by the Port Authority and against the Port Authority by the Lessee, but said endorsement shall not limit,

vary, change or affect the protections afforded the Port Authority as an additional insured.

(e) As to insurance of any type whatsoever required or permitted by any provision of this Agreement, a certified copy of each of the policies or a certificate evidencing the existence thereof, or a binder, shall be delivered to the Port Authority within fifteen (15) days after the execution of this Agreement by the Port Authority and the Lessee and the delivery to the Lessee of a fully executed copy thereof (which date is hereinafter called "the Commencement Date"). In the event any binder is delivered it shall be replaced with due diligence by a certified copy of the policy or by a certificate. Each such copy or certificate shall contain a valid provision or endorsement that the policy may not be cancelled, terminated, changed or modified, without giving ten (10) days' written advance notice thereof to the Port Authority. A binder evidencing each renewal policy shall be delivered to the Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy, except for any policy expiring after the date of expiration of the letting hereunder, as the letting may be from time to time extended, and a certificate or a certified copy of each such renewal policy shall be delivered to the Port Authority with due diligence. If at any time any policy shall be or become unsatisfactory to the Port Authority as to form or substance or as to coverages or minimum limits, or if any carrier issuing any one or more such policies shall be or become unsatisfactory to the Port Authority, the Lessee shall promptly obtain one or more new and satisfactory policies in replacement. If the Port Authority at any time so requests, a certified copy of each of the policies shall be delivered to the Port Authority.

Section 16. Maintenance and Repair

(a) The Lessee shall at all times keep the premises clean, and in an orderly condition and appearance, together with all the fixtures, equipment and personal property of the Lessee located in or on the premises.

(b) The Lessee shall repair, replace, rebuild and paint all or any part of the premises or of the Facility which may be damaged or destroyed by the acts or omissions of the Lessee or by those of its officers or employees, or of other persons on or at the premises with the consent of the Lessee.

(c) Subject to the provisions of paragraph (f) of this Section and Section 17 of this Agreement, throughout the term of the letting under this Agreement, the Lessee shall assume the entire responsibility for, and shall relieve the Port Authority from all responsibility from, all care, maintenance, repair and rebuilding whatsoever in the premises, whether such care,



maintenance, repair, or rebuilding be ordinary or extraordinary, partial or entire, inside or outside, foreseen or unforeseen, structural or otherwise; and without limiting the generality of the foregoing the Lessee shall maintain and make repairs and replacements, structural or otherwise to all improvements located on the premises and all other fixtures, machinery, or equipment now or hereafter belonging to or connected with said premises or the Lessee's operations being conducted thereon, including without limitation thereto all maintenance, repair and replacement of the following items: (1) paving, which shall mean maintenance paving, crack sealing, weed removal, repair of damaged or overstressed surfaces, manholes, catch basins, underground storm water pipes, and grate support systems. In addition, the Lessee shall be responsible for maintenance repairs, and damages, that are required above the structural concrete chamber of catch basins and manholes. Such repairs shall include the concrete brick collar, concrete collar, brick collar, asphalt concrete pavement, Portland cement concrete pavement, the frame and grate or manhole cover and silt bucket when and where applicable. For the purpose of manhole and catch basin repair, the top of the structural chamber shall be the top of the concrete slab that covers the vertical walls of the underground manhole structure, and for the purpose of catch basin and manhole repair, the top of the structural chamber shall be the top of the (cast-in-place or pre-cast) vertical walls of the underground catch basin and manhole structure; (2) crane rails and rail foundations; (3) scales; (4) rail tracks on the premises; (5) lights, light poles and light pole foundations; (6) sprinkler systems; (7) gas and electric from the meter (utility companies are responsible up to the meter); (8) container cranes (excluding Paceco container crane bearing Serial No. 299 and Paceco container crane bearing Serial No. 300); (9) the electrical system, equipment and fixtures, including, without limitation, lighting fixtures, switches, outlets, receptacles and other electrical devices and accessories, and all relamping and fuse replacement; (10) the plumbing system, fixtures and equipment, and all finished plumbing; (11) buildings and all parts thereof; (12) special mooring devices and special loading devices, whether mechanical, electrical, hydraulic or otherwise; (13) fencing, (14) signs; (15) fire extinguishers; and (16) all painting. The Lessee shall maintain all such improvements, fixtures, machinery and equipment at all times in good condition, and shall perform all necessary preventive maintenance thereto so that at the expiration or termination of the letting and all times during the letting, the same (or a reconstruction of all or any part thereof) will be in as good condition as at the commencement of the term of the letting thereof (or, in the case of improvements made during the letting hereunder, in as good condition as at the time of the installation or construction thereof), except for reasonable wear which does not adversely affect the watertight condition or structural integrity of the

buildings or other structures on the premises or adversely affect the efficient or the proper utilization of any part of the premises or the environmental condition thereof. The Lessee shall make frequent periodic inspections of the premises and subject to Sections 8, 17 and 20 of this Agreement shall make all repairs and replacements, and do all rebuilding, inside and outside, ordinary and extraordinary, partial and entire, foreseen and unforeseen, structural or otherwise, regardless of the cause of the condition requiring such repairs, rebuilding or replacements, which repairs, rebuilding and replacements by the Lessee shall be in quality and class not inferior to the original in materials and workmanship.

(d) Without limiting the obligations of the Lessee stated elsewhere in this Agreement, the Lessee shall be solely responsible to the Port Authority for loss or theft of or damage to any and all personal property, equipment and fixtures belonging to the Port Authority or for which it is responsible, located or to be located in or on the premises and shall promptly replace or repair the same within twenty (20) days after such loss, theft or damage (except that if any such repair requires activity over a period of time, then the Lessee shall commence to perform such repair within such twenty (20) day period and shall diligently proceed therewith without interruption); and the Lessee shall yield and deliver the same or replacements thereof to the Port Authority at the expiration or earlier termination of the letting under this Agreement in the same condition as at the commencement of the letting, reasonable wear not materially affecting the efficient use and functioning of the same excepted.

(e) (1) Until and unless the berthing area has been deepened as part of the Lessee's Construction Work to forty-nine (49) feet below mean low water, upon sixty (60) days' notice from the Lessee that any part of the berthing area, except the Forty Foot Area, as hereinafter defined, has shallowed to a depth of thirty-five (35) feet below mean low water, then upon the Lessee's making such part of the berthing area available for dredging operations, the Port Authority, at no expense to the Lessee, shall proceed (to the extent permitted by governmental authorities having jurisdiction) to dredge such part of the berthing area specified in the said notice (or such portion thereof as may be necessary), either directly or through a contractor, to a depth of thirty-seven (37) feet below mean low water. Notwithstanding the provisions set forth above in this subparagraph, upon sixty (60) days' notice from the Lessee that any part of the Forty Foot Area has shallowed to a depth of forty (40) feet below mean low water, then upon the Lessee's making such part of the berthing area available for dredging operations, the Port Authority, at no expense to the Lessee, shall proceed (to the extent permitted by governmental authorities having jurisdiction) to dredge such part of the berthing area specified

in the said notice (or such portion thereof as may be necessary), either directly or through a contractor, to a depth of Forty-two (42) feet below mean low water. "Forty Foot Area" shall mean the approximately one thousand two hundred (1,200) linear feet of the berthing area extending from Station 20 to Station 32. The term "mean low water" as used in this subparagraph shall mean mean low water as most recently at the time of execution of this Agreement determined by observations of the United States Coast and Geodetic Survey. Notwithstanding the foregoing, any dredging required under this subparagraph shall be only such as shall produce (or leave in place) such depths and slopes as may be required in the opinion of the Port Authority for underwater support of structures, which opinion shall be controlling.

(2) From and after such time that the deepening of the berthing area has been completed as part of the Lessee's Construction Work to a depth of at least forty-nine (49) feet below mean low water (which depth of at least forty-nine (49) feet below mean low water in the part of the berthing area designated in subdivision (viii) of paragraph (a)(1) of Section 8 hereof and any other part of the berthing area so deepened by the Lessee, as any such depth may from time to time during the term of the letting be further increased by the Lessee at its sole cost and expense, is hereinafter in this subparagraph called the "Existing Depth"), upon sixty (60) days' notice from the Lessee that any part of the berthing area has shallowed to a depth below mean low water of two (2) feet less than its Existing Depth, then upon the Lessee's making such part of the berthing area available for dredging operations, the Port Authority, at no expense to the Lessee, shall proceed (to the extent permitted by governmental authorities having jurisdiction) to dredge such part of the berthing area specified in the said notice (or such portion thereof as may be necessary), either directly or through a contractor, to its Existing Depth. The term "mean low water" as used in this subparagraph shall mean mean low water as most recently at the time of execution of this Agreement determined by observations of the United States Coast and Geodetic Survey. Notwithstanding the foregoing, any dredging required under this subparagraph shall be only such as shall produce (or leave in place) such depths and slopes as may be required in the opinion of the Port Authority for underwater support of structures, which opinion shall be controlling.

(3) From and after such time that the deepening of the berthing area has been completed as part of the Lessee's Construction Work to a depth of at least fifty-two (52) feet below mean low water (which depth of at least fifty-two (52) feet below mean low water in the part of the berthing area designated in subdivision (ix) of paragraph (a)(1) of Section 8 hereof and any other part of the berthing area so deepened by the Lessee, as any such depth may from time to time during the term of the

letting be further increased by the Lessee at its sole cost and expense, is hereinafter in this subparagraph called the "Existing Depth"), upon sixty (60) days' notice from the Lessee that any part of the berthing area has shallowed to a depth below mean low water of two (2) feet less than its Existing Depth, then upon the Lessee's making such part of the berthing area available for dredging operations, the Port Authority, at no expense to the Lessee, shall proceed (to the extent permitted by governmental authorities having jurisdiction) to dredge such part of the berthing area specified in the said notice (or such portion thereof as may be necessary), either directly or through a contractor, to its Existing Depth. The term "mean low water" as used in this subparagraph shall mean mean low water as most recently at the time of execution of this Agreement determined by observations of the United States Coast and Geodetic Survey. Notwithstanding the foregoing, any dredging required under this subparagraph shall be only such as shall produce (or leave in place) such depths and slopes as may be required in the opinion of the Port Authority for underwater support of structures, which opinion shall be controlling.

(4) Notwithstanding any other provision of this Section, in the event that the Port Authority shall determine that the Estimated Cubic Yard Cost, as hereinafter defined, will exceed Eighty Dollars and No Cents (\$80.00) (which amount is hereinafter called "the Base Cost"), the Port Authority shall not be obligated to perform the dredging work set forth in subparagraph (1), (2) or (3) of this paragraph unless the Lessee shall pay for any amount of the Estimated Cubic Yard Cost which shall exceed the Base Cost. "The Estimated Cubic Yard Cost" shall mean the cost on average of dredging the portion of the berthing area described in the Lessee's notice given to the Port Authority under the aforesaid subparagraphs per cubic yard calculated from the difference in bottom elevations as determined by pre-dredge soundings and the bottom elevations (including normal overdredge amounts) called for hereunder, with such estimate to include, but not be limited to, the cost of dredging, transportation, processing (including amendment, separation, removal, transportation and disposal of trash and debris), disposal (including mobilization at disposal sites) of any dredged material, insurances, compliance with environmental laws and obtaining necessary permits, work to address unanticipated site conditions, and an amount equal to one hundred fifteen percent (115%) of all of the direct staff costs to the Port Authority attributable to all of the foregoing. In the event that the Port Authority shall determine that the Estimated Cubic Yard Cost of any such dredging will exceed the Base Cost, the Port Authority shall so notify the Lessee and the Lessee shall have the right to elect to have the dredging performed subject to its obligation to pay for any such excess cost. In the event that the Lessee shall not elect to pay such excess cost of the

dredging, the Port Authority shall be relieved of its obligation to perform such dredging until such time, if ever, that it shall determine that the Estimated Cubic Yard Cost of such dredging does not exceed the Base Cost. The Base Cost shall be subject to adjustment during the term of the letting under this Agreement in accordance with the provisions of subparagraph (5) of this paragraph.

(5) As used in this subparagraph:

(i) "Index" shall mean the Construction Cost Index published by ENR Magazine.

(ii) "Base Period" shall mean the calendar month of November, 2000.

(iii) "Adjustment Period" shall mean, as the context requires, the calendar month of November, 2001 and the calendar month of November in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(iv) "Anniversary Date" shall mean, as the context requires, December 1, 2001 and each anniversary of such date which thereafter occurs during the term of the letting under this Agreement.

(v) "Percentage Change" shall mean the percentage of change in the Index on each Anniversary Date equal to a fraction the numerator of which shall be the difference between (aa) the Index for the Adjustment Period immediately preceding such Anniversary Date and (bb) the Index for the Adjustment Period immediately preceding the Anniversary Date which immediately precedes such Anniversary Date, and the denominator of which shall be the Index for the Adjustment Period immediately preceding the Anniversary Date which immediately precedes such Anniversary Date.

Commencing on each Anniversary Date and for the period commencing with such Anniversary Date and continuing through the day preceding the next Anniversary Date, or the expiration date of the term of the letting under this Agreement, as the case may be, the Base Cost set forth in subparagraph 4 of this paragraph shall be adjusted by adding to or subtracting from the Base Cost, as the case may be, the product obtained by multiplying the Base Cost by the Percentage Change for such Anniversary Date. For purposes of any adjustment under this subparagraph, the Base Cost employed in the calculation described in the immediately preceding sentence shall be the Base Cost as previously adjusted under this paragraph.

In the event the Index shall hereafter be converted to a different standard reference base or otherwise revised or ENR Magazine shall cease to publish the Index, then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in construction costs in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine. If after an adjustment in the Base Cost shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the adjustment of the Base Cost for that period shall be recomputed accordingly.

(6) Notwithstanding any other provision of this Section, the Port Authority shall not be obligated to perform the dredging work set forth in subparagraph (1), (2) or (3) of this paragraph as to any part of the portion of the berthing area described in the Lessee's notice given to the Port Authority under the aforesaid subparagraphs as long as any vessel or other floating structure, equipment or other personal property (whether or not intended to be floating) is sunk, settled or partially or wholly submerged in such part of the berthing area. The provisions of this subparagraph shall be applicable whether or not the aforesaid object is owned by the Lessee or is connected in any way with the Lessee or its occupancy of or operations at the premises. The Port Authority shall have no obligation to raise or remove any such object unless its presence in the berthing area predates the effective date of this Agreement or is the result of the sole negligence or willful act of the Port Authority.

(f) Except under circumstances as to which paragraph (b) of this Section applies, upon receipt of notice that repair or replacement of such of the following as are located in or are a part of the premises is required: (1) the structure of the wharf, fender systems (but not backing logs or bumpers), and standard mooring devices; (2) the water distribution system (i) up to the closer of twenty (20) feet from the exterior building walls of the building being serviced or the valve connection thereto and (ii) up to the closer of the ships' water pits or the single meter on the premises or closest meter on the premises servicing said water pit (but in no event the ships' water pits themselves); and (3) the underground sanitary systems; the Port Authority will make such repairs and replacements to the extent necessary to keep such part of the premises in a reasonably good condition for the operations of the Lessee hereunder, but the Port Authority shall not be obligated to make any repairs or replacements to bring the premises, excepting the wharf, to a better condition than that existing at the commencement of the letting, or to bring the wharf to a better condition than that existing upon the completion of the Wharf Rehabilitation Work, as

defined in Section 8B hereof. The Port Authority's responsibilities under this paragraph shall be limited to bearing the expense of repair or replacement, and without limiting the foregoing the Port Authority shall have no responsibility with respect to any repairs or replacements which are the obligation of the Lessee under any other provision of this Agreement. The Port Authority shall have no responsibility with respect to any repairs or replacements which are required because of any casualty whether or not insured or insurable, except as expressly provided in Section 17 of this Agreement. If the Port Authority shall fail, after a reasonable period of time to perform its repair and replacement obligations under this paragraph, the Lessee, as its sole remedy, shall perform the work, and the Port Authority shall on demand pay the Lessee its actual certified cash expenditures to third parties therefor, or, at the option of the Port Authority, shall extend to the Lessee a credit against its rental obligations under this Agreement in an amount equal to such expenditures. Furthermore, prior to the commencement by the Port Authority of any work set forth in the Lessee's notice to the Port Authority, the Lessee shall take all precautions necessary to protect persons or property at the Facility, including the immediate performance by the Lessee of any work required to correct conditions which involve danger to persons or property, and the Port Authority will reimburse the Lessee for such work as provided in this paragraph. The Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, agents, and representatives, from and against all claims and demands, including but not limited to claims and demands for death, claims and demands for personal injuries, and claims and demands for property damages, of any third persons whatsoever, including, but not limited to, the Lessee's officers, employees, agents, and representatives which may arise from the condition of the premises or any part thereof, or from the failure of the Lessee to notify the Port Authority of conditions requiring repair or replacement, or from the failure of the Lessee to make timely corrections of dangerous or potentially dangerous conditions in or on the premises. Except as set forth above, the Lessee hereby releases and discharges the Port Authority, its Commissioners, officers, employees, agents, and representatives from any liability for damages to the Lessee, consequential, or otherwise, in connection with any of the provisions of this paragraph concerning repairs or replacements to any portion of the premises, including without limitation thereto any failure on the part of the Port Authority for any reason whatsoever to make any repair or replacement, and including without limitation thereto any act or omission of the Port Authority, its officers, agents, employees, contractors or their employees, connected with the performance of such repairs or replacements.

Section 17. Casualty

(a) In the event that as a result of a casualty, whether or not insured or insurable, the premises are damaged the Lessee shall rebuild the same with due diligence. Without in any way limiting the obligations of the Lessee set forth in the first sentence of this paragraph, with respect to all portions of the premises, the Lessee shall secure and maintain in its own name as assured and shall pay the premiums on the following policy of insurance in the limit set forth below, which policy shall be effective during the term of the letting under this Agreement:

(1) All risk property damage insurance covering the full replacement cost of any property owned, leased, or within the care, custody or control of the Lessee and now or in the future located on or constituting a part of the premises, except for any personal property owned by the Port Authority. Full replacement cost shall be determined by the Port Authority. No omission on the part of the Port Authority to make such determination shall relieve the Lessee of its obligations to maintain the appropriate insurance under this paragraph. Such insurance shall cover and insure against such hazards and risks as at least would be insured against under the Standard Form of Fire Insurance policy in the State of New Jersey, or any successor thereto, and the broadest form of extended coverage endorsement prescribed as of the effective date of said insurance by the rating organization having jurisdiction, including without limitation hazards and risks of flood, earthquake, windstorm, cyclone, tornado, hail, explosion, riot, civil commotion, aircraft, vehicles, smoke, and boiler and machinery hazards and risks, and, if the Port Authority so requests, also covering nuclear property losses and contamination (if said coverage regarding nuclear property losses and contamination is or becomes available).

(2) Unless otherwise directed by the Port Authority, the property damage insurance policy required by this paragraph shall name the Port Authority and the Lessee (with insurance clauses consistent with the provisions of this Agreement) as the insureds, as their respective interests may appear, and shall provide that loss, if any, shall be adjusted with and payable to the Port Authority. As to any insurance required by this paragraph, a certificate of insurance, or binders, shall be delivered by the Lessee to the Port Authority on or before the Commencement Date. In the event any binder is delivered, it shall be replaced within thirty (30) days by a certificate of insurance. Each such policy shall contain a valid provision or endorsement that the policy may not be cancelled, terminated, changed or modified, without giving at least thirty (30) days' written



advance notice thereto to the Port Authority and an endorsement to the effect that the insurance as to the interest of the Port Authority shall not be invalidated by any act or negligence of the Lessee or any other insured. Each policy of insurance shall have attached thereto an endorsement that the Port Authority will be given at least thirty (30) days' prior notice of any material change in the policy. A certificate of insurance with respect to a renewal policy shall be delivered to the Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy, except for any policy expiring after the date of expiration of the effective period hereof. If at any time the policy required by this paragraph shall be or become unsatisfactory to the Port Authority as to form or substance, or if the carrier issuing such policy shall be or become unsatisfactory to the Port Authority, the Lessee shall promptly obtain a new and satisfactory policy in replacement.

The proceeds of insurance from coverages secured in accordance with this paragraph shall be made available to the Lessee and shall be applied by the Lessee strictly and solely to the repair, replacement, or rebuilding of the premises as provided in this Agreement. The procedures for such rebuilding shall be the same as for the initial construction as set forth in Section 8 hereof. The Lessee shall not be entitled to any abatement of the rentals payable hereunder at any time by reason of such casualty.

(b) If there shall be an excess of the proceeds of insurance over the cost of the repair, replacement or rebuilding of the premises as required under paragraph (a) of this Section, then the Lessee shall identify to the Port Authority other capital improvements on the premises beyond the aforesaid work required in connection with the casualty, including, without limitation, any portion of the Lessee's Construction Work, and the Port Authority shall make such excess proceeds available to the Lessee for such capital improvements; provided, however, that the Lessee shall commence such capital improvements within one (1) year of the Port Authority's receipt of the proceeds of insurance, and if the Lessee shall not so proceed in a timely manner, all of such proceeds shall be returned to the Port Authority regardless of any expenditure by the Lessee on such capital improvements.

(c) The Port Authority and the Lessee hereby stipulate that neither the provisions of Titles 46:8-6 and 46:8-7 of the Revised Statutes of New Jersey nor those of any other similar statute shall extend or apply to this Agreement.

(d) In the event of damage to or a partial or total destruction of the premises, the Lessee shall within thirty (30) days after the occurrence commence to remove from the premises or from the portion thereof destroyed, all damaged property (and all debris thereof) including damaged buildings and structures, and all damaged property belonging to the Lessee or to any third person whatsoever, and thereafter shall diligently continue such removal, and if the Lessee does not perform its obligation hereunder, the Port Authority may remove such debris and dispose of the same and may remove such property to a public warehouse for deposit or may retain the same in its own possession and sell the same at public auction, the proceeds of which shall be applied first to the expenses of removal, storage and sale, and second to any sums owed by the Lessee to the Port Authority, with any balance remaining to be paid to the Lessee; if the expenses of such removal, storage and sale shall exceed the proceeds of sale, the Lessee shall pay such excess to the Port Authority on demand. Without limiting any term or provision of this Agreement, the Lessee shall indemnify and save harmless the Port Authority, its officers, agents, employees, contractors and subcontractors, from and against any and all claims of third persons arising out of the exercise by the Port Authority of its right to remove property as hereinabove provided including all claims for conversion, all claims for damage or destruction of property, all claims for injuries to persons (including death), and all other claims for damages, consequential or otherwise.

**Section 18. Assignment and Sublease**

(a) The Lessee covenants and agrees that it will not sell, convey, transfer, assign, mortgage or pledge this Agreement or any part thereof, or any rights created thereby or the letting thereunder or any part thereof, without the prior written consent of the Port Authority.

(b) The Lessee shall not sublet the premises or any part thereof without the prior written consent of the Port Authority.

(c) If the Lessee assigns, sells, conveys, transfers, mortgages, pledges or sublets in violation of paragraphs (a) or (b) of this Section or if the premises are occupied by any person, firm or corporation other than the Lessee, the Port Authority may collect rent from any assignee, sublessee, or anyone who claims a right to this Agreement or to the letting or who occupies the premises, and shall apply the net amount collected to the rental herein reserved; and no such collection shall be deemed a waiver by the Port Authority of the covenants contained in paragraphs (a) and (b) of this Section, nor an acceptance by the Port Authority of any such assignee, sublessee, claimant or occupant as tenant, nor a release of the Lessee by

the Port Authority from the further performance by the Lessee of the covenants contained in this Agreement.

(d) The Lessee further covenants and agrees that it will not use or permit any person whatsoever to use the Facility or any portion thereof for any purpose other than as provided in Section 7 of this Agreement.

Section 19. Condemnation

(a) (1) Upon the acquisition by condemnation or the exercise of the power of eminent domain by anybody having a superior power of eminent domain of an interest in all or any part of the premises, or in the case of any deed, lease or other conveyance in lieu thereof (any such acquisition under this Section 19 being hereinafter referred to as a "taking" or "conveyance"), the Port Authority shall purchase from the Lessee, and the Lessee shall sell to the Port Authority, the Lessee's leasehold interest (excluding any of its personal property whatsoever) in the premises, except that in the event of a taking of less than all of the said premises, the Port Authority shall purchase and the Lessee shall sell only so much of the Lessee's leasehold interest in the premises as are taken. The sole and entire consideration to be paid by the Port Authority to the Lessee shall be an amount equal to the Unamortized Investment of the Lessee in the Generic Work (as defined in Section 42(a) hereof), if any, of the Lessee in the premises or, in the event of a permanent taking of less than all of the said premises, an amount equal to the Unamortized Investment of the Lessee in the Generic Work (as such defined in Section 42(a) hereof), if any, of the Lessee in so much of the premises as are taken. However, the Port Authority shall purchase and the Lessee shall sell only if the consideration paid by the Port Authority therefor will constitute "unamortized Port Authority funds other than bond proceeds or federal or state grants, expended for capital improvements at the Newark Marine and Air Terminals", within the meaning of said phrase as used in Section 26, I, D of the Basic Lease or if an amount not less than such consideration can otherwise be retained by the Port Authority (and not be required to be paid to The City of Newark) out of the damages or award in respect to such taking without violation of any obligation of the Port Authority to The City of Newark under the Basic Lease. Such purchase and sale shall take effect as of the date upon which such body having superior power of eminent domain obtains possession of any such interest in the premises, and in that event, the Lessee (except with respect to its personal property), shall not have any claim or right to claim or be entitled to any portion of the amount which may be awarded as damages or paid as a result of such taking, and all rights to damages, if any, of the Lessee (except for damages to its personal property) by reason thereof are hereby assigned to the Port Authority.

(2) In the event of the taking of all of the premises and if the Lessee has no Unamortized Investment of the Lessee in the Generic Work (as defined in Section 42(a) hereof) in the premises at the time of the taking, then the aforesaid agreement to purchase and sell said leasehold interest shall be null and void; and in that event, this Agreement and all rights granted by this Agreement to the Lessee to use or occupy the premises for its exclusive use and all rights, privileges, duties and obligations of the parties in connection therewith or arising thereunder shall terminate as of the date of the taking, and in that event, the Lessee (except with respect to its personal property) shall not have any claim or right to claim or be entitled to any portion of the amount which may be awarded as damages or paid as a result of such taking, and all rights to damages, if any, of the Lessee (except for damages to its personal property and its moving expenses) by reason thereof are hereby assigned to the Port Authority.

(3) In the event that the taking covers fifty percent (50%) or more of the total usable area of the premises, then the Lessee and the Port Authority shall each have an option exercisable by notice given within ten (10) days after the effective date of such taking to terminate the letting hereunder with respect to the premises not taken, as of the date of such taking and such termination shall be effective as if the date of such taking were the original date of expiration hereof. If the Port Authority exercises this option, it shall purchase from the Lessee the Lessee's leasehold interest (excluding any of its personal property whatsoever) in the premises not taken for a consideration equal to the Unamortized Investment of the Lessee in the Generic Work (as defined in Section 42(a) hereof), if any, of the Lessee in the premises not taken. If the letting of the entire premises is not terminated the settlement or abatement of rentals after the date possession is taken by the body having a superior power of eminent domain shall be in accordance with Section 50 hereof.

(b) In the event that all or any portion of the premises is required by the Port Authority to comply with any present or future governmental law, rule, regulation, requirement, order or direction, the Port Authority may by notice, which if practicable shall be given ninety (90) days in advance, to the Lessee terminate the letting with respect to all or such portion of the premises so required. Such termination shall be effective on the date specified in the notice. The Lessee hereby agrees to deliver possession of all or such portion of the premises so required upon the effective date of such termination in the same condition as that required for the delivery of the premises upon the date originally fixed by this Agreement for the expiration of the term of the letting. No

taking by or conveyance to any governmental authority as described in paragraph (a) of this Section, nor any delivery by the Lessee nor taking by the Port Authority pursuant to this paragraph, shall be or be construed to be an eviction of the Lessee or a breach of this Agreement or be made the basis of any claim by the Lessee against the Port Authority for damages, consequential or otherwise.

(c) Except as set forth in subparagraph (1) of paragraph (a) of this Section, in the event that the taking or conveyance covers the entire premises, or in the event that the letting is terminated with respect to the entire premises pursuant to paragraph (b) of this Section, then this Agreement shall, as of the date possession is taken by such agency or agencies from the Port Authority, or as of the effective date of such termination, cease and determine in the same manner and with the same effect as if the said date were the original date of expiration hereof.

(d) Except as set forth in subparagraph (1) of paragraph (a) of this Section, in the event that the taking or conveyance covers a part only of the premises, or in the event that the letting is terminated pursuant to paragraph (b) of this Section with respect to a part only of the premises, then the letting as to such part shall, as of the date possession thereof is taken by such agency or agencies, or as of the effective date of such termination, cease and determine in the same manner and with the same effect as if the term of the letting had on that date expired, and the basic rental shall be abated as provided in Section 50 hereof.

(e) In the event that the taking by the Port Authority pursuant to paragraph (b) of this Section covers fifty per cent (50%) or more of the total usable area of the premises, then the Lessee and the Port Authority shall each have an option exercisable by notice given within ten (10) days after such taking to terminate the letting hereunder, as of the date of such taking, and such termination shall be effective as if the date of such taking were the original date of expiration hereof.

#### Section 20. Construction by the Lessee

Except as may be otherwise expressly provided in Section 8 hereof, the Lessee shall not erect any structures, make any improvements or do any other construction work on the premises or alter, modify or make additions, improvements or repairs to or replacements of, any structure now existing or built at any time during the letting, or install any fixtures without the prior consent of the Port Authority. Except for the Lessee's personal property, in the event any construction, improvement, alteration, modification, addition, repair or replacement is made, with or

without the Port Authority's consent, and unless the consent of the Port Authority shall expressly provide otherwise, the same shall immediately become the property of the Port Authority, and the Lessee shall have no right to remove the same either during the letting or at the expiration thereof unless the Port Authority, at any time prior to the expiration of the term of the letting, or any extension or renewal thereof, shall give notice to the Lessee to remove the same, or to cause the same to be changed to the satisfaction of the Port Authority, in which case the Lessee agrees to remove the same, or change it in compliance with such notice. In case of any failure on the part of the Lessee to comply with such notice, the Port Authority may effect the removal or change, and the Lessee hereby agrees to pay the cost thereof to the Port Authority upon demand.

Section 21. Additional Rent and Charges

(a) If the Port Authority has paid any sum or sums or has incurred any obligations or expense which the Lessee has agreed to pay or reimburse the Port Authority for, or if the Port Authority is required or elects to pay any sum or sums or incurs any obligations or expense by reason of the failure, neglect or refusal of the Lessee to perform or fulfill any one or more of the conditions, covenants or agreements contained in this Agreement or as a result of an act or omission of the Lessee contrary to the said conditions, covenants and agreements, the Lessee shall pay to the Port Authority the sum or sums so paid or the expense so incurred, including all interest, costs, damages and penalties, and the same may be added to any installment of rent thereafter due hereunder, and each and every part of the same shall be and become additional rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of any of the rentals set forth in this Agreement. No payment made by the Lessee to the Port Authority under this Section shall be or be deemed a waiver by the Lessee of any right to contest its making of such payment.

(b) Should the Port Authority elect to use its operating and maintenance staff in performing any work and to charge the Lessee with the cost thereof, any time report of any employee of the Port Authority showing hours of work or labor allocated to such work, or any stock requisition of the Port Authority showing the issuance of materials for use in the performance thereof, shall be prima facie evidence against the Lessee that the amount of such charge was necessary.

(c) The term "cost" in this Section shall mean and include: (1) Payroll costs, including contributions to the Retirement System, or the cost of participation in other pension plans or systems, insurance costs, sick-leave pay, holiday, vacation and authorized-absence pays; (2) Cost of materials and

supplies used; (3) Payments to contractors; (4) Any other direct costs; and (5) 30% of the sum of the foregoing.

Section 22. Rights of Entry Reserved

(a) The Port Authority, by its officers, employees, agents, representatives and contractors shall have the right at all reasonable times to enter upon the premises for the purpose of inspecting the same, for observing the performance by the Lessee of its obligations under this Agreement, and for the doing of any act or thing which the Port Authority may be obligated or have the right to do under this Agreement or otherwise.

(b) Without limiting the generality of the foregoing, the Port Authority, by its officers, employees, agents, representatives, and contractors, and on behalf of furnishers of utilities and other services, shall have the right, for its own benefit, for the benefit of the Lessee, or for the benefit of others than the Lessee at the Facility, to maintain existing and future utility, mechanical, electrical and other systems and to enter upon the premises at all reasonable times to make such repairs, replacements or alterations as the Port Authority shall deem necessary or advisable and, from time to time, to construct or install over, in or under the premises new systems or parts thereof, and to use the premises for access to other parts of the Facility otherwise not conveniently accessible; provided, however that in the exercise of such rights of access, repair, alteration or new construction the Port Authority shall not unreasonably interfere with the use and occupancy of the premises by the Lessee.

(c) In the event that any property of the Lessee shall obstruct the access of the Port Authority, its employees, agents or contractors to any of the existing or future utility, mechanical, electrical and other systems and thus shall interfere with the inspection, maintenance or repair of any such system, the Lessee shall move such property, as directed by the Port Authority, in order that the access may be had to the system or part thereof for its inspection, maintenance or repair, and, if the Lessee shall fail so to move such property after written direction from the Port Authority to do so, the Port Authority may move it and the Lessee hereby agrees to pay the cost of such moving upon demand.

(d) Nothing in this Section shall impose, or shall be construed to impose upon the Port Authority any obligations so to construct or maintain or to make repairs, replacements, alterations or additions, or shall create any liability for any failure so to do. The Lessee is and shall be in exclusive control and possession of the premises and the Port Authority shall not in any event be liable for any injury or damage to any

property or to any person happening on or about the premises or for any injury or damage to the premises or to any property of the Lessee or of any other person located therein or thereon (other than those occasioned by the acts of the Port Authority).

(e) At any time and from time to time during ordinary business hours within the three (3) months next preceding the expiration of the letting, the Port Authority, by its agents and employees, whether or not accompanied by prospective lessees, occupiers or users of the premises, shall have the right to enter thereon for the purpose of exhibiting and viewing all parts of the same, and during such three-month period the Port Authority may place and maintain on the premises, the usual "To Let" signs, which signs the Lessee shall permit to remain without molestation.

(f) If, during the last month of the letting, the Lessee shall have removed all or substantially all its property from the premises and shall have discontinued operations, the Port Authority may immediately enter and alter, renovate and redecorate the premises.

(g) The exercise of any or all of the foregoing rights by the Port Authority or others shall not be or be construed to be an eviction of the Lessee nor be made the grounds for any abatement of rental nor any claim or demand for damages, consequential or otherwise.

### Section 23. Limitation of Rights and Privileges Granted

(a) The premises are let to the Lessee and the Lessee takes the same subject to all the following: (i) easements, restrictions, reservations, covenants and agreements, if any, to which the premises may be subject; rights of the public in and to any public street; (ii) rights, if any, of any enterprise, public or private, which is engaged in furnishing heating, lighting, power, telegraph, telephone, steam, or transportation services and of the municipality and State in which the premises are located; (iii) permits, licenses, regulations and restrictions, if any, of the United States the municipality or State in which the premises are located, or other governmental authority.

(b) No greater rights or privileges with respect to the use of the premises or any part thereof are granted or intended to be granted to the Lessee by this Agreement, or by any provision thereof, than the rights and privileges expressly and specifically granted.

(c) Nothing in this Agreement contained shall grant to the Lessee any rights whatsoever in the air space above the roof



of any building or buildings or portion of any building or buildings, if any are included in the premises (except to the extent required in either case for the performance of any of the obligations of the Lessee hereunder), or more than twenty (20) feet above the present ground level of any open area included in the premises (except to the extent required for the operation of the container cranes on the premises and the movement and storage of containers). If any construction or installation is contemplated in this Agreement, the height thereof above ground shall be as determined solely by the Port Authority.

Section 24. Prohibited Acts

(a) The Lessee shall not do or permit to be done anything which may interfere with the effectiveness or accessibility of the drainage and sewerage system, water system, communications system, fuel system, electrical, fire-protection system, sprinkler system, alarm system, fire hydrants and hoses and other systems, if any, installed or located on, under, or in the premises.

(b) The Lessee shall not dispose of nor permit any one to dispose of any waste material (whether liquid or solid) by means of the toilets, manholes, sanitary sewers or storm sewers in the premises or on the Facility except after treatment in installations or equipment included in plans and specifications submitted to and approved by the Port Authority.

(c) The Lessee shall not operate any engine or any item of automotive equipment in any enclosed space on the premises unless such space is adequately ventilated and unless such engine or item of automotive equipment is equipped with a proper spark arresting device which has been approved by the Port Authority.

(d) Unless otherwise expressly permitted so to do, the Lessee shall not install, maintain or operate, or permit the installation, maintenance or operation on the premises of any vending machine or device designed to dispense or sell food, beverages, tobacco, tobacco products or merchandise of any kind, whether or not included in the above categories, or of any restaurant, cafeteria, kitchen, stand or other establishment of any type for the preparation, dispensing or sale of food, beverages, tobacco, tobacco products or merchandise of any kind, whether or not included in the above categories or of any equipment or device for the furnishing to the public of service of any kind, including therein, without limitation thereto, telephone pay-stations.

(e) The Port Authority, by itself, or by contractors, lessees, or permittees, shall have the exclusive right to install, maintain and receive and retain the revenues from all

coin-operated or other machines or devices for the sale of merchandise of all types, or for the rendering of services, which may be operated on the premises, provided, however, that no such machine or device shall be installed except upon the request of the Lessee. This provision shall not be construed to confer upon the Lessee any right to have such machine installed except at the sole discretion of the Port Authority.

(f) The Lessee shall not overload any floor and shall repair any floor, including supporting members, and any paved area damaged by overloading. Nothing in this paragraph or elsewhere in this Agreement shall be or be construed to be a representation by the Port Authority of the weight any floor will bear.

(g) The Lessee shall not fuel or defuel its automotive vehicles or other equipment in the enclosed portions of the premises without the prior approval of the Manager of the Facility.

(h) The Lessee shall not keep or store in the premises, explosives, inflammable liquids or solids or oxidized materials or use any cleaning materials having a harmful corrosive effect on any part of the premises, except for those materials normally used in the operation of a marine terminal and stored in a structure normally used for the storage of such materials and made safe for the storage thereof.

(i) The Lessee shall not use or permit the use of any truss or structural supporting member of the building or roof or any part thereof for the storage of any material or equipment, or to hoist, lift, move or support any material or equipment or other weight or load, by means of said trusses or structural supporting members.

(j) The Lessee shall not dispose of, release or discharge nor permit anyone to dispose of, release or discharge any Hazardous Substance on or from the premises, and shall not dispose of, release or discharge or permit anyone subject to its control or authority to dispose of, release or discharge any Hazardous Substance at the Facility. Any Hazardous Substance disposed of, released or discharged by the Lessee (or permitted by the Lessee to be disposed of, released or discharged) on or from the premises or at the Facility, shall upon notice by the Port Authority to the Lessee and subject to the provisions of Section 20 hereof, be completely removed, cleaned up and/or remediated by the Lessee. The obligations of the Lessee pursuant to this paragraph shall survive the expiration or termination of this Agreement.

Section 25. Termination

(a) If any one or more of the following events shall occur, that is to say:

(1) The Lessee shall become insolvent, or shall take the benefit of any present or future insolvency statute, or shall make a general assignment for the benefit of creditors, or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement or its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any other law or statute of the United States or of any State thereof, or consent to the appointment of a receiver, trustee, or liquidator of all or substantially all of its property; or

(2) By order or decree of a court the Lessee shall be adjudged bankrupt or an order shall be made approving a petition filed by any of its creditors or, if the Lessee is a corporation, by any of its stockholders, seeking its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any law or statute of the United States or of any State thereof; or

(3) A petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute shall be filed against the Lessee and shall not be dismissed within thirty (30) days after the filing thereof; or

(4) The letting or the interest of the Lessee under this Agreement shall be transferred to, pass to or devolve upon, by operation of law or otherwise, any other person, firm or corporation; or

(5) The Lessee shall, without the prior approval of the Port Authority, become a possessor or merged corporation in a merger, a constituent corporation in a consolidation, or a corporation in dissolution; or

(6) If the Lessee is a partnership, the said partnership shall be dissolved as the result of any act or omission of its partners or any of them, or by operation of law or the order or

decree of any court having jurisdiction, or for any other reason whatsoever; or

(7) By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of the Lessee, and such possession or control shall continue in effect for a period of fifteen (15) days; or

(8) (i) The Lessee shall voluntarily abandon, desert or vacate the premises or discontinue its operations at the premises or at the Facility or (ii) after exhausting or abandoning any right of further appeal, the Lessee shall be prevented for a period of thirty (30) days by action of any governmental agency from conducting its operations on the premises, regardless of the fault of the Lessee; or

(9) Any lien shall be filed against the premises because of any act or omission of the Lessee and shall not be discharged or bonded within thirty (30) days; or

(10) The Lessee shall fail duly and punctually to pay the rental or to make any other payment required under this Agreement when due to the Port Authority; or

(11) The Lessee shall fail to keep, perform and observe each and every other promise, covenant and agreement set forth in this Agreement, on its part to be kept, performed or observed, within twenty (20) days after its receipt of notice of default thereunder from the Port Authority (except where fulfillment of its obligation requires activity over a period of time, and the Lessee shall have commenced to perform whatever may be required for fulfillment within twenty (20) days after receipt of notice, and continues such performance without interruption except for causes beyond its control);

then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Port Authority may by twenty (20) days' written notice terminate the letting and the rights of the Lessee under this Agreement, such termination to be effective upon the date specified in such notice. Such right of

termination and the exercise thereof shall be and operate as a conditional limitation.

(b) If any of the events enumerated in paragraph (a) of this Section shall occur prior to the commencement of the letting, the Lessee shall not be entitled to enter into possession of the premises, and the Port Authority, upon the occurrence of any such event, or at any time thereafter during the continuance thereof may, by twenty-four (24) hours' notice, cancel the interest of the Lessee under this Agreement, such cancellation to be effective upon the date specified in such notice.

(c) No acceptance by the Port Authority of rentals, fees, charges or other payments in whole or in part for any period or periods after a default of any of the terms, covenants and conditions hereof to be performed, kept or observed by the Lessee shall be deemed a waiver of any right on the part of the Port Authority to terminate the letting. No waiver by the Port Authority of any default on the part of the Lessee in performance of any of the terms, covenants or conditions hereof to be performed, kept or observed by the Lessee shall be or be construed to be a waiver by the Port Authority of any other or subsequent default in performance of any of the said terms, covenants and conditions.

(d) The rights of termination described above shall be in addition to any other rights of termination provided in this Agreement and in addition to any rights and remedies that the Port Authority would have at law or in equity consequent upon any breach of this Agreement by the Lessee, and the exercise by the Port Authority of any right of termination shall be without prejudice to any other such rights and remedies.

#### Section 26. Right of Re-entry

The Port Authority shall, as an additional remedy upon the giving of a notice of termination as provided in Section 25 of this Agreement, have the right to re-enter the premises and every part thereof upon the effective date of termination without further notice of any kind, and may regain and resume possession either with or without the institution of summary or other legal proceedings, or otherwise. Such re-entry, or regaining or resumption of possession, however, shall not in any manner affect, alter or diminish any of the obligations of the Lessee under this Agreement, and shall in no event constitute an acceptance of surrender.

Section 27. Waiver of Redemption

The Lessee hereby waives any and all rights to recover or regain possession of the premises and all rights of redemption, granted by or under any present or future law in the event it is evicted or dispossessed for any cause, or in the event the Port Authority obtains possession of the premises in any lawful manner.

Section 28. Survival of the Obligations of the Lessee

(a) In the event that the letting shall have been terminated in accordance with a notice of termination as provided in Section 25 of this Agreement (it being understood by the parties that this Section shall have no application to a termination pursuant to Section 25(a)(8)(ii)), or the interest of the Lessee shall have been cancelled pursuant thereto, or in the event that the Port Authority has re-entered, regained or resumed possession of the premises in accordance with the provisions of Section 26 of this Agreement, the Lessee shall pay to the Port Authority, upon such termination or cancellation, re-entry, regaining or resumption of possession, subject to the provisions of Section 29 hereof, the damages set forth in paragraph (b) of this Section, and the damages under subparagraph (b)(3) of this Section shall be payable to the Port Authority on the first anniversary of the first day of the first full calendar month next following the earlier of the date of termination or cancellation, re-entry, regaining or resumption of possession. The Port Authority may maintain separate actions from time to time to recover the damage or deficiency then due, if any, (less the proper discount), or at its option and at any time may sue to recover the full deficiency, if any, (less the proper discount) for the entire unexpired term.

(b) The amount or amounts of damages for the period of time subsequent to termination or cancellation (or re-entry, regaining or resumption of possession) shall be:

(1) the amount of all unfulfilled monetary obligations of the Lessee under this Agreement, including, without limitation thereto, all sums constituting additional rental under Section 21 of this Agreement, and all sums constituting the rentals under Section 3, Section 4, Section 5, Section 6 and Section 41(b) of this Agreement, accrued prior to the effective date of termination, and the cost to and expenses of the Port Authority for fulfilling all other obligations of the Lessee which would have accrued or matured during the balance of the term or on the expiration date originally fixed or within a stated time after expiration or termination; and

(2) an amount equal to the cost and the expenses of the Port Authority in connection with the termination, cancellation, regaining, possession and restoring and reletting the premises, the Port Authority's legal expenses and costs, and the Port Authority costs and expenses for the care and maintenance of the premises during any period of vacancy; and

(3) on account of the Lessee's obligations with respect to basic rental, the Container Throughput Rental, and the Guaranteed Rental, an amount equal to the fair market rental value of the leasehold, without calculation for present value, at the time of the first anniversary of the first day of the first full calendar month next following the earlier of the date of termination or cancellation, re-entry, regaining or resumption of possession.

(c) Notwithstanding any other provision of this Section, and without limiting the generality thereof, the Lessee shall pay to the Port Authority liquidated damages in the amounts set forth below in this paragraph. The aforesaid liquidated damages shall be payable in full by the Lessee to the Port Authority on the first day of the first calendar month next following the termination or cancellation (or re-entry, regaining or resumption of possession), and said liquidated damages shall be in addition to, and not in substitution of, any other damages payable under this Section. In addition, the said liquidated damages shall not be subject to reduction under the provisions of Section 29 hereof.

(1) On account of the Lessee's basic rental obligations, an amount equal to the basic rental payable under Sections 3 and 4 hereof for the twelve-month period commencing on the first day of the first calendar month next following the earlier of the date of termination or cancellation (or re-entry, regaining or resumption of possession); and

(2) On account of the Lessee's obligations under this Agreement with respect to the Container Throughput Rental and the Guaranteed Rental, an amount equal to the amount of each such rental payable by the Lessee during the period of twelve full calendar months immediately preceding the earlier of the date of termination or cancellation (or re-entry, regaining or resumption of possession).

(d) Without limiting the generality of any other provision of this Section, in the event that the letting shall have been terminated in accordance with a notice of termination

as provided in Section 25 of this Agreement, or the interest of the Lessee shall have been cancelled pursuant thereto, or in the event that the Port Authority has re-entered, regained or resumed possession of the premises in accordance with the provisions of Section 26 of this Agreement, the Port Authority shall have the right to require the Lessee to assign to the Port Authority any then outstanding contract or contracts entered into by the Lessee for the performance of the Lessee's Construction Work or the Lessee's Additional Work. The contract or contracts to be so assigned, if any, shall be determined by the Port Authority acting in its sole discretion and designated by written notice from the Port Authority to the Lessee. In the event that the Lessee shall assign any such contract to the Port Authority under the provisions of this paragraph, the Lessee shall be fully responsible and liable for the payment of any amounts accrued under such contract through the date that the letting shall have been terminated in accordance with a notice of termination as provided in Section 25 of this Agreement, or the interest of the Lessee shall have been cancelled pursuant thereto, or in the event that the Port Authority has re-entered, regained or resumed possession of the premises in accordance with the provisions of Section 26 of this Agreement. The Lessee agrees that it shall include in each contract entered into by it for the performance of the Lessee's Construction Work or the Lessee's Additional Work provisions allowing the assignment of said contract to the Port Authority. Nothing contained in this paragraph shall be or be deemed an agreement by the Port Authority to accept an assignment and/or to perform any contract entered into by the Lessee for the performance of the Lessee's Construction Work or the Lessee's Additional Work or shall create or be deemed to create any rights against the Port Authority in any contractor or other third party with respect to any such contract.

(e) Nothing contained above in this Section or in Section 29 hereof shall or shall be construed to lessen, limit, mitigate, release or in any way affect any of the obligations of the Lessee under Section 8, Section 9 or Section 31 of this Agreement, which obligations shall remain in full force and effect notwithstanding any such termination or cancellation, re-entry, regaining or resumption of possession.

Section 29. Reletting by the Port Authority

The Port Authority, upon termination or cancellation pursuant to Section 25 of this Agreement, or upon any re-entry, regaining or resumption of possession pursuant to Section 26 of this Agreement, may occupy the premises or may relet the premises and shall have the right to permit any person, firm or corporation to enter upon the premises and use the same. Such reletting may be of part only of the premises or of the premises, and for a period of time the same as or different from the balance of the term of the letting hereunder remaining, and on



terms and conditions the same as or different from those set forth in this Agreement. The Port Authority shall also, upon termination or cancellation pursuant to Section 25 of this Agreement, or upon re-entry, regaining or resumption of possession pursuant to Section 26 of this Agreement, have the right to repair and to make structural or other changes in the premises, including changes which alter the character of the premises and the suitability thereof for the purposes of the Lessee under this Agreement, without affecting, altering or diminishing the obligations of the Lessee hereunder. In the event either of any reletting or of any actual use and occupancy by the Port Authority (the mere right to use and occupy not being sufficient however) there shall be credited to the account of the Lessee against its survived obligations hereunder any net amount remaining after deducting from the amount actually received from any lessee, licensee, permittee or other occupier in connection with the use of the premises (or portion thereof) during the balance of the term of the letting as the same is originally stated in this Agreement, or from the market value of the occupancy of such portion of the premises as the Port Authority may itself during such period actually use and occupy, all reasonable expenses, reasonable costs and reasonable disbursements incurred or paid by the Port Authority in connection therewith. Neither any such letting nor any such other use or occupancy shall be or be construed to be an acceptance of a surrender. It is understood by the Port Authority and the Lessee that the Port Authority has no obligation to relet the premises or any portion thereof or to use or occupy the premises or any portion thereof itself, except to the extent as may be required by law; provided, however, that the Port Authority will offer the premises or portions thereof in the general maritime real estate rental market promptly upon the cessation of the Lessee's operations, removal by the Lessee of its equipment and trade fixtures removable without material damage to the premises, and its substantial restoration of the premises required under Section 31 of this Agreement.

Section 30. Remedies to Be Nonexclusive

All remedies provided in this Agreement shall be deemed cumulative and additional and not in lieu of or exclusive of each other or of any other remedy available to the Port Authority at law or in equity, and neither the exercise of any remedy, nor any provision in this Agreement for a remedy or an indemnity shall prevent the exercise of any other remedy.

Section 31. Surrender

(a) The Lessee covenants and agrees to yield and deliver peaceably to the Port Authority possession of the premises on the date of the cessation of the letting, whether such cessation be by termination, expiration or otherwise,

promptly and in the condition required by the provisions of Section 16(c) hereof regarding the condition of the premises at the expiration or termination of the letting hereunder; .

(b) Unless required for the performance by the Lessee of its obligations hereunder, the Lessee shall have the right at any time during the letting to remove from the premises, all its equipment, removable fixtures and other personal property, and all property of third persons for which the Lessee is responsible, and on or before the expiration or earlier termination of the letting it shall remove all of the same from the premises, repairing all damage caused by any removal; provided, however, that the Lessee shall have ninety (90) days from any termination (but not expiration) of the letting to remove any container cranes from the premises. If the Lessee shall fail to remove such property on or before the termination or expiration of the letting, the Port Authority may remove such property to a public warehouse for deposit or may retain the same in its own possession and in either event may sell the same at public auction, provided, however, that the Port Authority shall have given the Lessee twenty (20) days' notice of the Port Authority's intent to sell such property at public auction, the proceeds of which shall be applied: first to the expenses of removal, including repair required thereby, and of storage and sale; second, to any sums owed by the Lessee to the Port Authority, with any balance remaining to be paid to the Lessee; if the expenses of such removal, repair, storage and sale shall exceed the proceeds of sale, the Lessee shall pay such excess to the Port Authority upon demand. Without limiting any other term or provision of this Agreement, the Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, agents, employees and contractors from all claims of third persons arising out of the Port Authority's removal and disposition of property pursuant to this Section, including claims for conversion, claims for loss of or damage to property, claims for injury to persons (including death), and claims for any other damages, consequential or otherwise.

#### Section 32. Acceptance of Surrender of Lease

No agreement of surrender or to accept a surrender shall be valid unless and until the same shall have been reduced to writing and signed by the duly authorized representatives of the Port Authority and of the Lessee. Except as expressly provided in this Section, neither the doing of, nor any omission to do, any act or thing, shall be deemed an acceptance of a surrender of the letting or of this Agreement.

### Section 33. Notices

(a) All notices, permissions, requests, consents and approvals given or required to be given to or by either the Port Authority or the Lessee, except as otherwise expressly provided herein, shall be in writing, and all such notices and requests shall be (i) personally delivered to the party or to the duly designated officer or representative of such party; or (ii) delivered to an office of such party, officer or representative during regular business hours; or (iii) delivered to the residence of such party, officer or representative at any time; or (iv) forwarded to such party, officer or representative at the office or residence address by registered or certified mail, or delivered to such party at such address by "Federal Express" or similar courier service. In addition, notice to the Lessee may be delivered to the premises at any time to the offices of the terminal manager; provided, however, that said notice shall also be delivered to the Lessee as set forth in subdivision (i), (ii), (iii) or (iv) of the immediately preceding sentence. The Lessee shall designate an office within the Port of New York District and an officer or representative whose regular place of business is at such office. Until further notice, the Port Authority hereby designates its Executive Director, and the Lessee designates the person whose name appears on the first page of this Agreement as their respective officers or representatives upon whom notices and requests may be served, and the Port Authority designates its office at One World Trade Center, New York, New York 10048, and the Lessee designates its office, the address of which is set forth in Page 1 of this Agreement, as their respective offices where notices and requests may be served.

(b) If any notice is mailed or delivered, the giving of such notice shall be complete upon receipt or, in the event of a refusal by the addressee, upon the first tender of the notice to the addressee or at the permitted address.

### Section 34. General

(a) Wherever in this Agreement the Lessee agrees or is required to do or has the right to do, any act or thing, the following shall apply:

(1) If the Lessee is a corporation, its obligations shall be performed by it and its rights shall be exercised only by its officers and employees; or

(2) If the Lessee is a partnership, its obligations shall be performed and its rights shall be exercised by its partners and employees only; or

(3) If the Lessee is an individual, his obligations shall be performed and his rights shall be exercised by himself and his employees only;

except that the Lessee may use contractors, including without limitation P&O Ports North America Inc., in the performance of its obligations to maintain and repair the premises and to supply watching and stevedoring services, including, cooperating, clerking, checking, and extra labor functions at the Facility provided, that if separate contractors are engaged to perform any of the foregoing services nevertheless the active management, direction, administration and executive action involved in the operations of the Lessee shall all be performed at all times during the letting solely by the Lessee, its officers and employees, and provided, further, that the Lessee shall be fully responsible to the Port Authority for the acts and omissions of such contractors and their officers, agents, representatives, employees and persons on the premises with their consent to the same extent as if the same were the employees of the Lessee. None of the provisions of this paragraph (a) shall be taken to alter, amend or diminish any obligation of the Lessee assumed in relation to its invitees, business visitors, agents, representatives, contractors, customers, guests, or other persons, firms or corporations doing business with it or using or on or at the premises with its consent.

(b) If more than one individual or other legal entity is the Lessee under this Agreement, each and every obligation hereof shall be the joint and several obligation of each such individual or other legal entity.

(c) Unless otherwise stated in this Agreement, in its use of the premises the Lessee shall act only for its own account and, without limiting the generality of the foregoing, shall not act as agent, representative, factor, broker, forwarder, bailee, or consignee without legal title to the subject matter of the consignment, except to the extent necessary for exercise of the rights of user granted by this Agreement.

(d) The Lessee's representative, hereinbefore specified in this Agreement, (or such substitute as the Lessee may hereafter designate in writing) shall have full authority to act for the Lessee in connection with this Agreement and any things done or to be done hereunder, and to execute on the Lessee's behalf any amendments or supplements to this Agreement or any extension thereof.

(e) The Section headings in this Agreement are inserted only as a matter of convenience and for reference, and they in no way define or limit or describe the scope or intent of any provision hereof.

(f) All payments required of the Lessee by this Agreement shall be made by mail to the Port Authority at P. O. Box 17309, Newark, New Jersey, 07194, or to such other address as may be substituted therefor. Alternatively, with the advance written permission of the Port Authority, the Lessee may make such payments via wire transfer to the Port Authority to such bank and to such account number as the Port Authority shall advise the Lessee in writing from time to time. Until such time as the Port Authority shall advise the Lessee differently, the Port Authority designates PNC Bank-New Jersey as the bank to which payments should be wired as follows:

Bank: PNC Bank-New Jersey  
ABA Number: -----  
Account Number: (

(g) This Agreement does not constitute the Lessee the agent or representative of the Port Authority for any purpose whatsoever. Neither a partnership nor any joint venture is hereby created, notwithstanding the fact that all or a portion of the rental to be paid hereunder may be determined by gross receipts from the operations of the Lessee hereunder.

(h) As used in Sections 13 and 22, the phrase "utility, mechanical, electrical and other systems" shall mean and include (without limitation thereto) the following: machinery, engines, dynamos, boilers, elevators, escalators, incinerators and incinerator flues, systems for the supply of fuel, electricity, water, gas and steam, plumbing, heating, sewerage, drainage, ventilating, air-conditioning, communications, fire-alarm, fire-protection, sprinkler, telephone, telegraph and other systems, fire hydrants and fire hoses, and their respective wires, mains, switches, conduits, lines, tubes, valves, pipes, motors, cables, fixtures and other equipment.

(i) All designations of time herein contained shall refer to the time-system then officially in effect in the municipality wherein the premises are located.

(j) The rights of the Port Authority in the Facility are those acquired by it pursuant to the Basic Lease, hereinafter defined in this Agreement, and no greater rights are granted or intended to be granted to the Lessee hereunder than the Port Authority has power thereunder to grant. The letting shall in any event terminate simultaneously with the termination or expiration of the Basic Lease. The Lessee shall have no surviving obligations to pay any then unpaid rents to the Port Authority in the event of a termination of the letting under this Agreement as a result of a termination or expiration of the Basic Lease.

(k) Nothing herein contained shall prevent the Port Authority from entering into an agreement with The City of Newark pursuant to which the Basic Lease is surrendered, canceled or terminated; provided, that, The City of Newark, at the time of such agreement, assumes the obligations of the Port Authority under this Agreement.

(l) As used in this Agreement, "Facility", "Port Newark" or "marine terminal" shall mean the land and premises in the City of Newark, in the County of Essex and State of New Jersey, which are easterly of the right-of-way of the Central Railroad of New Jersey and are shown upon the exhibit attached to the Basic Lease and marked "Exhibit A" (thereto), as contained within the limits of a line of crosses appearing on the said Exhibit A and marked (by means of the legend) "Boundary of Terminal Area in City of Newark", and lands contiguous thereto within the County of Essex which may have been heretofore or may hereafter be acquired by the Port Authority to use for marine terminal purposes.

(m) "Basic Lease" shall mean that agreement of lease respecting marine and air terminals entered into with the Port Authority by the City of Newark (New Jersey) under date of October 22, 1947, and recorded in the Office of the Register of the County of Essex on October 30, 1947, in Book E-110 of Deeds, on pages 242 et seq. as the said agreement of lease has been heretofore or may be hereafter from time to time supplemented and amended.

(n) In the event that obstruction lights are now or in the future shall be installed on the premises, the Lessee agrees to furnish the Port Authority without charge, electricity for energizing such obstruction lights daily for a period commencing thirty (30) minutes before sunset and ending thirty (30) minutes after sunrise (as sunset and sunrise may vary from day to day throughout the year) and for such other periods as may be directed or requested by the Control Tower of Newark Airport.

(o) As used in this Agreement, "letting" shall include any extension of the letting under this Agreement, whether made by agreement or by operation of law, and "Manager of the Facility" or "Facility Manager" or "Manager" shall mean the person or persons from time to time designated by the Port Authority to exercise the powers and functions vested in the said Manager or in the Superintendent of the Facility by this Agreement; but until further notice from the Port Authority to the Lessee, it shall mean the Manager (or the Acting Manager) Port Authority Marine Terminals-New Jersey for the time being, or his duly designated representative or representatives.

(p) No designation in this Agreement of any area as a street, highway, roadway or other comparable characterization,

whether or not by name, shall be or be deemed to be an admission, recognition or acknowledgement of public or private rights in the area so designated, or as a dedication for or a consent to any public or private use of the same. All use in this Agreement of names and designations in connection with such areas is merely for the purpose of fixing geographical locations.

(q) So long as the Lessee shall pay all rentals provided for in this Agreement and shall observe and perform all the terms, covenants and conditions on the Lessee's part to be observed and performed under this Agreement, the Lessee may peaceably and quietly enjoy the premises, during the term of the letting, without hindrance or molestation by anyone claiming by, through or under the Port Authority, subject, nevertheless, to the terms, covenants and conditions of this Agreement, it being understood that the Port Authority's liability hereunder shall obtain only so long as it remains the lessee of the premises.

(r) The Port Authority, for the benefit of itself and of others using the Facility with its consent, shall have the right of access and passage for vessels along, upon and across the waters of the berthing area or any part thereof, to the extent only that such right may be exercised without unreasonably interfering with the operations of the Lessee.

(s) Without in any way limiting the obligations of the Lessee as elsewhere stated in this Agreement, the Lessee shall be liable to the Port Authority for any damage done to the Facility or to any part thereof, or to any property of the Port Authority thereon through any act or omission of those in charge of any one or more vessels, steamers, tugboats, barges, lighters, or other floating equipment, or highway or other vehicles, or other transportation equipment while the same are at, coming to or leaving the premises, except for damages to the Facility (other than the premises) caused by any one or more of such vessels, steamers, tugboats, barges, lighters, or other floating equipment, or highway or other vehicles, or other transportation equipment as may be coming to or leaving the premises without previous knowledge on the part of the Lessee.

(t) The Lessee recognizes that height restrictions, due primarily to the proximity of Newark Airport to the premises, now exist and that they may at any time be changed, including changes that make them more onerous and restrictive. The Lessee and all persons, firms and corporations using the premises or any part thereof with the express or implied consent of the Lessee, shall at all times obey such height restrictions as may be posted from time to time or otherwise communicated to the Lessee by the Port Authority, whether or not through the Manager of the Facility.

Section 35. Premises

(a) The Port Authority shall deliver the premises to the Lessee in its presently existing "as is" condition. The Lessee agrees to and shall take the premises in its "as is" condition and the Port Authority shall have no obligations under this Agreement for finishing work or preparation of any portion of the premises for the Lessee's use, except as are set forth in Section 8B and Section 8C hereof.

(b) The Lessee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of the premises or the suitability thereof for the operations permitted on the premises by this Agreement. The Lessee, prior to the execution of this Agreement, has thoroughly examined the premises as existing and has found the same to be suitable and satisfactory for the operations of the Lessee contemplated and permitted under this Agreement. Without limiting any obligation of the Lessee to commence operations under this Agreement at the time and in the manner stated elsewhere in this Agreement, the Lessee agrees that no portion of the premises will be used initially or at any time during the letting which is in a condition unsafe or improper for the conduct of the operations of the Lessee, so that there is possibility of injury or damage to life or property, and the Lessee further agrees that before any use it will immediately correct any such unsafe or improper condition.

(c) Except for claims and demands which result solely from the negligent or wilful acts of the Port Authority, the Port Authority shall not be liable to the Lessee for injury or death to any person or persons whomsoever, or for damage to any property whatsoever at any time in the premises or elsewhere at the Facility, including but not limited to any such injury, death or damage from falling material, water, rain, hail, snow, gas, steam, or electricity, whether the same may leak into, or flow from any part of the Facility or from any other place or quarter.

Section 36. Force Majeure

(a) Neither the Port Authority nor the Lessee shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder by reason of strikes, boycotts, labor disputes, embargoes, shortages of material, acts of God, acts of the public enemy, acts of superior governmental authority, weather conditions, tides, riots, rebellion, sabotage or any other circumstances for which it is not responsible and which are not within its control; provided, however, that this paragraph shall not apply to failures by the Lessee to pay the rentals specified in Sections 3, 5 and 41(b)



hereof and shall not apply to any other charges or money payments payable by the Lessee, except that this paragraph shall apply to the Lessee's obligation to make any payment to the Port Authority under the provisions of paragraph (b) of Section 40 hereof.

(b) The Port Authority shall be under no obligation to supply any service or services if and to the extent and during any period that the supplying of any such service or services or the use of any component necessary therefor shall be prohibited or rationed by any federal, state or municipal law, rule, regulation, requirement, order or direction and if the Port Authority deems it in the public interest to comply therewith, even though such law, rule, regulation, requirement, order or direction may not be mandatory on the Port Authority as a public agency.

(c) No abatement, diminution or reduction of the rent or other charges payable by the Lessee, shall be claimed by or allowed to the Lessee for any inconvenience, interruption, cessation or loss of business or other loss caused, directly or indirectly, by any present or future law, rule, requirement, order, direction, ordinance or regulation of the United States of America, or of the state, county or city government, or of any other municipal, governmental or lawful authority whatsoever, or by priorities, rationing or curtailment of labor or materials, or by war or any matter or thing resulting therefrom, or by any other cause or causes beyond the control of the Port Authority, nor shall this Agreement be affected by any such causes.

#### Section 37. Brokerage

The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from any and every claim for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation and execution of this Agreement.

#### Section 38. Non-Liability of Individuals

Neither the Commissioners of the Port Authority nor any Directors of the Lessee, nor any of them, nor any officer, agent or employee of the Port Authority or any officer, member, manager, agent or employee of the Lessee shall be charged personally by either party with any liability, or held liable to either party under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach or attempted or alleged breach, thereof.

Section 39. Services

(a) The Port Authority shall be under no obligation to supply the Lessee with any services provided by utility companies and other service providers, including but not limited to water, gas, electricity, sewer service, heat, steam, air-conditioning, telephone, telegraph, cable, or electrical guard or watch service.

(b) The Lessee shall promptly pay all water-bills covering its own consumption, including but not limited to water delivered and sold by the Lessee to vessels berthing at the premises. In the event that any such water-bill or bills shall remain unpaid for a period of six (6) months after the same becomes due and payable, or in the event that any such bill remains unpaid at the date of expiration or earlier termination of the letting under this Agreement, the Port Authority may pay the same and any interest or penalties thereon, and the total payment or payments shall constitute an item of additional rental, payable to the Port Authority on demand.

(c) The Lessee agrees to heat the enclosed portions of the premises to a sufficient temperature, or to bleed pipes, so that the plumbing, fire-protection and sprinkler system, if any, will not be damaged by reason of low temperatures.

(d) If any federal, state, municipal or other governmental body, authority or agency, or any public utility or other entity providing any service, assesses, levies, imposes, makes or increases any charge, fee, rent or assessment on the Port Authority, for any service, system or utility now or in the future supplied to or available at the premises or to any tenant, lessee, occupant or user thereof, or to the structures or buildings, which, or a portion or portions of which, are included in the premises, the Lessee shall, at the option of the Port Authority exercised at any time and from time to time by notice to the Lessee, pay, in accordance with any such notice, such charge, fee, rent or assessment or such increase thereof (or the portion thereof allocated by the Port Authority to the premises or to the operations of the Lessee under this Agreement) either directly to the governmental body, authority or agency, or to the public utility or other entity, or directly to the Port Authority, as such notice may direct. All such payments shall constitute items of additional rental.

(e) No failure, delay or interruption in any service or services, whether such service or services shall be supplied by the Port Authority or by others, shall relieve or be construed to relieve the Lessee of any of its obligations hereunder, or shall be or be construed to be an eviction of the Lessee, or shall constitute grounds for any diminution or abatement of the

rental or rentals payable under this Agreement, or grounds for any claim by the Lessee for damages, consequential, or otherwise.

(f) Without in any wise affecting the obligations of the Lessee elsewhere stated in this Agreement, the Lessee shall, subject to the provisions of Section 16 of this Agreement, provide, maintain and keep in good order, condition and repair any and all meters (to be located as designated by the Port Authority, other governmental authority or utility), ship-filling lines and other water-using equipment and facilities.

Section 40. Port Guarantee

(a) For purposes of this Agreement, the following terms shall have the meanings set forth below:

(1) "Carrier" shall mean P&O Nedlloyd Container Line Limited, as more fully described in Section 48(a)(2) hereof;

(2) "Carrier's Containers" shall mean Qualified Containers carrying cargo for which P&O Nedlloyd Container Line Limited is acting as common carrier;

(3) "Port" shall mean the Port of New York District (as defined in Section 43 hereof);

(4) "Port Throughput Year" shall mean as the context requires the calendar year commencing on January 1, 2003 and each calendar year thereafter occurring during the term of the letting under this Agreement (with the period from January 1, 2030 through November 30, 2030 to be deemed a calendar year subject to the proration provisions of this Agreement).

(b) The Lessee agrees that the number of the Carrier's Containers transported to or from the Port shall not be less than the Port Throughput Guarantee Number, as hereinafter defined, for the respective Port Throughput Year. "The Port Throughput Guarantee Number" shall be a percentage (hereinafter called "the Port Percentage") of the Carrier's Containers transported during the respective Port Throughput Year to or from marine terminals located during the term of the letting on the east coast of the North American continent in the geographical range from Halifax, Canada through and including Norfolk, Virginia (which marine terminals are hereinafter called "the East Coast Terminals"). The Port Percentage for each Port Throughput Year shall be as set forth in the Schedule attached hereto, hereby made a part hereof and marked "Schedule C" opposite the respective Port Throughput Year. In the event that during any Port Throughput Year the number of the Carrier's Containers transported to or from the Port shall be less than ninety percent (90%) of the Port Throughput Guarantee Number for that Port Throughput Year, the

Lessee shall pay to the Port Authority a sum (hereinafter called "the Port Throughput Fee") equal to the product obtained by multiplying (1) Twenty Dollars and No Cents (\$20.00) by (2) the difference between the Port Throughput Guarantee Number for that Port Throughput Year and the actual number of the Carrier's Containers transported to or from the Port during that Port Throughput Year, with payment to be made as set forth in paragraph (c) of this Section.

(c) The Lessee shall pay the Port Throughput Fee as follows: on February 28, 2003, and on the 30th day of each and every month thereafter occurring during the first Port Throughput Year and each subsequent Port Throughput Year occurring during the term of the letting (or the 28<sup>th</sup> day if a February and the 29<sup>th</sup> of February if a leap year), including the month following the end of each such Port Throughput Year, the Lessee shall render to the Port Authority a statement certified by a responsible officer of the Lessee showing the total number of the Carrier's Containers transported to or from the Port during the preceding month and the cumulative number of the Carrier's Containers transported to or from the Port from the date of the commencement of the Port Throughput Year for which the report is made through the last day of the preceding month, and also showing the total number of the Carrier's Containers transported to or from the East Coast Terminals during the preceding month and the cumulative number of the Carrier's Containers transported to or from the East Coast Terminals from the date of the commencement of the Port Throughput Year for which the report is made through the last day of the preceding month; each monthly statement shall be accompanied by monthly vessel activity reports to substantiate the statement, showing the total number of the Carrier's Containers transported to or from the Port and to or from the East Coast Terminals during the month for which the report is made. If the statement rendered for the month following the end of each Port Throughput Year shall show that the cumulative number of the Carrier's Containers transported to or from the Port during that Port Throughput Year is less than ninety percent (90%) of the Port Throughput Guarantee Number for that Port Throughput Year, the Lessee shall pay to the Port Authority the Port Throughput Fee at the time of rendering such statement. The Port Authority shall have the audit rights set forth in Section 43 with respect to all matters pertaining to the determination of the Port Throughput Fee.

(d) Notwithstanding any provision to the contrary contained in this Section, the Port Percentage of forty-two percent (42%), as set forth in Schedule C hereto for the Port Throughput Year ending on December 31, 2004, shall not be increased and shall remain at forty-two percent (42%) for purposes of the calculation of the Port Throughput Fee in the event that the Forty-five Foot Deepening, as hereinafter defined,

shall not have been completed by December 31, 2004. "Forty-five Foot Deepening" shall mean the following work to be performed by the United States Corps of Engineers (hereinafter called "the Corps") or such successor or other United States agency performing the present functions of the Corps: the completion of a channel of a depth of forty-five (45) feet below mean low water in the Kill Van Kull and the Newark Bay sufficient to allow passage of a single ship at one time to or from Port Newark. The term "mean low water" as used in this paragraph shall mean mean low water as most recently at the time of execution of this Agreement determined by observations of the United States Coast and Geodetic Survey. The calculation of the Port Throughput Fee shall be made based on the Port Percentage of forty-two percent (42%) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Port Throughput Fee shall reflect the Port Percentage of forty-two (42%) for any portion of the Port Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Port Percentage of forty-four percent (44%) for any portion of the Port Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Port Throughput Year, in which event the Port Percentage for the entire Port Throughput Year next following the Port Throughput Year in which the Forty-five Foot Deepening shall be completed shall be forty-four percent (44%). Thereafter the Port Percentage shall increase in the succession set forth in Schedule C hereto for the succeeding Port Throughput Years without regard to the actual calendar year of the Port Throughput Year set forth in said Schedule C. In addition, and notwithstanding any provision to the contrary contained in this Section, the Port Percentage of fifty-one percent (51%), as set forth in Schedule C hereto for the Port Throughput Year ending on December 31, 2009, or such lower Port Percentage as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Port Percentage is hereinafter called "the 2009 Port Percentage"), shall not be increased and shall remain at the 2009 Port Percentage for purposes of the calculation of the Port Throughput Fee in the event that the Fifty Foot Deepening, as hereinafter defined, shall not have been completed by December 31, 2009. "Fifty Foot Deepening" shall mean the following work to be performed by the Corps or such successor or other United States agency performing the present functions of the Corps: the completion of a channel of a depth of fifty (50) feet below mean low water in the Kill Van Kull and the Newark Bay sufficient to allow passage of a single ship at one time to or from Port Newark. The calculation of the Port Throughput Fee shall be made based on the 2009 Port Percentage until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Port Throughput Fee shall reflect the 2009 Port Percentage for any portion of the Port Throughput

Year preceding the completion of the Fifty Foot Deepening and shall reflect the next succeeding Port Percentage for any portion of the Port Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Port Throughput Year, in which event the Port Percentage for the entire Port Throughput Year next following the Port Throughput Year in which the Fifty Foot Deepening shall be completed shall be the Port Percentage next succeeding the 2009 Port Percentage. Thereafter the Port Percentage shall increase in the succession set forth in Schedule C hereto for the succeeding Port Throughput Years without regard to the actual calendar year of the Port Throughput Year set forth in said Schedule C.

(e) Notwithstanding any provision to the contrary contained in this Section, the Port Percentage of forty-four percent (44%), as set forth in Schedule C hereto for the Port Throughput Year ending on December 31, 2005, shall not be increased and shall remain at forty-four percent (44%) for purposes of the calculation of the Port Throughput Fee in the event that the Dredging, as defined in Section 8(a)(3) hereof, shall not have been completed by December 31, 2005 because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Port Throughput Fee shall be made based on the Port Percentage of forty-four percent (44%) until such time as the Dredging is completed, and upon the completion thereof the calculation of the next payable Port Throughput Fee shall reflect the Port Percentage of forty-four percent (44%) for any portion of the Port Throughput Year preceding the completion of the Dredging and shall reflect the Port Percentage of forty-six percent (46%) for any portion of the Port Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Port Throughput Year, in which event the Port Percentage for the entire Port Throughput Year next following the Port Throughput Year in which the Dredging shall be completed shall be forty-six percent (46%). Thereafter the Port Percentage shall increase in the succession set forth in Schedule C hereto for the succeeding Port Throughput Years without regard to the actual calendar year of the Port Throughput Year set forth in said Schedule C. In addition, and notwithstanding any provision to the contrary contained in this Section, the Port Percentage of fifty-two percent (52%), as set forth in Schedule C hereto for the Port Throughput Year ending on December 31, 2010, or such lower Port Percentage as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Port Percentage is hereinafter called "the 2010 Port Percentage"), shall not be increased and shall remain at the 2010 Port Percentage for purposes of the calculation of the Port Throughput Fee in the event that the Fifty-two Foot Dredging, as defined in Section 8(a)(5) hereof,

shall not have been completed by December 31, 2010 because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Fifty-two Foot Dredging. The calculation of the Port Throughput Fee shall be made based on the 2010 Port Percentage until such time as the Fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the next payable Port Throughput Fee shall reflect the 2010 Port Percentage for any portion of the Port Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the next succeeding Port Percentage for any portion of the Port Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Port Throughput Year, in which event the Port Percentage for the entire Port Throughput Year next following the Port Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Port Percentage next succeeding the 2010 Port Percentage. Thereafter the Port Percentage shall increase in the succession set forth in Schedule C hereto for the succeeding Port Throughput Years without regard to the actual calendar year of the Port Throughput Year set forth in said Schedule C. The postponement of the respective increase in the Port Percentage as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

(f) Notwithstanding any provision to the contrary contained in this Section, in the event that on January 1, 2003 the combined intermodal rail facilities at Port Newark and the Elizabeth-Port Authority Marine Terminal do not have the capacity to perform six hundred thousand (600,000) lifts, as hereinafter defined, per year (which annual rate of lift capacity is hereinafter called "the Minimum Lift Capacity"), then the commencement of the Port Guarantee shall be postponed until the Minimum Lift Capacity shall be in effect; provided, however, that such postponement shall not occur unless the Lessee can reasonably demonstrate to the Port Authority that the Minimum Lift Capacity is required for the Lessee's efficient use of the premises for the operations permitted thereon. For example, if the Minimum Lift Capacity shall not be in effect until July 14, 2003, the first Port Throughput Year shall commence on July 14, 2003 and end on December 31, 2003, and the Port Percentage of forty percent (40%) for the calendar year of 2003 shall be prorated for the period from July 14, 2003 through December 31, 2003 (for a revised Port Percentage of eighteen and seventy-four one-hundredths (18.74%)) for purposes of calculating the Port Throughput Guarantee Number for that Port Throughput Year; the next Port Throughput Year shall commence on January 1, 2004 and

each succeeding Port Throughput Year shall commence on the January 1<sup>st</sup> of each calendar year thereafter occurring during the term of the letting under this Agreement. For a second example, if the Minimum Lift Capacity shall not be in effect until September 8, 2004, the first Port Throughput Year shall commence on September 8, 2004 and end on December 31, 2004, and the Port Percentage of forty-two percent (42%) for the calendar year of 2004 shall be prorated for the period from September 8, 2004 through December 31, 2004 (for a revised Port Percentage of thirteen and twenty-three one-hundredths (13.23%)) for purposes of calculating the Port Throughput Guarantee Number for that Port Throughput Year; the next Port Throughput Year shall commence on January 1, 2005 and each succeeding Port Throughput Year shall commence on the January 1<sup>st</sup> of each calendar year thereafter occurring during the term of the letting under this Agreement. Except as specifically stated in this paragraph, all provisions of this Section shall remain in full force and effect. Without limiting the generality of the immediately preceding sentence, nothing contained in this paragraph shall affect the reporting requirements of the Lessee set forth in paragraph (c) of this Section, which shall commence on January 1, 2003 notwithstanding any postponement of the Port Guarantee under this paragraph. For purposes of this Agreement, a "lift" shall mean the movement of a single cargo container to or from a rail car carrying or to carry a cargo container or containers; in the event that more than one cargo container is so moved in one operation, each of said cargo containers shall be counted as one lift.

Section 41. Terminal Guarantee

(a) For purposes of this Agreement, the following terms shall have the meanings set forth below:

(1) "Terminal Throughput Year" shall mean as the context requires the calendar year commencing on January 1, 2003 and each calendar year thereafter occurring during the term of the letting under this Agreement (with the period from January 1, 2030 through November 30, 2030 to be deemed a calendar year subject to the proration provisions of this Agreement);

(2) "Rent Guarantee Number" shall mean the number of Qualified Containers set forth in the Schedule annexed to this Agreement, hereby made a part hereof and marked "Schedule D" opposite the respective Terminal Throughput Year;

(3) "Terminal Guarantee Number" shall mean the number of Qualified Containers set forth in the Schedule annexed to this Agreement, hereby made a part hereof and marked "Schedule E" opposite the respective Terminal Throughput Year.



(b) The Lessee shall be subject to the payment of a guaranteed rental (hereinafter called the "Guaranteed Rental") for the Terminal Throughput Year commencing on January 1, 2011 and ending on December 31, 2011, and in each subsequent Terminal Throughput Year to occur thereafter during the term of the letting under this Agreement as follows: in the event that the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during any such Terminal Throughput Year shall exceed the Exemption Number (as defined in subparagraph (5) of paragraph (a) of Section 5 hereof) but shall not exceed the Rent Guarantee Number for that Terminal Throughput Year, the Lessee shall pay to the Port Authority a Guaranteed Rental equal to the product obtained by multiplying (1) the difference between the Rent Guarantee Number for that Terminal Throughput Year and the actual number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during that Terminal Throughput Year by (2) the Throughput Rental Rate in effect on the last day of that Terminal Throughput Year pursuant to the provisions of Sections 5 and 6 hereof. Any Guaranteed Rental owed under this Section shall be paid by the Lessee to the Port Authority within ten (10) days after notification by the Port Authority to the Lessee stating the amount thereof.

(c) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of two hundred fifty thousand (250,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at two hundred fifty thousand (250,000) for purposes of the calculation of the Guaranteed Rental in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of two hundred fifty thousand (250,000) (and thus no Guaranteed Rental shall be payable) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of two hundred fifty thousand (250,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Rent Guarantee Number of two hundred fifty-seven thousand five hundred (257,500) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be two hundred fifty-seven thousand five hundred (257,500) (and thus in either event no Guaranteed Rental shall be payable). Thereafter the Rent Guarantee Number shall increase in the succession set forth

in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of two hundred eighty-nine thousand eight hundred nineteen (289,819), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2009 Rent Guarantee Number"), shall not be increased and shall remain at the 2009 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Guaranteed Rental shall be made based on the 2009 Rent Guarantee Number (and thus no Guaranteed Rental shall be payable) until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number (and thus in either event no Guaranteed Rental shall be payable). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D.

(d) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of two hundred fifty-seven thousand five hundred (257,500), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at two hundred fifty-seven thousand five hundred (257,500) for purposes of the calculation of the Guaranteed Rental in the event that the Dredging, as defined in Section 8(a)(3) hereof, shall not have been completed by December 31, 2005 because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of two hundred fifty-seven thousand five hundred (257,500) (and thus no Guaranteed Rental shall be payable) until such time as the Dredging is completed, and upon the completion thereof the

calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of two hundred fifty-seven thousand five hundred (257,500) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Rent Guarantee Number of two hundred sixty-five thousand two hundred twenty-five (265,225) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be two hundred sixty-five thousand two hundred twenty-five (265,225) (and thus in either event no Guaranteed Rental shall be payable). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of two hundred ninety-eight thousand five hundred thirteen (298,513), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2010, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2010 Rent Guarantee Number"), shall not be increased and shall remain at the 2010 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty-two Foot Dredging, as defined in Section 8(a)(5) hereof, shall not have been completed by December 31, 2010 because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform Fifty-two Foot Dredging. The calculation of the Guaranteed Rental shall be made based on the 2010 Rent Guarantee Number (and thus no Guaranteed Rental shall be payable) until such time as the Fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number (and thus in either event Guaranteed Rental may be payable). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to

the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. The postponement of the respective increase in the Rent Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

(e) In the event that for each of any three consecutive Terminal Throughput Years to occur during the period from January 1, 2003 through the expiration date of the term of the letting, the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises shall be less than the Terminal Guarantee Number respectively for said three consecutive Terminal Throughput Years, the Port Authority shall have the right to terminate the letting under this Agreement. Termination under this paragraph shall be effected by the Port Authority's giving the Lessee one (1) year's prior written notice at any time during the period from the first day following the end of the third of said consecutive Terminal Throughput Years through the one hundred eightieth (180<sup>th</sup>) day following the end of said third consecutive Terminal Throughput Year; provided, however, that if the Lessee shall fail to submit to the Port Authority the certified statements required under paragraph (c) of Section 5 hereof during said third consecutive Terminal Throughput Year and on the thirtieth (30<sup>th</sup>) day of the month immediately following the end of said third consecutive Terminal Throughput Year within ninety (90) days of the date for the submission the last of said statements, the parties agree that it shall be presumed that the Lessee's throughput is insufficient and that the termination right of the Port Authority under this paragraph is in effect and the Port Authority shall have one hundred eighty (180) days from said ninety (90) period to provide notice of termination to the Lessee under this paragraph. Termination under the provisions of this paragraph shall be governed by Section 25 hereof, and, without limiting any other rights of the Port Authority under this Agreement, the Port Authority shall have all of its rights under Section 28 hereof upon any such termination of the letting.

(f) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of one hundred fifty thousand (150,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at one hundred fifty thousand (150,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Terminal Guarantee

Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of one hundred fifty thousand (150,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of one hundred fifty thousand (150,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Terminal Guarantee Number of one hundred fifty-four thousand five hundred (154,500) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be one hundred fifty-four thousand five hundred (154,500). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of one hundred seventy-three thousand eight hundred ninety-one (173,891), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2009 Terminal Guarantee Number"), shall not be increased and shall remain at the 2009 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2009 Terminal Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number.

Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E.

(g) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of one hundred fifty-four thousand five hundred (154,500), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at one hundred fifty-four thousand five hundred (154,500) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Dredging, as defined in Section 8(a)(3) hereof, shall not have been completed by December 31, 2005 because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of one hundred fifty-four thousand five hundred (154,500) until such time as the Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of one hundred fifty-four thousand five hundred (154,500) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Terminal Guarantee Number of one hundred fifty-nine thousand one hundred thirty-five (159,135) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be one hundred fifty-nine thousand one hundred thirty-five (159,135). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of one hundred seventy-nine thousand one hundred eight (179,108), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2010, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2010 Terminal Guarantee Number"), shall not be increased and shall remain at the 2010 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty-two Foot Dredging, as defined

in Section 8(a)(5) hereof, shall not have been completed by December 31, 2010 because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Fifty-two Foot Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2010 Terminal Guarantee Number until such time as the Fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2010 Terminal Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. The postponement of the respective increase in the Terminal Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

(h) Notwithstanding any provision to the contrary contained in this Section, in the event that this Agreement shall not be in effect, as hereinafter defined, on January 1, 2001, then the commencement of the Terminal Guarantee shall be postponed for one day for each day from January 1, 2001 until the date that this Agreement shall first be in effect. For example, if this Agreement shall first be in effect on April 20, 2001, the commencement of the Terminal Guarantee shall be postponed for one hundred nine (109) days, such that: (1) the first Terminal Throughput Year shall commence on April 20, 2003 and end on December 31, 2003; (2) the Rent Guarantee Number of two hundred thousand (200,000) for the calendar year of 2003 shall be prorated for the period from April 20, 2003 through December 31, 2003 (for a revised Rent Guarantee Number of one hundred forty thousand two hundred seventy-four (140,274)); (3) the Exemption Number shall be similarly prorated (for a revised Exemption Number of two hundred ten thousand four hundred eleven

(210,411)); and (4) the Terminal Guarantee Number of one hundred twenty thousand (120,000) for the calendar year of 2003 shall be similarly prorated (for a revised Terminal Guarantee Number of eighty-four thousand one hundred sixty-four (84,164)); the next Terminal Throughput Year shall commence on January 1, 2004 and each succeeding Terminal Throughput Year shall commence on the January 1<sup>st</sup> of each calendar year thereafter occurring during the term of the letting under this Agreement. For a second example, if this Agreement shall first be in effect on February 11, 2002, the commencement of the Terminal Guarantee shall be postponed for four hundred six (406) days, such that: (1) the first Terminal Throughput Year shall commence on February 11, 2004 and end on December 31, 2004; (2) the Rent Guarantee Number of two hundred fifty thousand (250,000) for the calendar year of 2004 shall be prorated for the period from February 11, 2004 through December 31, 2004 (for a revised Rent Guarantee Number of two hundred twenty-one thousand nine hundred eighteen (221,918)); (3) the Exemption Number shall be similarly prorated (for a revised Exemption Number of two hundred sixty-six thousand three hundred one (266,301)); and (4) the Terminal Guarantee Number of one hundred fifty thousand (150,000) for the calendar year of 2004 shall be similarly prorated (for a revised Terminal Guarantee Number of one hundred thirty-three thousand one hundred fifty-one (133,151)); the next Terminal Throughput Year shall commence on January 1, 2005 and each succeeding Terminal Throughput Year shall commence on the January 1<sup>st</sup> of each calendar year thereafter occurring during the term of the letting under this Agreement. Except as specifically stated in this paragraph, all provisions of this Section shall remain in full force and effect. For purposes of this paragraph, this Agreement shall be "in effect" upon its execution by the Port Authority and the Lessee and the delivery of a fully executed copy thereof by the Port Authority to the Lessee.

Section 42. Lessee's Recovery of Investment

(a) For purposes of this Agreement, the following terms shall have the meanings set forth below:

(1) "Generic Work" shall mean the Specific Work Items set forth in paragraph (a)(1) of Section 8 hereof and the Additional Specific Work Items set forth in paragraph (a)(8) of Section 8 hereof;

(2) "Qualifying Cost" shall mean an amount equal to the lesser of (xx) Seventy-eight Million Dollars and No Cents (\$78,000,000.00) or (yy) the reasonable cost of the Generic Work. To the extent permitted by sound accounting practice, the sum of the following items of cost incurred by the Lessee in performing the Generic Work shall constitute the reasonable cost thereof for the purposes of this Agreement:



(i) The Lessee's payments to contractors for the performance of the Generic Work;

(ii) The Lessee's payments for supplies and materials for the performance of the Generic Work;

(iii) The Lessee's payments to persons, firms or corporations other than construction contractors or suppliers of materials, for services rendered or rights granted in connection with the construction of the Generic Work, not including services of the types mentioned in items (v), (vi) and (vii) of this subparagraph;

(iv) The Lessee's payments for all necessary permits and governmental authorizations for the performance of the Specific Work Items set forth in Section 8(a)(1)(viii) and (ix) hereof and the Additional Work Items set forth in Section 8(a)(8)(dd) and (ee) hereof;

(v) The Lessee's payments of premiums for performance bonds and for the insurance the Lessee is required to maintain in effect in accordance with the provisions of paragraphs (i) and (j) of Section 8 hereof with respect to and during the period of construction of the Generic Work only;

(vi) The Lessee's payments for engineering services, consulting services, surveys and construction management fees in connection with the Generic Work;

(vii) The Lessee's payments for architectural, planning and design services in connection with the Generic Work;

(viii) The sum of the costs accepted under items (v), (vi) and (vii) of this subparagraph shall not exceed 20% of the sum of the costs approved under items (i), (ii) and (iii) of this subparagraph; if in fact there is any such excess, such excess shall not be a part of the cost incurred by the Lessee in the performance of the Generic Work for the purposes of this Section.

No payment or payments on account of administrative or other overhead costs and no payment to employees of the Lessee shall be included in the cost of the Generic Work whether or not allocated to the cost of the work by the Lessee's own accounting practices. No payment to a firm or corporation wholly or partially owned by or in common ownership with the Lessee shall be included in the cost of the Generic Work;

(3) "Unamortized Investment of the Lessee in the Generic Work" shall mean the unallocated Qualifying Cost of the Lessee's investment as calculated on a straight-line basis according to generally accepted accounting principles (GAAP, as set by the Financial Accounting Standards Board or any successor entity).

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(b) Notwithstanding any other provision of this Agreement, in the event that the Port Authority shall terminate the letting under this Agreement pursuant to the provisions of paragraph (c) of Section 41 hereof or the provisions of Section 48 hereof, the Port Authority shall pay to the Lessee on account of the Generic Work performed in accordance with the provisions of Section 8 hereof the following amount:

(1) seventy-five percent (75%) of the Unamortized Investment of the Lessee in the Generic Work, in the event that the effective date of termination of the letting under this Agreement shall occur during the period from December 1, 2000 through November 30, 2005;

(2) ninety percent (90%) of the Unamortized Investment of the Lessee in the Generic Work, in the event that the effective date of termination of the letting under this Agreement shall occur during the period from December 1, 2005 through November 30, 2010;

(3) one hundred percent (100%) of the Unamortized Investment of the Lessee in the Generic Work, in the event that the effective date of termination of the letting under this Agreement shall occur during the period from December 1, 2010 through November 30, 2030.

(c) Any payment required under this Section shall not be or be deemed prerequisite to the exercise of the Port Authority's right of termination under paragraph (d) of Section 41 of this Agreement and any such payment shall be conditioned upon the Lessee's having delivered possession of the premises to the Port Authority. On the payment by the Port Authority of the Unamortized Investment of the Lessee in the Generic Work, all equipment, fixtures and improvements in the premises constituting any part of the Lessee's Construction Work and the Lessee's Additional Work and all interest of the Lessee therein which have not already become the property of the Port Authority shall be and become the property of the Port Authority and the Lessee shall execute any and all instruments necessary to transfer title and any such interest.

(d) Notwithstanding any other provision of this Section, in ascertaining the amount that the Port Authority shall be obligated to pay to the Lessee under this Section, such amount

shall be diminished by the amount of the cost of any equipment, fixtures or improvements constituting any part of the Lessee's Construction Work or the Lessee's Additional Work that are secured by liens, mortgages, other encumbrances or conditional bills of sale and less any other amounts whatsoever due from the Lessee to the Port Authority under this Agreement. In addition, the Port Authority shall have a reasonable opportunity to perform an audit of the Qualifying Cost of the Generic Work prior to making any payment to the Lessee under this Section, with the Port Authority to have all of the rights of audit as are set forth in Section 43 hereof. In no event whatsoever shall the Qualifying Cost of the Generic Work include any expenses, outlays or charges whatsoever by or for the account of the Lessee for or in connection with any equipment, fixtures or improvements constituting any part of the Lessee's Construction Work or the Lessee's Additional Work unless said equipment, fixtures and/or improvements are actually and completely installed in and/or made to the premises.

#### Section 43. Records

(a) The Lessee shall maintain in accordance with accepted accounting practice during the term of the letting under this Agreement and for three years thereafter records and books of account recording all transactions in any way connected with or reflecting upon (1) the payment of any rental by the Lessee pursuant to Sections 3, 5 or 41(b) hereof; (2) the respective cost of the work described in Sections 8(a), 8(o), 8B, 8C and 42 hereof; or (3) the determination of any Port Throughput Guarantee Number and the fulfillment of the Lessee's obligations under Section 40 hereof; and which records and books of account shall be kept at all times within the Port of New York District, as defined in the Port Compact of 1921 authorized by C. 154 Laws of N.Y. 1921 and C. 151 Laws of N.J. 1921, approved by Public Resolution No. 17 of the 67th Congress, First Session, and permit, in ordinary business hours during such time, the examination and audit by the officers, employees and representatives of the Port Authority of such records and books of account and also any of such records and books of account of any company which is owned or controlled by the Lessee, if said company performs services, similar to those performed by the Lessee, anywhere in the Port of New York District.

(b) Notwithstanding the provisions of paragraph (a) of this Section, the Lessee may maintain the records and books of account referred to in said paragraph (a) outside of the Port of New York District, subject to the following conditions:

(1) If any such records and books of account have been maintained outside of the Port of New York District, but within the continental United States, then the Port

Authority in its sole discretion may (i) require such records and books of account to be produced within the Port of New York District or (ii) examine such records and books of account at the location at which they have been maintained and in such event the Lessee shall pay to the Port Authority when billed all travel costs and related expenses, as determined by the Port Authority, for Port Authority auditors and other representatives, employees and officers in connection with such examination and audit, or

(2) If any such records and book of account have been maintained outside the continental United States then, in addition to the costs specified in subparagraph (1) of this paragraph, the Lessee shall pay to the Port Authority when billed all other costs of the examination and audit of such records and books of account including without limitation salaries, benefits, travel costs and related expenses, overhead costs and fees and charges of third party auditors retained by the Port Authority for the purpose of conducting such audit and examination.

(c) The foregoing auditing costs, expenses and amounts set forth in subparagraphs (1) and (2) of paragraph (b) of this Section shall be deemed additional rent under this Agreement payable to the Port Authority with the same force and effect as all other rents payable hereunder.

(d) Nothing contained in this Agreement shall be deemed to render any records, or any statement, of the Lessee required to be maintained or supplied hereunder conclusive as to any of the matters set forth therein. The Port Authority may at its sole discretion, in lieu of any records or books of account or statements of the Lessee, employ its own records and books of account for the calculation of any amounts to be paid under this Agreement.

#### Section 44. Added Space

Subject to the provisions of this Section, the Lessee agrees that the open area shown in stipple and the water area shown in honeycomb on Exhibit A, Sheet 4, hereto shall be added to the premises under this Agreement upon sixty (60) days' prior written notice given by the Port Authority to the Lessee (which open area and water area are hereinafter collectively called "the Added Space" and which date of its addition to the premises pursuant to said notice is hereinafter called "the Effective Date"). Said notice shall be accompanied by an environmental survey (hereinafter called "the Added Environmental Survey") and a statement by the Port Authority describing any environmental remediation, use restrictions and/or physical controls required with respect to the Added Space, which statement shall specify

which of the above are completed and/or in effect and which are to be completed and/or put into effect. The Added Space shall become part of the premises under this Agreement on the Effective Date; provided, that, this Agreement shall be in full force and effect on the Effective Date and further, provided, that, the Lessee shall not prior to the Effective Date provide notice to the Port Authority that the Lessee rejects the Added Space on the ground that the Added Space is not or will not be in a suitable condition for its operations as a marine terminal. The Lessee shall have full rights to inspect the Added Space during the sixty (60) day period from receipt of the Port Authority's notice to the Effective Date. In the event that the Lessee shall so reject the Added Space, this Section and the provisions thereof shall be null and void and of no further force or effect, and each party shall and does release and discharge the other of and from any claims or demands based on this Section or based on any breach or alleged breach hereof. In the event that the Lessee shall accept the Added Space, then upon the addition of the Added Space to the premises the Added Environmental Survey shall become part of Exhibit I applying to the Added Space, and the Added Space shall be subject to all of the terms and conditions of this Agreement applicable to the premises thereunder for the period from the Effective Date through the expiration date of the letting under this Agreement. The Lessee shall pay annual basic rental to the Port Authority pursuant to the provisions of Section 3 hereof equal to the product obtained by multiplying the annual per square foot rental rate in effect on the Effective Date under said Section 3 (as such rate shall have then been adjusted pursuant to the provisions of Section 4 hereof) by one hundred thirty-five thousand thirty-six (135,036), which annual rental rate shall thereafter be adjusted during the remainder of the term of the letting under this Agreement in accordance with the provisions of Section 4 hereof. Notwithstanding any provision set forth above in this Section, in the event that the Added Environmental Survey indicates that remediation of the Added Space and/or the assumption of additional obligations is required, such remediation and/or additional obligations shall be subject to and in accordance with the provisions of Section 9 hereof.

Section 45. Option Space

(a) The Lessee shall have the option to add to the premises under this Agreement the space shown in diagonal crosshatching on the sketch attached hereto, hereby made a part hereof and marked "Exhibit A-1, Sheet 1" (which space is hereinafter called "the Option Space") effective on December 1, 2010; provided, that, the Lessee shall have given to the Port Authority written, unconditional (except as provided below in this Section) notice of the Lessee's election to add the Option Space to the premises under this Agreement and such notice shall

have been received by the Port Authority not later than three hundred six-five (365) days prior to December 1, 2010; and further, provided, that, this Agreement shall be in full force and effect on December 1, 2010. The Port Authority shall prepare an environmental survey of the Option Space which shall be submitted to the Lessee no later than July 31, 2010. The Lessee shall have the option to accept the environmental survey prepared by the Port Authority or to prepare its own environmental survey of the Option Space, and the Lessee shall have full rights of entry to the Option Space for the purpose of preparing such environmental survey. In the event that the Port Authority and the Lessee are unable to agree on the final form of environmental survey of the Option Space by December 1, 2010, this Section and the provisions thereof shall be null and void and of no further force or effect, and each party shall and does release and discharge the other of and from any claims or demands based on this Section or based on any breach or alleged breach hereof. In the event that the Port Authority and the Lessee shall agree upon a final form of environmental survey for the Option Space by December 1, 2010, then upon the addition of the Option Space to the premises on December 1, 2010 such environmental survey shall become part of Exhibit I applying to the Option Space, and the Option Space shall be subject to all of the terms and conditions of this Agreement applicable to the premises thereunder for the period from December 1, 2010 through the expiration date of the letting under this Agreement. The Lessee shall pay annual basic rental to the Port Authority pursuant to the provisions of Section 3 hereof equal to the product obtained by multiplying the annual per square foot rental rate in effect on December 1, 2010 under said Section 3 (as such rate shall have then been adjusted pursuant to the provisions of Section 4 hereof) by six hundred eighty-three thousand eight hundred ninety-two (683,892), which annual rental rate shall thereafter be adjusted during the remainder of the term of the letting under this Agreement in accordance with the provisions of Section 4 hereof. Notwithstanding any provision set forth above in this paragraph, in the event that the environmental survey prepared by the Port Authority or agreed to by the parties indicates that the Port Authority is required to remediate the Option Space or to assume additional obligations therewith, the Port Authority shall not be obligated to perform or be responsible for the cost of any such remediation or additional obligations unless the cost thereof is authorized by its Board of Commissioners acting in its sole discretion. In the event such authorization is not received from the said Board of Commissioners prior to December 1, 2010, the Lessee shall have the option to accept the Option Space subject to any required remediation and/or additional obligations or to reject the letting of the Option Space, and in the latter case this Section and the provisions thereof shall be null and void and of no further force or effect, and each party shall and does release and discharge the other of and from any claims or demands

based on this Section or based on any breach or alleged breach hereof.

(b) If the Port Authority shall not give possession of the Option Space on December 1, 2010 for the commencement of the term of the letting thereof, by reason of the fact that the Option Space or any part thereof is in the course of construction, repair, alteration, improvement, or any environmental survey or environmental remediation, or by reason of the fact that the occupant thereof failed or refused to deliver possession to the Port Authority, or by reason of any cause or condition beyond the control of the Port Authority, the Port Authority shall not be subject to any liability for the failure to give possession on said date. No such failure to give possession on the date of commencement of the term of the letting of the Option Space shall in any wise affect the validity of this Section or the obligations of the Lessee hereunder, nor shall the same be construed in any wise to extend the term of the letting of the Option Space beyond the expiration date of the letting under this Agreement. However, the rent payable for the Option Space shall not commence until possession of thereof is tendered by the Port Authority to the Lessee, with the basic rental calculated at the annual per square foot rental rate then in effect; the tender shall be made by notice given at least five (5) days prior to the effective date of the tender and in the event that such notice of tender is not given for possession to commence on or before one hundred eighty-five (185) days after December 1, 2010 then this Section shall be deemed canceled, except that each party shall and does hereby release the other party of and from any and all claims or demands based on the matters set forth in this Section, or a breach or alleged breach thereof.

Section 46.     Security

(a) Upon the execution of this Agreement by the Lessee and delivery thereof to the Port Authority, the Lessee shall deliver to the Port Authority as security for the full, faithful and prompt performance of and compliance with, on the part of the Lessee, all of the terms, provisions, covenants and conditions of this Agreement on its part to be fulfilled, kept, performed or observed, a clean, irrevocable letter of credit issued to and in favor of the Port Authority by a banking institution satisfactory to the Port Authority and having its main office within the Port of New York District, in the respective amount set forth in paragraph (h) of this Section for the respective period therein indicated. The form and terms of such letter of credit, as well as the institution issuing it, shall be subject to the prior and continuing approval of the Port Authority. Such letter of credit shall provide that it shall continue throughout the term of the letting under this Agreement and for a period of not less than

six (6) months thereafter. Such continuance may be by provision for automatic renewal or by substitution of a subsequent satisfactory clean, irrevocable letter. Upon notice of cancellation of a letter of credit the Lessee agrees that unless, by a date twenty (20) days prior to the effective date of cancellation, the letter of credit is replaced by another letter of credit satisfactory to the Port Authority, the Port Authority may draw down the full amount thereof and thereafter the Port Authority will hold the same as security under this Section.

(b) In addition to any and all other remedies available to it, the Port Authority shall have the right, at its option at any time and from time to time, with or without notice, to draw upon said letter of credit or any part thereof in whole or partial satisfaction of any of its claims or demands against the Lessee. There shall be no obligation on the Port Authority to exercise such right and neither the existence of such right nor the holding of a letter of credit shall cure any default or breach of any obligation of the Lessee under this Agreement. If requested by the Port Authority, said letter of credit shall be accompanied by a letter expressing the opinion of counsel for the banking institution that the issuance of said clean, irrevocable letter of credit is an appropriate and valid exercise by the banking institution of the corporate power conferred upon it by law.

(c) If at any time any bank shall fail to make any payment to the Port Authority in accordance with any letter of credit issued by any such bank in favor of the Port Authority as herein provided, the Lessee shall cause to be delivered to the Port Authority on demand another clean, irrevocable letter of credit satisfactory to the Port Authority and issued by another banking institution in favor of the Port Authority and satisfactory to it, in an amount equal to the original amount of the said letter of credit.

(d) Failure to provide a letter of credit in accordance with the terms and provisions of this Section at any time during the term of the letting and for a period of six (6) months thereafter valid and available to the Port Authority and any failure of any banking institution issuing a letter of credit in favor of the Port Authority to make one or more payments as provided in such letter of credit, shall be and be deemed to be a breach of the Lessee's obligations under this Agreement. If at any time and from time to time during the term of the letting and for a period of six (6) months thereafter a payment is made to the Port Authority under any letter of credit running in its favor as provided in this Section, the Lessee shall cause to be delivered to the Port Authority on demand and within two (2) days thereafter, an additional clean, irrevocable letter of credit satisfactory to and issued in favor of the Port Authority by a



banking institution satisfactory to the Port Authority, in such an amount so that at all times during the term of the letting and for a period of six (6) months thereafter the Port Authority shall have a clean, irrevocable letter of credit in the amount required by paragraph (h) of this Section. The form and content of said letter of credit shall have been approved by the Port Authority in advance and, if required by the Port Authority, shall be accompanied by an opinion of counsel for the banking institution that the issuance of said clean, irrevocable letter of credit is an appropriate and valid exercise by the banking institution of the corporate power conferred upon it by law.

(e) No action by the Port Authority pursuant to the terms of any letter of credit, or receipt by the Port Authority of funds from any bank issuing any such letter of credit, shall be or be deemed to be a waiver of any default by the Lessee of any obligation under this Agreement and all remedies under this Agreement consequent upon such default shall not be affected by the existence of or recourse to any such letter of credit.

(f) Upon the expiration of the term of the letting and a period of six (6) months thereafter, and upon the condition that the Lessee shall then be in no wise in default of any of its obligations under this Agreement, and upon written request therefor by the Lessee, the Port Authority will return the letter of credit to the Lessee less the amount of any and all unpaid claims and demands (included estimated damages) of the Port Authority by reason of default or breach by the Lessee of any of its obligations under this Agreement.

(g) In addition to any and all other remedies available to it, the Port Authority shall have the right, at its option, at any time and from time to time, with or without notice, to use any deposit or any part thereof resulting from a draw down of all or any part of a letter of credit provided by the Lessee under this Section in whole or partial satisfaction of any of the Port Authority's claims or demands against the Lessee arising under this Agreement. There shall be no obligation on the Port Authority to exercise such right and neither the exercise of such right nor the holding of the deposit itself shall cure any default or breach of this Agreement on the part of the Lessee.

(h) The letter of credit to be provided by the Lessee to the Port Authority under this Section shall be maintained in the following respective amount for the following respective period:

(1) Eleven Million Eighty-three Thousand Six Hundred Ninety-two Dollars and No Cents (\$11,083,692.00) during the period from December 1, 2000 through November 30, 2010;

(2) Fifteen Million Two Hundred Sixty-seven Thousand Four Hundred Twenty-nine Dollars and No Cents (\$15,267,429.00) during the period from December 1, 2010 through November 30, 2020; and

(3) Eleven Million Three Hundred Thirty Thousand Eight Hundred Thirty-nine Dollars and No Cents (\$11,330,839.00) during the period from December 1, 2020 through November 30, 2030.

Section 47. Affirmative Action

(a) The Lessee shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons and women are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeship and on-the-job training.

(b) In addition to and without limiting the foregoing and without limiting the provisions of Schedule F attached hereto and hereby made a part hereof, it is hereby agreed that the Lessee, in connection with its continuing operation, maintenance and repair of the premises, or any portion thereof, and in connection with every award or agreement for concessions or consumer services at the Facility, shall throughout the Term commit itself to and use good faith efforts to implement an extensive program of Affirmative Action, including specific affirmative action steps to be taken by the Lessee, to ensure maximum opportunities for employment and contracting by minorities and women. In meeting the said commitment the Lessee agrees to submit its said extensive Affirmative Action program, including the specific affirmative action steps to be taken by the Lessee to meet its aforesaid commitment, within sixty (60) days after the commencement of the Term to the Port Authority for its review and approval. The Lessee shall incorporate in its said program such revisions and changes as the Port Authority and the Lessee may agree upon from time to time. The Lessee throughout the Term shall document its efforts in implementing the said program, shall keep the Port Authority fully advised of the Lessee's progress in implementing the said program and shall supply to the Port Authority such information, data and documentation with respect thereto as the Port Authority may from time to time and at any time request, including but not limited to, annual reports. The obligations imposed on the Lessee under this paragraph shall not be construed to impose any greater

requirements on the Lessee than those which may be imposed on the Lessee under applicable law.

(c) "Minority" as used herein shall be as defined in paragraph II (c) of Part of Schedule F.

(d) In the implementation of this Section the Port Authority may consider compliance by the Lessee with the provisions of any federal, state or local law concerning affirmative action equal employment opportunity which are at least equal to the requirements of this Section, as effectuating the provisions of this Section. If the Port Authority determines that by virtue of such compliance with the provisions of any such federal, state or local law that the provisions hereof duplicate or conflict with such law the Port Authority may waive the applicability of the provisions of this Section to the extent that such duplication or conflict exists.

(e) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

(f) Nothing in this Section shall grant or be deemed to grant to the Lessee the right to make any agreement or award for concessions or consumer services at the Facility.

#### Section 48. Right of Termination - Ownership and Control

(a) (1) The Lessee hereby represents, knowing that the Port Authority is relying on the accuracy of such representation, that it is a limited liability company organized and existing under the laws of the State of Delaware, that one thousand (1,000) membership interests constitute all of its existing membership interests, that the owners of the membership interests are as follows: (i) P&O Ports North America Inc. (hereinafter called "POPNA"), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at Evertrust Plaza, Jersey City, New Jersey 07302, owns five hundred (500) of the membership interests and (ii) P&O Nedlloyd B.V. (hereinafter called "PONLBV"), a corporation organized and existing under the laws of the Netherlands and having an office and place of business at Boompjes 40, 3011 XB Rotterdam, Netherlands, owns five hundred (500) of the membership interests, that there are no other membership interests in the Lessee, and that there are no other individuals or corporations and no partnerships or other entities, except as later set forth in this Section, having any direct or indirect beneficial ownership of the Lessee.

(2) The Lessee hereby represents, knowing that the Port Authority is relying on the accuracy of such representation, that through the direct and indirect ownership of other business entities, The Peninsular and Oriental Steam Navigation Company (hereinafter called "P&O"), a corporation organized and existing under the laws of England and having an office and place of business at 79 Pall Mall, London, SW1Y 5EJ United Kingdom, and which is a public company listed on the London Stock Exchange, has indirect beneficial ownership of one hundred percent (100%) of POPNA, and thereby P&O has indirect beneficial ownership of fifty percent (50%) of the Lessee. The Lessee hereby further represents, knowing that the Port Authority is relying on the accuracy of such representation, that through the direct and indirect ownership of other business entities, P&O Nedlloyd Container Line Limited (hereinafter called "PONL"), a corporation organized and existing under the laws of England and having an office and place of business at Beagle House, Braham Street, London E1 8EP, England, has indirect beneficial ownership of one hundred percent (100%) of PONLBV, and thereby PONL has indirect beneficial ownership of fifty percent (50%) of the Lessee. The Lessee hereby further represents, knowing that the Port Authority is relying on the accuracy of such representation, that Royal Nedlloyd N.V. (hereinafter called "Nedlloyd"), a corporation organized and existing under the laws of the Netherlands and having an office and place of business at Boompjes 40, 3011 XB Rotterdam, Netherlands, and which is a public company listed on the Amsterdam Stock Exchange, has fifty percent (50%) of the direct beneficial ownership of PONL, and that P&O has fifty percent (50%) of the direct beneficial ownership of PONL. The Lessee hereby further represents, knowing that the Port Authority is relying on the accuracy of such representation, that PONL is engaged in the conduct of a worldwide waterborne ocean container shipping business (which business is hereinafter called "the Shipping Business").

(3) The Lessee recognizes the fact that a transfer of securities in the Lessee or of a substantial part thereof, or any other act or transaction involving or resulting in a change in the ownership or distribution of such securities or with respect to the identity of the parties in control of the Lessee or the degree thereof, is for practical purposes a transfer or disposition of the rights obtained by the Lessee through this Agreement. The Lessee further recognizes that because of the nature of the obligations of the Lessee hereunder, the qualifications and identity of the Lessee and its security holders are of particular concern to the Port Authority. The Lessee also recognizes that it is because of such qualifications and identity that the Port Authority is entering into this Agreement and, in doing so, is willing to accept and rely on the Lessee for the faithful performance of all obligations and covenants hereunder. The Lessee further recognizes that the

operation by PONL of the Shipping Business is a major inducement for the Port Authority's entering into this Agreement, and that it is of great importance to the Port Authority, in order to achieve the business and regional economic goals of this Agreement, that at least fifty percent (50%) of the Lessee be owned, directly or indirectly, by an entity or entities directly or indirectly owning the Shipping Business in order to assure the availability of cargo to meet the foregoing business and regional economic goals of the Port Authority. Therefore, the Lessee represents and agrees for itself, POPNA and PONLBV, and any successor in interest thereof, respectively, that without the prior written approval of the Port Authority, there shall be no transfer of any securities in the Lessee by POPNA or PONLBV to any other person; nor shall POPNA or PONLBV suffer any transfer to be made; nor shall there be or be suffered to be made by the Lessee or by any owner of securities therein, any other change in the ownership of such securities or in the relative distribution thereof, or with respect to the identity of the parties in control of the Lessee or the degree thereof, by any other method or means, whether by increased capitalization, merger with another entity, amendments to the operating agreement or otherwise, issuance of additional new securities or classification of securities or otherwise; and the Lessee further represents and agrees for itself, POPNA and PONLBV, and any successor in interest thereof, respectively, that the direct ownership and control of the Lessee shall be as set forth in paragraph (a) (1) of this Section except as shall be otherwise approved by the Port Authority pursuant to the provisions of this paragraph (a) (3).

(4) The Lessee represents and agrees for itself and P&O and any successor in interest thereof, respectively, that without the prior written approval of the Port Authority, P&O shall maintain direct or indirect beneficial ownership of greater than fifty percent (50%) of POPNA. The Lessee further represents and agrees for itself and PONL and any successor in interest thereof, respectively, that without the prior written approval of the Port Authority, PONL shall maintain direct or indirect beneficial ownership of one hundred percent (100%) of PONLBV. The Lessee further represents and agrees for itself, Nedlloyd, P&O and PONL and any successor in interest thereof, respectively, that without the prior written approval of the Port Authority, P&O or Nedlloyd, or a joint venture of P&O and Nedlloyd, shall have greater than fifty percent (50%) of the direct or indirect beneficial ownership of PONL.

(5) The Lessee acknowledges that it is contemplated that POPNA and/or PONL may become a publicly owned entity (as defined in paragraph (f) of this Section), or that a parent corporation of POPNA and/or PONL owning all of the voting securities of and controlling POPNA and/or PONL (which parent

corporation(s) are hereinafter individually and collectively called "the Parent Company") may become a publicly owned entity. Notwithstanding any other provision of this Section, in the event that POPNA and/or PONL, or the Parent Company, shall become a publicly owned entity and as a result of such transaction the required ownership of POPNA and/or PONL set forth above in this Section shall cease to be in effect, such failure to so maintain said ownership interests in effect shall not be an event of default under this Section granting the Port Authority the right to terminate this Agreement under Section 25 hereof; provided, that, POPNA and/or PONL, or the Parent Company, as a publicly owned entity, shall be listed on a major stock exchange (as hereinafter defined) and further, provided, that, in the event that any individual, corporation, partnership or other entity (other than P&O or Nedlloyd, or a publicly owned entity listed on a major stock exchange in the event that and as long as no individual, corporation, partnership or other entity shall have in excess of fifty percent (50%) of the direct or indirect beneficial ownership of any class of outstanding voting securities of such publicly owned entity) shall have direct or indirect beneficial ownership of a portion of any class of outstanding voting securities of POPNA and/or PONL, or of the Parent Company, in excess of fifty percent (50%) thereof unless the Port Authority shall have given its prior written consent thereto, then upon the occurrence of any such event or at any time thereafter during the continuance thereof the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of Section 25 hereof. Notwithstanding any other provision of this subparagraph, in the event that the Parent Company shall cease to own all of the voting securities of and to control POPNA and/or PONL unless the Port Authority shall have given its prior written consent thereto, then upon the occurrence of any such event or at any time thereafter during the continuance thereof the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of Section 25 hereof. For purposes of this Section, a "major stock exchange" shall be the London Stock Exchange, the Amsterdam Stock Exchange, the New York Stock Exchange, the American Stock Exchange, the Singapore Stock Exchange or the Tokyo Stock Exchange.

(6) The Lessee represents and agrees for itself and PONL and any successor in interest thereof, respectively, that in the event that PONL, whether or not it is a publicly owned entity, shall sell or otherwise transfer all or substantially all of its shipping assets to an acquiring entity (whether by direct or indirect sale or by direct or indirect transfer of securities or by a combination thereof or otherwise), or shall sell or otherwise transfer one hundred percent (100%) of its voting securities to an acquiring entity, unless the Port Authority shall have given its prior written consent thereto,

then upon the occurrence of any such event or at any time thereafter during the continuance thereof the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of Section 25 hereto, except that the Port Authority shall not have such termination right in the event that (i) said acquiring entity shall be a publicly owned corporation listed on a major stock exchange (as defined in subparagraph (5) of this paragraph) and (ii) said acquiring corporation shall also acquire the direct or indirect beneficial ownership of one hundred percent (100%) of PONLBV and said acquiring corporation shall continue the operation of the Shipping Business.

(7) In addition to the requirements set forth above in this paragraph, the Lessee agrees that greater than fifty percent (50%) of the ultimate beneficial ownership of the Lessee shall not be transferred to an entity that is not a major ocean shipping line and/or a major marine terminal operator having a reputation for honest dealing and competence in the conduct of its business, unless the Port Authority shall have given its prior written consent thereto, then upon the occurrence of any such event or at any time thereafter during the continuance thereof the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of Section 25 hereof.

(b) The Lessee acknowledges the Lessee's assurance of faithful performance of these provisions is a special inducement for the Port Authority to enter into this Agreement. Noncompliance on the part of the Lessee with the provisions contained in this Section shall be and be deemed an event of default under Section 25 of this Agreement, and the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of said Section 25 hereof.

(c) The foregoing right of termination shall be in addition to all other rights of termination the Port Authority has under this Agreement and the failure of the Port Authority to exercise its right of termination under this Section at any time in which it may have such right shall not affect, waive or limit its right to exercise said right of termination at any subsequent time.

(d) The phrase "direct or indirect beneficial ownership" shall include without limiting the generality thereof the direct or indirect power through contract, arrangement, understanding, relationship, ownership of other business entities or otherwise to dispose of or to direct the disposal of, or to vote or to direct the voting of, any voting security of an entity.

(e) The term "security" shall include any membership interest, stock, any bond which carries voting rights, or rights or options to subscribe to, purchase, convert or transfer into or otherwise acquire equity securities, or any other obligation of a limited liability company or a corporation the holder of which has any voting rights including but not limited to the right to vote for the election of members of the governing body or board of directors of said limited liability company or corporation and shall include any security convertible into a voting security and any right, option or warrant to purchase a voting security.

(f) A "publicly owned entity" shall be and mean one that has any class of securities subject to the registration requirements of the Securities Exchange Act of 1934, or any successor or substitute therefor, and any entity that has met any equivalent legal registration or listing requirements of Great Britain, the Netherlands, Singapore or Japan, as the circumstances require.

(g) The Lessee shall promptly advise the Port Authority of any change in the representations made in paragraph (a) (1), (a) (2), (a) (3), (a) (4), (a) (5), (a) (6) or (a) (7) of this Section.

#### Section 49. Guaranty

(a) The Lessee shall cause to be executed by P&O, as defined in Section 48(a) (2) hereof, simultaneously with the execution and delivery by the Lessee of this Agreement to the Port Authority, a Contract of Guaranty in the form attached hereto and hereby made a part hereof, which Contract of Guaranty shall provide for the guarantee by P&O of the full, faithful and prompt performance of and compliance with, on the part of the Lessee, certain of the terms, provisions, covenants and conditions of the Lessee under the Lease as set forth in said Contract of Guaranty, and the Lessee shall keep and maintain said Contract of Guaranty in full force and effect. The existence of the contract of guaranty described in this Section shall not limit or alter any other remedies of the Port Authority under this Agreement, and the Port Authority may from time to time and at any time elect to pursue (or not to pursue) its rights under this contract of guaranty without thereby limiting, voiding or relinquishing any of its other rights or remedies under this Agreement.

(b) The Lessee shall cause to be executed by PONL, as defined in Section 48(a) (2) hereof, simultaneously with the execution and delivery by the Lessee of this Agreement to the Port Authority, a Contract of Guaranty in the form attached hereto and hereby made a part hereof, which Contract of Guaranty shall provide for the guarantee by Container Line of the full,



faithful and prompt performance of and compliance with, on the part of the Lessee, certain of the terms, provisions, covenants and conditions of the Lessee under the Lease as set forth in said Contract of Guaranty, and the Lessee shall keep and maintain said Contract of Guaranty in full force and effect. The existence of the contract of guaranty described in this Section shall not limit or alter any other remedies of the Port Authority under this Agreement, and the Port Authority may from time to time and at any time elect to pursue (or not to pursue) its rights under this contract of guaranty without thereby limiting, voiding or relinquishing any of its other rights or remedies under this Agreement.

Section 50. Abatement

If at any time during the term of the letting under this Agreement the Lessee shall become entitled to an abatement of basic rental, whether pursuant to the terms of this Agreement, or otherwise, such abatement shall be computed as follows: for each square foot of open area constituting part of the premises the use of which is denied the Lessee, at the annual rate of \$0.37 during the period from December 1, 2000 through November 30, 2001, at the annual rate of \$1.12 during the period from December 1, 2001 through November 30, 2002, with the annual rate of \$1.49 thereafter to be adjusted during the term of the letting proportionately to the adjustment in basic rental in accordance with the provisions of Section 4 of this Agreement. Except as provided in this Section, no abatement of rental shall be claimed by or allowed to the Lessee.

Section 51. Partial Termination

The Port Authority shall have the right to terminate the letting of the portion of the open area shown in diagonal hatching on Exhibit A, Sheets 1 and 2, annexed hereto, without cause, on thirty (30) days' prior written notice given to the Lessee at any time from and after November 30, 2001. Termination under the provisions of this paragraph shall have the same effect as if the effective date of termination stated in the notice were the date of expiration of the term of the letting of said portion of the premises under this Agreement. Notwithstanding any provision to the contrary contained in Section 50 hereof, there shall be no abatement of any rental payable by the Lessee under this Agreement on account of the termination of the aforesaid portion of the premises pursuant to the provisions of this Section.

Section 52. Tax Election

(a) Attached hereto as Exhibit Y is a form of election pursuant to Section 142(b) of the Internal Revenue Code of 1986,

as amended. The Lessee acknowledges that two counterparts of said form of election have been delivered to it by the Port Authority. Upon the execution of this Agreement by the Lessee and its delivery to the Port Authority, the Lessee shall execute the said two counterparts and deliver one fully executed counterpart to the Port Authority with its delivery of this Agreement, and the Lessee shall keep the second executed counterpart with its records for the balance of the entire term of the letting under this Agreement.

(b) The Lessee is not acquiring an ownership interest in the premises defined in Section 1 of this Agreement. Capital expenditures in connection with the premises are expected to be made in whole or in part by the Port Authority from "exempt facility bonds" (within the meaning of Section 142(a) of the Internal Revenue Code of 1986) issued by the Port Authority from time to time with respect to the Wharf Rehabilitation Work as defined in Section 8B hereof (such capital expenditures with respect to the Wharf Rehabilitation Work are hereinafter called "the Property"). The Lessee hereby irrevocably elects not to claim for purposes of federal, state or local taxation of income any depreciation or investment credits, with respect to the Property. The Lessee further agrees that this irrevocable election shall be binding upon its successors in interest, if any, under this Agreement, and as a condition of any permitted sale or assignment of the interest of the Lessee under this Agreement, every successor in interest shall furnish an executed irrevocable election in the form of the immediately preceding sentence to the Port Authority. The foregoing shall not grant or be deemed to grant to the Lessee the right to sell or assign, in any manner, its interest under this Agreement.

(c) In the event the Lessee records any documents in lieu of recording this Agreement, such documents shall incorporate the substance of paragraph (b) of this Section.

(d) It is understood that the election set forth in paragraph (b) of this Section shall not apply to any personal property of the Lessee (including equipment and trade fixtures) removable without material damage to the premises leased to the Lessee pursuant to this Agreement which are installed by the Lessee in or on the premises leased to the Lessee pursuant to this Agreement and which shall be deemed to be and remain the property of the Lessee.

#### Section 53. Third Parties on Premises

The Lessee acknowledges that portions of the premises defined in Section 1 hereof and of the Added Space defined in Section 44 hereof (which portions of said premises and the Added Space are hereinafter, as the context requires, called "the

Occupied Space") have been and may be occupied on December 1, 2000 (hereinafter called "the Commencement Date") by Distribution and Auto Service, Inc., FAPS, Inc., and/or Maher Terminals, Inc. (which entities are hereinafter, as the context requires, individually and collectively called "the Third Party"). Prior to the Commencement Date, the Port Authority shall serve notice upon the Third Party which shall terminate the lease agreement or other agreement or arrangement under which the Third Party occupies the Occupied Space and shall direct the Third Party to vacate the Occupied Space. In the event that the Third Party has not vacated the Occupied Space by the Commencement Date, the Lessee agrees to take possession of the Occupied Space at the time respectively set forth in Section 1 and Section 44 hereof subject to the presence of the Third Party on the Occupied Space, and the Port Authority shall not be subject to any liability to the Lessee on account of the presence of the Third Party on the Occupied Space, and such presence of the Third Party shall in no way affect the validity of this Agreement or the obligations of the Lessee hereunder. Effective upon the Commencement Date, the Port Authority shall and does assign to the Lessee all rights of the Port Authority to cause or require the Third Party to vacate the Occupied Space, and except as set forth above in this sentence, the Port Authority shall have no obligations to the Lessee with respect to the Third Party.

Section 54. Late Charges

If the Lessee should fail to pay any amount required under this Agreement when due to the Port Authority, including without limitation any payment of rental or any payment of utility fees or charges, or other charges or fees, or if any such amount is found to be due as the result of an audit, then, in such event, the Port Authority may impose (by statement, bill or otherwise) a late charge with respect to each such unpaid amount for each late charge period hereinbelow described during the entirety of which such amount remains unpaid, each such late charge not to exceed an amount equal to eight-tenths of one percent of such unpaid amount for each late charge period. There shall be twenty-four late charge periods during each calendar year; each late charge period shall be for a period of at least fifteen (15) calendar days except one late charge period each calendar year may be for a period of less than fifteen (but not less than thirteen) calendar days. Without limiting the generality of the foregoing, late charge periods in the case of amounts found to have been owing to the Port Authority as the result of Port Authority audit findings shall consist of each late charge period following the date the unpaid amount should have been paid under this Agreement. Each late charge shall be payable immediately upon demand made at any time there for by the Port Authority. No acceptance by the Port Authority of payment of any unpaid amount or of any unpaid late charge amount shall be

deemed a waiver of the right of the Port Authority to payment of any late charge or late charges payable under the provisions of this Section, with respect to such unpaid amount. Each late charge shall be and become additional rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of the rentals as set forth in this Agreement. Nothing in this Section is intended to, or shall be deemed to, affect, alter, modify or diminish in any way (i) any rights of the Port Authority under this Agreement, including without limitation the Port Authority's rights set forth in Section 25 of this Agreement entitled "Termination" or (ii) any obligations of the Lessee under this Agreement. In the event that any late charge imposed pursuant to this Section shall exceed a legal maximum applicable to such late charge, then, in such event, each such late charge payable under this Agreement shall be payable instead at such legal maximum.

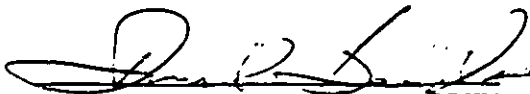
Section 55. Entire Agreement

The within Agreement consists of pages number 1 through 128, together with Schedules C, D, E and F, and Exhibit A (Sheets 1, 2, 3, 4 and 5), Exhibit A-1 (Sheet 1), and Exhibits I and Y. It constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended, except by written instrument duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed this Agreement as of the date first above written.

ATTEST:

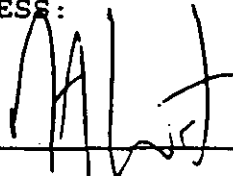
THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

  
Secretary

By Lillian C. Janne  
(Title) ASSISTANT EXECUTIVE DIRECTOR  
(seal)

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

  
\_\_\_\_\_

By A. Bon...  
(Title) Senior Manager

APPROVED:  
Form Terms  
KW p. 1

SCHEDULE C

PORT THROUGHPUT  
YEAR BEGINNING:

PORT PERCENTAGE:

January 1, 2003	Forty Percent (40%)
January 1, 2004	Forty-two Percent (42%)
January 1, 2005	Forty-four Percent (44%)
January 1, 2006	Forty-six Percent (46%)
January 1, 2007	Forty-eight Percent (48%)
January 1, 2008	Fifty Percent (50%)
January 1, 2009	Fifty-one Percent (51%)
January 1, 2010	Fifty-two Percent (52%)
January 1, 2011	Fifty-three Percent (53%)
January 1, 2012	Fifty-four Percent (54%)
January 1, 2013 through January 1, 2030	Fifty-five Percent (55%)

**PNCT LLC TERMINAL GUARANTEE**  
**Schedules D and E**

<u>Year</u> <u>Commencing</u>	<u>Annual Containers Handled</u>	
	<u># of Containers (Schedule D)</u>	<u>60% (Schedule E)</u>
1/1/2003	200,000	120,000
1/1/2004	250,000	150,000
1/1/2005	257,500	154,500
1/1/2006	265,225	159,135
1/1/2007	273,182	163,909
1/1/2008	281,377	168,826
1/1/2009	289,819	173,891
1/1/2010	298,513	179,108
1/1/2011	307,468	184,481
1/1/2012	316,693	190,016
1/1/2013	326,193	195,716
1/1/2014	335,979	201,587
1/1/2015	346,058	207,635
1/1/2016	356,440	213,864
1/1/2017	367,133	220,280
1/1/2018	378,147	226,888
1/1/2019	389,492	233,695
1/1/2020	401,177	240,706
1/1/2021	413,212	247,927
1/1/2022	425,608	255,365
1/1/2023	438,377	263,026
1/1/2024	450,000	270,000
1/1/2025	450,000	270,000
1/1/2026	450,000	270,000
1/1/2027	450,000	270,000
1/1/2028	450,000	270,000
1/1/2029	450,000	270,000
1/1/2030	450,000	270,000

SCHEDULE F

PART I

Affirmative Action Guidelines - Equal Employment Opportunity

I. The Lessee agrees to comply with and the Lessee shall require the Contractor, as hereinafter defined, to comply with the provisions set forth hereinafter and in paragraphs (q) and (r) of Section 8 of the Agreement to which this schedule is attached (herein called "the Agreement"). The provisions set forth in this Part I are similar to the conditions for bidding on federal government contracts adopted by the Office of Federal Contract Compliance and effective May 8, 1978.

The Lessee agrees fully to comply with and shall require each bidder, contractor and subcontractor of the Lessee and each subcontractor of a contractor at any tier of construction (herein collectively referred to as "the Contractor") fully to comply with the following conditions set forth in this Schedule as to each construction trade to be used on the construction work or any portion thereof (said conditions being herein called "Bid Conditions"). The Lessee hereby agrees to commit itself to the goals for minority and female utilization set forth below and all other requirements, terms and conditions of the Bid Conditions. The Lessee agrees to require the Contractor to commit itself to the said goals for minority and female utilization set forth below and all other requirements, terms and conditions of the Bid Conditions by submitting a properly signed bid.

II. The Lessee agrees to and shall require the Contractor to appoint an executive of its respective company to assume the responsibility for the implementation of the requirements, terms and conditions of the following Bid Conditions:

(a) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work are as follows:

- |                             |      |
|-----------------------------|------|
| (1) Minority participation: | 32%  |
| (2) Female participation:   | 6.9% |

These goals are applicable to all the Contractor's construction work performed in and for the premises.

The Contractor's specific affirmative action obligations set forth herein of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make good faith efforts to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract. Compliance with the goals will be measured against the total work hours performed.

(b) The Contractor shall provide written notification to the Lessee and the Lessee agrees to provide written notification to the Manager of the Equal Opportunity Programs Unit of the Port Authority within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

(c) As used in these specifications:

- (1) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- (2) "Minority" includes:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and



(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(d) Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the construction work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 those provisions which include the applicable goals for minority and female participation.

(e) The Contractor shall implement the specific affirmative action standards provided in subparagraphs (1) through (16) of paragraph (h) hereof. The goals set forth above are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the premises. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

(f) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations hereunder.

(g) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period, and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

(h) The Contractor shall take specific affirmative actions to ensure equal employment opportunity ("EEO").

The evaluation of the Contractor's compliance with these provisions shall be based upon its good faith efforts to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

(1) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each phase of the construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other supervisory personnel at the premises are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at the premises.

(2) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

(4) Provide immediate written notification to the Lessee when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and training programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (2) above.

(6) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the Contractor's newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the Contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

(7) Review, at least every six months the Contractor's EEO policy and affirmative action obligations hereunder with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-premises supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at the premises. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

(9) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations and to State-certified minority referral agencies serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the premises and in other areas of a Contractor's workforce.

(11) Tests and other selection requirements shall comply with 41 CFR Part 60-3.

(12) Conduct, at least every six months, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(13) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations hereunder are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and supplies, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least every six months, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

(i) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (subparagraphs (1)-(16) of Paragraph (h) above). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraph (h) hereof provided that the Contractor actively participates in the group, makes good faith efforts to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes good faith efforts to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.

(j) A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation hereof if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation hereof if a specific minority group of women is underutilized).

(k) The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

(l) The Contractor shall not enter into any sub-contract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

(m) The Contractor shall carry out such sanctions and penalties for violation of this clause including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered by the Lessee. Any Contractor who fails to carry out such sanctions and penalties shall be in violation hereof.

(n) The Contractor, in fulfilling its obligations hereunder shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (h) hereof so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of these provisions, the Lessee shall proceed accordingly.

(o) The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

(p) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(q) Without limiting any other obligation, term or provision under the Lease, the Contractor shall cooperate with all federal, state or local agencies established for the purpose of implementing affirmative action compliance programs and shall comply with all procedures and guidelines established or which may be established by the Port Authority.

PART II

Minority Business Enterprises/Women-Owned Business Enterprises

The Lessee agrees to and shall require the general contractor or other construction supervisor and each of the Lessee's contractors to use every good faith effort to provide for meaningful participation by Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBEs) in the construction work, pursuant to the provisions hereof and in accordance with the Agreement. For purposes hereof, Minority Business Enterprise (MBE) shall mean any business enterprise which is at least fifty-one percentum owned by or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by citizens or permanent resident aliens who are minorities and such ownership is real, substantial and continuing. For the purposes hereof, Women-owned Business Enterprise (WBE) shall mean any business enterprise which is at least fifty-one percentum owned by, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by women and such ownership is real, substantial and continuing. A minority shall be as defined in paragraph II(c) of Part I of this Schedule F. "Meaningful participation" shall mean that at least seventeen percent (17%) of the total dollar value of the construction contracts (including subcontracts) covering the construction work are for the participation of Minority Business Enterprises and Women-owned Business Enterprises, of which at least twelve percent (12%) are for the participation of Minority Business Enterprises. Good faith efforts to include meaningful participation by MBEs and WBEs shall include at least the following:

(a) Dividing the Work to be subcontracted into smaller portions where feasible.

(b) Actively and affirmatively soliciting bids for subcontracts from MBEs and WBEs, including circulation of solicitations to minority and female contractor associations. The Contractor shall maintain records detailing the efforts made to provide for meaningful MBE and WBE participation in the Work, including the names and addresses of all MBEs and WBEs contacted and, if any such MBE or WBE is not selected as a joint venturer or subcontractor, the reason for such decision.

(c) Making plans and specifications for prospective construction work available to MBEs and WBEs in sufficient time for review.

(d) Utilizing the list of eligible MBEs and WBEs maintained by the Port Authority or seeking minorities and women from other sources for the purpose of soliciting bids for subcontractors.

(e) Encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors, where appropriate, to insure that the Lessee and Contractor will meet their obligations hereunder.

(f) Insuring that provision is made to provide progress payments to MBEs and WBEs on a timely basis.

(g) Not requiring bonds from and/or providing bonds and insurance for MBEs and WBEs, where appropriate.

LCB  
For the Port Authority

Initialed:

MB  
For the Lessee



**EXHIBIT I**

**to Lease No. L-PN-264**

**Between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**Initialed:**

*LCB*  
\_\_\_\_\_  
**For the Port Authority**

\_\_\_\_\_  
**For the Lessee**

**SUBSURFACE BASELINE REPORT  
PORT NEWARK CONTAINER TERMINAL, LLC**

**OCTOBER 2000**

**PORT NEWARK CONTAINER TERMINALS LLC/P&O PORTS  
ENVIRONMENTAL BASELINE ASSESSMENT**

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## **1.0 INTRODUCTION**

In July 2000, a subsurface investigation was conducted at the former Maersk/Universal terminal at Port Newark. P&O Ports has commenced negotiations with the Port Authority regarding the leasing of this terminal area, referred to here as the Port Newark Container Terminal LLC. As part of their leasing process, P&O Ports initiated the baseline investigation. This report presents the field methods and the results of the investigation as conducted by Foster Wheeler Environmental Corporation (Foster Wheeler).

## **2.0 FIELD ACTIVITIES**

The purpose of the field investigation was to establish current environmental conditions of subsurface soils and groundwater for the area located upland of Berths 51 to 61 at Port Newark at specific locations designated by the Port Authority. The area encompassing the terminal is approximately 154 acres. Figure 1 presents the Site Plan as provided by GEOD Corporation, a NJ licensed land surveyor.

As an important part of the planning process for conducting site activities, Foster Wheeler developed a site specific work plan prior to mobilizing to the field. Included in the investigation were the drilling of 32 soil borings and installation of 12 groundwater monitoring wells at the locations shown in Figure 1. Table 2-3 provides details concerning the protocols for all analyses performed. All investigative work conducted for the baseline program was performed in accordance with details presented in the Foster Wheeler work plan and the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual, May 1992.

## **2.1 SOIL SAMPLING PROGRAM**

To implement the soil sampling program, one drill rig and one earthprobe rig were mobilized on separate occasions. The soil sampling program was conducted at the site from July 13 to July 25. A hollow stem auger (HAS) drill rig and an earthprobe were utilized for the performance of the sampling. Continuous samples were collected with this earthprobe rig using 1-inch inside diameter carbon steel split-spoons. Soil borings were advanced with the HAS utilizing 4 1/4-inch inside diameter hollow stem augers. Continuous samples were collected with 2-inch inside diameter carbon steel split-spoons with all samples collected from beneath the asphalt cover and subbase to the water table. Standard penetration tests were performed on samples, per ASTM-D-1586-84 (1992) Standard Method for Penetration Test and Split-barrel Sampling of Soils.

A total of 66 soil samples, including four duplicate samples, were collected for laboratory analysis. Sample intervals for laboratory analysis in each boring were at depths of 18 to 24 inches below the soil surface and at 0 to 6 inches above the water table, where possible. Actual sample depth intervals varied depending on several factors, as follows:

- Sample recovery amount needed to be sufficient to fill sample jars. At times, an amount covering greater than a six-inch interval was collected to fulfill this requirement.
- In instances where a confining layer was encountered before reaching the water table, a sample was collected directly above the confining layer in the interests of not drilling through it.
- When elevated PID readings or a non-organic odor was detected in other split-spoon sample intervals, these samples were also sent for analysis. (Only in MW-2 and MW-5 did slight odors warrant collection of one additional sample from each soil boring.)

Soil sampling was conducted in accordance with Section 2.1 of the work plan. All sampling equipment was decontaminated according to the procedures found in Section 2.3 of this document before use at each new sample location. All soil samples were analyzed for the parameters found in Table 2-1, which also displays sample names and depths. All soil boring logs are included in Appendix A.

All residual drummed waste (17 drums in all) generated during the investigation was turned over to the Port Authority.

## **2.2 GROUNDWATER SAMPLING PROGRAM**

The groundwater investigation program involved the installation of 12 groundwater monitoring wells at the terminal. Although 15 well installations were intended, a confining clay layer was found to be present at three locations prior to encountering the water table. Thus three planned monitoring well locations were abandoned after initial drilling as a result of being dry. This was done by simply placing the drill cuttings back into the dry hole from which they were obtained, and sealing the surface with asphalt "cold patch" material.

Following the previous soil boring/sampling activities at those locations to be converted to monitoring wells, well installations began approximately July 25 and completed on August 1. Well development was finished at all 12 monitoring wells by August 7 and, after the requisite two week waiting period for stabilization, groundwater sampling began on August 21. Groundwater sampling of the 12 wells was completed by August 24.

Wells were installed in 12 of the boreholes completed during the preceding soil boring/sampling program. Locations of these wells are shown on Figure 1. Tabasco Drilling Corporation, a licensed driller in the State of New Jersey, installed the wells with a Foster Wheeler geologist providing oversight. Prior to the initiation of well installation, Tabasco obtained well permits for 15 wells. However, at the time of the investigation, MW-2, MW-4, and MW-10 locations were characterized by having the confining clay layer stratigraphically higher than the water table; therefore, wells were not installed at these locations.

Wells were screened across the water table with screens extending from three feet above the water table (if possible) to seven feet below (or to the confining layer), and constructed of 2-inch diameter, Schedule 40 PVC. All wells were installed with flush mount locking caps and constructed according to NJDEP monitoring well specifications found in the May 1992 Field Sampling Procedures Manual. Well Construction Diagrams providing as-built well specifications are found in Appendix B.

Each well was developed by the pumping and surging method. Wells were allowed to stabilize for two weeks after development prior to collecting groundwater samples.

Groundwater samples were collected via low-flow sampling techniques according to the procedures outlined in Section 2.2 of the Foster Wheeler project work plan.

The submersible pump used for groundwater sampling was decontaminated prior to use on each well according to the procedures described in Section 2.3.3 of this document. Dedicated teflon-lined tubing was used for sampling each separate well, with the exception of MW-14. MW-14 was purged and sampled using a polypropylene bailer since the pump control box malfunctioned, making the pump temporarily unavailable.

To purge the well, the bailer was carefully lowered into the well, and groundwater was removed from the well and measured for the indicator parameters of pH, turbidity, conductivity, temperature, dissolved oxygen and oxidation-reduction potential. Groundwater samples were collected for MW-14 after parameter stabilization by transferring water directly from the bailer into the sample bottles. This sampling technique is considered to yield accurate analytical results, the same as might be obtained by sampling directly from a pump discharge. Foster Wheeler used a disposable, dedicated bailer for sampling MW-14, to eliminate any cross contamination concerns. NJDEP and USEPA have recognized manual bailer sampling of groundwater as being acceptable on other projects. Groundwater samples were analyzed for the parameters found in Table 2-2.

## **2.3 EQUIPMENT DECONTAMINATION**

### **2.3.1 Sampling Equipment Decontamination**

All sampling equipment, except heavy machinery and submersible pumps, were decontaminated according to the following procedure:

1. Equipment was washed with a non-phosphate detergent and potable water.
2. Equipment was rinsed with potable water.
3. Equipment was rinsed with deionized water.
4. Equipment was allowed to air dry.
5. Equipment was wrapped with aluminum foil.

All decontaminated sampling equipment was stored and handled in a manner to prevent contamination.

### **2.3.2 Heavy Machinery Decontamination**

Prior to use on-site, heavy equipment was steam cleaned. Equipment that came into contact with contaminated media, such as augers and split spoons, were decontaminated between sampling locations to prevent cross-contamination of samples collected.

### **2.3.3 Pump Decontamination**

The submersible pump used for low-flow sampling was decontaminated between well locations to prevent cross-contamination. The following decontamination procedure was used:

1. The pump was submerged into a potable water and non-phosphate detergent rinse. Water was allowed to flush through the pump.
2. The pump was then flushed with potable water.
3. The pump was then flushed with deionized water.

## **2.4 SURVEYING**

GEOD Corporation, a New Jersey licensed professional land surveyor, located all sampling points and surveyed each monitoring well and soil boring location to the nearest 0.1 foot. The top of outer casing, top of inner casing, and ground elevations for all wells were measured to the nearest 0.01 foot. The New Jersey State Plane Coordinate System (1983 version for horizontal measurements and the Port Authority system for vertical measurements) was used for reference.

### **3.0 QUALITY ASSURANCE/QUALITY CONTROL**

#### **3.1 Quality Assurance/Quality Control for the Soil Sampling Program**

Six field blanks and six trip blanks were analyzed in order to ensure the validity of the data. The field blanks and trip blanks were only analyzed for TCL VOCs. Table 3-3 presents the results for all the QA/QC samples.

The FIELDBLANK and TRIPBLANK results are utilized for validating laboratory and sampling techniques. Constituents such as methylene chloride and chloroform are typically laboratory artifacts, such as residuals from cleaning analytical equipment. Since field data were not subject to a rigid data validation process against NJDEP and/or USEPA data validation criteria, the precise source of these constituents in the blanks, and their impact, if any, is currently unknown.

#### **3.2 Quality Assurance/Quality Control for the Groundwater Sampling Program**

Four field blanks and four trip blanks were analyzed in order to ensure the validity of the data. The field blanks were analyzed for TCL VOCs, TCL SVOCs, Pesticides, PCBs, Metals, Chloride, Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Total Dissolved Solids, and Cyanide. The trip blanks were only analyzed for TCL VOCs. The results are presented in Table 3-4.

### **4.0 FIELD MEASURED PARAMETERS**

Field parameter measurements were collected and recorded during groundwater sampling activities. Depth-to-water values were collected prior to well purging. These values are found in Table 3-5. As well purging began and after each three-minute interval, field parameter measurements were collected with a HORIBA U-22 Water Quality Monitoring System. These measurements collected include pH, specific conductivity, temperature, dissolved oxygen, Eh, and turbidity. All field measured parameters are shown on Table 3-6 and the well purge data sheet for each well sampled (Appendix C).

### **5.0 FIELD OBSERVATIONS**

All soil borings were drilled through asphalt and sub-base cover. Fill material observed in the borings varied, depending on location. In some places, an orange-brown sand was found. In other locations, a gray silt and gravel layer was found. The depths for these layers varied from approximately 2 feet in the interior area of the site to greater than 18 feet near the bulkhead on the Elizabeth Channel. Below this fill material was additional fill material in the form of a semi-confining gray silt and silty clay layer. This unit varied in thickness as well, from being not present in some locations to being of an unknown thickness in others (although it is believed to be at least several feet thick in some areas). Because this unit is semi-confining, Foster Wheeler refrained from drilling through it to



avoid creating a potential pathway for contaminant migration. Where this silt and clay unit was not present, a black organic layer, or peat, was encountered. Drilling was likewise halted whenever this material was encountered.

The water table was found at varying depths below grade. In general, its gradient is toward the Elizabeth Channel, with groundwater flow moving perpendicular to the channel and toward it. The water table was not encountered before the confining layer at borings MW-4 and SB-7. Where groundwater was encountered, however, its depth varied from approximately two to ten feet below grade, with a deeper water table existing adjacent to the channel.

**TABLES**

**TABLE 2-1  
PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SOIL SAMPLING PROGRAM**

	SOIL SAMPLE	ACTUAL DEPTHS	TCL VOCs	TCL SVOCs	PESTICIDES	PCBs	TAL METALS	OTHER
1	MW-1(1-2)	1-1.67	√	√	√	√	√	√
2	MW-1(4-5)	4.33-4.75	√	√	√	√	√	√
3	MW-2(1-2)	1-1.75	√	√	√	√	√	√
4	MW-2(4-5)	4-4.75	√	√	√	√	√	√
5	MW-2(11-11.5)	10.67-11.42	√	√	√	√	√	√
6	MW-3 (1.5-2)	1.5-2	√	√	√	√	√	√
7	MW-3 (5-5.5)	5-5.5	√	√	√	√	√	√
8	MW-04(0.75-1.25)	0.75-1.25	√	√	√	√	√	√
9	MW-04(2-2.5)	2-2.33	√	√	√	√	√	√
10	MW-05(1-1.5)	1.08-1.42	√	√	√	√	√	√
11	MW-05(3.5-4)	3.33-3.83	√	√	√	√	√	√
12	MW-05(4.5-5)	4.5-4.67	√	√	√	√	√	√
13	MW-6(1.5-2)	1.5-2	√	√	√	√	√	√
14	MW-6(9.5-10)	9.5-10	√	√	√	√	√	√
15	MW-07(1-1.5)	1-1.33	√	√	√	√	√	√
16	MW-07(3.5-4)	3.42-4	√	√	√	√	√	√
17	MW-09(1-2)	0.83-1.92	√	√	√	√	√	√
18	MW-09(4-5)	4-4.83	√	√	√	√	√	√
19	MW-10(1.5-2)	1.5-2	√	√	√	√	√	√
20	MW-10(3.5-4)	3.5-4	√	√	√	√	√	√
21	MW-11(2-3)	2-3	√	√	√	√	√	√
22	MW-11(3-4)	3-4	√	√	√	√	√	√
23	MW-12(0.5-1.5)	0.5-1.58	√	√	√	√	√	√
24	MW-12(10-11)	10-11.25	√	√	√	√	√	√
23	MW-13 (1.5-2)	1.5-2	√	√	√	√	√	√
24	MW-13 (6.5-7)	6.5-7	√	√	√	√	√	√
25	MW-14(1.5-2)	1.5-2	√	√	√	√	√	√
26	MW-14(4.5-5)	4.5-5	√	√	√	√	√	√
27	MW-15(1.5-2)	1.5-2	√	√	√	√	√	√
28	MW-15(7.5-8)	7.5-8	√	√	√	√	√	√
29	SB-01(1-1.5)	0.83-1.58	√	√	√	√	√	√
30	SB-01(4-5)	4-4.83	√	√	√	√	√	√
31	SB-02(1-2)	1-1.58	√	√	√	√	√	√
32	SB-02(2.5-3)	2.58-3.08	√	√	√	√	√	√
33	SB-03(1-1.5)	1.17-1.67	√	√	√	√	√	√
34	SB-03(2-2.5)	2-2.83	√	√	√	√	√	√
35	SB-4 (1.5-2)	1.5-2	√	√	√	√	√	√
36	SB-4 (3.5-4)	3.5-4	√	√	√	√	√	√
37	SB-5 (1.5-2)	1.5-2	√	√	√	√	√	√
38	SB-5 (3.5-4)	3.5-4	√	√	√	√	√	√
39	SB-6(1-2)	1-1.75	√	√	√	√	√	√
40	SB-6(3-3.5)	2.92-3.42	√	√	√	√	√	√
41	SB-7(1-2)	1-1.75	√	√	√	√	√	√
42	SB-7(2-2.5)	2-2.42	√	√	√	√	√	√
43	SB-8 (1.5-2)	1.5-2	√	√	√	√	√	√

TCL VOCs - Target Compound List Volatile Organic Compounds

TCL SVOCs - Target Compound List Semi-Volatile Organic Compounds

TAL METALS - Target Analyte List Metals

PCBs - Polychlorinated Biphenyls

OTHER - Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Percent Solids, Cyanide

**TABLE 2-1  
PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SOIL SAMPLING PROGRAM**

	SOIL SAMPLE	ACTUAL DEPTHS	TCL VOCs	TCL SVOCs	PESTICIDES	PCBs	TAL METALS	OTHER
44	SB-8 (3.5-4)	3.5-4	√	√	√	√	√	√
45	SB-10(1.5-2)	1.17-1.67	√	√	√	√	√	√
46	SB-10(2-2.5)	2-2.58	√	√	√	√	√	√
47	SB-11(1.5-2)	1.5-2	√	√	√	√	√	√
48	SB-11(9-9.5)	9-9.5	√	√	√	√	√	√
49	SB-12(0.5-2)	0.5-1.67	√	√	√	√	√	√
50	SB-12(3-4)	3.08-4.33	√	√	√	√	√	√
51	SB-13(0.5-1.5)	0.5-1.58	√	√	√	√	√	√
52	SB-13(10-11)	10-11.25	√	√	√	√	√	√
53	SB-13A(1.5-2)	1.5-2	√	√	√	√	√	√
54	SB-13A(8.5-9)	8.5-9	√	√	√	√	√	√
55	SB-14 (1.5-2)	1.5-2	√	√	√	√	√	√
56	SB-14 (5.5-6)	5.5-6	√	√	√	√	√	√
57	SB-15 (1.5-2)	1.5-2	√	√	√	√	√	√
58	SB-15 (5.5-6)	5.5-6	√	√	√	√	√	√
59	SB-16(0.5-1)	0.5-1.08	√	√	√	√	√	√
60	SB-16(8-9)	8-8.83	√	√	√	√	√	√
61	SB-17(1.5-2)	1.5-1.92	√	√	√	√	√	√
62	SB-17(8-9)	8.33-8.67	√	√	√	√	√	√

TCL VOCs - Target Compound List Volatile Organic Compounds

TCL SVOCs - Target Compound List Semi-Volatile Organic Compounds

TAL METALS - Target Analyte List Metals

PCBs - Polychlorinated Biphenyls

OTHER - Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Percent Solids, Cyanide

**TABLE 2-2**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**GROUNDWATER SAMPLING PROGRAM**

	WELL ID	TCL VOCs	TCL SVOCs	PESTICIDES	PCBs	TOTAL PP METALS	OTHER	FIELD PARAMETERS*
1	MW-3	√	NA	NA	NA	NA	√*	√
2	MW-5	√	√	√	√	√	√	√
3	MW-6	√	√	√	√	√	√	√
4	MW-7	√	√	√	√	√	√	√
5	MW-8A	√	√	√	√	√	√	√
6	MW-9A	√	√	√	√	√	√	√
7	MW-11	√	√	√	√	√	√	√
8	MW-12	√	√	√	√	√	√	√
9	MW-14	√	√	√	√	√	√	√
10	MW-15	√	√	√	√	√	√	√

\* - Parameters to include temperature, pH, dissolved oxygen, turbidity, oxidation-reduction potential, specific conductivity, and flow rate.

TCL VOCs - Target Compound List Volatile Organic Compounds

TCL SVOCs - Target Compound List Semi-Volatile Organic Compounds

PCBs - Polychlorinated Biphenyls

PP - Priority Pollutant

OTHER - Chloride, Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Total Dissolved Solids, and Cyanide

NA - Not Analyzed due to not enough water.

√ - Analyzed

√\* - Analyzed for Total Recoverable Phenolics only

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SOIL AND GROUNDWATER ANALYTICAL PROTOCOLS**

Parameter Name	Matrix	Container	Analytical Method	Preservatives	Maximum Holding Time
Volatile Organic Compounds +10	Water	(2) 40-mL VOA vials w/Teflon lined septums	USEPA 624	HCl to pH<2; Cool to 4°C	14 days
Semi-volatile Organic Compounds +30	Water	(2) 1L Amber glass bottles	USEPA 625	Cool to 4°C	7 days extract; 40 days analyze
Pesticides/PCBs	Water	(2) 1L Amber glass bottles	USEPA 608	Cool to 4°C	7 days extract; 40 days analyze
Metals	Water	(1) 500 ml Polyethylene bottle	USEPA 200.7/245.2	HNO <sub>3</sub> to pH<2; Cool to 4°C	6 months (Hg - 28 days)
Cyanide	Water	(1) 500 ml Polyethylene bottle	USEPA 335.2	NaOH to pH>12; Cool to 4°C	14 days
Phenolics	Water	(1) 1L Glass bottle	USEPA 420.1		28 days
Total Petroleum Hydrocarbons	Water	(1) 1L Amber glass bottle	USEPA 418.1	H <sub>2</sub> SO <sub>4</sub> or HCl to pH<2; Cool to 4°C	28 days
Total Dissolved Solids	Water	(1) 500 ml Polyethylene	USEPA 160.1	Cool to 4°C	7 days
Total Chloride	Water	(1) 500 ml Polyethylene	USEPA 325.3	Cool to 4°C	28 days
Volatile Organic Compounds +10	Soil	(1) 4 oz. Amber glass jar	SW846 8260B	Methanol; Cool to 4°C	14 days
Semi-volatile Organic Compounds +30 and	Soil	(1) 16 oz. Glass jar	SW846 8270C	Cool to 4°C	7 days extract 40 days analyze
Pesticides/PCBs	Soil		SW846 8081A/8082		7 days extract 40 days analyze
Metals	Soil		SW846 6010B/7000		6 months (Hg - 28 days)
Cyanide	Soil		SW846 9013/9010B		14 days
Phenolics	Soil		SW846 9065		28 days
Total Petroleum Hydrocarbons	Soil		USEPA 418.1M		28 days

**Note:**

All holding times listed are from time of sample collection.

TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-1(1-2) O29519 Soil 7/19/00	MW-1(4-5) O29520 Soil 7/19/00	MW-2(1-2) O29516 Soil 7/19/00	MW-2(4-5) O29517 Soil 7/19/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	420 J	340 J	330 J	500 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	820	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	760	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	1400 J	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-1(1-2) O29519 Soil 7/19/00	MW-1(4-5) O29520 Soil 7/19/00	MW-2(1-2) O29516 Soil 7/19/00	MW-2(4-5) O29517 Soil 7/19/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				640 J	1380 J	1400 J	4110 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2150	4520	1980	6050
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	0.74 B	4.6	0.54 B	6.9
Barium	700	47,000	NC	12.5 B	63.6	10.2 B	51.4
Beryllium	2	2	NC	0.14 B	0.63	0.16 B	0.27 B
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	815	4630	709	1270
Chromium	240	6100	NC	3.2	9.7	5.9	18.3
Cobalt	NC	NC	NC	2.1 B	9.8	3.6 B	4.6 B
Copper	600	600	NC	2.8	22.1	5.4	19.4
Iron	NC	NC	NC	4300	27100	7250	13500



TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-1(1-2) O29519 Soil 7/19/00	MW-1(4-5) O29520 Soil 7/19/00	MW-2(1-2) O29516 Soil 7/19/00	MW-2(4-5) O29517 Soil 7/19/00
Lead	400	600	NC	3.3	56.1	3.2	31.2
Magnesium	NC	NC	NC	526 B	2440	1180	2400
Manganese	NC	NC	NC	70.4	643.0	50.2	105.0
Mercury	14	270	NC	U	0.35	0.02 B	0.16
Nickel	230	4,200	100	3.3 B	20.1	12.4	8.9
Potassium	NC	NC	NC	220 B	1130	399 B	1220
Silver	110	4,100	NC	U	0.51 B	U	0.23 B
Sodium	NC	NC	NC	137 B	175 B	152 B	359 B
Thallium	2	2	NC	U	2.9	U	0.97 B
Vanadium	370	7,100	NC	6.3	15.6	9.6	20.8
Zinc	1,500	1,500	NC	11.3	55.9	16.7	42.4
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93.9	91	94.7	77.1

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3.

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-2(11-11.5) O29518 Soil 7/19/00	MW-3 (1.5-2) O29085 Soil 7/17/00	MW-3 (5-5.5) O29086 Soil 7/17/00	MW-04(0.75-1.25) O30041 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	750 J	U	U	740 J
2-Butanone	1,000,000	1,000,000	50,000	U	2,400	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				20500 J	U	U	2450 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	37 J	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	49 J	U	370
Fluoranthene	2,300,000	10,000,000	100,000	150 J	96 J	U	U
Pyrene	1,700,000	10,000,000	100,000	120 J	120 J	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	76 J	63 J	U	U
Chrysene	9,000	40,000	500,000	98 J	75 J	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	42 J
Benzo(b)fluoranthene	900	4,000	50,000	91 J	98 J	U	U

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-2(11-11.5) O29518 Soil 7/19/00	MW-3 (1.5-2) O29085 Soil 7/17/00	MW-3 (5-5.5) O29086 Soil 7/17/00	MW-04(0.75-1.25) O30041 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	69 J		U	U
Benzo(a)pyrene	660	660	100,000	74 J	67 J		U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U		U
Dibenzo(a,h)anthracene	660	660	100,000	U	U		U
Benzo(g,h,i)perylene	NC	NC	NC	U	U		U
SVOC TICs				5000 J	2406 J	1540 J	155 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U		U
Delta-BHC	NC	NC	NC	U	U		U
alpha-Chlordane	NC	NC	NC	U	U		U
4,4'-DDE	2,000	9,000	50,000	U	U		U
Endrin	17,000	310,000	50,000	U	U		U
4,4'-DDD	3,000	12,000	50,000	U	U		U
4,4'-DDT	2,000	9,000	500,000	U	U		U
Endrin ketone	NC	NC	NC	U	U		U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U		U
Aroclor-1254	NC	NC	NC	U	U		U
Aroclor-1260	NC	NC	NC	U	U		U
Total PCBs	490	2,000	50,000	U	U		U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	7240	3910	7710	1720
Antimony	14	340	NC	1.9 B	0.81 B	0.74 B	U
Arsenic	20	20	NC	29.1	5.2	8.6	0.85 B
Barium	700	47,000	NC	672	53.7	146	10.1 B
Beryllium	2	2	NC	0.58 B	0.59	0.89	0.25 B
Cadmium	39	100	NC	0.92	1	0.72	U
Calcium	NC	NC	NC	16700	1660	12800	1930
Chromium	240	6100	NC	308	27.6	39.1	6.4
Cobalt	NC	NC	NC	8.2 B	5.6	8.4	3.2 B
Copper	600	600	NC	153	34.8	37	9.7
Iron	NC	NC	NC	23300	10800	17300	5760

TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-2(11-11.5) O29518 Soil 7/19/00	MW-3 (1.5-2) O29085 Soil 7/17/00	MW-3 (5-5.5) O29086 Soil 7/17/00	MW-04(0.75-1.25) O30041 Soil 7/24/00
Lead	400	600	NC	317	43.4	52	8.9
Magnesium	NC	NC	NC	5570	2290	5120	1820
Manganese	NC	NC	NC	425.0	101.0	365.0	52.7
Mercury	14	270	NC	5.0	0.16	0.11	0.07
Nickel	230	4,200	100	21.3	16.1	19.3	11.9
Potassium	NC	NC	NC	2330	1150	2350	412 B
Silver	110	4,100	NC	3	1.1	1.6	U
Sodium	NC	NC	NC	3560	493 B	738	318 B
Thallium	2	2	NC	2.1	U	U	U
Vanadium	370	7,100	NC	28	14.3	23.5	6.4
Zinc	1,500	1,500	NC	532	70.5	83.4	23.2
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	670	U	U	2500
Total Recoverable Phenolics (ppm)	NC	NC	NC	1.4	U	U	U
Percent Solids (%)	NC	NC	NC	56.4	93.4	86.2	95.9

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-04(2-2.5) O30051 Soil 7/24/00	MW-05(1-1.5) O30050 Soil 7/24/00	MW-05(3.5-4) O30046 Soil 7/24/00	MW-05(4.5-5) O30044 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	700 J	660 J	590 J	780 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				1000 J	1300 J	1200 J	1000 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	78 J	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	50 J
Fluoranthene	2,300,000	10,000,000	100,000	140 J	U	U	U
Pyrene	1,700,000	10,000,000	100,000	130 J	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	74 J	U	U	U
Chrysene	9,000	40,000	500,000	78 J	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	62 J	U	U	U

## TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-04(2-2.5) O30051 Soil 7/24/00	MW-05(1-1.5) O30050 Soil 7/24/00	MW-05(3.5-4) O30046 Soil 7/24/00	MW-05(4.5-5) O30044 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	62 J	U	U	U
Benzo(a)pyrene	660	660	100,000	49 J	70 J	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1057 J	1908 J	837 J	1992 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	13700	2370	2050	2200
Antimony	14	340	NC	0.79 B	U	U	U
Arsenic	20	20	NC	3.3	0.91 B	0.63 B	2.1
Barium	700	47,000	NC	205	9.7 B	5.7 B	6.9 B
Beryllium	2	2	NC	1.2	0.28 B	0.26 B	0.3 B
Cadmium	39	100	NC	0.49 B	U	U	U
Calcium	NC	NC	NC	22700	633	504 B	645
Chromium	240	6100	NC	26.5	10.1	12.8	10.1
Cobalt	NC	NC	NC	15.6	4.1 B	3.7 B	5.4 B
Copper	600	600	NC	30.3	6.1	6	7.4
Iron	NC	NC	NC	33700	9620	7700	8120

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-04(2-2.5) O30051 Soil 7/24/00	MW-05(1-1.5) O30050 Soil 7/24/00	MW-05(3.5-4) O30046 Soil 7/24/00	MW-05(4.5-5) O30044 Soil 7/24/00
Lead	400	600	NC	31.2	3.6	3.3	3.4
Magnesium	NC	NC	NC	11400	1200	1080	1240
Manganese	NC	NC	NC	772.0	63.5	45.8	39.3
Mercury	14	270	NC	0.07	0.23	0.04	0.29
Nickel	230	4,200	100	28.1	14.1	13.7	19.8
Potassium	NC	NC	NC	4440	522	501 B	410 B
Silver	110	4,100	NC	0.27 B	U	0.14 B	0.18 B
Sodium	NC	NC	NC	902	279 B	300 B	614
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	32.1	11.5	9.7	6.3
Zinc	1,500	1,500	NC	83.2	18.3	16.3	19.8
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	90	90	120	57
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	0.96
Percent Solids (%)	NC	NC	NC	81.9	96.9	96.3	83

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-6(1.5-2) O28789 Soil 7/14/00	MW-6(9.5-10) O28790 Soil 7/14/00	MW-07(1-1.5) O30043 Soil 7/24/00	MW-07(3.5-4) O30042 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	360 J	350 J	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	62 J	39 J	61 J	110 J
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	53 J	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	54 J	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U



TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-6(1.5-2) O28789 Soil 7/14/00	MW-6(9.5-10) O28790 Soil 7/14/00	MW-07(1-1.5) O30043 Soil 7/24/00	MW-07(3.5-4) O30042 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				3900 J	2657 J	1894 J	2484 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2490	2420	2290	1890
Antimony	14	340	NC	U	0.52 B	U	U
Arsenic	20	20	NC	1.4	1.1	1.5	0.55 B
Barium	700	47,000	NC	10.9 B	7.7 B	16.4 B	6.9 B
Beryllium	2	2	NC	0.52 B	0.51 B	0.27 B	0.28 B
Cadmium	39	100	NC	0.11 B	U	0.12 B	U
Calcium	NC	NC	NC	8450	347 B	573	569
Chromium	240	6100	NC	7.9	19.3	10.3	8.3
Cobalt	NC	NC	NC	4.2 B	5 B	3.5 B	3.1 B
Copper	600	600	NC	9.9	14	9.3	5.8
Iron	NC	NC	NC	8280	8240	7930	6720

TABLE 3.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-6(1.5-2) O28789 Soil 7/14/00	MW-6(9.5-10) O28790 Soil 7/14/00	MW-07(1-1.5) O30043 Soil 7/24/00	MW-07(3.5-4) O30042 Soil 7/24/00
Lead	400	600	NC	6.1	3.9	8.3	3.2
Magnesium	NC	NC	NC	5840	1680	1150	906
Manganese	NC	NC	NC	73.8	48.0	58.2	42.3
Mercury	14	270	NC	0.0 B	U	0.1	U
Nickel	230	4,200	100	14.6	16.1	13	13.1
Potassium	NC	NC	NC	463 B	507 B	560	397 B
Silver	110	4,100	NC	0.17 B	0.23 B	0.28 B	U
Sodium	NC	NC	NC	122 B	757	873	383 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	11.5	12.6	8.9	7.6
Zinc	1,500	1,500	NC	23.8	22.6	25.4	15.7
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	530	U	U	300
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93.7	94	96.1	90

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-09(1-2) O28408 Soil 7/13/00	MW-09(4-5) O28409 Soil 7/13/00	MW-10(1.5-2) O28797 Soil 7/14/00	MW-10(3.5-4) O28800 Soil 7/14/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	300 J	570 J	700	620 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	1,500	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	1,900
1,2,3-Trichlorobenzene	NC	NC	NC	U	870 J	U	1,500
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	36 J	47 J	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	36 J	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	49 J	U	48 J	46 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-09(1-2) O28408 Soil 7/13/00	MW-09(4-5) O28409 Soil 7/13/00	MW-10(1.5-2) O28797 Soil 7/14/00	MW-10(3.5-4) O28800 Soil 7/14/00
Benzo(k)fluoranthene	900	4,000	500,000	51 J	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2450 J	3700 J	693 J	1590 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	3	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1650	2460	1630	2080
Antimony	14	340	NC	U	U	U	0.57 B
Arsenic	20	20	NC	1.6	2.1	0.38 B	0.85 B
Barium	700	47,000	NC	8.1 B	7.5 B	8.2 B	10.3 B
Beryllium	2	2	NC	0.67	0.82	0.53	0.68
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	11200	1860	320 B	1060
Chromium	240	6100	NC	5.8	8.1	3.9	6.2
Cobalt	NC	NC	NC	2.7 B	3.5 B	2.5 B	3.3 B
Copper	600	600	NC	5	5.6	3.7	4.3
Iron	NC	NC	NC	5390	8900	4580	5590

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-09(1-2) O28408 Soil 7/13/00	MW-09(4-5) O28409 Soil 7/13/00	MW-10(1.5-2) O28797 Soil 7/14/00	MW-10(3.5-4) O28800 Soil 7/14/00
Lead	400	600	NC	9	5.7	2.4	3.2
Magnesium	NC	NC	NC	953	1140	673	916
Manganese	NC	NC	NC	73.0	46.7	33.1	54.7
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	9.5	7.1	4.5	6.1
Potassium	NC	NC	NC	375 B	556	276 B	393 B
Silver	110	4,100	NC	U	U	U	0.29 B
Sodium	NC	NC	NC	195 B	350 B	405 B	725
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	6.5	11	5 B	6.8
Zinc	1,500	1,500	NC	22.3	23	16.9	19.2
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	0.88	0.96	U	U
Percent Solids (%)	NC	NC	NC	97.1	88.1	97.1	90

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-11(2-3) O28799 Soil 7/14/00	MW-11(3-4) O28805 Soil 7/14/00	MW-13 (1.5-2) O29080 Soil 7/17/00	MW-13 (6.5-7) O29081 Soil 7/17/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	590	570 J	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
<b>VOC TICs</b>							
				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	54 J
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	240 J	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	99 J
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	39 J	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	98 J
Chrysene	9,000	40,000	500,000	U	U	U	120 J
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	220 J	140 J	37 J	81 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	130 J

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-11(2-3) O28799 Soil 7/14/00	MW-11(3-4) O28805 Soil 7/14/00	MW-13 (1.5-2) O29080 Soil 7/17/00	MW-13 (6.5-7) O29081 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	110 J
Benzo(a)pyrene	660	660	100,000	U	U	U	130 J
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	48 J
SVOC TICs				1958 J	1625 J	637 J	3050 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	1.2
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	4.6
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1690	1520	2200	9190
Antimony	14	340	NC	U	U	U	2.9 B
Arsenic	20	20	NC	0.48 B	0.39 B	1.4	40.1
Barium	700	47,000	NC	6.1 B	10.9 B	13.5 B	281
Beryllium	2	2	NC	0.55	0.67	0.39 B	0.88
Cadmium	39	100	NC	U		0.14 B	4.3
Calcium	NC	NC	NC	541	487 B	592	5300
Chromium	240	6100	NC	7.9	10.2	7.5	421
Cobalt	NC	NC	NC	3 B	2.9 B	3.1 B	8
Copper	600	600	NC	4.8	5.1	5.4	190
Iron	NC	NC	NC	5690	5060	6620	22600

## TABLE 3.1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-11(2-3) O28799 Soil 7/14/00	MW-11(3-4) O28805 Soil 7/14/00	MW-13 (1.5-2) O29080 Soil 7/17/00	MW-13 (6.5-7) O29081 Soil 7/17/00
Lead	400	600	NC	3.8	3.3	4	308
Magnesium	NC	NC	NC	1000	851	1280	5790
Manganese	NC	NC	NC	38.2	31.7	44.2	270.0
Mercury	14	270	NC	U		0.04	1.5
Nickel	230	4,200	100	11.8	12.7	13.2	24
Potassium	NC	NC	NC	358 B	300 B	440 B	2220
Silver	110	4,100	NC	U	U	0.55 B	6
Sodium	NC	NC	NC	313 B	485 B	378 B	985
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	8.3	6.2	7.9	46.6
Zinc	1,500	1,500	NC	13.8	13.5	17.6	239
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	150	U	480
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	95.2	92.2	97.6	69.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.



TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-14(1.5-2) O28801 Soil 7/14/00	MW-14(4.5-5) O28802 Soil 7/14/00	MW-15(1.5-2) O28796 Soil 7/14/00	MW-15(7.5-8) O28798 Soil 7/14/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	540 J	600	670 J	640
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	330 J	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	170 J	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	990	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	590 J	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	700	U	U	U
Naphthalene	230,000	4,200,000	100,000	16,000	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	1000	U	U	U
Naphthalene	230,000	4,200,000	100,000	300 J	U	U	U
2-Methylnaphthalene	NC	NC	NC	140 J	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	890	U	U	U
Dibenzofuran	NC	NC	NC	390	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	170 J
Fluorene	2,300,000	10,000,000	100,000	840	U	U	U
Phenanthrene	NC	NC	NC	6000 D	U	U	U
Anthracene	10,000,000	10,000,000	100,000	1300	U	U	U
Di-n-butyl phthalate	NC	NC	NC	190 J	U	290 J	U
Fluoranthene	2,300,000	10,000,000	100,000	8200 D	U	U	U
Pyrene	1,700,000	10,000,000	100,000	6900 D	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	1600	U	U	U
Benzo(a)anthracene	900	4,000	500,000	3600 D	U	U	U
Chrysene	9,000	40,000	500,000	3800 D	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	2400 JD	87 J	U	U
Benzo(b)fluoranthene	900	4,000	50,000	2300 JD	U	U	U



TABLE 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-14(1.5-2) O28801 Soil 7/14/00	MW-14(4.5-5) O28802 Soil 7/14/00	MW-15(1.5-2) O28796 Soil 7/14/00	MW-15(7.5-8) O28798 Soil 7/14/00
Lead	400	600	NC	2250	3.9	4.3	2.9
Magnesium	NC	NC	NC	5770	641	863	882
Manganese	NC	NC	NC	724.0	90.8	30.5	31.9
Mercury	14	270	NC	26.8	0.07	U	U
Nickel	230	4,200	100	141	4.5	9.2	8.8
Potassium	NC	NC	NC	786	258 B	270 B	321 B
Silver	110	4,100	NC	9	U	0.14 B	U
Sodium	NC	NC	NC	1100	532 B	473 B	425 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	60.4	5.1 B	5.9	7.3
Zinc	1,500	1,500	NC	1360	14.6	15.9	15
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	16000	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	1.9	U	U	U
Percent Solids (%)	NC	NC	NC	93.8	93.5	96.6	95.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-01(1-1.5) O28407 Soil 7/13/00	SB-01(4-5) O28406 Soil 7/13/00	SB-02(1-2) O30052 Soil 7/24/00	SB-02(2.5-3) O30045 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	450 J	480 J	730 J	430 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	320 J	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	990 J	930 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	48 J	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	50 J	57 J	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	41 J	U
Pyrene	1,700,000	10,000,000	100,000	U	U	55 J	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	42 J	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

## TABLE 3.

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-01(1-1.5) O28407 Soil 7/13/00	SB-01(4-5) O28406 Soil 7/13/00	SB-02(1-2) O30052 Soil 7/24/00	SB-02(2.5-3) O30045 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				610 J	2320 J	525 J	2336 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	3	U	U	U
Delta-BHC	NC	NC	NC	U	3	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1690	2160	2700	2060
Antimony	14	340	NC	U	0.54 B	U	U
Arsenic	20	20	NC	1.3	1.3	2.4	0.79 B
Barium	700	47,000	NC	9.9 B	8.6 B	13.5 B	6.8 B
Beryllium	2	2	NC	0.7	0.26 B	0.27 B	0.29 B
Cadmium	39	100	NC	U	U	0.14 B	U
Calcium	NC	NC	NC	2070	1480	822	685
Chromium	240	6100	NC	6.4	9.5	10.6	10.2
Cobalt	NC	NC	NC	2.7 B	3.1 B	4.5 B	3.3 B
Copper	600	600	NC	4.7	5.2	9.1	6.2
Iron	NC	NC	NC	5560	8690	8720	7560

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-01(1-1.5) O28407 Soil 7/13/00	SB-01(4-5) O28406 Soil 7/13/00	SB-02(1-2) O30052 Soil 7/24/00	SB-02(2.5-3) O30045 Soil 7/24/00
Lead	400	600	NC	5.4	5.1	6.6	3.6
Magnesium	NC	NC	NC	800	1060	1550	1150
Manganese	NC	NC	NC	58.0	58.0	65.0	46.9
Mercury	14	270	NC	U	U	0.06	0.04
Nickel	230	4,200	100	6.7	6.6	14.4	12.4
Potassium	NC	NC	NC	337	429 B	538	509 B
Silver	110	4,100	NC	U	U	0.18 B	0.16 B
Sodium	NC	NC	NC	246 B	369 B	20.1 B	282 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	7.9	9.7	9.3	8
Zinc	1,500	1,500	NC	16.3	22.3	24.7	17.9
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	480	100
Total Recoverable Phenolics (ppm)	NC	NC	NC	0.95	U	U	U
Percent Solids (%)	NC	NC	NC	95.1	88.9	97.1	95.9

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-03(1-1.5) O30079 Soil 7/25/2000	SB-03(2-2.5) O30081 Soil 7/25/2000	SB-03(3-3.5) O30080 Duplicate of SB-03(2-2.5)	SB-4 (1.5-2) O29089 Soil 7/17/2000
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2010 J	2455 J	3684 J	2648 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	1.3
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2810	1950	1800	1830
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	1.4	0.9 B	0.54 B	0.58 B
Barium	700	47,000	NC	8.5 B	6.5 B	6 B	6 B
Beryllium	2	2	NC	0.27 B	0.26 B	0.25 B	0.14 B
Cadmium	39	100	NC	0.09 B	U	U	0.13 B
Calcium	NC	NC	NC	445 B	364 B	272 B	316 B
Chromium	240	6100	NC	8.6	8.6	8	7.7
Cobalt	NC	NC	NC	4.1 B	3.1 B	2.9 B	2.8 B
Copper	600	600	NC	6.5	7.9	4.8	4.8
Iron	NC	NC	NC	8370	7320	6500	5470
Lead	400	600	NC	3.4	3.1	3.3	5
Magnesium	NC	NC	NC	1340	946	855	893
Manganese	NC	NC	NC	58.4	41.6	38.0	37.4
Mercury	14	270	NC	0.04	0.04	0.04	U

TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-03(1-1.5) O30079 Soil 7/25/00	SB-03(2-2.5) O30081 Soil 7/25/00	SB-03(3-3.5) O30080 Duplicate of SB-03(2-2.5)	SB-4 (1.5-2) O29089 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2010 J	2455 J	3684 J	2648 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	1.3
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2810	1950	1800	1830
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	1.4	0.9 B	0.54 B	0.58 B
Barium	700	47,000	NC	8.5 B	6.5 B	6 B	6 B
Beryllium	2	2	NC	0.27 B	0.26 B	0.25 B	0.14 B
Cadmium	39	100	NC	0.09 B	U	U	0.13 B
Calcium	NC	NC	NC	445 B	364 B	272 B	316 B
Chromium	240	6100	NC	8.6	8.6	8	7.7
Cobalt	NC	NC	NC	4.1 B	3.1 B	2.9 B	2.8 B
Copper	600	600	NC	6.5	7.9	4.8	4.8
Iron	NC	NC	NC	8370	7320	6500	5470



TABLE 3-1

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-03(1-1.5) O30079 Soil 7/25/00	SB-03(2-2.5) O30081 Soil 7/25/00	SB-03(3-3.5) O30080 Duplicate of SB-03(2-2.5)	SB-4 (1.5-2) O29089 Soil 7/17/00
Lead	400	600	NC	3.4	3.1	3.3	5
Magnesium	NC	NC	NC	1340	946	855	893
Manganese	NC	NC	NC	58.4	41.6	38.0	37.4
Mercury	14	270	NC	0.04	0.04	0.04	U
Nickel	230	4,200	100	13.6	13.2	13.2	11.1
Potassium	NC	NC	NC	570	394 B	378 B	383 B
Silver	110	4,100	NC	0.26 B	U	0.19 B	0.13
Sodium	NC	NC	NC	105 B	270 B	295 B	367 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	10.1	10.2	7.6	8.4
Zinc	1,500	1,500	NC	22.2	18.6	16	15.6
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	560	760	640	330
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93.5	95.2	94	97.8

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-54 (1.5-2) O29093 Duplicate of SB-4 (1.5-2)	SB-4 (3.5-4) O29090 Soil 7/17/00	SB-5 (1.5-2) O29091 Soil 7/17/00	SB-5 (3.5-4) O29092 Soil 7/17/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	44 J	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	42 J	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-54 (1.5-2) O29093 Duplicate of SB-4 (1.5-2)	SB-4 (3.5-4) O29090 Soil 7/17/00	SB-5 (1.5-2) O29091 Soil 7/17/00	SB-5 (3.5-4) O29092 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2010 J	1680 J	1676 J	1930 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1770	2260	1810	1920
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	0.78 B	0.46 B	0.76 B	0.41 B
Barium	700	47,000	NC	6 B	9.7 B	8.6 B	9.8 B
Beryllium	2	2	NC	0.18 B	0.17 B	0.14 B	0.16 B
Cadmium	39	100	NC	0.1 B	U	0.12 B	U
Calcium	NC	NC	NC	323 B	567 B	389 B	509 B
Chromium	240	6100	NC	10.6	7.1	6.5	6.8
Cobalt	NC	NC	NC	3 B	3.4 B	3 B	3 B
Copper	600	600	NC	4.6	5.7	5.3	5.8
Iron	NC	NC	NC	6840	5930	6370	5270

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-54 (1.5-2) O29093 Duplicate of SB-4 (1.5-2)	SB-4 (3.5-4) O29090 Soil 7/17/00	SB-5 (1.5-2) O29091 Soil 7/17/00	SB-5 (3.5-4) O29092 Soil 7/17/00
Lead	400	600	NC	3.7	4.5	3.2	3.8
Magnesium	NC	NC	NC	837	1070	874	1040
Manganese	NC	NC	NC	41.5	37.8	37.8	33.8
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	13.9	14	13.1	14.9
Potassium	NC	NC	NC	408 B	454 B	359 B	395 B
Silver	110	4,100	NC	U	U	U	U
Sodium	NC	NC	NC	336 B	623	349 B	403 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	9.8	8.5	8.3	6.8
Zinc	1,500	1,500	NC	14.4	17.9	15.5	15.5
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	97.6	84.4	96.5	90.7

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-6(1-2) O29515 Soil 7/19/00	SB-6(3-3.5) O29514 Soil 7/19/00	SB-7(1-2) O29521 Soil 7/19/00	SB-7(2-2.5) O29522 Soil 7/19/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	290 J	340 J	410 J	580 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	1100 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	40 J
Pyrene	1,700,000	10,000,000	100,000	U	U	U	47 J
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	44 J
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	73 J	U	U	56 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	50 J

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-6(1-2) O29515 Soil 7/19/00	SB-6(3-3.5) O29514 Soil 7/19/00	SB-7(1-2) O29521 Soil 7/19/00	SB-7(2-2.5) O29522 Soil 7/19/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	43 J
Benzo(a)pyrene	660	660	100,000	U	U	U	41 J
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1790 J	500 J	1157 J	8607 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	2.5	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	19	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	3770	1750	3230	6250
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	2	4	1.4	6.5
Barium	700	47,000	NC	33.6	29	16.1 B	149
Beryllium	2	2	NC	0.22 B	0.21 B	0.21 B	0.41 B
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	8050	2360	2270	15100
Chromium	240	6100	NC	7.6	5.4	8.8	48.8
Cobalt	NC	NC	NC	3.2 B	4.1 B	3.3 B	6.5
Copper	600	600	NC	7	16	7.6	44.2
Iron	NC	NC	NC	8700	5040	7160	15700

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-6(1-2) O29515 Soil 7/19/00	SB-6(3-3.5) O29514 Soil 7/19/00	SB-7(1-2) O29521 Soil 7/19/00	SB-7(2-2.5) O29522 Soil 7/19/00
Lead	400	600	NC	6.7	32.6	11.1	65.4
Magnesium	NC	NC	NC	4350	1130	1520	4750
Manganese	NC	NC	NC	82.7	83.9	126.0	383.0
Mercury	14	270	NC	0.08	0.12	U	0.48
Nickel	230	4,200	100	3.9 B	6.7	15.3	64.7
Potassium	NC	NC	NC	367 B	370 B	358 B	1700
Silver	110	4,100	NC	U	U	U	0.62 B
Sodium	NC	NC	NC	193 B	272 B	369 B	1180
Thallium	2	2	NC	U	U	U	0.99 B
Vanadium	370	7,100	NC	13.3	12.2	12.8	23.4
Zinc	1,500	1,500	NC	14.3	66.5	19.4	92.4
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	260	1200
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93	86.2	92.4	87.2

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-8 (1.5-2) O29087 Soil 7/17/00	SB-8 (3.5-4) O29088 Soil 7/17/00	SB-10(1.5-2) O30083 Soil 7/25/00	SB-10(2-2.5) O30082 Soil 7/25/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	8230 J	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	50 J	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	44 J	U	U
Phenanthrene	NC	NC	NC	U	350 J	U	U
Anthracene	10,000,000	10,000,000	100,000	U	89 J	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	45 J	U
Fluoranthene	2,300,000	10,000,000	100,000	U	340 J	U	U
Pyrene	1,700,000	10,000,000	100,000	U	370 J	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	170 J	U	U
Chrysene	9,000	40,000	500,000	U	190 J	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	37 J	48 J	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	160 J	U	U



**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-8 (1.5-2) O29087 Soil 7/17/00	SB-8 (3.5-4) O29088 Soil 7/17/00	SB-10(1.5-2) O30083 Soil 7/25/00	SB-10(2-2.5) O30082 Soil 7/25/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	130 J	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	56 J	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	69 J	U	U
SVOC TICs				1357 J	1756 J	2335 J	3185 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	150
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	150
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2790	4360	2970	2790
Antimony	14	340	NC	U	U	U	0.56 B
Arsenic	20	20	NC	0.9 B	5.1	0.88 B	3.1
Barium	700	47,000	NC	5.8 B	84.2	11.7 B	10 B
Beryllium	2	2	NC	0.65	0.72	0.29 B	0.53 B
Cadmium	39	100	NC	0.21 B	1	0.08 U	0.26 B
Calcium	NC	NC	NC	1880	5480	603	526 B
Chromium	240	6100	NC	39.5	37.3	9.1	29.3
Cobalt	NC	NC	NC	7.5	5.9	4.3 B	7
Copper	600	600	NC	5.9	32.4	6.2	5.6
Iron	NC	NC	NC	12000	11100	8590	21200

TABLE 3-1

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-8 (1.5-2) O29087 Soil 7/17/00	SB-8 (3.5-4) O29088 Soil 7/17/00	SB-10(1.5-2) O30083 Soil 7/25/00	SB-10(2-2.5) O30082 Soil 7/25/00
Lead	400	600	NC	4.2	38.4	3.8	4.4
Magnesium	NC	NC	NC	2320	3070	1540	956
Manganese	NC	NC	NC	58.4	167.0	58.0	71.7
Mercury	14	270	NC	0.09	0.13	0.04	0.05
Nickel	230	4,200	100	48.1	24.2	17.6	28.6
Potassium	NC	NC	NC	429 B	1160	729	516 B
Silver	110	4,100	NC	1 B	1.1 B	U	0.21 B
Sodium	NC	NC	NC	490 B	626	437 B	499 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	11.8	17	9.9	27.7
Zinc	1,500	1,500	NC	25.5	86.4	21.2	32
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	270	1400
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	96.1	86.8	95.3	93

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

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**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-11(1.5-2) O28792 Soil 7/14/00	SB-11(9-9.5) O28793 Soil 7/14/00	SB-12(0.5-2) O28414 Soil 7/13/00	SB-12(3-4) O28415 Soil 7/13/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	620 J	480 J	550 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	390 J	350 J
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	43 J	U	58 J
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	58 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-11(1.5-2) O28792 Soil 7/14/00	SB-11(9-9.5) O28793 Soil 7/14/00	SB-12(0.5-2) O28414 Soil 7/13/00	SB-12(3-4) O28415 Soil 7/13/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1734 J	3890 J	5850 J	1100 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	2	2
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2270	1500	2050	2520
Antimony	14	340	NC	0.43 B	U	0.44 B	U
Arsenic	20	20	NC	0.99 B	0.51 B	0.75 B	0.81 B
Barium	700	47,000	NC	11.3 B	6.7 B	9.3 B	17.4 B
Beryllium	2	2	NC	0.49 B	0.5 B	0.21 B	0.3 B
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	1880	301 B	472 B	519 B
Chromium	240	6100	NC	11.8	7.3	8	11.9
Cobalt	NC	NC	NC	3.6 B	2.8 B	3.8 B	3.8 B
Copper	600	600	NC	6.7	4	5.9	10.8
Iron	NC	NC	NC	10000	5050	7280	7390

TABLE 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-11(1.5-2) O28792 Soil 7/14/00	SB-11(9-9.5) O28793 Soil 7/14/00	SB-12(0.5-2) O28414 Soil 7/13/00	SB-12(3-4) O28415 Soil 7/13/00
Lead	400	600	NC	5.7	2.7	4.9	5.3
Magnesium	NC	NC	NC	2100	729	1100	1210
Manganese	NC	NC	NC	63.8	29.2	43.2	39.7
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	13.8	11	13.4	16.3
Potassium	NC	NC	NC	446 B	275 B	421 B	550
Silver	110	4,100	NC	0.28 B	0.17 B	U	U
Sodium	NC	NC	NC	624	471 B	245 B	226 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	11.2	6.9	10	11
Zinc	1,500	1,500	NC	19.6	12.9	19.3	21.7
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	0.78	U	0.77	U
Percent Solids (%)	NC	NC	NC	96.2	91.3	96.9	89.3

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-13(0.5-1.5) O28410 Soil 7/13/00	SB-13(10-11) O28411 Soil 7/13/00	SB-13A(1.5-2) O28803 Soil 7/14/00	SB-13A(8.5-9) O28804 Soil 7/14/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	550 J	390 J	490 J	560 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	70 J	52 J	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	160 J	44 J	53 J	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-13(0.5-1.5) O28410 Soil 7/13/00	SB-13(10-11) O28411 Soil 7/13/00	SB-13A(1.5-2) O28803 Soil 7/14/00	SB-13A(8.5-9) O28804 Soil 7/14/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1270 J	2480 J	2220 J	2740 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	1	2	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2000	2050	2190	1700
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	1.2	0.89 B	0.88 B	0.69 B
Barium	700	47,000	NC	9.5 B	5.5 B	9.4 B	5.4 B
Beryllium	2	2	NC	0.75	0.82	0.66	0.65
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	913	415 B	525	432 B
Chromium	240	6100	NC	9	9.6	8.1	9.6
Cobalt	NC	NC	NC	3.5 B	3.9 B	3.3 B	3.2 B
Copper	600	600	NC	5.4	3.7	4.3	4.2
Iron	NC	NC	NC	7290	6650	7450	6110

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-13(0.5-1.5) O28410 Soil 7/13/00	SB-13(10-11) O28411 Soil 7/13/00	SB-13A(1.5-2) O28803 Soil 7/14/00	SB-13A(8.5-9) O28804 Soil 7/14/00
Lead	400	600	NC	5.4	3.9	4.4	4.1
Magnesium	NC	NC	NC	1360	1010	1180	916
Manganese	NC	NC	NC	42.7	41.0	47.7	34.4
Mercury	14	270	NC	U	U	0.02 B	U
Nickel	230	4,200	100	13.4	11.3	13	16.7
Potassium	NC	NC	NC	396 B	390 B	468 B	386 B
Silver	110	4,100	NC	U	U	U	0.2 B
Sodium	NC	NC	NC	498 B	260 B	340 B	437 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	9.9	9.7	10.3	8.6
Zinc	1,500	1,500	NC	17.4	19	17.5	15.6
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	110
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	95.5	88	97.2	95.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.



**TABLE 3-i**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-14 (1.5-2) O29082 Soil 7/17/00	SB-14 (5.5-6) O29083 Soil 7/17/00	SB-44 (5.5-6) O29084 Duplicate of SB-14 (5.5-6)	SB-15 (1.5-2) O29077 Soil 7/17/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000		U	U	U
2-Butanone	1,000,000	1,000,000	50,000	3,100		U	2,800 U
Chloroform	19,000	28,000	1,000		U	U	U
Toluene	1,000,000	1,000,000	500,000		U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000		U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*		U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*		U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC		U	U	U
Naphthalene	230,000	4,200,000	100,000		U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000		U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC		U	U	U
VOC TICs					U	U	750 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000		U	U	U
Naphthalene	230,000	4,200,000	100,000		U	U	U
2-Methylnaphthalene	NC	NC	NC		U	U	U
Acenaphthylene	NC	NC	NC		U	U	U
Acenaphthene	3,400,000	10,000,000	100,000		U	U	U
Dibenzofuran	NC	NC	NC		U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000		U	U	U
Fluorene	2,300,000	10,000,000	100,000		U	U	U
Phenanthrene	NC	NC	NC		U	U	U
Anthracene	10,000,000	10,000,000	100,000		U	U	U
Di-n-butyl phthalate	NC	NC	NC		U	U	U
Fluoranthene	2,300,000	10,000,000	100,000		U	U	U
Pyrene	1,700,000	10,000,000	100,000		U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000		U	U	U
Benzo(a)anthracene	900	4,000	500,000		U	U	U
Chrysene	9,000	40,000	500,000		U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	39 J	46 J	50 J	61 J
Benzo(b)fluoranthene	900	4,000	50,000		U	U	U

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-14 (1.5-2) O29082 Soil 7/17/00	SB-14 (5.5-6) O29083 Soil 7/17/00	SB-44 (5.5-6) O29084 Duplicate of SB-14 (5.5-6)	SB-15 (1.5-2) O29077 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1819 J	1230 J	4538 J	1305 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	3200	2260	2090	869
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	2.6	1.4	2	1.3
Barium	700	47,000	NC	20.8	8.8 B	8.5 B	8.1 B
Beryllium	2	2	NC	0.52	0.48 B	0.48 B	0.26 B
Cadmium	39	100	NC	0.45 B	0.13 B	U	0.25 B
Calcium	NC	NC	NC	1090	580	878	373 B
Chromium	240	6100	NC	13	6.6	5.7	5.3
Cobalt	NC	NC	NC	4.1 B	2.9 B	2.3 B	1.2 B
Copper	600	600	NC	11.9	7	5.3	5.5
Iron	NC	NC	NC	8560	6760	6310	2140

TABLE 3-1

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-14 (1.5-2) O29082 Soil 7/17/00	SB-14 (5.5-6) O29083 Soil 7/17/00	SB-44 (5.5-6) O29084 Duplicate of SB-14 (5.5-6)	SB-15 (1.5-2) O29077 Soil 7/17/00
Lead	400	600	NC	10.6	5.4	3.6	4.6
Magnesium	NC	NC	NC	1450	1020	974	510 B
Manganese	NC	NC	NC	60.8	43.9	42.1	53.3
Mercury	14	270	NC	0.09	0.09	U	0.2
Nickel	230	4,200	100	9.5	5.7	5.7	3.5 B
Potassium	NC	NC	NC	576	457 B	440 B	221 B
Silver	110	4,100	NC	0.59 B	0.62 B	0.41 B	0.23 B
Sodium	NC	NC	NC	336 B	445 B	444 B	153 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	12.1	8.7	8.4	3.5 B
Zinc	1,500	1,500	NC	32.6	21	19.8	16.2
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	96.4	91.1	90.3	94.9

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-45 (1.5-2) O29079 Duplicate of SB-15(1.5-2)	SB-15 (5.5-6) O29078 Soil 7/17/00	SB-16(0.5-1) O28412 Soil 7/13/00	SB-16(8-9) O28413 Soil 7/13/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	310 J	350 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	59 J	42 J
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	58 J	100 J	160 J	110 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-45 (1.5-2) O29079 Duplicate of SB-15(1.5-2)	SB-15 (5.5-6) O29078 Soil 7/17/00	SB-16(0.5-1) O28412 Soil 7/13/00	SB-16(8-9) O28413 Soil 7/13/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1517 J	2340 J	1030 J	730 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	I	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1330	1180	2260	3160
Antimony	14	340	NC	1.3 B	U	U	U
Arsenic	20	20	NC	1.9	1.1 B	1 B	1.6
Barium	700	47,000	NC	11.2 B	4.4 B	8.4 B	8.4 B
Beryllium	2	2	NC	0.34 B	0.34 B	0.84	0.27 B
Cadmium	39	100	NC	0.41 B	U	U	U
Calcium	NC	NC	NC	335 B	485 B	776	543
Chromium	240	6100	NC	8.2	4.3	8.2	19.6
Cobalt	NC	NC	NC	1.8 B	1.3 B	4.1 B	4.4 B
Copper	600	600	NC	6.3	2.3 B	7.2	7
Iron	NC	NC	NC	3560	2540	7350	12500

## TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-45 (1.5-2) O29079 Duplicate of SB-15(1.5-2)	SB-15 (5.5-6) O29078 Soil 7/17/00	SB-16(0.5-1) O28412 Soil 7/13/00	SB-16(8-9) O28413 Soil 7/13/00
Lead	400	600	NC	6.7	2.7	6.8	4.7
Magnesium	NC	NC	NC	689	676	1360	1420
Manganese	NC	NC	NC	72.9	37.5	52.9	65.9
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	4.9	3.6 B	12.7	16.8
Potassium	NC	NC	NC	331 B	342 B	431 B	638
Silver	110	4,100	NC	0.36 B	U	U	U
Sodium	NC	NC	NC	96.5 B	U	416 B	235 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	4.6 B	4 B	10	17.2
Zinc	1,500	1,500	NC	22.1	10.8	23.7	24
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	0.96	0.79
Percent Solids (%)	NC	NC	NC	94.3	78.5	93.8	94.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-17(1.5-2) O30048 Soil 7/24/00	SB-17(8-9) O30049 Soil 7/24/00
<b>VOCs - ug/kg</b>					
Methylene Chloride	49,000	210,000	1,000	560 J	570 J
2-Butanone	1,000,000	1,000,000	50,000	U	U
Chloroform	19,000	28,000	1,000	U	U
Toluene	1,000,000	1,000,000	500,000	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U
Naphthalene	230,000	4,200,000	100,000	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U
VOC TICs				1000 J	1000 J
<b>SVOCs - ug/kg</b>					
Isophorone	1,100,000	10,000,000	50,000	U	U
Naphthalene	230,000	4,200,000	100,000	U	U
2-Methylnaphthalene	NC	NC	NC	U	U
Acenaphthylene	NC	NC	NC	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U
Dibenzofuran	NC	NC	NC	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U
Phenanthrene	NC	NC	NC	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U
Chrysene	9,000	40,000	500,000	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	150 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U

TABLE 3.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-17(1.5-2) O30048 Soil 7/24/00	SB-17(8-9) O30049 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U
Benzo(a)pyrene	660	660	100,000	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U
SVOC TICs				1414 J	260 J
<b>Pesticides - ug/kg</b>					
Beta-BHC	NC	NC	NC	U	U
Delta-BHC	NC	NC	NC	U	U
alpha-Chlordane	NC	NC	NC	U	U
4,4'-DDE	2,000	9,000	50,000	U	U
Endrin	17,000	310,000	50,000	U	U
4,4'-DDD	3,000	12,000	50,000	U	U
4,4'-DDT	2,000	9,000	500,000	U	U
Endrin ketone	NC	NC	NC	U	U
<b>PCBs - ug/kg</b>					
Aroclor-1248	NC	NC	NC	U	U
Aroclor-1254	NC	NC	NC	U	U
Aroclor-1260	NC	NC	NC	U	U
Total PCBs	490	2,000	50,000	U	U
<b>Metals - mg/kg</b>					
Aluminum	NC	NC	NC	2080	2440
Antimony	14	340	NC	U	U
Arsenic	20	20	NC	1.7	1.5
Barium	700	47,000	NC	8.2 B	10.9 B
Beryllium	2	2	NC	0.29 B	0.3 B
Cadmium	39	100	NC	U	U
Calcium	NC	NC	NC	4240	3740
Chromium	240	6100	NC	6.3	8
Cobalt	NC	NC	NC	3.3 B	3.7 B
Copper	600	600	NC	5.4	6.5
Iron	NC	NC	NC	7120	7370



TABLE 3.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-17(1.5-2) O30048 Soil 7/24/00	SB-17(8-9) O30049 Soil 7/24/00
Lead	400	600	NC	3.5	3.6
Magnesium	NC	NC	NC	1400	2890
Manganese	NC	NC	NC	76.1	62.8
Mercury	14	270	NC	0.04	0.04 B
Nickel	230	4,200	100	10.1	11.4
Potassium	NC	NC	NC	470 B	564
Silver	110	4,100	NC	0.16 B	U
Sodium	NC	NC	NC	89.7 B	167 B
Thallium	2	2	NC	U	U
Vanadium	370	7,100	NC	7.7	9.7
Zinc	1,500	1,500	NC	19	18.2
<b>Other</b>					
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	110	50
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U
Percent Solids (%)	NC	NC	NC	97.5	89.1

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	MW-3 O32972 Groundwater 8/22/2000	MW-5 O32899 Groundwater 8/21/2000	MW-6 O33035 Groundwater 8/23/2000	MW-7 O32969 Groundwater 8/22/2000	MW-77 O32970 Duplicate of MW-7	MW-8A O33040 Groundwater 8/23/2000
<b>VOCs</b>							
Carbon Disulfide	NC	U	U	U	U	U	U
Chloroform	6	U	U	U	U	2.2	U
VOC TICs		U	U	U	U	U	U
<b>SVOCs</b>							
Phenol	4,000	NA	U	U	U	U	U
Dimethylphthalate	10	NA	U	U	U	U	U
Acenaphthene	400	NA	U	U	U	U	U
Di-n-butylphthalate	NC	NA	U	3	U	1.4	2.2
Bis(2-Ethylhexyl)phthalate	30	NA	U	U	U	U	U
SVOC TICs		NA	15.7 J	U	U	U	U
<b>Pesticides</b>							
Heptachlor	0.4	NA	U	U	U	U	0.003
Dieldrin	0.03	NA	U	0.003	U	U	U
4,4'-DDT	0.1	NA	U	U	U	U	U
<b>PCBs</b>							
Total PCBs	0.5	NA	U	U	U	U	U
<b>Metals</b>							
Silver	NC	NA	U	U	U	U	U
Arsenic	8	NA	U	U	U	U	U
Beryllium	20	NA	U	U	U	U	U
Cadmium	4	NA	U	U	U	U	U
Chromium	100	NA	U	2.7 B	U	U	U
Copper	1,000	NA	U	U	U	U	U
Thallium	10	NA	U	U	U	U	U
Nickel	100	NA	U	U	U	U	U
Lead	10	NA	U	U	U	U	U
Antimony	20	NA	U	9.6 B	U	U	U
Selenium	50	NA	U	U	5.1	U	3.1 B
Zinc	5,000	NA	U	45.2	25.8	29.1	70.9

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID	New Jersey	MW-3	MW-5	MW-6	MW-7	MW-77	MW-8A
Lab ID	Groundwater	O32972	O32899	O33035	O32969	O32970	O33040
Matrix	Quality	Groundwater	Groundwater	Groundwater	Groundwater	Duplicate of	Groundwater
Date	Standards	8/22/00	8/21/00	8/23/00	8/22/00	MW-7	8/23/00
<b>Other</b>							
Chloride (mg/L)	250	NA	2400	6700	36	36	480
Total Petroleum Hydrocarbons (mg/L)	NC	NA	2.7	2.5	2.4	2.3	1.6
Total Dissolved Solids (mg/L)	500	NA	4800	8700	160	160	1100
Cyanide (mg/L)	0.2	NA	U	U	0.066	0.058	U

NA - Not Analyzed due to not enough water.

NC - No Criteria

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

Results are in ug/L unless otherwise stated.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	MW-9A O32973 Groundwater 8/22/00	MW-11 O32900 Groundwater 8/21/00	MW-12 O33038 Groundwater 8/23/00	MW-14 O33139 Groundwater 8/24/00	MW-15 O33039 Groundwater 8/23/00
<b>VOCs</b>						
Carbon Disulfide	NC	12	U	U	28	U
Chloroform	6	U	U	U	U	U
VOC TICs		U	U	U	11.8 J	U
<b>SVOCs</b>						
Phenol	4,000	1.8	U	U	U	U
Dimethylphthalate	10	U	U	U	4.6	U
Acenaphthene	400	U	1.8	U	U	U
Di-n-butylphthalate	NC	2.6	U	2.6	U	2.2
Bis(2-Ethylhexyl)phthalate	30	1.1	U	U	U	U
SVOC TICs		8.2 J	7 J	U	471 J	5.9 J
<b>Pesticides</b>						
Heptachlor	0.4	U	U	U	U	U
Dieldrin	0.03	U	U	U	U	U
4,4'-DDE	0.1	0.1	U	U	U	U
<b>PCBs</b>						
Total PCBs	0.5	U	U	U	U	U
<b>Metals</b>						
Silver	NC	U	U	7.6 B	0.92 B	1.3 B
Arsenic	8	6.1 B	U	12.9	13.0	3.9 B
Beryllium	20	U	U	0.11 B	U	U
Cadmium	4	U	U	1.5 B	1.0 B	U
Chromium	100	4.1 B	U	6.9 B	16.5	U
Copper	1,000	U	U	2.6 B	14.4 B	U
Thallium	10	U	U	13.0	U	2.9 B
Nickel	100	U	U	16.6 B	11.4 B	5.1 B
Lead	10	3.0 B	U	2.7 B	29.6	2.8 B
Antimony	20	U	U	24.6 B	U	U
Selenium	50	U	U	U	U	2.3 B
Zinc	5,000	30.0	U	56.3	106	39.4

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	MW-9A O32973 Groundwater 8/22/00	MW-11 O32900 Groundwater 8/21/00	MW-12 O33038 Groundwater 8/23/00	MW-14 O33139 Groundwater 8/24/00	MW-15 O33039 Groundwater 8/23/00
<b>Other</b>						
Chloride (mg/L)	250	920	410	1300	500	340
Total Petroleum Hydrocarbons (mg/L)	NC	2.6	2.2	3.2	1.3	3.5
Total Dissolved Solids (mg/L)	500	1500	940	1800	1200	930
Cyanide (mg/L)	0.2	U	U	U	U	U

NA - Not Analyzed due to not enough water.

NC - No Criteria

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

Results are in ug/L unless otherwise stated.

TABLE 3-5

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
 QUALITY ASSURANCE/QUALITY CONTROL FOR SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	FieldBlank O28417 Water 7/13/00	Field Blank O28794 Water 7/14/00	FB-71700 O29095 Water 7/17/00	FIELDBLANK O29523 Water 7/19/00
<b>VOCs - ug/L</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	U	2.4 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				0	0	0	0

\* - Total Xylenes  
 U - Undetect  
 J - Estimated  
 NC - No Criteria

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	FB-07-24-00 O30040 Water 7/24/00	Field Blank O30078 Water 7/25/00	TB-07-13-00 O28416 Methanol 7/13/00	TB071400 O28795 Methanol 7/14/00
<b>VOCs - ug/L</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	360 J	690
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	290 J	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				0	0	0	0

\* - Total Xylenes

U - Undetect

J - Estimated

NC - No Criteria

TABLE 3-3

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	TB-71700 O29094 Methanol 7/17/00	TRIPBLANK O29513 Methanol 7/19/00	TB-07-24-00 O30047 Methanol 7/24/00	TB-07-25-00 O30077 Methanol 7/25/00
<b>VOCs - ug/L</b>							
Methylene Chloride	49,000	210,000	1,000	U	310 J	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				0	0	0	0

\* - Total Xylenes

U - Undetect

J - Estimated

NC - No Criteria



**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	FIELDBLANK O32902 Aqueous 8/21/00	FIELDBLANK O32974 Aqueous 8/22/00	FIELDBLANK O33036 Aqueous 8/23/00	FIELDBLANK O33140 Aqueous 8/24/00
<b>VOCs</b>					
Carbon Disulfide	NC	U	U	U	U
Chloroform	6	U	U	U	U
VOC TICs		U	105 J	U	14.8 J
<b>SVOCs</b>					
Phenol	4,000	U	U	U	1.6
Dimethylphthalate	10	U	U	U	U
Acenaphthene	400	U	U	U	U
Di-n-butylphthalate	NC	U	U	1.6	1.1
Bis(2-Ethylhexyl)phthalate	30	U	U	U	U
SVOC TICs		6.2 J	U	U	8.5 J
<b>Pesticides</b>					
Heptachlor	0.4	U	U	U	U
Dieldrin	0.03	U	U	U	U
4,4'-DDT	0.1	U	U	U	U
<b>PCBs</b>					
Total PCBs	0.5	U	U	U	U
<b>Metals</b>					
Silver	NC	U	U	1.0 B	3.1 B
Arsenic	8	U	U	4.4 B	4.8 B
Beryllium	20	U	U	U	U
Cadmium	4	U	U	0.52 B	0.54 B
Chromium	100	U	U	U	U
Copper	1,000	U	U	U	2.7 B
Thallium	10	5.7 B	U	U	U
Nickel	100	U	U	U	U
Lead	10	U	U	U	U
Antimony	20	U	U	U	U
Selenium	50	U	U	4.7 B	U
Zinc	5,000	U	U	U	U

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES**

Sample ID	New Jersey	FIELDBLANK	FIELDBLANK	FIELDBLANK	FIELDBLANK
Lab ID	Groundwater	O32902	O32974	O33036	O33140
Matrix	Quality	Aqueous	Aqueous	Aqueous	Aqueous
Date	Standards	8/21/00	8/22/00	8/23/00	8/24/00
<b>Other</b>					
Chloride (mg/L)	250		U		U
Total Petroleum Hydrocarbons (mg/L)	NC		U		U
Total Dissolved Solids (mg/L)	500		U		U
Cyanide (mg/L)	0.2		U		U

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

NC - No Criteria

NA - Not Analyzed; Trip Blanks are only analyzed for VOC's.

Results are in ug/L unless otherwise stated.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	TRIPBLANK O32901 Aqueous 8/18/00	TRIPBLANK O32971 Aqueous 8/18/00	TRIPBLANK O33037 Aqueous 8/18/00	TRIPBLANK O33141 Aqueous 8/18/00
<b>VOCs</b>					
Carbon Disulfide	NC	U	U	U	U
Chloroform	6	U	U	U	U
VOC TICs		U	U	U	3.1 J
<b>SVOCs</b>					
Phenol	4,000	NA	NA	NA	NA
Dimethylphthalate	10	NA	NA	NA	NA
Acenaphthene	400	NA	NA	NA	NA
Di-n-butylphthalate	NC	NA	NA	NA	NA
Bis(2-Ethylhexyl)phthalate	30	NA	NA	NA	NA
SVOC TICs		NA	NA	NA	NA
<b>Pesticides</b>					
Heptachlor	0.4	NA	NA	NA	NA
Dieldrin	0.03	NA	NA	NA	NA
4,4'-DDT	0.1	NA	NA	NA	NA
<b>PCBs</b>					
Total PCBs	0.5	NA	NA	NA	NA
<b>Metals</b>					
Silver	NC	NA	NA	NA	NA
Arsenic	8	NA	NA	NA	NA
Beryllium	20	NA	NA	NA	NA
Cadmium	4	NA	NA	NA	NA
Chromium	100	NA	NA	NA	NA
Copper	1,000	NA	NA	NA	NA
Thallium	10	NA	NA	NA	NA
Nickel	100	NA	NA	NA	NA
Lead	10	NA	NA	NA	NA
Antimony	20	NA	NA	NA	NA
Selenium	50	NA	NA	NA	NA
Zinc	5,000	NA	NA	NA	NA

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES**

Sample ID	New Jersey Groundwater Quality Standards	TRIPBLANK O32901 Aqueous 8/18/00	TRIPBLANK O32971 Aqueous 8/18/00	TRIPBLANK O33037 Aqueous 8/18/00	TRIPBLANK O33141 Aqueous 8/18/00
Lab ID					
Matrix					
Date					
<b>Other</b>					
Chloride (mg/L)	250	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NC	NA	NA	NA	NA
Total Dissolved Solids (mg/L)	500	NA	NA	NA	NA
Cyanide (mg/L)	0.2	NA	NA	NA	NA

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

NC - No Criteria

NA - Not Analyzed; Trip Blanks are only analyzed for VOCs.  
Results are in ug/l. unless otherwise stated.

**TABLE 3-5  
PORT NEWARK CONTAINER TERMINAL LLC  
GROUNDWATER ELEVATIONS  
AUGUST 2000**

<b>WELL ID</b>	<b>TOTAL DEPTH OF WELL (ft-bgs)</b>	<b>TOP OF INNER CASING (ft-msl)</b>	<b>DEPTH TO WATER (ft-bgs)</b>	<b>WATER LEVEL ELEVATION (ft-msl)</b>
MW-1	2.82		2.65	-2.65
MW-3	3.96		1.17	-1.17
MW-5	6.00		4.10	-4.10
MW-6	14.95		10.92	-10.92
MW-7	6.16		4.36	-4.36
MW-8A	5.76		4.79	-4.79
MW-9A	6.52		3.70	-3.70
MW-11	15.98		8.99	-8.99
MW-12	14.55		10.14	-10.14
MW-13	4.77		Dry	NK
MW-14	7.70		4.92	-4.92
MW-15	14.79		8.76	-8.76

bgs - BELOW GROUND SURFACE  
msl - MEAN SEA LEVEL  
ft - FEET  
NK - NOT KNOWN

**TABLE 3-6**  
**PORT NEWARK CONTAINER TERMINAL LLC**  
**DEPTH TO WATER, PURGE AND SAMPLE DATA, AND GROUNDWATER QUALITY PARAMETERS**  
**AUGUST 2000**

	WELL ID	TIC (ft-msl)	DTW (ft)	GWE (ft-msl)	TDW (ft)	DTS (ft)	VOL (gal)	TOT (gal)	pH Final	Conductivity Final (mW/cm)	Temperature Final (°C)	DO Final (mg/L)	Eh Final (mu)	Turbidity Final (NTU)
1	MW-1		2.65	-2.65	2.82	1.0	NS	NS	NS	NS	NS	NS	NS	NS
2	MW-3		1.17	-1.17	3.96	1.0	0.45	1	7.16	0.286	24.9	1.62	71	106
3	MW-5		4.10	-4.10	6.00	3.0	0.31	11	6.77	0.96	24.7	0.00	-166	10.3
4	MW-6		10.92	-10.92	14.95	5.0	0.66	4	7.16	1.83	19.9	5.15	91	2.4
5	MW-7		4.36	-4.36	6.16	2.0	0.29	6	7.24	37.3	26.3	0.00	-99	8.8
6	MW-8A		4.79	-4.79	5.76	2.0	0.16	8	6.64	0.295	25.1	0.00	-22	-0.8
7	MW-9A		3.70	-3.70	6.52	3.0	0.46	3.5	6.47	0.412	26.4	0.00	-126	21.2
8	MW-11		8.99	-8.99	15.98	6.0	1.14	6.5	7.22	0.235	19.7	0.35	-115	2.1
9	MW-12		10.14	-10.14	14.55	5.0	0.72	5.5	7.04	0.450	20.6	0.00	-71	4.1
10	MW-13		Dry	NK	4.77	2.0	NS	NS	NS	NS	NS	NS	NS	NS
11	MW-14		4.92	-4.92	7.70	1.0	0.45	10	7.34	0.273	23.5	5.44	-213	7.4
12	MW-15		8.76	-8.76	14.79	5.0	0.98	6	7.05	0.209	20.0	0.00	22	1.7

TIC - TOP OF INNER CASING

DTW - DEPTH TO WATER FROM TIC

GWE - GROUNDWATER ELEVATION

TDW - TOTAL DEPTH OF WELL FROM TIC

DTS - DEPTH TO TOP OF SCREENED INTERVAL FROM TIC

VOL - ONE VOLUME

TOT - TOTAL VOLUME PURGED

ft - FEET

msl - MEAN SEA LEVEL

gal - GALLONS

NS - Not Sampled due to lack of water.

NK - Not Known

**FIGURE**

**APPENDIX A**



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P20 Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-1  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: -2.17ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-1 (1-2)	0					0-1.0': Asphalt				
	1 2	8 20	0.67'			Tan m SAND; dense; wet.	1011	07/19/00	0.0	
	3 4	5 8 10 11	0.75'			0-0.42': Same as above. 0.42'-0.75': Black CLAY; dense; wet to satd.	1015	07/19/00	0.0	water table at -2.17ft.
	5 6	7 24 24	0.75'			0-0.33': Black m sandy CLAY; semi-dense - dense; satd. 0.33-0.75': Coal-like material; trace rounded f gravel; loose; wet.	1021	07/19/00	0.0	
	7 8	9 10 10	0.92'			Black m-c SAND; some round-ang f gravel; trace clay; semi-dense; satd. trace silt.	1029	07/19/00	0.0	
	9 10	3 4 3	0.58'			0-0.33': Black m-c SAND; semi-loose - semi-dense; satd. 0.33-0.58': Black clayey m-c SAND; trace ang. c gravel; semi-loose - semi-dense; satd.	1033	07/19/00	0.0	
	11 12					Boring complete at 10ft.				
	13 14 15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-2  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: ~4.75ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS			
							Time	Date					
MW-2 (1-2)	0												
	1		0.75'			0-1.0': Asphalt. Orange m SAND; trace ang f gravel; semi-dense; wet	1054	07/19/00	0.0				
	7												
2	13												
	10		1.67'			0-0.5': Same as above, except wet-satd. 0.5'-1.67': Olive silty m SAND; little ang f gravel; dense; wet.	1058	07/19/00	0.0				
	3	21											
		25											
	4	17											
MW-2 (4-5)	2		1.58'			0-0.58': Black clayey m SAND; dense; wet. 0.58'-1.58': Black clayey f SAND dense; wet, satd. at -4.75'	1104	07/19/00	0.0	Water table at ~4.75ft.			
	5	3											
		5											
	6	8											
	1		0.92'			Pink CLAY; dense; dry.	1111	07/19/00	0.0				
	7	4											
	5												
	8	6											
	1		1.42'			Pink CLAY; dense; dry-wet; 1': becomes c sandy and ang f gravelly. 0.75'-0.79': Piece of coal-like gravel	1115	07/19/00	0.0				
	9	2											
	4												
MW-2 (11-11.5)	10	5											
	11	5				0-0.42': Pink c sandy and ang f gravelly CLAY; dense; dry-wet; 0.42'-0.67': Pink CLAY; dense; dry-wet. 0.67'-1.42': Olive silty CLAY; some black mottling; dense; dry-wet, true color	1119	07/19/00	0.0				
		3											
12	3												
	13					Boring complete at 12ft.							
	14												
	15												

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-3  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~5.42ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-3 (1.5-2)	0					0-1.0': Asphalt and Gravel, Brown f-c SAND;	1351	07/17/00	NAB	
	1									
	7	1.08'								
	2	19			Brown f-c SAND;	1355	07/17/00	NAB		
	3	15	0.5'							
		18								
	4	13								
MW-3 (5-5.5)	1				Reddish-Brown CLAY; little m-c SAND.	1400	07/17/00	NAB	Water table at ~5.42ft.	
	5	3	1.08'							
	7									
	6	7			Reddish-Brown CLAY; trace gravel.	1405	07/17/00	NAB		
	7	4	1.0'							
	2									
	8	1			Reddish-Brown CLAY and GRAVEL; little f-c sand.	1410	07/17/00	NAB		
	9	3	0.25'							
	3									
	10	3			Reddish-Brown CLAY.	1423	07/17/00	NAB		
	11	1	1.17'							
	1									
	12	3			Boring complete at 12ft.					
	13									
	14									
	15									

NOTES: NAB: Not Above Background

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P20 Ports Port Newark Facility  
 GEOLOGIST: A. Rai  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-4  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: Not obtained.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-4 (0.75-1.25)	1 9	7	0.75'			0-0.5': Asphalt. 0-0.25': Grey ANG. f (trace m) GRAVEL; trace brown silt; loose; dry. 0.25'-0.75': Red-Brown m SAND; trace f sand; loose; dry	1502	07/24/00	0.0	
MW-4 (2-2.5)	3 9	7	0.33'			Red-Brown CLAY; dense; dry	1506	07/24/00	0.0	
	4 10	9								
	5 16	9	1.0'			0-0.42': Same as above. 0.42'-1': Red f-c GRAVEL; some silt, little grey organics; loose; dry	1510	07/24/00	0.0	
	6									
	7					Boring complete at 5 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: A. Rai  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-5  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/31/00  
 GROUNDWATER DEPTH: ~4.0ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MN-5 (1-1.5)	0					0-0.5': Asphalt				
	1	31	0.92'			0-0.58': Grey ang f GRAVEL and SILT; dense; dry	1320	07/24/00	0.0	
	2	43		0.58'-0.92': Red-brown f-C SAND; loose; dry.						
MN-5 (3.5-4)	9		1.83'			Light Reddish-brown f-C SAND; loose; moist.	1327	07/24/00	0.0	Water table at ~4.0ft.
	3	11								
		34								
MN-5 (4.5-5)	4	18				Med. Brown c-m SAND; some f sand; semi-loose; satd.	1335	07/24/00	0.0	
	5	4	1.0'							
	6	5								
	2		1.67'			0-0.88': Brown Silty f-c SAND; little ang f gravel; loose; satd.	1400	07/31/00	0.0	acc 0.58': Organic odor.
	7	2		0-0.58': some black organics; semi-loose; satd.						
	1	1		c.c.p.s. 1.01': pink CLAY and SILT.						
	8	1				Boring Complete at 8ft.				
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg, R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push on 07/14/00

BORING NUMBER: MW-6  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/31/00  
 GROUNDWATER DEPTH: ~10ft on 07/14/00, ~7.75ft on 07/31/00  
 ELEVATION: 4 1/4" id Hollow Stem Augers / 2" Split Spore on 07/31/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-6 (1.5-2)	1	1.33'				0-0.5' Asphalt Reddish-brown c SAND; some silt	1515	07/14/00	0.0	
	2									
	3	1.33'				Top 0.33' grayish-redish brown c sand; some gravel. Rest reddish-brown c SAND; some silt; moist	1525	07/14/00	0.0	
	4									
	5	1.33'				Reddish-brown c SAND; some silt and gravel; moist.	1530	07/14/00	0.0	
	6									
	7	0.83'				0-0.8' white CLAY; some red gravel in gray sandy silt. 0.42' at bottom reddish-brown c SAND with some gravel	1540	07/14/00	0.0	Water table at ~7.75 ft on 07/31/00
	8									
MW-6 (9.5-10)	9	1.5'				Reddish-brown c silty SAND; some gravel/pebbles, moist.	1545	07/14/00	0.0	
	10									
	11	1.67'				Reddish-brown c silty SAND; some gravel; satd.	1600	07/14/00	0.0	Water table at ~10 ft on 07/14/00.
	12									
	13	1.25'				Orange-brown m-c SAND; little f sand and silt; semi-loose; satd.	0900	07/31/00	0.0	
	14									
	15	1.0'				0-0.5' Brown f SAND; semi-dense; satd.	0914	07/31/00	0.0	

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg, R. Centagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push  
 on 07/14/00

BORING NUMBER: MW-6  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/31/00  
 GROUNDWATER DEPTH: ~10 ft on 7/14/00  
 ELEVATION:  
 4" id Hollow Stem Augers / 2" Split Spacers  
 on 07/31/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		DVA ppm	COMMENTS
							Time	Date		
	0									
	4					0.5' - 1.0': Brown m-c SAND; semi-dense; satd.				
	16	5				Brown m-c SAND; trace black ang gravel; semi-loose; satd.	0925	07/31/00	0.0	
	17	6								
	18	8								
	19	6				Boring Complete at 18ft.				

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: A. Rai  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-7  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: ~ 4.0ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS		
							Time	Date				
MW-7 (1-15)	0					0-0.5': Asphalt. 0-0.5': Olive ang f-m GRAVEL and SILT; dense; dry. 0.5'-0.83': Org. f-m SAND; loose; moist.	1403	07/24/00	0.0			
	1	21	0.83'									
	2	39										
3	9	1.17'				m SAND; little f-m brown Sand; loose; wet.	1407	07/24/00	0.0	Water table at -4.0ft.		
4	22											
5	7					0-1': Orange m SAND; trace f sand; dense; satd. 1'-1.17': Gray f SAND; dense; satd.					1411	07/24/00
6	7											
7	1	0.92'			0-0.42': Gray m-c SAND; sem-dense; satd. 0.42'-0.92': Orange CLAY; trace organ. material; semi-loose; moist-wet.	1416	07/24/00	0.0				
8	2											
9	2								Boring complete at 8ft.			
	10											
	11											
	12											
	13											
	14											
	15											

NOTES:

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LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER MW-8A  
 DATE STARTED: 08/01/00  
 DATE COMPLETED: 08/01/00  
 GROUNDWATER DEPTH: ~4.42 ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	1	7	0.75'			0-0.08': Lt. Brown SILT and gray ang f-m gravel; loose; dry 0.08'-0.75': Orange f-m silty SAND; semi-loose; moist.	1434	08/01/00	0.0	
	2	9								
	3	7	1.17'			Orange-brown f-m SAND; at 0.25' becomes m-c; very dense; wet.	1440	08/01/00	0.0	
	4	12								
	5	13								
	6	7	1.17'			Orange-brown f-c SAND; at 0.83' becomes f sand; dense; wet, at 4.42' becomes satd.	1447	08/01/00	0.0	Water table at ~4.42 ft.
	7	9								
	8	7								
	9	1	1.75'			0-0.17': Gray f SAND and SILT; loose; satd. 0.17'-1.75': Gray silty CLAY; gradually becoming pink; trace organics; semi-compact; wet some organic matter; organic material lit	1453	08/01/00	0.0	
	10	1								
	11	1								
	12									
	13									
	14									
	15					Boring complete at 8ft.				

NOTES.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-9  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/13/00  
 GROUNDWATER DEPTH: ~ 4.83 Ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-9 (1-2)	0					0-0.5': Asphalt				
	1	1.92'				0.5'-1.92': Orange-brown m SAND; semi-loose - semi-dense; dry	0940	07/13/00	0.0	
	2									
3						0-1.42': Same as above; except moist.				
MW-9 (4-5)	4	2.0'				1.42'-1.67': Med. Brown m SAND; moist	0946	07/13/00	0.0	
	5					1.67'-1.75': Dark Brown CLAY; semi-dense; wet				
	6					Brown-red m-c SAND; semi-dense; wet; at 0.83' becomes sand.	0951	07/13/00	0.0	water table at ~4.83ft.
	7									Boring complete at 6 ft.
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER MW-9A  
 DATE STARTED: 08/01/00  
 DATE COMPLETED: 08/01/00  
 GROUNDWATER DEPTH: ~6.32 ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	9		1.08'			0-0.46': Olive SILT; trace ang f gravel; loose; dry 0.46'-1.08': Orange f-m SAND; very dense; dry	0926	08/01/00	0.0	
	1	9								
	11									
	2	13								
	9		1.08'			Brown f-m SAND; some c sand; very dense; wet; at 0.92', became semi-satd.	0937	08/01/00	0.0	
	3	14								
	17									
	4	21								
	4		1.42'			0-1': Brown-red m-c SAND; little f sand; semi-dense; satd. 1-1.42': Black SILT, CLAY, and f SAND; semi-loose - semi-dry; satd; little organic odor	0942	08/01/00	0.0	
	5	5								
	4									
	6	4								
	7 1/2		1.67'			0-0.67': Med. Brown SILT and f SAND; some clay; semi-dense; satd. 0.67'-1.67': Black CLAY; dense; wet some organic odor	0950	08/01/00	0.0	Water table at ~6.32 ft.
	7	1/2								
	8	1/2								
	9					Boring complete at 8 ft.				
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push to 8ft.

BORING NUMBER: MW-10  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 08/01/00  
 GROUNDWATER DEPTH: -4ft on 07/14/00  
 ELEVATION:  
 4 1/4" id Hollow Stem Augers / 2" split spoons to 8ft.

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW10 (US-2)	0					0-0.5': Asphalt. 0.5'-1.0': Crushed Stone.				
	1		1.67'			Reddish-brown to lt. brown f-m SAND; loose; dry.	0811	07/14/00	0.0	
MW (35-4)	2									
	3		1.83'			Lt. brown f-m SAND; firm, moist.	0815	07/14/00	0.0	
	4									
	5		1.75'			Brown Clayey SILT. Brownish-gray f-c SAND.	0820	07/14/00	0.0	Water table at ~4.0ft.
	6									
	7	2	1.75'			0-0.45': Gray SILT and CLAY; some organics; semi-dense; wet.	0839	08/01/00		
	8	1				0.45'-1.75': Pink CLAY, loose; wet-satd.				
	9					Boring complete at 8ft.				
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push 4 1/4" id Hollow Stem Augers 1/2" split spoons  
 on 07/14/00

BORING NUMBER: MW-11  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/28/00  
 GROUNDWATER DEPTH: ~4.0ft on 07/14/00  
 ELEVATION:  
 on 07/28/00

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					0-0.5': Asphalt.				
	1		1.08'			Brown SAND; firm; moist.	0734	07/14/00	0.0	
	2									
MW-11 (2-3)	3		1.75'			Brown f-c SAND.	0736	07/14/00	0.0	Water table at ~4.0ft on 7/14/00
MW-11 (3-4)	4									
	5									
	5		1.0'			Brown f-m SAND; semi-dense; wet.	1450	07/28/00	0.0	
	6									
	6									
	7									
	7		1.17'			Same as above.	1500	07/28/00	0.0	
	4									
	8									
	9		1.58'			0-0.5': Brown m-c SAND; some f sand; dense; wet. 0.05'-1.58': Brown m-c SAND; some f sand; dense; satd.	1570	07/28/00	NM	Water table at 6.5' ft on 07/28/00
	10									
	7									
	11		1.25'			Orange-brown m-c SAND; some f sand; trace silt; trace rounded f gravel; semi-dense-dens; satd.	1520	07/28/00	1.1	
	9									
	12									
	4									
	13		1.58'			Same as above; except semi-loose.	1526	07/28/00	1.5	
	3									
	14									
	2									
	15		1.0'			Same as above.	1534	07/28/00	1.2	

NOTES: NM: Not Measured.

## LOG OF BORING

PROJECT: Port Newark Container Terminal LLC PROJECT NO: 2341 LOCATION: P&O Ports Port Newark Facility GEOLOGIST: R. Centagallo DRILLER: Tabasco Drilling DRILLING/SAMPLING METHOD: Earthprobe Direct Push <span style="margin-left: 200px;">on 07/14/00</span>	BORING NUMBER: MW-11 DATE STARTED: 07/14/00 DATE COMPLETED: 07/28/00 GROUNDWATER DEPTH: -4.0ft on 07/14/00 ELEVATION: 4 1/4" id Hollow stem Augers / 2" Split Spacers <span style="margin-left: 100px;">on 07/28/00</span>
--	--

SAMPLE ID	DEPTH (feet)	BLOWS per 6'	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	1									
	16					Boring complete at 16ft.				

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push on 07/13/00.

BORING NUMBER: ~~2341~~  
 DATE STARTED: 07/13/00 (MW-12)  
 DATE COMPLETED: 07/27/00  
 GROUNDWATER DEPTH: ~10 ft  
 ELEVATION:  
 4 1/4" id Hollow Stem Augers / 2" split spoons on 07/27/00

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-13 (0.5-1.5)	0									
	1		1.25'			0-.5' Asphalt. Orange m-c SAND; semi-loose; dry.	1401	07/13/00	0.0	
	2									
	3		1.66'			Orange m-c SAND; dense; dry.	1405	07/13/00	0.0	
	4									
	5		1.92'			White-tan m-c SAND; dense; moist.	1408	07/13/00	0.0	
	6									
	7		1.58'			White and tan c SAND; dense; moist.	1417	07/13/00	0.0	
	8									
	9		1.58'			White and tan c SAND; dense; dry; becomes wet at 1.29'.	1428	07/13/00	0.0	
	10									
SB-13 (10-11)	11		1.25'			Orange c SAND; dense; satd.	1437	07/13/00	0.0	water table at ~10 ft.
	12									
	13	5	1.25'			Orange m-c SAND; trace f sand; dense; satd.	1447	07/27/00	0.0	
	14	7								
	15	8								
		5								
		3				Same as above.	1455	07/27/00	0.0	
		3								

NOTES: MW-12 installed where SB-13 is located.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push on 07/13/00

BORING NUMBER:  (MW-12)  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/27/00  
 GROUNDWATER DEPTH: ~10 ft.  
 ELEVATION:  
 4 1/4" id Hollow Stem Augers / 2" split spoons on 07/27/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	15	3								
	16	4								
	17	1	1.25'			Same as above	150	07/27/00	0.0	
	18	3								
	19					Boring complete at 18 ft.				
	20									
	21									
	22									
	23									
	24									
	25									
	26									
	27									
	28									
	29									
	30									

NOTES



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC

BORING NUMBER: MW-13

PROJECT NO: 2341

DATE STARTED: 07/17/00

LOCATION: P&O Ports Port Newark Facility

DATE COMPLETED: 07/17/00

GEOLOGIST: R. Cantagallo

GROUNDWATER DEPTH: ~7 ft

DRILLER: Tabasco Drilling

ELEVATION:

DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers/2" split spoons

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					Asphalt.				
	1					Gravel.				
MW-13 (1.5-2)	2	10 36	.75'			Lt brown f-c SAND	1124	07/17/00	NAB	
	3	5 20	1.5'			0-.83' Red-brown v-f m SAND. .83-1.25' Red-brown f silty SAND; dense. 1.25-1.5' Dk brown silty CLAY.	1127	07/17/00	NAB	
	4	11								
	5	2 7	1.33'			0-.66' Red-brown f-c SAND; trace gravel. .66-1.33' Dk brown to black CLAY.	1135	07/17/00	NAB	Black stain; slight odor.
	6	7								
MW-13 (6.5-7)	7	5 4	1.75'			0-1.17' Red-brown to black CLAY; v stiff. 1.17-1.75' Red-brown to brown CLAY.	1140	07/17/00	NAB	Black stain; slight odor. Water table at ~7 ft.
	8	4								
	9	1 1	2.0'			Brown to red-brown CLAY.	1146	07/17/00	NAB	Black stain; slight odor.
	10	2								
	11	2 3	1.75'			Brown to red-brown CLAY. Tip: Gray f-c SAND.	1150	07/17/00	NAB	Black stain; slight odor.
	12	4 6								
	13	3 4	1.5'			0-.83' Gray to dk gray v-f SAND. .83-1.42' Brown to gray SILT; laminated. 1.42-1.5' Acct.	1155	07/17/00	NAB	Slight odor.
	14	5 2								
	15					Boring complete at 14 ft.				

NOTES: NAB: Not above back ground.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantuagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER MW-14  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/14/00  
 GROUNDWATER DEPTH:  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECORD VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					0-0.5' Asphalt.				
	1		1.0'			Asphalt; Brown Silt, and gravel.	1105	07/14/00	0.0	
	2									
	3		0.5'			Crushed concrete in tip of spoon; DK. Brown SILT and asphalt.	1108	07/14/00	0.0	
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES: First Attempt at boring MW-14.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Funk  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-14  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/25/00  
 GROUNDWATER DEPTH: ~5.0 ft on 07/14/00  
 ELEVATION: ~3.5 ft on 07/25/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-14 (15-2)	0					0-0.5' Asphalt.				
	1		1.08'			Brownish-gray gravelly sand; Some silt.	1122	07/14/00	0.0	
	2					Dark brown silt; little gravel.				
	3		2.0'			Lt. gray-brown m-c SAND; rust-colored staining; loose.				
	4					Lt. gray w-f-c SAND; trace. rust-colored stainings	1135	07/14/00	0.0	
MW-14 (45-5)	5		2.0'			Gray-brown f-vc SAND; very firm.				Water table at ~5.0 ft on 07/14/00
	6					Lt. gray-dk. gray f-vc SAND; little shell hash; trace gravel.	1140	07/14/00	0.0	
	7					Gray m SAND; dense; satd. organic odor present.				
	8		1.25'				1341	07/25/00	0.0	
	9									
	10		1.5'			0-0.33': Same as above. 0.23'-1.5': Black CLAY; high plasticity; satd. heavy organic odor.	1350	07/25/00	0.0	Water table at ~3.5 ft on 07/25/00
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-15  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/27/00  
 GROUNDWATER DEPTH: ~8 ft on 07/14/00  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-15 (1.5-2)	0					0-0.5': Asphalt.				
	1		1.08'			Reddish-brown f-m SAND.	1002	07/14/00	0.0	
	2									
	3		1.75'			Reddish-brown f-vc SAND; trace gravel.	1005	07/14/00	0.0	
	4									
	5		1.83'			Reddish-brown f-vc SAND; trace gravel.	1017	07/14/00	0.0	
	6									
	7		1.67'			Brown f-vc SAND; trace gravel.	1022	07/14/00	0.0	
MW-15 (7.5-8)	8									
	9		2.0'			Same as above, except wet.	1030	07/14/00	0.0	water table at ~8.0 ft.
	10									
	11	5	1.33'			Orange-brown m-c SAND; trace sand; semi-loose, satd.	1033	07/27/00	0.0	
	12	9								
	13	10	1.25'			0-1.17': same as above, except dense.	1140	07/27/00	0.0	
	14	13			1.17'-1.25': orange-brown f SAND; dense; satd.					
	15	7								
	1		1.0'			Orange-brown f-m SAND; dense; satd.	1149	07/27/00	0.0	
	2									

NOTES:

### LOG OF BORING

PROJECT: Port Newark Container Terminal LLC PROJECT NO: 2341 LOCATION: P&O Ports Port Newark Facility GEOLOGIST: R. Cantagallo DRILLER: Tabasco Drilling DRILLING/SAMPLING METHOD: Earthprobe Direct Push	BORING NUMBER: MW-15 DATE STARTED: 07/14/00 DATE COMPLETED: 07/27/00 GROUNDWATER DEPTH: -8ft on 07/14/00 ELEVATION:
--	---

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	4									
	16.3					Boring Complete at 16ft.				

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P20 Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-1  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/13/00  
 GROUNDWATER DEPTH: ~4.88 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-1 (1-1.5)	0									
	1		1.08'			0-5' Asphalt; .5-1.59' M brown m SAND; semi-dense; moist	0902	07/13/00	0.0	
	2									
	3		1.5'			M brown m-c SAND; semi-dense; moist.	0906	07/13/00	0.0	
	4									
SB-1 (4-5)	5		1.17'			0-.88' M brown m-c SAND; Semi-dense; wet. .98-1.17' Black and red-brown CLAY; wet to satd.	0910	07/13/00	0.2	Water table at 4.88 ft. Slight odor present.
	6									
	7					Boring Complete at 6 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-2  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: ~4 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-2 (1-2)	0									
	1	9	1.08'			0-.5' Asphalt. 0-.5' Dk olive SILT; some org f gravel; loose; dry.	1605	07/24/00	0.0	
SB-2 (2.5-3)	2	22				.5-1.08' Orange f-m SAND; loose; dry.				
	3	11	1.08'			Lt brown f-m SAND; loose; dry; becomes dense and m-c at .5'; becomes moist at .92'	1610	07/24/00	0.0	
	4	17								
	5	22								
	6	5	1.42'			Orange m-c SAND; semi-dense; Satd; becomes gray at .75'.	1617	07/24/00	0.0	Water table at ~4 ft.
	7	7								
	8	1								
	9	9								
	10					Boring complete at 6 ft.				
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC PROJECT NO: 2341 LOCATION: P&O Ports Port Newark Facility GEOLOGIST: M. Greenberg DRILLER: Tabasco Drilling DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons	BORING NUMBER SB-3 DATE STARTED: 07/25/00 DATE COMPLETED: 07/25/00 GROUNDWATER DEPTH: ~2.83 ft ELEVATION:
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SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-3 (1-1.5)	0					0-0.5' Asphalt. 0-0.33' Olive SILT and ang of gravel; semi-loose; dry. 0.33-1.17' Orange f-m SAND; little silt; semi-loose.	0826	07/25/00	0.0	
	1	7	1.17'							
SB-3 (2-2.5)	2	13				Orange f-m SAND; little silt; semi-loose; becomes sand at .83'.  Boring complete at 4 ft.	0836	07/25/00	0.0	Water table at ~2.83 ft.
	3	8	1.25'							
	4	11								
	5	16								
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: E. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-4  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~4 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-4 (1.5-2)	1					0-1.0 Asphalt				
	2	12 18	1.0'			Brown f-c SAND; trace gravel.	1510	07/17/00	0.0	
SB-4 (3.5-4)	3	6 10	1.33			Brown f-c SAND; trace gravel.	1517	07/17/00	0.0	Water table at ~4 ft.
	4	10 12								
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-5  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~4 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-5 (1.5-2)	0					0-1.0' Asphalt.				
	1	11	.92'			Red-brown wf-c SAND; trace gravel.	1534	07/17/00	0.0	
	2	11								
SB-5 (3.5-4)	3	14	1.42'			Brown to red-brown f-c SAND; trace gravel.	1540	07/17/00	0.0	Water table at ~4 ft.
	4	25								
		24								
		26								
	5					Boring complete at 4 ft.				
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-6  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: ~3.42 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
SB-6 (1-2)	1					0-1.0' Asphalt,				
	2	18 26	.75'			Tan and olive m SAND; trace rounded to semi-rounded gravel; loose; dry.	1249	07/17/00	0.0	
SB-6 (3-3.5)	3	3	1.83'			0-1.17' Gray tan m SAND; semi-dense; wet.	1255	07/17/00	0.0	Water table at ~3.42 ft.
	3	10				1.17-1.93' Gray f-m SAND; little subrounded m gravel; wet; becomes semi-dense and satd.				
	4	20								
	4	33				Boring complete at 4 ft.				
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-7  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: Not encountered.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
SB-7 (1-2)	1					0-1.0' Asphalt.				
	2	7 14	.75'			11 ton m SAND; trace rounded gravel; semi-loose to semi-dense; moist.	0935	07/19/00	0.0	
SB-7 (2-2.5)	3	50/4	.33'			0-.17' Same as above. .17-.33' Pink CLAY; trace ang gravel; dense; dry.	0939	07/19/00	0.0	Refusal at 2.33 ft.
	4									
	5					Boring complete at 2.33 ft.				
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

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LOG OF BORING

PROJECT: Port Newark Container Terminal LLC PROJECT NO: 2341 LOCATION: P&O Ports Port Newark Facility GEOLOGIST: R. Contagallo DRILLER: Tabasco Drilling DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons	BORING NUMBER: SB-8 DATE STARTED: 07/17/00 DATE COMPLETED: 07/17/00 GROUNDWATER DEPTH: ~4 ft ELEVATION:
--	---

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
SB-8 (1.5-2)	1					0-1.0' Asphalt.				
	2	14	.75'			lt brown to brown f-m SAND; trace gravel.	1492	07/17/00	0.0	
SB-8 (3.5-4)	3	5	1.17'			0-.5' Brown f-c SAND; trace gravel.	1446	07/17/00	0.0	Water table at ~4 ft.
	4	5				.5-.83' Brown sandy CLAY and f-m SAND.				
	5	5				.83-1.17' Brown clayey f-c SAND.				
	6					Boring complete at 4 ft.				
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-10  
 DATE STARTED: 07/25/00  
 DATE COMPLETED: 07/25/00  
 GROUNDWATER DEPTH: ~2.58 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-10 (1.5-2)	1	10	1.17'			Asphalt. Orange brown f-m SAND; loose; moist.	0926	07/25/00	0.0	
	2	15								
SB-10 (2-2.5)	3	9	.92'			Orange m-c SAND; dense; wet; becomes solid at .58'.	0931	07/25/00	0.0	Water table at ~2.58 ft.
	4	7								
	5	9								
	6	3				Boring complete at 4 ft.				
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-11  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/14/00  
 GROUNDWATER DEPTH: ~9.5 ft  
 ELEVATION:

SAMPLE ID	DEPTH (100)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-11 (1.5-2)	0									
	1		1.25'			0-5' Asphalt Red-brown c SAND; some silt.	1342	07/14/00	0.0	
	2									
	3		2.00'			Red-brown c SAND; some silt.	1355	07/14/00	0.0	
	4									
	5		1.83'			Red-brown c SAND; some silt; trace m gravel; moist.	1400	07/14/00	0.0	
	6									
	7		2.0'			Same as above.	1407	07/14/00	0.0	
	8									
SB-11 (9-9.5)	9		1.58'			Same as above.	1414	07/14/00	0.0	Water table at ~9.5 ft.
	10									
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC PROJECT NO: 2341 LOCATION: P&O Ports Port Newark Facility GEOLOGIST: M. Greenberg DRILLER: Tabasco Drilling DRILLING/SAMPLING METHOD: Earthprobe Direct Push	BORING NUMBER: SB-12 DATE STARTED: 07/13/00 DATE COMPLETED: 07/13/00 GROUNDWATER DEPTH: ~4.33 ft ELEVATION:
---	---

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-12 (0.5-2)	0									
	1		1.17'			0-.5' Asphalt. M brown-orange mSAND; dense; dry.	1621	07/13/00	0.0	
	2									
SB-12 (3-4)	3		1.50'			0-.42' Orange-brown c SAND; dense; wet.	1626	07/13/00	0.0	
	4									
	5		1.0'			0-.33' M brown-orange c SAND; dense; wet. .33-1.0' M brown-orange c SAND; dense; satd.	1630	07/13/00		Water table at ~4.33 ft.
	6									
	7					Boring complete at 6 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-13A  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/14/00  
 GROUNDWATER DEPTH: ~9 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		DVA ppm	COMMENTS
							Time	Date		
SB-13A (1.5-2)	1	1.25'				0-5' Asphalt. 5-10' Gravel. Red-brown f-c SAND; trace gravel.	0842	07/14/00	0.0	
	2									
	3	1.75'				Red-brown f-c SAND; trace gravel.	0846	07/14/00	0.0	
	4									
	5	1.66'				Same as above.	0908	07/14/00	0.0	
	6									
	7	1.75'				Same as above.	0911	07/14/00	0.0	
	8									
SB-13A (8.5-9)	9	1.83'				Same as above.	NR	07/14/00	NM	Water table at ~9ft.
	10									
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES: NR: Not recorded.  
 NM: Not measured.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-14  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~6 ft  
 ELEVATION:

SAMPLE ID	DEPTH (1000)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-14 (1.5-2)	1	17	.66'			Asphalt.	1225	07/17/00		
	2	24				Brown f-m SAND; trace gravel.			0.0	
	3	12	1.25'			Lt brown to brown f-m SAND.	1231	07/17/00	0.0	
	4	20								
	5	24								
SB-14 (5.5-6)	6	3	1.0'			Brown f-m SAND; trace gravel.	1238	07/17/00	NM	Water table at ~6 ft.
	7	6								
	8	11								
	9	13			Boring complete at 6 ft.					
	10									
	11									
	12									
	13									
	14									
	15									

NOTES: NM: Not measured.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cartagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-15  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~5.5 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					Asphalt.				
	1					Gravel.				
SB-15 (1.5-2)	2	24	.83'			Lt brown vt-f SAND.	1045	07/17/00	NAB	
	3	29								
	4	10	1.17'			Lt brown vt-f SAND, loose, dry.	1055	07/17/00	NAB	
	5	26								
SB-15 (5.5-6)	6	14	1.25'			0-42 Gravel to lt brown SAND; trace gravel.	1105	07/17/00	NAB	Water table at ~5.5 ft.
	7	7				42-1.25' Gray f-m SAND.				
	8					Boring complete at 6 ft.				
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES: NAB: Not above background.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC

BORING NUMBER: SB-16

PROJECT NO: 2341

DATE STARTED: 07/13/00

LOCATION: P&O Ports Port Newark Facility

DATE COMPLETED: 07/13/00

GEOLOGIST: M. Greenberg

GROUNDWATER DEPTH: ~8.83 ft

DRILLER: Tabasco Drilling

ELEVATION:

DRILLING/SAMPLING METHOD: Earthprobe Direct Push

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-16 (0.5-1)	0					0-5' Asphalt.				
	1		.5B'			.5-1.08' Orange-brown m SAND; semi-loose to semi-dense; moist.	1509	07/13/00	0.0	
	2									
	3		1.5B'			Tan and white m-c SAND; dense; moist.	1512	07/13/00	0.0	
	4									
	5		2.0'			Red-brown c SAND; v dense; wet.	1520	07/13/00	0.0	
	6									
	7		1.5'			Red-brown c SAND; dense; wet.	1530	07/13/00	0.0	
	8									
SB-16 (8-9)	9		1.5'			Red-brown c SAND; dense; wet; sand at .83'.	1535	07/13/00	0.0	Water table at ~8.83 ft.
	10									
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-17  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: ~8.33ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS		
							Time	Date				
SB-17 (115-2)	1	19	1.42'			Asphalt. orange f SAND; trace ang f gravel; loose; dry	1124	07/24/00	0.0			
	2	12										
	3	13										
	3	28	1.42'			Same as above.	1128	07/24/00	0.0			
	4	21										
	5	32										
	5	48	2.00'			0-1.25' same as above. 1.25'-2.00' grey f. SAND; ang f-m gravel; loose; dry	1132	07/24/00	0.0			
	6	39										
	7	33										
	7	21	2.00'			Dark orange f-m SAND. Semi-loose; Moist.	1151	07/24/00	0.0			
	8	22										
	9	38										
SB-17 (8-9)	9	9	1.25'			Dark orange m SAND. some f sand; dense; moist; satd. at 8.33'	1155	07/24/00	0.0	Water table at ~8.33ft.		
	10	14										
	11	20										
	11					Boring complete at 10ft.						
	12											
	13											
	14											
	15											

NOTES:

PAGE 1 OF 1

**APPENDIX B**

**APPENDIX C**

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-15 Date 8-23-00  
 Well Depth (from TOC) = 14.79 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 8.76 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 14.79 - 8.76  
 T = 6.03 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times 6.03 \times 1^2$$

$$= \underline{0.98} \text{ gallons}$$

Total Water Purged

Design = 2.95 gallons  
 Actual = 6 gallons

Water Quality

	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	Turb
5.96 Initial	14:25	7.10	0.198	19.8	0.00	19	71.8
Volume 1	14:32	7.10	0.196	19.9	0.00	16	21
Volume 2	14:33	7.10	0.193	19.9	0.00	9	19.2
Volume 3	14:36	7.07	0.2	20.0	0.00	12	5.5
Volume 4	14:36	7.05	0.205	20.0	0.00	20	7.2
Volume 5	14:42	7.05	0.208	20.1	0.00	23	2.0
	14:25	7.05	0.209	20.0	0.00	22	1.0

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 14:25 started purging well. water in clear, no  
visible sludge, or debris.

Sampler(s): 14:25 14:32 14:33 14:36 14:42



EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-6 Date 08/22/02 and 08/23  
 Well Depth (from TOC) = 14.95 ft 14.95  
 Well Diameter (d) = 2 in 2  
 Static Water Level (from TOC) = 7.59 ft 10.92  
 Well Radius (d/2) = 1 in 1

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 14.95 - 7.59 14.95 - 10.92  
 T = 7.36 ft 4.03

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times \underline{7.36} \times \underline{1}^2 = 0.163 \times 4.03 \times 1^2$$

= 0.66

Total Water Purged

Design = 3.60 gallons 1.97 gal  
 Actual = 4.0 gallons

Water Quality

RT (Y <sub>min</sub> )	TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (OC)	DO (ppm)	Ed (mu)	Time	
0.23	Initial	0806	6.94	1.89	19.6	5.38	162	8.3
0.23	Volume 1	0809	7.04	1.89	19.9	5.19	142	29
0.23	Volume 2	0812	7.11	1.88	20.1	5.18	122	8
0.27	Volume 3	0815	7.14	1.87	20.1	5.14	111	4
0.22	Volume 4	0818	7.15	1.87	20.2	5.12	105	3
0.64	Volume 5	0821	7.16	1.87	20.1	5.22	101	3
0.49	Volume 6	0824	7.16	1.86	19.8	5.13	98	4

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 15.07 Start purging Well, 2804 Start purging Well  
Water purged has no odor or visible solids. It is clear.

RT	Sampler(s)	TIME	pH	SPEC. CONDC.	TEMPERATURE	DO	Ed	Time
0.49	7	0827	7.16	1.86	19.8	5.15	96	3.3
0.61	8	0830	7.16	1.85	19.7	5.16	94	2.8
0.39	9	0833	7.14	1.84	19.8	5.16	93	2.2
0.40	10	0836	7.16	1.83	19.9	5.15	91	2.4

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-7

Date 8-22-00

Well Depth (from TOC) = 6.16 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.36 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

$T = \text{Depth (ft)} - \text{Static Water Level (ft)}$   
 $T = 6.16 - 4.36 = 1.80$   
 $T = \underline{1.80}$  ft

Gallons of Water per Well Volume

$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$   
 $= 0.163 \times 1.80 \times 1^2$   
 $= \underline{0.29}$  gallons

Total Water Purged

Design = 0.88 gallons  
 Actual = ~5 gallons

Water Quality

TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (OC)	DO (ppm)	Ed (mu)	Time
Initial	7.22	43.1	26.0	0.50	-106	33
Volume 1	7.21	39.3	25.9	0.07	-94	19.
Volume 2	7.22	39.5	26.0	0.00	-96	19.
Volume 3	7.22	39.0	26.2	0.00	-96	11.
Volume 4	7.21	39.0	26.2	0.00	-95	11
Volume 5	7.22	39.2	26.2	0.00	-97	9.
Volume 6	7.23	37.9	26.2	0.00	-98	8.

Purge Method: SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 09511 start purging well, water appears clear and odor free

Sampler(s): N. Greenberg, R. Robles

0.47	Time 7	1015	7.24	37.9	26.3	0.00	-99	8.7
0.55	Time 8	1018	7.24	37.9	26.3	0.00	-99	8.
0.45	Time 9	1021	7.24	37.3	26.3	0.00	-97	8.8

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. W-8A Date 8/23/00

Well Depth (from TOC) = 5.76 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.79 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 5.76 - 4.79  
 T = 0.97 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times \underline{0.97} \times \underline{1}^2$$

$$= \underline{0.16} \text{ gallons}$$

Total Water Purged

Design = 0.47 gallons  
 Actual = \_\_\_\_\_ gallons

Water Quality

Rate  
(g/min)  
0.77  
0.74  
0.94  
0.68  
0.94  
0.55  
0.82

	TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (OC)	DO (ppm)	Ed (mu)	Tu
Initial	16:17	6.42	0.253	24.7	0.00	-36	-1
Volume 1	16:21	6.51	0.254	24.8	0.00	-38	2
Volume 2	16:24	6.56	0.260	24.8	0.00	-26	8
Volume 3	16:27	6.62	0.261	25.0	0.00	-26	4
Volume 4	16:30	6.60	0.253	25.0	0.00	-23	2
Volume 5	16:33	6.62	0.295	24.9	0.00	-26	1
6	16:36	6.65	0.251	25.0	0.00	-21	0

Purge Method SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 16:15 Start Purge in W-8A. Water is clear, not free of green visible. Water has been yellowish tint.

Sampler	TIME	pH	SPEC. CONDC.	TEMPERATURE	DO	Ed	Tu
7	16:38	6.64	0.275	25.1	0.00	-22	-2

0.83

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-9A

Date 0822/00

Well Depth (from TOC) = 6.52 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 3.70 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 6.52 - 3.70  
 T = 2.82 ft

Gallons of Water per Well Volume

Volume =  $0.163 \times T(\text{ft}) \times r(\text{in})^2$   
 =  $0.163 \times 2.82 \times 1^2$   
 = 0.46 gallons

Total Water Purged

Design = 1.38 gallons  
 Actual = 3.5 gallons

Water Quality

Flow (l/min)	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	Turb
	Initial	<u>6.57</u>	<u>0.830</u>	<u>26.1</u>	<u>0.03</u>	<u>-140</u>	<u>57.1</u>
<u>2.46</u>	Volume 1	<u>6.53</u>	<u>0.510</u>	<u>26.1</u>	<u>0.00</u>	<u>-134</u>	<u>30.1</u>
<u>3.43</u>	Volume 2	<u>6.49</u>	<u>0.463</u>	<u>26.4</u>	<u>0.02</u>	<u>-130</u>	<u>25.9</u>
<u>0.39</u>	Volume 3	<u>6.48</u>	<u>0.455</u>	<u>26.1</u>	<u>0.00</u>	<u>-128</u>	<u>25.1</u>
<u>2.35</u>	Volume 4	<u>6.46</u>	<u>0.445</u>	<u>26.5</u>	<u>0.02</u>	<u>-127</u>	<u>24.1</u>
<u>1.40</u>	Volume 5	<u>6.47</u>	<u>0.439</u>	<u>26.5</u>	<u>0.02</u>	<u>-128</u>	<u>23.5</u>
<u>0.37</u>	Time 6	<u>6.57</u>	<u>0.748</u>	<u>26.2</u>	<u>0.00</u>	<u>-143</u>	<u>58.1</u>

Purge Method SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: Water is clear free and has yellowish tinge. Slight  
shock present, water has petroleum like odor

Sampler(s): M Greenberg & P. D. ...

<u>0.40</u>	Time 7	1201	<u>6.51</u>	<u>0.450</u>	<u>26.5</u>	<u>0.00</u>	<u>-134</u>	<u>25.1</u>
<u>0.40</u>	Time 8	1204	<u>6.48</u>	<u>0.428</u>	<u>26.6</u>	<u>0.00</u>	<u>-129</u>	<u>23.0</u>
<u>2.43</u>	Time 9	1207	<u>6.47</u>	<u>0.420</u>	<u>26.5</u>	<u>0.00</u>	<u>-127</u>	<u>21.9</u>
<u>0.40</u>	Time 10	1210	<u>6.47</u>	<u>0.415</u>	<u>26.4</u>	<u>0.00</u>	<u>-126</u>	<u>21.4</u>
<u>0.43</u>	Time 11	1215	<u>6.47</u>	<u>0.412</u>	<u>26.4</u>	<u>0.00</u>	<u>-126</u>	<u>21.2</u>

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-11 Date 08-21-00

Well Depth (from TOC) = 15.98 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 8.99 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 15.98 - 8.99  
 T = 6.99 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times 6.99 \times 1^2$$

$$= \underline{1.14} \text{ gallons}$$

Total Water Purged

Design = 3.42 gallons  
 Actual = ~6.5 gallons

Water Quality

	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	Ed (mu)	Turb
Initial	<u>1348</u>	<u>7.34</u>	<u>0.265</u>	<u>19.5</u>	<u>1.03</u>	<u>-91</u>	<u>30</u>
Volume 1	<u>1351</u>	<u>7.31</u>	<u>0.243</u>	<u>19.5</u>	<u>0.00</u>	<u>-99</u>	<u>19</u>
Volume 2	<u>1407</u>	<u>7.32</u>	<u>0.239</u>	<u>19.7</u>	<u>0.29</u>	<u>-95</u>	<u>8</u>
Volume 3	<u>1410</u>	<u>7.30</u>	<u>0.236</u>	<u>19.6</u>	<u>0.00</u>	<u>-100</u>	<u>6</u>
Volume 4	<u>1413</u>	<u>7.28</u>	<u>0.235</u>	<u>19.6</u>	<u>0.97</u>	<u>-104</u>	<u>5</u>
Volume 5	<u>1416</u>	<u>7.27</u>	<u>0.239</u>	<u>19.6</u>	<u>1.16</u>	<u>-107</u>	<u>3</u>
Volume 6	<u>1419</u>	<u>7.26</u>	<u>0.238</u>	<u>19.6</u>	<u>2.03</u>	<u>-110</u>	<u>3</u>

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 1348 start purging well. well water clear  
no odor, no sludge. stopped purge @ 1407 to get New PID. Resumed  
purge @ 1408

Sampler(s):

Volume 7	<u>1422</u>	<u>7.25</u>	<u>0.240</u>	<u>19.7</u>	<u>2.29</u>	<u>-112</u>	<u>3.2</u>
Volume 8	<u>1425</u>	<u>7.23</u>	<u>0.236</u>	<u>19.6</u>	<u>1.74</u>	<u>-113</u>	<u>2.1</u>
Volume 9	<u>1425</u>	<u>7.23</u>	<u>0.236</u>	<u>19.7</u>	<u>1.34</u>	<u>-114</u>	<u>2.2</u>
Volume 10	<u>1431</u>	<u>7.22</u>	<u>0.238</u>	<u>19.7</u>	<u>1.05</u>	<u>-113</u>	<u>2.1</u>
Volume 11	<u>1434</u>	<u>7.22</u>	<u>0.239</u>	<u>19.7</u>	<u>0.70</u>	<u>-114</u>	<u>2.1</u>
Volume 12	<u>1437</u>	<u>7.22</u>	<u>0.235</u>	<u>19.7</u>	<u>0.35</u>	<u>-115</u>	<u>2</u>

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-12

Date 8/23/00

Well Depth (from TOC) = 14.55 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 10.14 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 14.55 - 10.14  
 T = 4.41 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times 4.41 \times 1^2$$

$$= \underline{0.72} \text{ gallons}$$

Total Water Purged

Design = 2.2 gallons  
 Actual = 5.5 gallons

Water Quality

Time (min)	TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	TW
0.47 Initial	1308	7.12	0.472	20.4	1.30	-28	10'
0.59 Volume 1	1311	7.12	0.448	20.2	0.00	-20	44
0.65 Volume 2	1314	7.12	0.445	20.1	0.00	-33	30
0.80 Volume 3	1317	7.12	0.440	20.0	0.00	-45	17
0.54 Volume 4	1320	7.10	0.435	20.1	0.00	-57	10.
0.55 Volume 5	1323	7.09	0.439	20.2	0.00	-60	6.0
0.55 6	1326	7.07	0.439	20.2	0.00	-65	6.0

Purge Method SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 1308 Start purging well. water has yellowish tint with the odor and the steam.

Time	Sampler(s)	TIME	pH	SPEC. CONDC.	TEMPERATURE	DO	En	TW
0.47	7	1329	7.06	0.439	20.2	0.00	-67	5.8
0.38	8	1332	7.05	0.439	20.5	0.00	-70	5.3
0.32	9	1335	7.04	0.441	20.7	0.00	-71	4.1
0.35	10	1338	7.04	0.448	20.7	0.00	-71	3.7
0.35	"	1341	7.04	0.450	20.6	0.00	-71	4.1

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-14 Date 8-24-00  
 Well Depth (from TOC) = 7.70 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.92 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 7.70 - 4.92  
 T = 2.78 ft

Gallons of Water per Well Volume

Volume = 0.163 x T(ft) x r(in)<sup>2</sup>  
 = 0.163 x 2.78 x 1<sup>2</sup>  
 = 0.45 gallons

Total Water Purged

Design = 1.36 gallons  
 Actual = 10 gallons

Water Quality

	TIME	PH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	Ed (mu)	TUR (NTU)
Initial	<u>0850</u>	<u>7.74</u>	<u>0.236</u>	<u>22.8</u>	<u>2.98</u>	<u>-224</u>	<u>0.2</u>
Volume 1	<u>0853</u>	<u>7.33</u>	<u>0.274</u>	<u>23.4</u>	<u>4.76</u>	<u>-209</u>	<u>32.</u>
Volume 2	<u>0855</u>	<u>7.27</u>	<u>0.288</u>	<u>23.4</u>	<u>5.32</u>	<u>-206</u>	<u>23.</u>
Volume 3	<u>0857</u>	<u>7.87</u>	<u>0.284</u>	<u>23.5</u>	<u>4.46</u>	<u>-207</u>	<u>110.</u>
Volume 4	<u>0859</u>	<u>7.16</u>	<u>0.356</u>	<u>23.4</u>	<u>4.99</u>	<u>-214</u>	<u>31.</u>
Volume 5	<u>0901</u>	<u>7.23</u>	<u>0.314</u>	<u>23.4</u>	<u>3.94</u>	<u>-212</u>	<u>28.</u>
Volume 6	<u>0904</u>	<u>7.25</u>	<u>0.245</u>	<u>23.5</u>	<u>3.74</u>	<u>-215</u>	<u>22.</u>

Purge Method: SUCTION PUMP SUBMERSIBLE PUMP  BAILER OTHER  
 (SPECIFY)

Notes/Observations: Water is gray cloudy colored; has organic odor; visible sheen.

Sampler(s): M. Greenberg, R. Rabalais

Volume 7	<u>0907</u>	<u>7.20</u>	<u>0.281</u>	<u>23.5</u>	<u>4.73</u>	<u>-214</u>	<u>34.5</u>
Volume 8	<u>0909</u>	<u>7.31</u>	<u>0.273</u>	<u>23.5</u>	<u>4.40</u>	<u>-213</u>	<u>22.4</u>
Volume 9	<u>0911</u>	<u>7.32</u>	<u>0.271</u>	<u>23.5</u>	<u>5.60</u>	<u>-213</u>	<u>13.5</u>
Volume 10	<u>0913</u>	<u>7.23</u>	<u>0.308</u>	<u>23.4</u>	<u>4.05</u>	<u>-219</u>	<u>12.9</u>
		<u>7.24</u>	<u>0.273</u>	<u>23.5</u>	<u>5.44</u>	<u>-213</u>	<u>7.4</u>

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-5 Date 8-21-00

Well Depth (from TOC) = 6.0 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.10 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 6.0 - 4.10  
 T = 1.9 ft

Gallons of Water per Well Volume

$$\begin{aligned} \text{Volume} &= 0.163 \times T(\text{ft}) \times r(\text{in})^2 \\ &= 0.163 \times \underline{1.9} \times \underline{1}^2 \\ &= \underline{0.31} \text{ gallons} \end{aligned}$$

Total Water Purged

Design = 0.93 gallons  
 Actual = 11 gallons

Water Quality

TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (OC)	DO (ppm)	En (mu)	ft
Initial	<u>6.73</u>	<u>1.14</u>	<u>24.5</u>	<u>0.01</u>	<u>-160</u>	0.
Volume 1	<u>6.74</u>	<u>1.08</u>	<u>24.6</u>	<u>0.00</u>	<u>-160</u>	4.
Volume 2	<u>6.75</u>	<u>1.05</u>	<u>24.7</u>	<u>0.00</u>	<u>-158</u>	4.
Volume 3	<u>6.76</u>	<u>1.04</u>	<u>24.7</u>	<u>0.00</u>	<u>-157</u>	5.
Volume 4	<u>6.76</u>	<u>1.01</u>	<u>24.7</u>	<u>0.00</u>	<u>-158</u>	5.
Volume 5	<u>6.77</u>	<u>0.95</u>	<u>24.7</u>	<u>0.00</u>	<u>-159</u>	6.
Volume 6	<u>6.77</u>	<u>0.97</u>	<u>24.7</u>	<u>0.00</u>	<u>-161</u>	7.

Purge Method:  SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 11:00 start purging well. Water appears clear odor free.

Sampler(s): M. Greenberg, R. Robbs

Volume 7	11:25	6.77	0.96	24.7	0.00	-164	8.
Volume 8	11:28	6.77	0.97	24.7	0.00	-165	9.
Volume 9	11:31	6.77	0.96	24.7	0.00	-166	10.



EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-3 Date 8-22-00  
 Well Depth (from TOC) = 3.96 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 1.17 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 3.96 - 1.17  
 T = 2.79 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times \underline{2.79} \times \underline{1}^2$$

$$= \underline{0.45} \text{ gallons}$$

Total Water Purged

Design = 1.36 gallons  
 Actual = 1 gallons

Water Quality

	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	Tur.
Initial	<u>0825</u>	<u>7.16</u>	<u>0.286</u>	<u>24.9</u>	<u>1.62</u>	<u>71</u>	<u>106</u>
Volume 1	_____	_____	_____	_____	_____	_____	_____
Volume 2	_____	_____	_____	_____	_____	_____	_____
Volume 3	_____	_____	_____	_____	_____	_____	_____
Volume 4	_____	_____	_____	_____	_____	_____	_____
Volume 5	_____	_____	_____	_____	_____	_____	_____

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 0822 Start purging well. water is brackish product with no odor well used Day

Sampler(s): M. Greenberg, R. Robles

EXHIBIT Y

ELECTION

(PURSUANT TO SECTION 142 (b) OF THE  
INTERNAL REVENUE CODE OF 1986)

1. PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee") pursuant to an Agreement of Lease bearing Port Authority Lease No. L-PN-264 (hereinafter called "the Lease") made under date of December 1, 2000, between the Lessee and The Port Authority of New York and New Jersey (hereinafter called "the Port Authority"), has leased a site and the structures, improvements, additions, buildings and facilities located or to be located thereon at Port Newark, all as described in the Lease (hereinafter called "the Leased Premises") to be used basically as marine terminal premises constituting a portion of a public port for a term commencing on December 1, 2000 and expiring November 30, 2030.

2. The principal office of the Port Authority is at One World Trade Center, New York, New York 10048 and its taxpayer identification number is

3. The principal office of the Lessee is at One Evertrust Plaza, Jersey City, New Jersey 07302, and its taxpayer identification number is

4. Capital expenditures in connection with the Leased Premises are expected to be made in whole or in part by the Port Authority from "exempt facility bonds" (within the meaning of Section 142(a) of the Internal Revenue Code of 1986) issued by the Port Authority from time to time with respect to the "Wharf Rehabilitation Work" as defined in Section 8B of the Lease (such capital expenditures with respect to the Wharf Rehabilitation Work being hereinafter called "the Property").

5. The Lessee has not acquired and is not acquiring an ownership interest in the Property. The Lessee hereby irrevocably elects not to claim for purposes of federal, state or local taxation of income any depreciation or investment credits, with respect to the Property. The Lessee further agrees that this irrevocable election shall be binding upon its successors in interest, if any, under the Lease, and as a condition of any permitted sale or assignment of the interest of the Lessee under the Lease, every successor in interest shall furnish an executed irrevocable election in the form of the immediately preceding sentence to the Port Authority. The foregoing shall not grant or be deemed to grant to the Lessee the right to sell or assign, in any manner, its interests under the Lease.

6. It is understood that the foregoing election shall not apply to any personal property of the Lessee (including equipment and trade fixtures) removable without material damage to the Leased Premises, installed by the Lessee in or on the Leased Premises pursuant to the Lease, and which are deemed to be and remain the property of the Lessee.

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

\_\_\_\_\_


By \_\_\_\_\_

(Title) \_\_\_\_\_

Dated: \_\_\_\_\_

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )


On the 1<sup>st</sup> day of November in the year 2000, before me, the undersigned, a Notary Public in and for said state, personally appeared William C. Borwick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
(notarial seal and stamp)

MARIE M. EDWARDS, NOTARY  
Public, State of New York  
No. 24-4959693  
Qualified in Kings County  
Commission Expires Jun. 6, 2002

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the 1<sup>st</sup> day of November in the year 2000, before me, the undersigned, a Notary Public in and for said state, personally appeared ALISTAIR J. BAILIE, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
(notarial seal and stamp)

MARIE M. EDWARDS, NOTARY  
Public, State of New York  
No. 24-4959693  
Qualified in Kings County  
Commission Expires Jun. 6, 2002

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**AMENDED AND RESTATED AGREEMENT OF LEASE**

**BETWEEN**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**AND**

**PORT NEWARK CONTAINER TERMINAL LLC**

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**CLOSING DOCUMENTS**

*June 14, 2011*

**Weil**

JOHN GOLDMAN  
WEIL, GOTSHAL & MANGES LLP  
767 FIFTH AVENUE  
NEW YORK, NY 10153

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**Lease No. L-PN-264**

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**AMENDED AND RESTATED AGREEMENT OF LEASE**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**Dated as of June 14, 2011**

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Exhibit E	- Starboard Street Property
Exhibit F	- Waterfront-Shimizaki Property
Exhibit G	- Initial Environmental Survey

**SCHEDULES**

Schedule A	- Base Rental Rates
Schedule B	- Tier 1 Rental Rates
Schedule C	- Guidelines
Schedule D	- Compact Disc Containing Existing Port Leases

THIS AMENDED AND RESTATED AGREEMENT OF LEASE (“Agreement”), made as of the 14th day of June, 2011, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (the “Port Authority”), a body corporate and politic created by compact between the States of New Jersey and New York, with the consent of the United States Congress, and having an office and place of business at 225 Park Avenue South, 15th Floor, New York, New York 10003-1604; and PORT NEWARK CONTAINER TERMINAL LLC (“Lessee”), a limited liability company organized under the laws of the State of Delaware and having an office and place of business at 241 Calcutta Street, Port Newark, New Jersey 07114, whose representative is: David F. Adam.

WHEREAS, as of December 1, 2000, the Port Authority and Lessee entered into that certain “Agreement” known as Lease No. L-PN-264 for the Existing Terminal Facility (as defined below), which was later amended and supplemented by certain Supplemental Agreements between the Port Authority and Lessee numbered 1 through 10, i.e. Supplement No. 1, dated as of August 31, 2001, Supplement No. 2, dated as of November 26, 2001, Supplement No. 3, dated as of March 25, 2002, Supplement No. 4, dated as of December 1, 2000, Supplement No. 5, dated as of October 1, 2002, Supplement No. 6, dated as of February 15, 2003, Supplement No. 7, dated as of May 31, 2005, Supplement No. 8, dated as of August 31, 2005, Supplement No. 9, dated as of March 13, 2007 and Supplement No. 10, dated as of December 31, 2006 (collectively, as so amended and supplemented, the “Existing Lease”);

WHEREAS, contemporaneously with the execution of this Agreement (1) the parties are entering into a Railroad Operating Agreement (as defined herein), dated as of the date hereof and (2) Mediterranean Shipping Company has delivered a Port-Wide Throughput Guaranty Agreement, dated as of the date hereof, to the Port Authority, relating to a guaranteed number of Qualified Containers which shall be loaded onto or discharged from vessels berthing within the Port during any Lease Year and, in addition, and the Port Authority and Lessee acknowledge and agree that the execution of each of the Railroad Operating Agreement and Port-Wide Throughput Guaranty Agreement, together with the execution of this Agreement, shall be a condition precedent to the effectiveness of this Agreement;

WHEREAS, the Port Authority and Lessee intend to amend and restate the Existing Lease in its entirety on the terms set forth in this Agreement.

NOW THEREFORE, the Port Authority and Lessee, for and in consideration of the covenants and agreements hereinafter contained, hereby agree as follows:

Section 1. Definitions

The following terms, as used herein, shall have the meaning set forth below:

“Acceptable Accounting Firm” shall have the meaning set forth in Section 11(d).

“Added Parcels” shall mean the Polaris Street Property, the Marsh Street Property, the Development Parcels, the Starboard Street Property and the Waterfront-Shimizaki Property, to the extent that each such parcel of land shall become a part of the Premises (and for so long as each such parcel of land shall remain a part of the Premises) in accordance with the provisions of this Agreement.

“Additional Terminal Facilities” shall have the meaning set forth in Section 10(a)(2).

“Adjustment Period” shall mean, as the context requires, the calendar month of May, 2010 and the calendar month of May in each calendar year which thereafter occurs during the Term.

“Affiliate” shall mean, with respect to any Person, any other Person that directly or indirectly Controls or is Controlled by or is under common Control with the Person specified.

“Agreement” shall mean this Amended and Restated Agreement of Lease between the Port Authority and Lessee known as Lease Number LPN-264, together with all schedules and exhibits hereto, and as may be amended or supplemented in writing by the parties hereto from time to time.

“Agreed Rental Terms” shall have the meaning set forth in Section 53(a).

“Analyzed Item” shall mean (i) with respect to the ground water all of the constituents for which the groundwater samples described in the Initial Environmental Survey were tested, and (ii) with respect to soil all of the constituents for which the soil samples described in the Initial Environmental Survey were tested.

“Analyzed Item Increases” shall have the meaning set forth in Section 13(s).

“Applicable Rental Rate” shall have the meaning set forth in Section 7(a).

“Assignee” shall have the meaning set forth in Section 22(a).

“Assignment” shall have the meaning set forth in Section 22(a).

“Audit Findings” shall have the meaning set forth in Section 52(a).

“Base Cost” shall have the meaning set forth in Section 20(e)(2).

“Base Period” shall mean, as the context requires, the calendar month of May, 2009 and the calendar month of May in each calendar year which thereafter occurs during the term of the letting under this Agreement.

“Base Rent” shall mean the rent payable on the land from time to time comprising the Premises at the rates set forth in, and otherwise in accordance with, Section 4, and during the Extended Term, Section 7 (i.e. the product of the number of acres from time to time constituting the Premises multiplied by the then applicable Base Rental Rate, paid in advance in monthly installments).

“Base Rental Rate” shall mean, with respect to the Initial Term, the per acre rates set forth on Schedule A, and during the Extended Term, the Initial Extended Term Base Rental Rate as escalated annually accordance with Section 7.

“Basic Lease” shall mean that agreement of lease respecting marine and air terminals entered into with the Port Authority by the City of Newark (New Jersey) under date of October 22, 1947, and recorded in the Office of the Register of the County of Essex on October 30, 1947, in Book E-110 of Deeds, on pages 242 et seq. as the said agreement of lease has been heretofore or may be hereafter from time to time supplemented and amended.

“Building Debris Matter” shall have the meaning set forth in Section 13(k)(1).

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601 et seq.

“Certificate Period” shall have the meaning set forth in Section 11(b).

“Certification of Final Disposal” shall have the meaning set forth in Section 13(h).

“Change of Control” shall mean the occurrence of any of the following:

(1) the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) the result of which is that the Highstar Funds (i) cease to own and Control, directly or indirectly, at least 25.5% of either of (x) the outstanding voting securities and/or (y) the outstanding equity securities, of Lessee, (ii) cease to own equity securities entitling it to receive at least 25.5% of the economic interest (including the right to receive (directly or indirectly) at least 25.5% of the distributions and dividends) of Lessee, or (iii) cease to own and Control, directly or indirectly, at least 51% of the outstanding voting securities and outstanding equity of any kind of Ports America;

(2) the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or

reorganization) the result of which is that Highstar Capital L.P. ceases to control the management and policies of the Highstar Funds; or the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) that result of which is that TIL Parent Ownership ceases to own, and control the management and policies of, TIL Parent;

(3) subject to paragraph 5 hereof, the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) the result of which is that Ports America ceases to directly own and Control 50% of the outstanding voting securities and outstanding equity of any kind of Lessee;

(4) the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) the result of which is that TIL Parent (i) ceases to own and Control, directly or indirectly, at least 25.5% of either of (x) the outstanding voting securities and/or (y) the outstanding equity securities, of Lessee or (ii) ceases to own equity securities entitling it to receive at least 25.5% of the economic interest (including the right to receive (directly or indirectly) at least 25.5% of the distributions and dividends) of Lessee; provided, however, that this subsection (4) shall not apply to the extent that Ports America reacquires any or all of the outstanding voting securities and the outstanding equity securities in Lessee, owned by TIL;

(5) the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) the result of which is that any Person or group (within the meaning of the Exchange Act and the rules of the SEC thereunder), other than the Highstar Funds and TIL Parent or any of their respective wholly owned subsidiaries owns or Controls, directly or indirectly, more than 10% of the outstanding voting securities or outstanding equity of any kind of Lessee; provided however, that notwithstanding the foregoing, the Highstar Funds may transfer up to 49% of its indirect ownership interest in Ports America to one or more Persons so long as (1) such transfer does not otherwise result in a Change of Control or a violation of Section 48, and (2) such transferee is neither an Affiliate of TIL or MSC, nor directly or indirectly owned or controlled by any principal, officer, director, owner, employee or any designee or family member of any principal, officer, director, owner or employee of TIL or MSC or their affiliates. For the avoidance of doubt, to the extent the Highstar Funds transfers 49% of Ports America to one or more Persons (thereby reducing the Highstar Funds indirect ownership of Lessee to 25.5%), Highstar shall no longer be permitted to transfer any direct or indirect interests in Lessee without such transfer resulting in a Change of Control;

(6) the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) the result of which is that (i) Ports America and TIL, collectively, cease to maintain the ability to appoint a majority of the board of directors or similar governing body of Lessee or (ii) Ports America ceases to maintain the ability to appoint the senior

officers (with the exception of the Chief Operating Officer) of Lessee or (iii) Ports America ceases to provide the Services (as defined in that certain Amended and Restated Service Agreement between Ports America and Lessee or any similar agreement) to Lessee or (iv) TIL and any Affiliate, together with MSC and any Affiliate or any principal, officer, director, owner, employee or any designee or family member of any principal, officer, director, owner or employee of TIL or MSC or their Affiliates, in the aggregate, directly or indirectly, owns or Controls more than 50% of the outstanding voting securities or outstanding equity of any kind of Lessee; or

(7) the consummation of any transaction or series of transactions (including, without limitation, any merger, consolidation, recapitalization or reorganization) the result of which a Prohibited Person, either (i) has the power to direct or cause the direction of the management and policies of Lessee, (ii) owns or Controls directly, any of the outstanding voting securities or outstanding equity securities of any kind of Lessee or (iii) owns or Controls indirectly, 5% or more of any of the outstanding voting securities or outstanding equity securities of any kind of Lessee (any of (i), (ii) or (iii) a "Prohibited Person Threshold")

"Commencement Date" shall mean as of March 1, 2011.

"Completion Date" means, with respect to any particular phase of development contemplated herein, the first business day following the issuance of a certificate of completion by the Port Authority to Lessee for those improvements intended to be constructed by Lessee on such property, which certificate will allow Lessee to operate the subject acreage in the intended post development manner.

"Condemning Agency" shall have the meaning set forth in Section 23(a).

"Condition Exceptions" shall mean the following:

- (i) Migrated Hazardous Substances;
- (ii) The remediation or removal of the Existing Condition;
- (iii) The remediation or removal of Hazardous Substances in the soil or groundwater in, on and under the Premises to the extent caused by the sole acts or omissions of the Port Authority (or its employees, agents or contractors) (x) on or after December 1, 2000 with respect to the Existing Terminal Facility and (y) with respect to any of the Added Parcels, on or after the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof;
- (iv) Hazardous Substances contained in, or leaking into the soil or groundwater in, on or under the Premises from underground storage tanks (and contamination from the existence or use (other than by

Lessee) of such tanks) located (x) on the Existing Terminal Facility on or prior to December 1, 2000 and (y) on any of the Added Parcels on or prior to the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof; provided that Lessee never uses such tanks;

(v) Fines and penalties arising out of the Existing Condition if the fines and penalties are imposed due to the failure to have remediated or removed the Existing Condition or due to the failure to have a Deed Notice recorded with respect to the Existing Condition; and

(vi) The remediation or removal of Historic Fill material (as such term is defined in the New Jersey Technical Requirements for Site Remediation, set forth at N.J.A.C. 7:26E-1, et. seq.), provided that such presence of Historic Fill on the Premises was not caused by, nor arising out of, acts or omissions of Lessee or the Lessee's Representative.

"Consent Criteria" shall mean the Official Minutes of the Port Authority adopted February 22, 2007 entitled "Port Facilities – Consent to Transfers of Leases and Changes of Ownership Interests", as the same shall be amended or replaced by the Board of Commissioners of the Port Authority subsequent to the date hereof.

"Consent Fee" shall have the meaning set forth in Section 48(g).

"Construction Cost Index" shall mean the Construction Cost Index published by ENR Magazine.

"Construction Cost Percentage Change" shall mean the percentage of change in the Construction Cost Index on each Anniversary Date equal to a fraction the numerator of which shall be the difference between (a) the Construction Cost Index for the Adjustment Period immediately preceding such Anniversary Date minus (b) the Construction Cost Index for the Adjustment Period immediately preceding the Anniversary Date which immediately precedes such Anniversary Date, and the denominator of which shall be the Construction Cost Index for the Adjustment Period immediately preceding the Anniversary Date which immediately precedes such Anniversary Date.

"Container Throughput Rental" shall have the meaning set forth in Section 6(a).

"Contractor" shall mean any contractor and subcontractor at any tier of construction at or related to the Premises.

"Control" shall mean the direct or indirect power through contract, arrangement, understanding, relationship, ownership of other business entities or



otherwise to dispose of or to direct the disposal of, or to vote or to direct the voting of, voting securities or voting membership of any Person.

“Cost” means and includes: (1) payroll costs, including contributions to any retirement system, or the cost of participation in other pension plans or systems, insurance costs, sick-leave pay, holiday, vacation and authorized-absence pays; (2) cost of materials and supplies used; (3) payments to contractors; (4) any other direct costs; and (5) 30% of the sum of the foregoing.

“Delinquent User” shall have the meaning set forth in Section 16(d).

“Development Parcels” shall mean collectively the Phase 1 Development Parcel, the Phase 2 Development Parcel, the Phase 3 Development Parcel and the Phase 4 Development Parcel, as and when each such parcel is added to the Premises in accordance with this Agreement.

“Disposal” shall have the meaning set forth in Section 13(k)(1).

“Environmental Damages” shall mean any one or more of the following:

(i) the presence in, on, or under the premises of any Hazardous Substance, except for a Migrated Hazardous Substance, whether such presence occurred prior to or during the term of the letting under this Agreement or resulted from any act or omission of Lessee or others, and/or

(ii) the disposal, discharge, release or threatened release of any Hazardous Substance from the Premises or of any Hazardous Substance from under the Premises, and/or

(iii) the presence of any Hazardous Substance in, on or under other property at the Port Newark Facility as a result of (x) Lessee’s use and occupancy of the Premises or the performance of Lessee’s Construction Work, the Phase 1 Development Work, the Phase 2 Development Work, the Phase 3 Development Work, the Phase 4 Development Work, the Starboard Street Property Development Work, the Marsh Street Development Work or the Waterfront-Shimizaki Property Development Work, or (y) a migration of a Hazardous Substance, except for a Migrated Hazardous Substance, from the Premises, or from under the Premises, and/or

(iv) any personal injury including wrongful death or property damage arising out of or related to any Hazardous Substance described in (i), (ii) or (iii) above (except for a Migrated Hazardous Substance), and/or

(v) the violation of any Environmental Requirement pertaining to any Hazardous Substance described in (i), (ii) or (iii) above (except for a Migrated Hazardous Substance), at the Premises and/or the activities thereon.

“Environmental Requirements” shall mean in the plural and “Environmental Requirement” shall mean in the singular, all applicable, common law and past, present and future laws, statutes, enactments, resolutions, regulations, rules, directives, ordinances, codes, licenses, permits, orders, memoranda of understanding and memoranda of agreement, guidance documents, approvals, plans, authorizations, concessions, franchises, requirements and similar items of all governmental agencies, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, all pollution prevention programs, “best management practices plans”, and other voluntary programs adopted and agreements made by the Port Authority with any governmental agencies, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, and all judicial, administrative, voluntary and regulatory decrees, judgments, orders and agreements, in each case relating to the protection of human health or the environment, the foregoing to include without limitation:

(i) All requirements pertaining to reporting, licensing, permitting, investigation and remediation of emissions, discharges, releases or threatened releases of Hazardous Substances into the air, surface water, groundwater or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Substances, or the transfer of property on which Hazardous Substances exist; and

(ii) All requirements pertaining to the protection of the health and safety of employees or the public.

“Estimated Cubic Yard Cost” shall have the meaning set forth in Section 20(e)(2).

“Event of Default” shall have the meaning set forth in Section 29(a).

“Exacerbation” shall have the meaning set forth in Section 13(b)(2)(ii).

“Existing Condition” shall mean the levels of Analyzed Items in the soil and ground water on or at the Existing Terminal Facility on or before December 1, 2000, or any Added Parcel on or before the commencement of the Term as to such parcel as determined in accordance with Section 3 of this Lease, as derived by applying the methodology set forth in Section 13(j) to the test results in the Initial Environmental Survey, as such test results may be superseded and supplemented by subsequent test results and in each Remediation Completion Report in accordance with the provisions of Section 13(m); provided, however, that notwithstanding any other term or provision of

this Agreement, the “Existing Condition” shall in no event include any Hazardous Substance to the extent the presence of the same in, on or under the Existing Terminal Facility or any Added Parcel was caused by or resulted from (i) an Exacerbation of the Existing Condition by Lessee or Lessee’s Representative, or (ii) the acts or omissions of the Lessee, Lessee’s Representative, or any affiliated company of the Lessee, which act or omission creates a clean-up, removal or remediation obligation as to such Hazardous Substance where one previously did not exist. Nor shall the “Existing Condition” include any Hazardous Substance that was added to or under the Existing Terminal Facility and/or Added Parcel on or after December 1, 2000 (as to the Existing Terminal Facility) or after the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof unless such Hazardous Substance is either (x) a Condition Exception, including without limitation, a Migrated Hazardous Substance or (y) such Hazardous Substance was added by the sole acts or omissions of the Port Authority (or its employees, agents or contractors). Nor shall an Existing Condition include Building Debris Matter.

“Existing Depth” shall have the meaning set forth in Section 20(e)(1).

“Existing Lease” shall have the meaning set forth in first Whereas clause above.

“Existing Terminal Facility” shall have the meaning set forth in Section 2 (a).

“Exit Baseline” shall have the meaning set forth in Section 13(v)(2).

“Expiration Date” means the Initial Expiration Date of November 30, 2030, or during the Extended Term, if applicable, the Extended Expiration Date of November 30, 2050 or such earlier date as determined in accordance with Section 11.

“Extended Expiration Date” means November 30, 2050 or such earlier date as determined in accordance with Section 11.

“Extended Term” means the period from and after the Initial Expiration Date through the Extended Expiration Date.

“FAA” shall mean the Federal Aviation Administration.

“FMC” shall mean the Federal Maritime Commission.

“Facility” shall mean the land and premises in the City of Newark, in the County of Essex and State of New Jersey, which are easterly of the right-of-way of the Central Railroad of New Jersey and are shown upon the exhibit attached to the Basic Lease and marked “Exhibit A”, as contained within the limits of a line of crosses appearing on the said Exhibit A and marked (by means of the legend) “Boundary of Terminal Area in City of Newark”, and lands contiguous thereto within the County of

Essex which may have been heretofore or may hereafter be acquired by the Port Authority to use for marine terminal purposes

“Governmental Authority” and “Governmental Authorities” shall mean all governmental agencies, authorities, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, except that it shall not be construed to include The Port Authority of New York and New Jersey, the lessor under this Agreement. Governmental Authorities shall also include with respect to any remediation hereunder an LSRP acting in such capacity, pursuant to the Site Remediation Reform Act, N.J.S.A. 58:10C-1 et seq. and the applicable regulations and guidance documents promulgated thereunder.

“Guaranteed Rental” shall have the meaning set forth in Section 56(a)

“Hazardous Substances” shall mean and include in the plural and “Hazardous Substance” shall mean and include in the singular any pollutant, contaminant, toxic or hazardous waste, dangerous substance, potentially dangerous substance, noxious substance, toxic substance, flammable, explosive or radioactive material, urea formaldehyde foam insulation, asbestos, polychlorinated biphenyls (“PCBs”), chemicals known to cause cancer, endocrine disruption or reproductive toxicity, petroleum and petroleum products and other substances which have been or in the future shall be declared to be hazardous or toxic, or the removal, containment or restriction of which have been or in the future shall be required, or the manufacture, preparation, production, generation, use, maintenance, treatment, storage, transfer, handling or ownership of which have been or in the future shall be restricted, prohibited, regulated or penalized by any Environmental Requirements now or at any time hereafter in effect as amended or supplemented.

“Highstar Funds” shall mean, subject to Section 48(h)(1), collectively, Highstar Capital Fund III, L.P., Highstar Capital III Prism Fund, L.P., and Highstar Capital III Prism Fund I-A, L.P.

“Index” shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

“Initial Environmental Survey” shall mean each of (i) the reports attached hereto, hereby made a part hereof and marked “Exhibit G” entitled (x) “Surface Baseline Report Port Newark Container Terminal, LLC” and dated October 2000 and (y) “Subsurface Baseline Report Former Naporano Iron and Metal Company and Hugh Neu Schnitzer East Facilities” and dated September, 2002, and (ii) prior to the commencement of the Term as to each Added Parcel as determined in accordance with Section 3 hereof, or at such other time as may be agreed upon by the Port Authority and Lessee, the Port Authority shall cause to be performed by an environmental professional selected by the Port Authority, and reasonably acceptable to Lessee, a baseline environmental assessment

of Environmental Damages (if any) on or from such Added Parcel and deliver to Lessee a report of such environmental professional describing in reasonable detail the results of such assessment and identifying any Environmental Damages present on such Added Parcel (each such report is hereinafter referred to as an "Added Parcel Baseline Environmental Assessment Report"), subject to the following conditions. Each Added Parcel Baseline Environmental Assessment Report shall be reasonably acceptable to the Lessee. In the event an Added Parcel Baseline Assessment Report is unacceptable to Lessee in its reasonable opinion, Lessee shall have the right to cause to be performed by an environmental professional selected by Lessee such additional assessment or investigation work as to the relevant Added Parcel as it deems necessary and to produce and deliver to the Port Authority a written report of the findings of such additional assessment or investigation (each such report is hereinafter referred to as a "Lessee's Supplemental Added Parcel Baseline Assessment Report"). Provided that such Lessee's Supplemental Added Parcel Baseline Assessment Report is acceptable to the Port Authority, then the Added Parcel Baseline Assessment Report(s), as supplemented by Lessee's Supplemental Added Parcel Baseline Assessment Report(s), if any, together with the report identified in clause (i) hereof, will be collectively referred to herein as the "Initial Environmental Survey".

"Initial Expiration Date" means November 30, 2030, unless earlier terminated in accordance with the terms of the Agreement.

"Initial Extended Term Base Rental Rate" shall mean the annual rate of Base Rental Rate for the first year of the Extended Term, in an amount equal to (i) Eighty Thousand Dollars and No Cents (\$80,000.00) per acre escalated on a year by year basis by the Percentage Increase over the period from May 2009 through May 2030 in accordance with Section 7 of this Agreement; provided that in no event shall the Initial Extended Term Base Rental Rate be less than \$121,253 per acre nor more than \$156,596 per acre.

"Initial Term" shall mean the period commencing on the Commencement Date and ending on the Initial Expiration Date.

"LSRP" shall mean a Licensed Site Remediation Professional.

"Labor Troubles" shall mean and include strikes, boycotts, picketing, work-stoppages, slowdowns, disputes or any other type of labor trouble, regardless of the employer of the person involved or their employment status, if any, which materially interferes with operations or construction at any facility within the Premises.

"Lease Year" shall mean any twelve (12) month period commencing on December 1 and ending on the following November 30 throughout the Term provided that the first Lease Year shall be the period commencing on the Commencement Date and ending on November 30, 2011.

“Lessee” shall mean Port Newark Container Terminal LLC, or any permitted successor or assign as provided in Section 22 or 48.

“Lessee’s Added Parcels Environmental Liability” shall have the meaning set forth in Section 13(a).

“Lessee’s Construction Application” shall have the meaning set forth in Section 10(e).

“Lessee’s Construction Work” shall have the meaning set forth in Section 10(c)(1).

“Lessee’s Parent” shall mean Ports America, Inc., a corporation organized and existing under the laws of the State of Delaware and Terminal Investment Limited, a company duly organized and existing under the laws of the Bailiwick of Guernsey.

“Lessee’s Representative” shall mean Lessee’s officers, employees, shareholders, members, agents, representatives, contractors, customers, guests, invitees, or other Persons who are doing business with the Lessee or are on the Premises with the Lessee’s consent or knowledge, or are on the Premises without Lessee’s consent but due to Lessee’s failure to undertake adequate security measures.

“Major Stock Exchange” shall mean any of the following: the London Stock Exchange, the Amsterdam Stock Exchange, the American Stock Exchange, the New York Stock Exchange, the NASDAQ Stock Market, the Singapore Stock Exchange or the Tokyo Stock Exchange.

“Marine Container Terminal Facility” shall have the meaning set forth in Section 9(a).

“Marsh Street Property” shall have the meaning set forth in Section 2(c).

“Marsh Street Property Development Work” shall have the meaning set forth in Section 10(c)(2)(vii).

“Matter” shall have the meaning set forth in Section 13(k)(1).

“MBE” shall mean Minority Business Enterprise.

“Mean Low Water” shall mean low water as most recently at the time of execution of this Agreement determined by observations of the United States Coast and Geodetic Survey.

“Migrated Hazardous Substance” shall mean (i) any Hazardous Substance which is an Analyzed Item and which is a part of the Existing Condition which has migrated from or from under the Existing Terminal Facility or an Added Parcel (as the case may be) in, on, or under property at the Port Newark Facility other than the Existing

Terminal Facility or an Added Parcel (as the case may be) if and only if such migration was not a result in whole or in part from the use and occupancy of the Existing Terminal Facility or an Added Parcel (as the case may be) by Lessee, Lessee' Representative, or by any affiliated company of Lessee, or the performance of Lessee's Construction Work, the Phase 1 Development Work, the Phase 2 Development Work, the Phase 3 Development Work, the Phase 4 Development Work, the Starboard Street Property Development Work, the Marsh Street Development Work or the Waterfront-Shimizaki Property Development Work, or the acts or omissions of Lessee or Lessee's Representative, or by any Affiliate of Lessee, and (ii) any Hazardous Substance which has migrated in, on, or under the Existing Terminal Facility or an Added Parcel (as the case may be) from outside of the Existing Terminal Facility or an Added Parcel (as the case may be) if and only if such migration was not a result in whole or in part from the use and occupancy of the Existing Terminal Facility or an Added Parcel (as the case may be) by Lessee, Lessee's Representative, or by any Affiliate of Lessee, or the performance of Lessee's Construction Work, the Phase I Development Work, the Phase II Development Work, the Phase III Development Work, the Phase IV Development Work, the Starboard Street Property Development Work, the Marsh Street Development Work or the Waterfront-Shimizaki Property Development Work, or the acts or omissions of Lessee or Lessee's Representative, or with the permission of an Affiliate of Lessee. Notwithstanding the foregoing, Lessee shall be responsible for such Migrated Hazardous Substance if any clean-up, remediation or other response action, or indemnification or other action under this Section 13 is required with respect to such Environmental Damage as a result of any Exacerbation by Lessee or Lessee's Representative.

"Minimum Capital Expenditure Requirement" shall have the meaning set forth in Section 11(a).

"Minimum Investment" shall have the meaning set forth in Section 11(d).

"Minimum Investment Date" shall have the meaning set forth in Section 11(d)

"Minority" shall have the meaning set forth in paragraph II (c) of Part I of Schedule C.

"Non-container Cargo" shall mean cargo, including without limitation breakbulk cargo, not in cargo containers loaded onto or discharged from vessels berthing at the Premises.

"Non-container Cargo Throughput Rental" shall have the meaning set forth in Section 8(b).

"PAH" shall mean Ports America Holdings, Inc. (formerly known as Ports America, Inc.), a corporation organized and existing under the laws of the State of Delaware.

“Partial Approval Work” shall have the meaning set forth in Section 10(g).

“Partial Approval Work Plans” shall have the meaning set forth in Section 10(g).

“Percentage Increase” shall mean the percentage of increase in the Index on each December 1, equal to: (x) with respect to December 1, 2010, a fraction of which the numerator shall be the Index for the Adjustment Period immediately preceding December 1, 2010 (i.e., May 2010) less the Index for the Base Period preceding such Adjustment Period by one year (i.e., May 2009), and the denominator shall be the Index for the Base Period preceding such Adjustment Period by one year (i.e., May 2009), and (y) with respect to each December 1 thereafter, a fraction of which the numerator shall be the Index for the Adjustment Period immediately preceding such date less the Index for the next Base Period preceding such Adjustment Period by one year, and the denominator shall be the Index the Base Period preceding such Adjustment Period by one year (for example, the Annual Index Increase for December 1, 2011 would be a fraction of which the numerator is the Index for May 2011 less the Index for May 2010 and the denominator is the Index for May 2010).

“Person” shall mean any individual, partnership, corporation, limited liability company, unincorporated organization, trust, joint venture or other entity.

“Phase 1 Development Parcel” shall have the meaning set forth in Section 2(d)(1).

“Phase 2 Development Parcel” shall have the meaning set forth in Section 2(d)(2).

“Phase 3 Development Parcel” shall have the meaning set forth in Section 2(d)(3).

“Phase 4 Development Parcel” shall have the meaning set forth in Section 2(d)(4).

“Phase 1 Development Work” shall have the meaning set forth in Section 10(c)(2)(ii).

“Phase 2 Development Work” shall have the meaning set forth in Section 10(c)(2)(iii).

“Phase 3 Development Work” shall have the meaning set forth in Section 10(c)(2)(iv)).

“Phase 4 Development Work” shall have the meaning set forth in Section 10(c)(2)(v)).

“Polaris Street Property” shall have the meaning set forth in Section 2(b).



“Port” shall mean the Port of New York District, as defined in the Port Compact of 1921 authorized by C. 154 Laws of N.Y. 1921 and C. 151 Laws of N.J. 1921, approved by Public Resolution No. 17 of the 67th Congress, First Session;

“Port Authority” shall mean The Port Authority of New York and New Jersey.

“Port Authority’s Added Parcels Environmental Liability” shall have the meaning set forth in Section 13(a).

“Port Leases” shall have the meaning set forth in Section 53(c).

“Port Newark Facility” shall mean the Facility.

“Ports America” shall mean Ports America, Inc., a corporation organized and existing under the laws of the State of Delaware.

“Premises” shall have the meaning set forth in Section 2.

“Previously Contaminated Matter” shall have the meaning set forth in Section 13(k)(2).

“Prohibited Person” shall mean shall mean any Person or any Person that is controlled by a Person, or any Person who is an Affiliate of a Person:

(1) that is currently under indictment for or has been convicted of a felony (or an equivalent offense, as applicable) or such lesser offense as would preclude such Person from doing business with a state or federal governmental agency within the United States or any United States controlled territory, in the preceding ten (10) years;

(2) that has had a development agreement with the Port Authority terminated for willful default or breach, has had a contract terminated by a state or federal governmental agency in the States of New York or New Jersey for willful breach or default or has had a contract terminated for any cause relating to a current indictment or a conviction of such Person or its principals for a felony (or an equivalent offense, as applicable) or such lesser offense as would preclude such Person from doing business with a state or federal governmental agency within the United States or any United States controlled territory, in the preceding ten (10) years;

(3) that is in material default beyond any applicable grace period, under any agreement with the Port Authority or has been, within the preceding five (5) years, in material default, beyond any applicable grace period, under any agreement with the Port Authority;

(4) that has been suspended, debarred, found not responsible or otherwise disqualified from entering into any contract with any state or federal

governmental agency in the United States or any United States controlled territory, in the preceding ten (10) years;

(5) that has had any sanction imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust regardless of the dollar amount of the sanctions or the date of their imposition;

(6) that is organized in or controlled from a country which is subject to any of the following: (i) the Trading with the Enemy Act of 1917, 50 U.S.C. App. §1, et seq., as amended; (ii) the International Emergency Economic Powers Act of 1976, 50 U.S.C. § 1701, et seq., as amended; and (iii) the Anti-Terrorism and Arms Export Amendments Act of 1989, codified at Section 6(j) of the Export Administration Act of 1979, 50 U.S.C. App. § 2405, as amended;

(7) that engages in any dealings or transactions or is blocked or subject to blocking pursuant to Executive Order 13224 of September 23, 2001 Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit, or Support Terrorism (66 Fed. Reg. 49079 (2001)) (the "Executive Order"), or is otherwise associated with any such Person in any manner violative of the Executive Order or any State or City of New York or the State of New Jersey statutes, codes, regulations, orders or other governmental action relating to activities referenced in this clause (7);

(8) that is on the list of Specially Designated Nationals and Blocked Persons or subject to the limitations or prohibitions under any other U.S. Department of Treasury's Office of Foreign Assets Control regulation or executive order ("OFAC") and/or with whom the Port Authority is restricted from doing business with under OFAC or under any statute, executive order, or other governmental action or any State or City of New York or the State of New Jersey statutes, codes, regulations, orders or other governmental action relating to activities referenced in this clause (8);

(9) that has currently (i) filed a petition under any insolvency statute, (ii) made a general assignment for the benefit of its creditors, (iii) commenced a proceeding for the appointment of a receiver, trustee, liquidator or conservator of itself or of the whole or any substantial part of its property or shall otherwise be dissolved or liquidated, or (iv) filed a petition seeking reorganization or liquidation or similar relief under any applicable law or statute, or is the subject to any of foregoing;

(10) that is involved or has been involved in a material litigation or similar proceeding adverse to the Port Authority or any subsidiary thereof;

(11) whose involvement, presence or ownership of any interest, in the Premises is deemed by the Port Authority to be unsuitable, in a manner consistent with the Consent Criteria;

(12) whose involvement or presence in the Premises would create any conflict of interest as defined under the Public Officers Law of the State of New York between any Commissioner of the Port Authority and itself or its chief executive officer, chief operating officer, chief financial officer, president, chairman of the board, other similar senior executive, or any Person or entity which controls, is controlled by, or is under common control with it; and

(13) that shall not subject or submit itself to the jurisdiction of the courts of the State of New York or New Jersey or the courts of federal jurisdiction in the State of New York or New Jersey, in the event that such Person is named as a party to any actions relating to this Agreement.

“Publicly Owned Entity” shall be and mean one that has any class of securities subject to the registration and reporting requirements of the Securities Exchange Act of 1934, or any successor or substitute therefor, and any entity that has met any equivalent legal registration or listing requirement of Great Britain, the Netherlands, Singapore or Japan, as the circumstances require.

“Qualified Containers” shall mean cargo containers (or similar cargo conveyances, if any, which shall generally replace, succeed or are functionally equivalent to present cargo containers) loaded onto or discharged from vessels berthing at the Premises (whether or not stuffed or stripped at the Premises, whether or not so loaded or discharged by means of container cranes, and whether or not empty or containing cargo), including without limitation any specialized cargo containers such as flat-racks (flat-racks when empty and bundled together as one unit shall be counted as one container), mafis, trailers and vehicles (provided that every five vehicles shall be counted as one container); but shall not mean containers arriving on shipboard and departing on the same ship and the same voyage if such containers are merely unloaded from the ship at the Premises and reloaded in the course of a restowing operation or are merely moved from one location to another location on the same ship in the course of a shifting operation. A container discharged from a vessel berthing at the Premises and loaded onto another vessel berthing at the Premises in the course of a transshipment operation shall be deemed to have been discharged and loaded in one discrete operation and counted as one (1) Qualified Container for purposes of the computation of the rental payable under Section 6. Every eighteen (18) Revenue Tons of Non-container Cargo shall be counted as one container for purposes of the computation of the rental payable under Section 6 of this Agreement, but shall not be counted as cargo for purposes of Section 56 of this Agreement.

“Qualifying Expenditures” shall mean expenditures made by or on behalf of Lessee in connection with the Premises and the operation thereon from and after the Commencement Date, that, in the opinion of Lessee’s Acceptable Accounting Firm as provided in Section 11(d) hereof, constitute capital expenditures or any expenditure that, but for a financing vehicle or structure such as a capital lease, would be considered a capital expenditure, under “generally accepted accounting principles” (“GAAP”) or such other standard form of accounting as reasonably approved by the Port Authority.

“RCRA” shall mean the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq.

“Rail Credit” shall have the meaning set forth in Section 6(e).

“Rail Fly-Over Completion Date” shall have the meaning set forth in Section 54.

“Railroad Operating Agreement” shall mean that certain Railroad Operating and Space Permit (Permit No. MNS-338), dated as of the date hereof, between the Port Authority and Lessee.

“Releasers” shall mean, collectively, Lessee and Lessee’s Parent.

“Remediation Completion Report” shall have the meaning set forth in Section 13(m).

“Rent” shall mean collectively Base Rent, Container Throughput Rental, Non-container Cargo Throughput Rental and any other sums payable by Lessee to the Port Authority under this Agreement.

“Revenue Ton” shall mean one long ton (a weight of 2,240 pounds), one metric ton (a weight of 2,207 pounds) or a measurement ton (40 cubic feet) as by the Port Authority in its sole discretion.

“Review Fee” shall have the meaning set forth in Section 10(r).

“Security” shall include any membership interest, stock, any bond which carries voting rights, or rights or options to subscribe to, purchase, convert or transfer into or otherwise acquire equity securities, or any other obligation of a limited liability company or a corporation the holder of which has any voting rights including but not limited to the right to vote for the election of members of the governing body or board of directors of said limited liability company or corporation and shall include any security convertible into a voting security and any right, option or warrant to purchase a voting security.

“Security Deposit” shall have the meaning set forth in Section 46(h).

“Shipping Act” shall mean the Shipping Act of 1984 (46 App. U.S.C. 1701 et seq.), as amended and as may be further amended, modified, succeeded or replaced, from time to time.

“Starboard Street Property” shall have the meaning set forth in Section 2(e).

“Starboard Street Property Development Work” shall have the meaning set forth in Section 10(c)(2)(vi).

“Sublease” shall have the meaning set forth in Section 22(a).

“Sublessee” shall have the meaning set forth in Section 22(a).

“TIL” shall mean Terminal Investment Limited, a company duly organized and existing under the laws of the Bailiwick of Guernsey.

“TIL Parent shall mean the 100% owner of TIL as of the date hereof.

“TIL Parent Ownership” shall mean the 100% ownership and control of TIL Parent as of the date hereof.

“Tariff” shall mean the Port Authority’s tariff, as incorporated in FMC SCHEDULE PA-10, as the same or any successor tariff may be amended from time to time.

“Term” shall have the meaning set forth in Section 3.

“Terminal Guarantee Number” shall mean the number of Qualified Containers calculated by multiplying the number of acres comprising the Existing Terminal Facility, as increased by each of the Development Parcels or any other property added to the Premises that is or becomes contiguous with the Existing Terminal Facility or the Development Parcels upon the Completion Date for each such Development Parcel or other property (and for so long as each such Development Parcel or other property is included in the Premises), during the applicable Lease Year by 2500. Solely for the purposes of calculating Guarantee Rental as specified in Section 56 of this Agreement, prior to the Rail Fly-over Completion Date, the calculation of the Terminal Guarantee Number shall not include any acres comprising the Phase 1 Development Parcel.

“Throughput Threshold Number” shall mean one hundred forty thousand nine hundred and sixty eight (140,968) Qualified Containers. The Throughput Threshold Number shall increase by (1) one thousand seven hundred and five (1,705) Qualified Containers per acre upon the Completion Date with respect to each acre of each of the Development Parcels or any other property added to the Premises that is or becomes contiguous with the Existing Terminal Facility or the Development Parcels, completed by Lessee and (2) eight hundred (800) Qualified Containers per acre upon the Completion Date with respect to each acre of the Starboard Street Property and the Waterfront-Shimizaki Property completed by Lessee.

“Tier 1 Number of Containers” shall mean the number of Qualified Containers exceeding the Throughput Threshold Number through and including the number of Qualified Containers calculated by multiplying the number of acres then comprising the Existing Terminal Facility, as increased by each of the Development Parcels or any other property added to the Premises that is or becomes contiguous with the Existing Terminal Facility or the Development Parcels upon the Completion Date for

each such Development Parcel or other property (and for so long as each such Development Parcel or other property is included in the Premises), by 2200.

“Tier 2 Number of Containers” shall mean the number of Qualified Containers in excess of the number calculated by multiplying the number of acres then comprising the Existing Terminal Facility, as increased by each of the Development Parcels or any other property added to the Premises that is or becomes contiguous with the Existing Terminal Facility or the Development Parcels upon the Completion Date for each such Development Parcel or other property (and for so long as each such Development Parcel or other property is included in the Premises), by 2200.

“Tier 1 Rental Rate” shall mean, (i) from the Commencement Date through November 30, 2030, the per Qualified Container charge as set forth on Schedule B attached hereto, and (ii) from December 1, 2030 through the Expiration Date, a rate for the first year of the Extended Term equal to \$21.00 escalated on a year by year basis by the Percentage Increase over the period from May 2009 through May 2030 as set forth in Section 7 of this Agreement, and thereafter increased annually as set forth in Section 7 of this Agreement, per Qualified Container.

“Tier 2 Rental Rate” shall mean seventy five percent (75%) of the Tier 1 Rental Rate then in effect.

“User Fee” shall have the meaning set forth in Section 16(d).

“User Fee Notice” shall have the meaning set forth in Section 16(d).

“WBE” shall mean Women-owned Business Enterprise.

“Waterfront-Shimizaki Property” shall have the meaning set forth in Section 2(f).

“Waterfront-Shimizaki Property Development Work” shall have the meaning set forth in Section 10(c)(2)(viii).

## Section 2. Letting

The Port Authority hereby lets to Lessee and Lessee hereby hires and takes from the Port Authority, at the premises located in Port Newark (in whole or in part, as applicable, the “Premises”), in the City of Newark, in the County of Essex and the State of New Jersey, the following:

(a) (1) the open area, and enclosed spaces shown in diagonal cross-hatching, as so shown on the sketches hereto attached, hereby made a part hereof, and marked “Exhibit A” and “Exhibit A-1”, containing approximately 176.21 acres of land, located in Port Newark and presently operated as a marine container terminal, together with all easements, rights of way, tideland rights, riparian rights or riparian grants benefiting the above described land, together with any buildings, structures, fixtures,

improvements located thereon, and (2) the open area as so shown on the sketches hereto attached, hereby made a part hereof, and marked "Exhibit A-2", containing approximately 4.27 acres of land, located in Port Newark and presently used for the storage of chassis and such other equipment as shall have the prior consent of the Port Authority and used in connection with Lessee's marine container terminal operations, subdivisions (1) and (2) hereinafter collectively referred to as the "Existing Terminal Facility";

(b) the open area, and enclosed spaces shown in diagonal cross-hatching, as so shown on the sketches hereto attached, hereby made a part hereof, and marked "Exhibit B", containing approximately 37.67 acres of land, located on Polaris Street, in Port Newark, together with all easements, rights of way, tideland rights, riparian rights or riparian grants benefiting the above described land, together with any buildings, structures, fixtures, improvements located thereon, and specifically including that certain building known as Building 1100 located thereon, hereinafter collectively referred to as the "Polaris Street Property", provided, however, the Port Authority in its sole discretion reserves the right to substitute up to three (3) acres contiguous to the Polaris Street Property and substantially similar to the three (3) acres being substituted, on written notice to Lessee, in order to accommodate the Port Authority's construction needs;

(c) the open area, and enclosed spaces shown in diagonal cross-hatching, as so shown on the sketches hereto attached, hereby made a part hereof, and marked "Exhibit C", containing approximately 26.62 acres of land, located between Marsh Street and Tyler Street, in Port Newark, together with all easements, rights of way, tideland rights, riparian rights or riparian grants benefiting the above described land, together with any buildings, structures, fixtures, improvements located thereon, hereinafter collectively referred to as the "Marsh Street Property", provided, however, the Port Authority in its sole discretion reserves the right not to deliver possession of the Marsh Street Property to Lessee;

(d) the land described below collectively referred to as the "Development Parcels", marked "Exhibit D-1", "Exhibit D-2" and "Exhibit D-3" and "Exhibit D-4" together with all easements and rights of way, tideland rights, riparian rights or riparian grants, buildings, structures, fixtures, improvements and other property owned by the Port Authority and benefiting the Development Parcels:

(1) the open area and the enclosed spaces shown in diagonal cross-hatching, all as so shown on sketches hereto attached, hereby made a part hereof, and marked "Exhibit D-1", containing approximately 32.98 acres of land located adjacent to and contiguous with the Existing Terminal Facility, together with the buildings, structures, fixtures, improvements and other property, if any, of the Port Authority located thereon, the said open area and enclosed spaces, buildings, structures, fixtures, improvements and other property of the Port Authority, collectively the "Phase 1 Development Parcel";

(2) the open area and the enclosed spaces shown in diagonal cross-hatching, all as so shown on sketches hereto attached, hereby made a part hereof, and marked "Exhibit D-2", containing approximately 18.06 acres of land located adjacent to and contiguous with the Existing Terminal Facility, together with the buildings, structures, fixtures, improvements and other property, if any, of the Port Authority located thereon, the said open area and enclosed spaces, buildings, structures, fixtures, improvements and other property of the Port Authority, collectively the "Phase 2 Development Parcel";

(3) the open area and the enclosed spaces shown in diagonal cross-hatching, all as so shown on sketches hereto attached, hereby made a part hereof, and marked "Exhibit D-3", containing approximately 16.49 acres of land located adjacent to and contiguous with the Existing Terminal Facility, together with the buildings, structures, fixtures, improvements and other property, if any, of the Port Authority located thereon, the said open area and enclosed spaces, buildings, structures, fixtures, improvements and other property of the Port Authority, collectively the "Phase 3 Development Parcel"; and

(4) the open area and the enclosed spaces shown in diagonal cross-hatching, all as so shown on sketches hereto attached, hereby made a part hereof, and marked "Exhibit D-4", containing approximately 12.02 acres of land located adjacent to and contiguous with the Existing Terminal Facility, together with the buildings, structures, fixtures, improvements and other property, if any, of the Port Authority located thereon, the said open area and enclosed spaces, buildings, structures, fixtures, improvements and other property of the Port Authority, collectively the "Phase 4 Development Parcel"; and

(e) the open area, and enclosed spaces shown in diagonal cross-hatching, as so shown on the sketches hereto attached, hereby made a part hereof, and marked "Exhibit E", containing approximately 0.83 acres of land adjacent to the Existing Terminal Facility, located on Starboard Street, in Port Newark, together with all easements, rights of way, tideland rights, riparian rights or riparian grants benefiting the above described land, together with any buildings, structures, fixtures, improvements located thereon, hereinafter collectively referred to as the "Starboard Street Property"; and

(f) the open area, and enclosed spaces shown in diagonal cross-hatching, as so shown on the sketches hereto attached, hereby made a part hereof, and marked "Exhibit F", containing approximately 2.93 acres of land adjacent to the Existing Terminal Facility, located on Tyler Street, in Port Newark, together with all easements, rights of way, tideland rights, riparian rights or riparian grants benefiting the above described land, together with any buildings, structures, fixtures, improvements located thereon and specifically including those certain buildings known as Building 117 "Waterfront Commission" and Building 121 "Shimizaki" located thereon, hereinafter collectively referred to as the "Waterfront-Shimizaki Property".



(g) The parties agree that the Premises constitute non-residential property.

Section 3. Term

(a) The initial term of the letting of the Premises under this Agreement (the "Term") shall be as follows:

(1) Lessee, prior to the date of this Agreement, has occupied, and currently continues to occupy, the Existing Terminal Facility pursuant to the Existing Lease and will continue to so occupy the Existing Terminal Facility, and pursuant to the terms of this Agreement, uninterruptedly, on and after the date hereof. For purposes of this Agreement, the Term with respect to the Existing Terminal Facility, shall commence at 12:01 A.M., on which date this Agreement has been fully executed by the Port Authority and Lessee and all consents necessary for the effectiveness of the Agreement by the Port Authority shall have been obtained and, unless sooner terminated, shall expire at 11:59 P.M. on the Initial Expiration Date.

(2) With respect to the Polaris Street Property, the Term shall commence, and the Polaris Street Property shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on March 1, 2011. The Term with respect to the Polaris Street Property shall expire at 11:59 P.M. on the Initial Expiration Date; provided, however, if the Port Authority delivers possession of the Marsh Street Property to Lessee, then the Term with respect to the Polaris Street Property shall expire on the Completion Date of the Marsh Street Property Development Work..

(3) With respect to the Marsh Street Property, the Term shall commence, and the Marsh Street Property shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of the Marsh Street Property is delivered to Lessee by the Port Authority which is anticipated to occur on or about September 30, 2013 and which is subject to the Port Authority's reserved right not to deliver possession of the Marsh Street Property to Lessee. Subject to the preceding sentence, the Term with respect to the Marsh Street Property shall expire at 11:59 P.M. on the Initial Expiration Date.

(4) With respect to the Phase 1 Development Parcel, the Term shall commence, and the Phase 1 Development Parcel shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of the Phase 1 Development Parcel is delivered to Lessee by the Port Authority which in no event shall be later than March 15, 2011, except with respect to the building known as Building 196 located on the Phase 1 Development Parcel, the Term for which shall commence no later than September 1, 2011. Tenant agrees that it shall provide the current tenant at Building 196 with access to such building until such tenant's lease has expired and has vacated Building 196. The Term with respect to the Phase 1 Development Parcel shall expire at 11:59 P.M. on the Initial Expiration Date.

(5) With respect to the Phase 2 Development Parcel, the Term shall commence, and the Phase 2 Development Parcel shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of the Phase 2 Development Parcel is delivered to Lessee by the Port Authority following nine (9) months' notice to Lessee, which delivery in no event shall be later than January 1, 2014. The Term with respect to the Phase 2 Development Parcel shall expire at 11:59 P.M. on the Initial Expiration Date.

(6) With respect to the Phase 3 Development Parcel, the Term shall commence, and the Phase 3 Development Parcel shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of the Phase 3 Development Parcel is delivered to Lessee by the Port Authority following nine (9) months' notice to Lessee, which delivery in no event shall be later than October 31, 2017. Upon the demolition of the improvements located on Phase 3 Development Parcel including the removal of all foundations, Lessee shall surrender (and the same shall no longer constitute a portion of the Phase 3 Development Parcel or of the Premises) to the Port Authority the land shown on "Exhibit D-3(i)" (the "New Roadway Parcel") attached hereto, and made a part hereof, on which the Port Authority will construct a 50-foot access roadway (the "New Roadway") running north to south connecting Calcutta Street to Starboard Street. Lessee shall, until such time as the Port Authority notifies Lessee in writing that such 50-foot access roadway has been completed and is open to the public, maintain and leave open to the public those portions of Export Street and Starboard Street lying within the Phase 3 Development Parcel as in existence on the date of this Agreement. In the event that the Port Authority has not completed construction of New Roadway by the later of the Rent commencement date for the Phase 3 Development Parcel and the date that is 18 months from Lessee's completion of demolition, foundation removal and surrender of the New Roadway Parcel by Lessee to the Port Authority, Base Rent for the acreage comprising the portions of Export Street and Starboard Street lying within the Phase 3 Development Parcel will abate until the completion of the New Roadway. The Term with respect to the Phase 3 Development Parcel shall expire at 11:59 P.M. on the Initial Expiration Date.

(7) With respect to the Phase 4 Development Parcel, the Term shall commence, and the Phase 4 Development Parcel shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of the Phase 4 Development Parcel is delivered to Lessee by the Port Authority following nine (9) months' notice to Lessee, which delivery in no event shall be later than January 1, 2019, provided, however, that if the Port Authority is able to deliver possession of the Phase 4 Development Parcel as of January 1, 2014, then the Phase 4 Development Parcel shall become part of the Premises and subject to the terms of this Agreement as of January 1, 2014. The Term with respect to the Phase 4 Development Parcel shall expire at 11:59 P.M. on the Initial Expiration Date.

(8) With respect to the Starboard Street Property, the Term shall commence, and the Starboard Street Property shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of

the Starboard Street Property is delivered to Lessee by the Port Authority which is anticipated to occur on or about September 1, 2011. The Term with respect to the Starboard Street Property shall expire at 11:59 P.M. on the Initial Expiration Date.

(9) With respect to the Waterfront-Shimizaki Property (or each portion thereof as described below), the Term shall commence, and the Waterfront-Shimizaki Property shall become part of the Premises and subject to the terms of this Agreement, at 12:01 A.M. on the date on which possession of such property is delivered to Lessee by the Port Authority which is anticipated to be delivered on or about June 30, 2012. The Term with respect to the Waterfront-Shimizaki Property shall expire at 11:59 P.M. on the Initial Expiration Date. The Port Authority, prior to delivery of the Waterfront-Shimizaki Property, shall demolish the existing improvements thereon, including the removal of the existing building foundations, and remove all demolished material and debris from the Waterfront-Shimizaki Property, however the Port Authority does not intend to perform any rough grading, any back filling of any holes or trenches left after the removal of the existing building foundations or any paving or resurfacing, all of which are the responsibility of Lessee pursuant to Section 10.

(b) Promptly following each of above specified commencement dates the Port Authority and Lessee shall enter into a letter agreement in a form reasonably satisfactory to both parties setting forth the applicable commencement date for the relevant portion of the Premises. The failure of the parties to execute any such letter agreement shall not affect the validity of this Agreement or the commencement date of the relevant portion of the Premises, which shall be as set forth above.

(c) The Port Authority shall deliver possession of each Added Parcel free of all tenants or other occupants. The Port Authority agrees that it shall use commercially reasonable efforts to cause the current tenants at each of the Added Parcels to comply with the applicable provisions in their lease agreements with respect to vacation and surrender of the relevant Added Parcel. The Port Authority agrees that it shall not extend or renew any leases of the current tenants at each of the Added Parcels and that it shall not enter into any new lease with any Person with respect to each of the Added Parcels. The Port Authority further represents and warrants that none of the currently existing leases for portions of the Added Parcels expire by their terms on dates that are later than the anticipated delivery dates for each such portion of the Added Parcels as indicated in Section 3(a). In the event that the Port Authority, after the use of commercially reasonable efforts, is unable to cause a tenant at an Added Parcel to vacate and surrender such Added Parcel within twelve (12) months following the expiration of such tenant's lease agreement, the Port Authority agrees to institute and diligently prosecute legal action against such tenant as is necessary to cause such tenant to vacate and surrender the relevant premises.

(d) Provided Lessee shall not be in default of its obligations under this Agreement and subject to (i) the reductions in the Term resulting from Lessee's failure to timely invest the required Capital Expenditures in accordance with Section 11 and (ii) the adjustment of each Applicable Rental Rate in accordance with Section 7, Lessee shall

have the option, subject to Section 11 of this Agreement, by notice to the Port Authority given no less than six (6) months prior to the Initial Expiration Date, to extend the Term of the Lease for the Extended Term. Upon delivery of notice from Lessee exercising the option to extend the Term for the Extended Term, the Term of the Lease with respect to the Premises (excluding the Polaris Street Property, which will expire as set forth above) will be extended for a period of twenty (20) years, expiring on the Extended Expiration Date.

(e) If on the date set forth as the commencement of the term of the letting in paragraph (a) above, with respect to any one or more of the parcels described in subparagraphs (2) through (9), the Premises are not available or ready for occupancy or use by Lessee, by reason of the fact that the Premises or any part thereof, are in the course of construction, repair, alteration or improvement or by reason of the fact that the occupant of the Premises, or a part thereof, failed or refused to deliver possession, or by reason of any causes or conditions beyond the control of the Port Authority, the Port Authority may postpone the letting and the Port Authority shall not be subject to any liability for such postponement or failure to give possession on such date, provided, however, that in no event shall the Port Authority fail to deliver the Phase 1 Development Parcel (other than the building known as Building 196 located thereon) on or before March 15, 2011, and with respect to all of the other Added Parcels shall take all commercially reasonable actions to enable the Added Parcels to be delivered as anticipated by Lessee on the date set forth in this Agreement or as soon thereafter as possible. Subject to the terms of this Agreement, no such postponement or failure to give possession on such date shall affect the validity of this Agreement or the obligations of Lessee hereunder. In the event of such postponement, the commencement date of the Term of the relevant parcel (other than the Phase 1 Development Parcel) shall not occur, and rental shall not commence, until possession of the Premises is tendered by the Port Authority to Lessee, such tender to be effective upon five (5) business days' prior notice from the Port Authority to Lessee. Notwithstanding any postponement in the date set forth in paragraph (a) as the commencement of the Term of the relevant parcel, however, the Expiration Date shall in no event be postponed. For the avoidance of doubt, this paragraph (e) shall not modify, supersede or diminish in any way the Port Authority's agreement in paragraph (c) above not to extend or renew any currently existing leases for portions of the Added Parcels or to use commercially reasonable efforts and if necessary legal action to cause any existing tenants to vacate the Added Parcels.

(f) Notwithstanding the foregoing, if at any time prior to the delivery of possession of the Marsh Street Property to Lessee, the Port Authority determines, in its sole discretion, that (1) it requires the Polaris Street Property for other purposes and (2) it shall not deliver possession of the Marsh Street Property to Lessee pursuant to Section 2(c) above, the Port Authority shall deliver possession to Lessee of another parcel of land that is either adjacent to the Existing Terminal Facility and Added Parcels or located somewhere else on the Port Newark peninsula, that is in all respects substantially similar to the Marsh Street Property, including with respect to the cost to develop such substitute property. The parties recognize that Lessee estimates the Marsh Street Property

Development Work will cost approximately \$6,000,000 to complete, however, in the event that the Marsh Street Property becomes part of the Premises, Lessee shall be responsible for the cost to complete the Marsh Street Property Development Work in accordance with this Agreement, regardless of the cost.

Section 4. Base Rent

(a) Lessee shall pay, with respect to the land from time to time comprising the Premises, Base Rent to the Port Authority, during the Term until the Initial Expiration Date, at the annual per acre rate of Forty-Eight Thousand Four Hundred Fifty Five Dollars and No Cents (\$48,455.00), subject to annual increases of 2% as specified on Schedule A attached hereto, in equal monthly installments, and commencing on the dates specified below, as follows:

(1) For the Existing Terminal Facility, beginning on the Commencement Date.

(2) For the Polaris Street Property, commencing on March 1, 2011 and ending on that date on which the Port Authority delivers the Marsh Street Property.

(3) For the Marsh Street Property (or a substitute property delivered pursuant to Section 3(f)), payment of Base Rent shall commence thirty-three (33) months after the Port Authority delivers the Marsh Street Property (or a substitute property delivered pursuant to Section 3(f)).

(4) For the Development Parcels, commencing as follows:

(i) Payment of Base Rent with respect to the acreage in the Phase 1 Development Parcel will commence on June 1, 2013 (regardless of whether the Phase 1 Development Work is complete on such date).

(ii) Payment of Base Rent with respect to the acreage in the Phase 2 Development Parcel will commence on the earlier to occur of (i) the Completion Date with respect to the Phase 2 Development Work; and (ii) twenty-four (24) months after such property is delivered to Lessee (regardless of whether the Phase 2 Development Work is complete on such date).

(iii) Subject to Section 3(a)(6), Payment of Base Rent with respect to the acreage in the Phase 3 Development Parcel will commence on the earlier to occur of (i) Completion Date with respect to the Phase 3 Development Work; and (ii) twenty-four (24) months after such property is delivered to Lessee (regardless of whether the Phase 3 Development Work is complete on such date).

(iv) Payment of Base Rent with respect to the acreage in the Phase 4 Development Parcel will commence on the earlier to occur of (i) Completion Date with respect to the Phase 4 Development Work; and (ii) twenty-four (24) months after such property is delivered to Lessee (regardless of whether the Phase 4 Development Work is complete on such date).

(5) For the Starboard Street Property, payment of Base Rent will commence on the earlier to occur of (i) Completion Date with respect to the Starboard Street Property Development Work and (ii) twelve (12) months after such property is delivered to Lessee (regardless of whether the Starboard Street Property Development Work is complete on such date).

(6) For the Waterfront-Shimizaki Property, payment of Base Rent will commence on the earlier to occur of (i) Completion Date with respect to the Waterfront-Shimizaki Property Development Work and (ii) twelve (12) months after such property is delivered to Lessee (regardless of whether the Waterfront-Shimizaki Property Development Work is complete on such date).

(b) All Rent payments due and payable under this Agreement shall be payable by Lessee to the Port Authority, (and with respect to Base Rent and Container Throughput Rental without notice and demand), and without any set-off, counterclaim, abatement or deduction whatsoever, except as may be expressly set forth in this Agreement, in lawful money of the United States which is legal tender in payment of all debts and dues, public and private, at the time of payment. Base Rent shall be payable in equal monthly installments, in advance, on the first day of each month, however the first month's payment of Base Rent for each applicable portion of the Premises, shall be appropriately prorated if the Base Rent is not due and payable on the first day of a month. All other Rent due hereunder shall be payable at the times and in the manner as set forth in this Agreement.

(c) From and after the Initial Expiration Date until the Extended Expiration Date, Base Rent will be reset and calculated, or continue to escalate, in accordance with Section 7 of this Agreement..

#### Section 5. Port Throughput Rental Adjustment

(a) Simultaneously with the execution of this Agreement, MSC Mediterranean Shipping Company S.A. ("MSC"), has entered into a certain Throughput Guaranty Agreement for the benefit of the Port Authority (the "MSC Guaranty"). The MSC Guaranty requires MSC to transport to or from the Port a certain minimum number of "qualified containers" (as such term is defined in the MSC Guaranty), failing which MSC has agreed to pay to the Port Authority, on a bi-annual basis, an amount equal to the shortfall below such minimum number of containers multiplied by the then applicable Tier 2 Rental Rate (the "MSC Port Guaranty Payment").

(b) In the event that (i) MSC becomes liable to the Port Authority for a MSC Port Guaranty Payment at any time, or from time to time, under the MSC Guaranty, (ii) the Port Authority is unable to collect a MSC Guaranty Payment following its written procedure for maintaining accounts receivable, which requires certain communications and legal notices at prescribed intervals for a period of 105 calendar days, or any successor to such procedure (the "Port Authority Collection Procedure"); then, on the 106th day following the date on which the MSC Port Guaranty Payment was due and payable, the amount of the MSC Port Guaranty Payment shall become Rent under this Agreement, payable by PNCT in twelve equal monthly installments due each month during the Lease Year in which such MSC Guaranty Payment is due and payable; provided that payment for each month elapsed since the beginning of that Lease Year shall be due in full on such 106th day, with the remainder to be paid monthly thereafter until paid in full at the end of such Lease Year.

(c) Lessee's obligation to pay the MSC Port Guaranty Payment shall be a contingent Rent obligation on the date that the MSC Guaranty Payment is due and payable, subject to MSC's timely payment of the same. The Port Authority will provide to Lessee contemporaneous copies of all correspondence, and notify Lessee of any other communications with MSC, regarding the MSC Guaranty generally and any MSC Port Guaranty Payment. Lessee shall have the option, in Lessee's sole discretion, to pay any unpaid MSC Guaranty Payment prior to the expiration of the 105 day period following the date that MSC Guaranty Payment is due and payable.

(d) To the extent that Lessee pays in full the outstanding MSC Guaranty Payment pursuant to paragraph (b) or (c) above, Lessee shall be subrogated to the rights of the Port Authority against MSC for any unpaid MSC Guaranty Payment under the MSC Guaranty. The Port Authority agrees to reasonably cooperate with Lessee in Lessee's collection efforts against MSC for the MSC Guaranty Payment in the event that Lessee elects to pursue MSC directly.

(e) Following Lessee's payment in full of the outstanding MSC Guaranty Payment pursuant to paragraph (b) or (c) above, the Port Authority will, at the written direction of Lessee or any member of Lessee, take commercially reasonable actions (including the commencement of litigation) in its own name against MSC to attempt to collect the MSC Guaranty Payment. The out-of-pocket costs and expenses of such collection actions, including costs of litigation and attorney's fees, shall be at the sole cost and expense of Lessee or, if applicable, the member of Lessee so directing the Port Authority to take such action, with an expense deposit in such amount as is reasonably acceptable to the Port Authority to be held by the Port Authority in advance of the commencement of any such action. Any amounts so collected, up to the full amount of the unpaid MSC Guaranty Payment together with any collection costs awarded to the Port Authority (to the extent such amounts were in fact paid to the Port Authority by Lessee or its member), will be paid to Lessee (or with respect to collection costs, to Lessee or its member, as applicable) promptly upon receipt by the Port Authority of the same. The Port Authority and Lessee (or its member, if applicable) will mutually agree

upon suitable and appropriate collection actions, with outside counsel selected by Lessee (or its member, if applicable) and reasonably acceptable to the Port Authority.

(f) In the event that a court of competent jurisdiction shall determine that the Port Authority was not entitled to all or a portion of any MSC Guaranty Payment paid by Lessee to the Port Authority pursuant to this Section as a result solely from either the Port Authority's failure to meet its obligations under the MSC Guaranty or an error in the calculation of the applicable Port Throughput Shortfall Number or Port Throughput Fee (including any adjustment in MSC Guaranty Payment amount as a result of such failure to meet obligations or error in calculation), but for no other reason, and subject to any right the Port Authority may have to appeal such decision, the Port Authority shall refund (net of any outstanding Rent then due under this Agreement) to Lessee the amount that such court determines was not rightfully due from MSC to the Port Authority.

(g) Lessee, subject to the consent of the Port Authority, which shall not be unreasonably withheld, shall have the right to procure a guaranteed throughout commitment for the benefit of the Port Authority from a new ocean carrier in order to potentially mitigate Lessee's obligations under this Section 5. Such additional throughput guaranty shall be in the form of the MSC Guaranty, or as otherwise approved by the Port Authority in its discretion, but shall only reduce Lessee's obligations under this Section from and after the date on which such additional throughput guaranty is executed and consented to by the Port Authority and only to the extent that such new ocean carrier does, in fact, satisfy the throughput and/or payment obligations under the MSC Guaranty. Nothing contained in this paragraph (g), or in any additional throughput guaranty, shall in any way reduce or diminish the direct obligations of MSC to the Port Authority under the MSC Guaranty. The Port Authority shall not be obligated to consent to any additional throughput guaranty that the Port Authority determines represents a commitment of throughput volume that already substantially exists within the Port or that has already been otherwise committed to the Port Authority.

(h) In the event that the Port Authority receives payment from or on behalf of MSC for all or a portion of any particular MSC Guaranty Payment previously paid by Lessee, provided no further MSC Guaranty Payment shall be outstanding at the time of receipt by the Port Authority of such payment, the Port Authority shall refund such amount to Lessee.

(i) The Port Authority shall, upon the request of Lessee, promptly provide Lessee with copies of all information and documentation provided to the Port Authority by MSC relating to all Carrier's Containers for any Throughput Year (as defined in the MSC Guaranty) and copies of all notices or invoices sent by the Port Authority to MSC relating to any claimed shortfall in any Throughput Year as defined in the MSC Guaranty.

(j) Except as otherwise provided herein, Lessee expressly waives any and all suretyship defenses. Lessee's obligations under this Section 5 shall not be released or discharged, in whole or in part, or otherwise affected by: (i) the failure of the



Port Authority to assert any claim or demand or to enforce any right or remedy against MSC with respect to their obligations, except as provided in paragraphs (b) and (e) above, (ii) any lack of validity or enforceability of the MSC Guaranty or the consideration therefore; (iii) bankruptcy or insolvency of MSC; (iv) any change in the existence, structure or ownership of MSC; or (v) the existence of any claim, set-off or other rights which Lessee may have at any time against MSC. Lessee acknowledges that it will receive substantial direct and indirect benefits from the transactions contemplated by this Agreement and the MSC Guaranty and that the waivers set forth herein are knowingly made in contemplation of such benefits and after the advice of counsel.

(k) The Port Authority shall not waive any right or remedy under the MSC Guaranty nor amend the MSC Guaranty without the written approval of Lessee.

#### Section 6. Container Throughput Rental

(a) Lessee shall pay to the Port Authority a container throughput rental (the "Container Throughput Rental") for each Lease Year from the Commencement Date through the Expiration Date equal to the sum of (1) the product obtained by multiplying the Tier 1 Rental Rate applicable for the relevant Lease Year by the Tier 1 Number of Containers loaded onto or discharged from vessels berthing at the Premises during such Lease Year; and (2) the product obtained by multiplying the Tier 2 Rental Rate applicable for the relevant Lease Year by the Tier 2 Number of Containers loaded onto or discharged from vessels berthing at the Premises during such Lease Year.

(b) The computation of the Container Throughput Rental for each Lease Year, or a portion of a Lease Year, shall be individual to such Lease Year, or such portion of a Lease Year, and without relation to any other Lease Year, or any other portion of any Lease Year. The Container Throughput Rental shall be payable on a monthly basis, as set forth in paragraph (d) of this Section, based on the number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the month.

(c) Lessee shall pay the Container Throughput Rental in arrears as follows: on the twentieth (20) day of the first month following the Commencement Date, and on the twentieth (20) day of each and every month thereafter with such payments terminating on the last day of the month following the month in which the Expiration Date occurs. Simultaneously with each payment, Lessee shall render to the Port Authority a statement certified by a responsible officer of Lessee showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the preceding month and the cumulative number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises from the date of the commencement of the Lease Year for which the report is made through the last day of the preceding month; each monthly statement shall be accompanied by monthly vessel activity reports reasonably satisfactory to the Port Authority to substantiate the statement showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the month for which the report is made, and measures

relating to containers handled at and discharged to and from the Premises and such other information and documentation as may be reasonably required from time to time by the Port Authority. Whenever any monthly statement shall show that the cumulative number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the Lease Year for which the report is made is in excess of the Throughput Threshold Number, Lessee shall pay to the Port Authority at the time of rendering such statement an amount equal to the applicable Container Throughput Rental.

(d) Upon any termination of the letting hereunder prior to the Expiration Date (even if stated to have the same effect as expiration), the number of Qualified Containers shall be reported and the Container Throughput Rental shall be paid on the last day of the first month following the month in which the effective date of such termination occurs, as follows: Lessee shall render to the Port Authority a statement certified by a responsible officer of Lessee showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the Lease Year in which the effective date of termination falls; the payment then due on account of all Container Throughput Rental for the Lease Year in which the effective date of termination falls shall be the excess of the Container Throughput Rental for such Lease Year, computed as follows, over the total of all Container Throughput Rental payments previously made by Lessee for such Lease Year: an amount equal to the sum of (1) the product obtained by multiplying the Tier 1 Rental Rate by the Tier 1 Number of Containers, as the case may be, loaded onto or discharged from vessels berthing at the Premises during such Lease Year, and (2) the product obtained by multiplying the Tier 2 Rental Rate by the Tier 2 Number of Containers, as the case may be, loaded onto or discharged from vessels berthing at the Premises during such Lease Year, after adjusting the Throughput Threshold Number, the Tier 1 Number of Containers, and the Tier 2 Number of Containers as follows: multiplying each number by a fraction, the numerator of which shall be the number of days from the commencement of such Lease Year to the effective date of termination and the denominator of which shall be 365. Any amount of the Container Throughput Rental determined to be owed to the Port Authority pursuant to such calculation shall be paid by Lessee at the time of rendering the statement.

(e) From the Commencement Date until the Rail Fly-over Completion Date, Lessee shall be entitled to a credit (the "Rail Credit") from the Port Authority against Container Throughput Rental in an amount equal to the Tier 1 Rental Rate for each Qualified Container moved by Lessee to or from the Facility via rail, up to a maximum of 125,000 Qualified Containers moved via rail per Lease Year, or such pro rata portion for any applicable partial Lease Year based on the number of days elapsed during the relevant Lease Year divided by 365 days. The Rail Credit will be calculated and applied as follows: Lessee shall indicate, on each monthly statement provided in accordance with paragraph (d) above, the number of Qualifying Containers moved by rail for such month as well as the aggregate number of Qualifying Containers moved by rail in each applicable Lease Year. For purposes of calculating the Container Throughput Rental due for each month in which the Rail Credit is applicable, the monthly number of Qualifying Containers and aggregate number of Qualifying Containers in any applicable

Lease Year and will be reduced by the number of Qualifying Containers moved by rail for each applicable month and in the aggregate for each applicable Lease Year, up to a maximum of 125,000 Qualified Containers (or pro rata portion thereof) per applicable Lease Year.

(f) Except as provided in paragraph (e) above, the Container Throughput Rental payable under this Section shall not be subject to abatement or suspension or reduction for any reason whatsoever.

#### Section 7. Extended Term Rental Amounts

(a) In the event that the Term of this Agreement is extended pursuant to Section 3, on December 1, 2030 the Base Rental Rate with respect to the Existing Terminal Facility, the Development Parcels, the Starboard Street Property, the Waterfront-Shimizaki Property and any other property from time to time added to the Premises that is or becomes contiguous with the Existing Terminal Facility or the Development Parcels and the Tier 1 Rental Rate will be reset in accordance with this Section 7 and on each December 1 thereafter, continuing through the remainder of the Term, the Base Rental Rate and the Tier 1 Rental Rate (as applicable, the "Applicable Rental Rate") payable by Lessee will be increased by the Percentage Increase, i.e., the *new Applicable Rental Rate will be the sum of the Applicable Rental Rate in effect immediately prior to such date (taking into account all prior increases pursuant to this subsection (a)) and the product of the Percentage Increase and Applicable Rental Rate in effect immediately prior to such date*; provided, however, that in no event, except with respect to the new Applicable Rental Rate taking effect on December 1, 2030, will the new Applicable Rental Rate commencing as of December 1 during the Extended Term be less than one hundred and two percent (102%), or greater than one hundred and three and one quarter percent (103.25%), of the Applicable Rental Rate payable for the year immediately prior to each such December 1 date.

(b) In the event the Index to be used in computing any adjustment referred to in paragraph (a) of this Section is not available on the effective date of such adjustment, Lessee shall continue to pay the Base Rent and Container Throughput Rental at the annual or per unit, as applicable, rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index, provided that the Port Authority is then using such substitute Index for all other facilities in the Port. In the event the Index shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the Index then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine, provided that the Port Authority is then using such substitute Index for all other facilities in the Port.

(c) If after the Applicable Rental Rate shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in the Base Rent or Container Throughput Rental due for such period as recomputed over amounts theretofore actually paid on account of the Base Rent or Container Throughput Rental for such period. If such change or adjustment results in a reduction in the Base Rent or Container Throughput Rental due for any period prior to notification, the Port Authority will credit Lessee with the difference between the Base Rent or Container Throughput Rental as recomputed for that period and the Base Rent or Container Throughput Rental actually paid.

(d) For the avoidance of doubt, in the event that the Term of this Agreement is extended pursuant to Section 3, the Base Rental Rate with respect to the Existing Terminal Facility, the Development Parcels, the Starboard Street Property, the Waterfront-Shimizaki Property and any other portion of the Premises that is or becomes contiguous with the Existing Terminal Facility or the Development Parcels, and the Tier 1 Rental Rate, will be reset based on the calculation set forth in this Section 7, which for the Lease Year beginning December 1, 2030 depending on each annual Percentage Increase, will result in, regardless of the rates in effect immediately prior thereto, (i) a per acre Base Rental Rate of between \$121,253 and \$156,596, and (ii) a per container Tier 1 Rental Rate of between \$31.83 and \$41.11. Each Applicable Rental Rate will then continue to escalate annually in accordance with this Section 7.

(e) Notwithstanding the foregoing, in the event that the Term of this Agreement is extended pursuant to Section 3, the Base Rental Rate with respect to the Polaris Street Property (until such time as the Polaris Street Property ceases to be a portion of the Premises) and the Marsh Street Property or any replacement parcel of land delivered to Lessee by the Port Authority pursuant to Section 3(f), to the extent that the Polaris Street Property, Marsh Street Property or replacement parcel is not contiguous with the Existing Terminal Facility or the Development Parcels, shall continue to escalate annually at the rate of 2% as specified on Schedule A.

**Section 8. Non-Container Cargo Throughput Rental**

(a) Lessee shall not be permitted to berth any vessel containing Non-container Cargo or handle Non-container Cargo at the Premises without in each such case, the prior written consent of the Port Authority, with the giving, withholding and withdrawing of such consent to be within the sole discretion of the Port Authority.

(b) Subject to the consent rights in subsection (a) above, Lessee shall pay to the Port Authority, as Non-container Cargo throughput rental for each Lease Year from the Commencement Date through the Expiration Date, the wharfage rates (as set forth in the Port Authority's tariff, as incorporated in FMC SCHEDULE PA-10, as the same or any successor tariff may be amended from time to time) for all Non-container Cargo handled at the Premises ("Non-container Cargo Throughput Rental").

(c) Notwithstanding the foregoing subsections (a) and (b), Lessee may, without the consent of the Port Authority and without payment of Non-container Cargo Throughput Rental, permit the berthing and handling of military vessels (or commercial vessels carrying exclusively military cargo) and such ancillary cargo carried aboard a container vessel as is customarily carried by container vessels and handled by container terminal operators.

#### Section 9. Rights of User

(a) Lessee shall use the Premises exclusively for the operation of a marine terminal facility which use shall be for activities relating to the receipt, handling and storage of loaded or empty containers ("Marine Container Terminal Facility"). The following activities, and no others, shall be permitted at the Premises: (i) the loading and unloading predominately of cargo housed in containers, and also of non-containerized cargo, such bulk cargo as, subject to Section 8(a) of this Agreement, shall have the prior and continuing consent of the Port Authority, and ships' stores, supplies and gear on or from seagoing vessels and other craft permitted to be berthed in the berthing area; (ii) the receipt, handling, delivery, and storage incidental to the transportation of cargo (whether or not in cargo containers) transported or to be transported by seagoing vessels permitted to be berthed in the berthing area, and of ships, stores, supplies and gear for such vessels; (iii) the storage and repair of cargo-containers, other cargo-handling equipment, and necessary amounts of dunnage used in the operations of Lessee under this Agreement; (iv) the parking of motor vehicles owned or operated by Lessee or by the employees of Lessee or by persons doing business with it at the Premises for the purposes set forth in this Section; and (v) the maintenance of office space solely for purposes incidental to the operations of Lessee set forth in this Section.

(b) Lessee shall have the right to berth in the berthing area seagoing vessels for which Lessee acts as stevedore or terminal operator, and operated by persons, firms or corporations which shall have the prior and continuing consent of the Port Authority, to be granted, withheld, and withdrawn in the sole discretion of the Port Authority, carrying or about to carry general cargo, and tugboats, barges, lighters and other harbor craft serving such seagoing vessels, for loading or discharge of cargo, ships' stores, supplies and gear. Such loading and discharge from seagoing vessels may be accomplished in the berthing area through the medium of barges, lighters, and other harbor craft moored inshore or offshore. Lessee shall have the exclusive right to collect dockage and wharf usage charges from seagoing vessels and all other craft, subject to all the terms and provisions of this Agreement. Lessee shall not use or permit the use of the berthing area except as hereinabove provided.

#### Section 10. Lessee's Construction Work

(a) Except as expressly provided in this Section 10, Lessee shall not erect any structures, make any improvements or do any other construction work on the Premises or alter, modify or make additions, improvements or repairs to or replacements of, any structure now existing or built at any time during the Term, or install any fixtures

without the prior written consent of the Port Authority, which consent shall not be unreasonably withheld, conditioned or delayed. The procedures for such construction work shall be the same as for Lessee's Construction Work as set forth in this section.

(b) Except for Lessee's personal property, trade fixtures and equipment (including, without limitation, any cranes, regardless of whether such cranes are affixed to the Premises), in the event any construction, improvement, alteration, modification, addition, repair or replacement is made, with or without the Port Authority's consent, and unless the consent of the Port Authority shall expressly provide otherwise, the same shall immediately become the property of the Port Authority, and Lessee shall have no right to remove the same either during the Term or at the expiration thereof unless the Port Authority, at any time prior to or upon the expiration of the Term, shall give notice to Lessee to remove the same, or to cause the same to be changed to the satisfaction of the Port Authority, in which case Lessee agrees to remove the same, or change it in compliance with such notice. In case of any failure on the part of Lessee to comply with such notice, the Port Authority may effect the removal or change, and Lessee hereby agrees to pay the cost thereof to the Port Authority upon demand.

(c) (1) Lessee and the Port Authority understand that development and construction work is required with respect to Lessee's occupancy of and operations on the Premises, and Lessee agrees to and shall perform such development and construction work with respect to the Premises ("Lessee's Construction Work") described below. Lessee shall perform Lessee's Construction Work at its sole cost and expense and the Port Authority shall have no obligation to pay for any of Lessee's Construction Work.

(2) Lessee shall develop and construct improvements on the Added Parcels for use as a Marine Container Terminal Facility as permitted under Section 9 of this Agreement (such facilities, the "Additional Terminal Facilities") including, without limitation, the removing, rerouting, rebuilding and/or replacement of underground utilities to support such operations and all asbestos abatement at and in existing structures, subject to Section 13 of this Agreement, but in no event in connection with cold ironing except as provided in this Agreement. Such development and construction of Additional Terminal Facilities shall be contiguous with and/or complementary to the Marine Container Terminal Facility presently located on the Existing Terminal Facility portion of the Premises and shall be performed in phases, in accordance with plans and specifications approved by the Port Authority in its discretion, not to be unreasonably withheld, conditioned or delayed, as follows:

(i) Lessee has delivered to the Port Authority, prior to the date of this Agreement, conceptual plans for Lessee's development of the Marine Container Terminal Facility, including the Existing Terminal Facility and the Added Parcels, together with an estimated timeline for phased completion of all of Lessee's Construction Work, which conceptual plans have been reviewed and approved by the Port Authority.

(ii) Upon delivery by the Port Authority of the Phase 1 Development Parcel, Lessee shall develop and construct improvements on the Phase 1 Development Parcel for use as a Marine Container Terminal Facility (the "Phase 1 Development Work"). Lessee shall submit plans and specifications for the Phase 1 Development Work to the Port Authority, for its approval no later than twelve (12) months after the Commencement Date.

(iii) Lessee shall develop and construct improvements on the Phase 2 Development Parcel for use as a Marine Container Terminal Facility (the "Phase 2 Development Work"). Lessee shall submit plans and specifications for the Phase 2 Development Work to the Port Authority for its approval no later than six (6) months after the Phase 2 Development Parcel is delivered to Lessee.

(iv) Lessee shall develop and construct improvements on the Phase 3 Development Parcel for use as a Marine Container Terminal Facility (the "Phase 3 Development Work"). Lessee shall submit plans and specifications for the Phase 3 Development Work to the Port Authority for its approval no later than six (6) months after the Phase 3 Development Parcel is delivered to Lessee.

(v) Lessee shall develop and construct improvements on the Phase 4 Development Parcel for use as a Marine Container Terminal Facility (the "Phase 4 Development Work"). Lessee shall submit plans and specifications for the Phase 4 Development Work to the Port Authority for its approval no later than six (6) months after the Phase 4 Development Parcel is delivered to Lessee.

(vi) Lessee shall develop and construct improvements on the Starboard Street Property for use as a Marine Container Terminal Facility (the "Starboard Street Property Development Work"). Lessee shall submit plans and specifications for the Starboard Street Property Development Work to the Port Authority for its approval no later than six (6) months after the Starboard Street Property is delivered to Lessee.

(vii) Lessee shall develop and construct improvements on the Marsh Street Property for use as a Marine Container Terminal Facility (the "Marsh Street Property Development Work"). Lessee shall submit plans and specifications for the Marsh Street Property Development Work to the Port Authority for its approval no later than six (6) months after the Marsh Street Property is delivered to Lessee.

(viii) Lessee shall develop and construct improvements on the Waterfront-Shimizaki Property for use as a Marine Container Terminal Facility (the "Waterfront-Shimizaki Property Development

Work”). Lessee shall submit plans and specifications for the Waterfront-Shimizaki Property Development Work to the Port Authority for its approval no later than six (6) months after the Waterfront-Shimizaki Property is delivered to Lessee.

(ix) The Completion Date for completion of all of the development work to be done on the Added Parcels as set forth above, shall be December 31, 2023, unless any portion of the Added Parcels is delivered to Lessee by the Port Authority after January 1, 2019, then with respect to such portion only, the Completion Date shall be four (4) years after the date of delivery of such portion of such Added Parcel.

(3) In the event that the Port Authority shall, in its reasonable judgment, require all other marine container terminal tenants in the Port to develop and install such infrastructure as may be necessary to support the provision of cold-ironing services at the berths, Lessee agrees that it will retro-fit the berth adjacent to the Premises with such necessary infrastructure and/or provide such cold-ironing services, as so required of the other marine container terminal tenants in the Port. The Port Authority shall enforce such requirement against all marine container terminal tenants in a non-discriminatory manner.

(d) With respect to Lessee’s Construction Work, Lessee shall indemnify and hold harmless the Port Authority, and its Commissioners, officers, agents and employees against the following distinct and several risks and all injuries, damages and loss suffered by reason thereof, whether they arise from acts or omissions of Lessee, any contractors of Lessee, the Port Authority, third persons, or from acts of God or the public enemy, or otherwise, excepting only risks which result solely from affirmative negligent or willful acts of the Port Authority, its Commissioners, officers, agents or employees subsequent to commencement of the work:

(1) The risk of loss or damage to all such construction prior to the completion thereof. In the event of such loss or damage, Lessee shall forthwith repair, replace and make good the work without cost to the Port Authority;

(2) The risk of death, injury or damage, direct or consequential, to the Port Authority, and its Commissioners, officers, agents and employees, and to its or their property, arising out of or in connection with the performance of Lessee’s Construction Work; and

(3) The risk of claims and demands, just or unjust, by third persons against the Port Authority, and its Commissioners, officers, agents and employees, arising or alleged to arise out of the performance of Lessee’s Construction Work.

(e) Prior to the commencement of any of Lessee’s Construction Work, Lessee shall submit to the Port Authority for its written approval a construction



application (“Lessee’s Construction Application”) in the form supplied by the Port Authority, and containing such terms and conditions consistent within this Agreement as the Port Authority may include, setting forth in detail by appropriate plans and specifications the work Lessee proposes to perform and the manner of and estimated time periods for performing the same, including without limitation a schedule listing each contract proposed to be entered into for the performance of the work and the estimated cost of the work to be performed under each such contract. The data to be supplied by Lessee shall identify each of the items constituting Lessee’s Construction Work, and shall describe in detail the systems, improvements, fixtures and equipment to be installed by Lessee. Lessee shall be responsible at its sole expense for retaining all architectural, engineering and other technical consultants and services as may be directed by the Port Authority and for developing, completing and submitting detailed plans and specifications for Lessee’s Construction Work. The plans and specifications to be submitted by Lessee shall be in sufficient detail for a contractor to perform the work and shall bear the seal of a qualified architect or professional engineer who shall be responsible for the administration of the work in accordance with the Port Authority’s requirements. In connection with review by the Port Authority of Lessee’s submissions under this Section, Lessee shall submit to the Port Authority, at the Port Authority’s request, such additional data, detail or information as the Port Authority may find necessary. Following the Port Authority’s receipt of Lessee’s Construction Application and plans and specifications, the Port Authority shall give its written approval or rejection thereof, or shall request such revisions or modifications thereto as the Port Authority may find reasonably necessary. Each Lessee Construction Application and plans and specifications and/or revision or modification thereof shall be prepared in accordance with the highest professional standards, of uniformly high quality and well coordinated with respect to all engineering and architectural disciplines. Lessee shall not engage any contractor or permit the use of any subcontractor unless and until each such contractor or subcontractor, and the contract such contractor is operating under, have been approved by the Port Authority. Lessee shall include in any such contract or subcontract such provisions as are required in accordance with the provisions of this Agreement and Lessee’s Construction Application approved by the Port Authority. Lessee shall obtain and maintain or cause each contractor to obtain and maintain in force such insurance coverage as is described in paragraphs (m) and (n) of this Section and performance bonds standard in the industry and reasonably acceptable to the Port Authority with respect to completion of the work. All of Lessee’s Construction Work shall be performed by Lessee in accordance with Lessee’s Construction Application and final plans and specifications approved by the Port Authority, shall be subject to inspection by the Port Authority during the progress of the work and after the completion thereof, and Lessee shall redo or replace at its own expense any work not done in accordance therewith. Upon final completion of all of Lessee’s Construction Work, Lessee shall deliver to the Port Authority a certificate to such effect signed by a responsible officer of Lessee and by the architect or engineer who sealed Lessee’s plans pursuant to the provisions of this paragraph certifying that all of the work has been performed in accordance with the approved plans and specifications and the provisions of this Agreement, and Lessee shall supply the Port Authority with one (1) set of as-built drawings of Lessee’s Construction

Work in such form as the Port Authority shall determine. Lessee shall keep said drawings current during the Term. No changes or modifications to Lessee's Construction Work shall be made without the prior written consent of the Port Authority. Following its receipt of Lessee's certificate, the Port Authority shall promptly inspect Lessee's Construction Work and unless such certification is not correct, or the Port Authority determines that the Premises is unsuitable for occupancy and use by Lessee, a certificate of final completion shall be delivered to Lessee by the Port Authority.

(f) Except as set forth in Section 10(g) below, Lessee shall not commence any portion of Lessee's Construction Work until Lessee's Construction Application and plans and specifications covering such work, referred to in Section 10(c), have been finally approved by the Port Authority.

(g) If Lessee desires to commence construction of portions of Lessee's Construction Work prior to the completion of and approval by the Port Authority of Lessee's Construction Application and plans and specifications covering all of such Lessee's Construction Work, Lessee shall submit to the Port Authority a separate Lessee's Construction Application for each portion of Lessee's Construction Work Lessee so desires to commence (each such portion of Lessee's Construction Work a "Partial Approval Work") which shall be executed by an authorized officer of Lessee and shall be accompanied by plans, specifications, drawings, and data with respect to such portion of Lessee's Construction Work (the plans, specifications, drawings, and data covering each such portion of Lessee's Construction Work, the "Partial Approval Work Plans" with respect to such portion of Lessee's Construction Work) setting forth in detail the work to be performed in connection with each such portion of Lessee's Construction Work. The Port Authority shall have full and complete discretion as to whether to permit Lessee to proceed with the performance of any Partial Approval Work. If the Port Authority consents to the performance of any Partial Approval Work, the Port Authority shall review Lessee's Construction Application covering such work and shall give its written approval or rejection of the Partial Approval Work Plans with respect thereto or shall request such revisions or modifications thereto as the Port Authority may find necessary. Upon the Port Authority's approval of Lessee's Construction Application covering an item of Partial Approval Work and its approval of the Partial Approval Work Plans with respect thereto, Lessee may proceed to perform such item of Partial Approval Work subject to and in accordance with the following terms and conditions:

(1) The performance by Lessee of any item of Partial Approval Work in accordance with the Port Authority's approval will be at its sole risk and if for any reason the plans and specifications for the balance of Lessee's Construction Work or, any part thereof, are not approved by the Port Authority or if the approval thereof calls for modifications or changes in any item of Partial Approval Work undertaken by Lessee under any approval granted by the Port Authority pursuant to this paragraph (g), Lessee will, as directed by the Port Authority, and at Lessee's sole cost and expense, either restore the area affected to the condition existing prior to the commencement of such item of Partial Approval Work or make such modifications and changes to such work as may be required by the Port Authority.

(2) Nothing contained in any approval given pursuant to this paragraph shall constitute a determination or indication by the Port Authority that Lessee has complied with any laws, rules, orders, ordinances, enactments, resolutions, regulations, statutes, requirements, codes, directions, and executive orders, including but not limited to those of the City of Newark, which may pertain to the Partial Approval Work to be performed and which Lessee is required to comply with pursuant to this Agreement.

(3) Each item of Partial Approval Work shall be performed in accordance with and subject to the terms and provisions of this Agreement covering Lessee's Construction Work and in accordance with the approved Construction Application covering such item of Partial Approval Work and in accordance with the approved Partial Approval Work Plans constituting a part of such construction application, and subject to any requirements, stipulations, and provisions which the Port Authority may impose in its approval of the performance of such item of Partial Approval Work.

(4) No Partial Approval Work performed by Lessee pursuant to the provisions of this paragraph shall affect or limit the obligations of Lessee under any prior approvals it may have obtained with respect to any of Lessee's Construction Work.

(5) The fact that Lessee has performed any item of Partial Approval Work and that the Port Authority has consented to the performance thereof shall not affect or limit the obligations of Lessee under this Agreement with respect to any of Lessee's Construction Work. Lessee specifically understands that neither the Port Authority's approval of any Construction Application and Partial Approval Work Plans covering any item of Partial Approval Work nor the performance by Lessee of any item of Partial Approval Work pursuant to such approval shall obligate the Port Authority to approve a construction application and plans and specifications submitted by Lessee for the balance of any Lessee Construction Work or shall create or be deemed to create any obligation on the part of the Port Authority to permit subsequent Partial Approval Work to be performed. Without limiting the generality of the provisions of this paragraph (g), it is specifically understood that the Port Authority may withhold its approval of a construction application and Partial Approval Work Plans covering any item of Partial Approval Work if the Port Authority determines that review of subsequent items of Partial Approval Work is required before the Port Authority can approve, reject, or comment upon such Partial Approval Work Plans.

(6) In the event that in the good faith opinion of the Port Authority Lessee at any time during the performance of any portion of any item of Partial Approval Work under the approval granted by the Port Authority pursuant to this paragraph shall fail to comply with all of the provisions of this Agreement with respect to such work or shall fail to comply with the provisions of Lessee's Construction Application covering such work and the plans and specifications forming a part thereof, or shall fail to comply with any requirements, stipulations, or provisions imposed by the Port Authority in its approval of the performance of such item of Partial Approval work,

or if in the Port Authority's opinion Lessee shall be in breach of any of the provisions, of this Agreement covering such work or shall be in breach of any of the provisions of Lessee's Construction Application and plans and specifications covering the performance of such work, or shall be in breach of any requirements, stipulations, or provisions imposed by the Port Authority in its approval of the work, the Port Authority shall have the right to require Lessee to cease all or such part of such item of the Partial Approval Work as is being performed in violation of this Agreement, Lessee's Construction Application and plans and specifications, or the conditions of the Port Authority's approval. Upon written direction from the Port Authority, Lessee shall promptly cease performance of the portion of the Partial Approval Work specified. Lessee shall thereupon submit to the Port Authority for its written approval Lessee's proposal for making modifications, corrections or changes in or to the item of Partial Approval Work that has been or is to be performed so that the same will comply with the provisions of this Agreement, Lessee's Construction Application and plans and specifications, or the conditions of the Port Authority's approval covering such work. Lessee shall not commence construction of the portion of the Partial Approval Work that has been halted until it has received written approval of the proposed modifications, corrections or changes.

(7) It is hereby expressly understood and agreed that the Port Authority has no duty or obligation of any kind whatsoever to inspect or police the performance of any Partial Approval Work by Lessee and the rights granted to the Port Authority hereunder shall not create or be deemed to create such a duty or obligation. Accordingly, the fact that the Port Authority has not exercised its right to require Lessee to cease performance of all or any part of the Partial Approval Work shall not be or be deemed to be an agreement or acknowledgment on the part of the Port Authority that Lessee has in fact, performed such work in accordance with the terms of this Agreement, Lessee's Construction Application and plans and specifications covering such work, or the conditions of the Port Authority's approval of such work, nor shall such fact be or be deemed to be a waiver by the Port Authority of any of the requirements of this Agreement with respect to such work, or any of the requirements of Lessee's Construction Application and plans and specifications covering such work, or any of the conditions of the Port Authority's approval of such work.

(h) Without limiting the generality of any of the provisions of this Agreement, Lessee's Construction Work (including any Partial Approval Work performed by Lessee) shall be performed in such a manner that there will be at all times during construction a minimum of air pollution, water pollution or any other type of pollution, and a minimum of noise emanating from, arising out of, or resulting from construction work generally, taking into account the nature of the work to be performed and the status of the Premises as a pre-existing industrial property.

(i) Subject to the provisions of this Agreement, Lessee shall construct such reasonable structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the objectives set forth in this paragraph, and,

without limiting the generality of the foregoing, such construction shall be subject to the Port Authority's review and approval in accordance with the provisions of this Section.

(j) Without limiting the generality of the provisions of this Section, Lessee shall be solely responsible for the plans and specifications used by it and submitted with Lessee's Construction Application, and for the adequacy or sufficiency of such plans, specifications and all the improvements, fixtures, and equipment depicted thereon or covered thereby, regardless of the consent thereto or approval thereof by the Port Authority or the incorporation therein of any Port Authority requirements or recommendations. The Port Authority shall have no obligation or liability in connection with the performance of Lessee's Construction Work or for the contracts for the performance thereof entered into by Lessee. Any warranties extended or available to Lessee in connection with any of Lessee's Construction Work shall be for the benefit of the Port Authority as well as Lessee. Lessee shall conduct no public operations in the Premises with respect to any improvements, fixtures or equipment constituting Lessee's Construction Work or a portion thereof until the Port Authority shall have notified Lessee in writing that Lessee's Construction Work or such portion thereof has been completed or substantially completed to its satisfaction, which notice shall be promptly delivered to Lessee by the Port Authority after completion of such construction work. In the event of any inconsistency between the provisions of this Agreement and those of Lessee's Construction Application, the provisions of this Agreement shall control; provided however, that if the Port Authority specifically approves of any activity in connection with a Construction Application for which such approval is required in the Agreement, Lessee shall be allowed to rely on such approval.

(k) Without limiting or affecting any other term or provision of this Agreement but subject to Section 20(f), Lessee shall be solely responsible for the design, adequacy and operation of all utility, mechanical, electrical, communications and other systems installed in the Premises by Lessee and all other improvements, additions, fixtures, finishes, decorations and equipment made or installed by Lessee in the Premises and shall do all preventive maintenance and make all repairs, replacements, rebuilding (ordinary or extraordinary, structural or non-structural) and painting necessary to keep such systems, improvements, additions, fixtures, finishes, decorations and equipment (whether the same involves structural or non-structural work) in the condition they were in when made or installed except for reasonable wear and tear which does not (i) adversely affect the efficient or proper utilization of any part of the Premises, or (ii) adversely affect the appearance of any part of the Premises.

(l) Lessee shall pay all claims lawfully made against it by its contractors, subcontractors, material-men and workmen, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of any of Lessee's Construction Work, and shall use reasonable efforts to cause its contractors and subcontractors to pay all such claims lawfully made against them. Nothing herein contained shall be deemed to constitute consent to the creation of any lien or claim against the Premises or any part thereof, nor to prevent Lessee from contesting any such liens or claims in good faith.

(m) In addition to all policies of insurance otherwise required by this Agreement, Lessee shall procure and maintain or cause to be procured and maintained in effect during the performance of Lessee's Construction Work and any other construction work performed by Lessee at the Premises:

(1) Commercial General Liability Insurance including, but not limited to, coverage for Products Liability-Completed Operations and for Broad Form Property Damage and Independent Contractor coverage, with a contractual liability endorsement covering the obligations assumed by Lessee under Section 10(b), which coverage shall not exclude claims arising out of or in connection with work performed within fifty (50) feet of railroad property, and which are customarily insured under such a policy, with a minimum combined single limit coverage for bodily injury and property damage of \$25,000,000.00; said insurance shall also include coverage for explosion, collapse and underground property damage hazards.

(2) Protection and Indemnity Insurance, if Lessee's work involves the ownership, maintenance, operation, use, loading or unloading of watercraft, with a minimum combined single limit coverage for bodily injury and property damage of \$25,000,000.00.

(3) Commercial Automobile Liability Insurance covering all owned, non-owned or hired vehicles used in connection with said construction with minimum combined single limit coverage for bodily injury and property damage of \$3,000,000.00.

(4) Environmental Liability Insurance, with a minimum combined single limit coverage for bodily injury and property damage for both gradual and sudden occurrences of \$5,000,000.00, including coverage for environmental clean-up on land, in air and on water.

(5) Workers' Compensation and Employers' Liability Insurance in accordance with the requirements of law. The Workers' Compensation Policy shall be specially endorsed to include coverage afforded by (i) the U.S. Longshoremen's and Harbor Workers' Compensation Act and Coverage B - Jones Act, maritime (including coverage for Masters or Members of the Crew of Vessels) and (ii) Coverage - B under the Federal Employers' Liability Act.

(n) In addition to the insurance required pursuant to the provisions of Section 10(m), Lessee shall procure or cause to be procured prior to the commencement of any of Lessee's Construction Work, Builder's Risk Insurance (All Risk) covering loss or damage (including any loss or damage resulting from flood or earthquake) to any structures, improvements, fixtures and equipment and furnishing and materials or, the Premises during said construction, whether or not attached to the land, in an amount equal to their full replacement cost. Such insurance shall name the Port Authority as an insured and such policy shall provide that the loss shall be adjusted with the Port Authority, and that the proceeds thereof shall be paid to the Port Authority and shall be

made available to Lessee for and applied strictly and solely to the payment of the cost of the repair, replacement, rebuilding or other performance of Lessee's Construction Work.

(o) With the exception of the Workers' Compensation and Employers' Liability Insurance policy, each policy of insurance described in Section 10(m) shall include the Port Authority as an additional insured (including, without limitation, for purposes of Premises operations and completed-operation), and no such policy shall contain any care, custody or control exclusions, or any exclusion for bodily injury to or sickness, disease or death of any employee of Lessee or of any of its contractors which would conflict with or in any way impair the coverage resulting from the Port Authority's status as an additional insured or the coverage under the contractual liability endorsement described in Section 10(m)(1). Such insurance shall also contain an endorsement providing that the protection afforded Lessee thereunder with respect to any claim or action against Lessee by a third party shall pertain and apply with like effect with respect to any claim or action against Lessee by the Port Authority and against the Port Authority by Lessee, but said endorsement shall not limit, vary, change or affect the protections afforded the Port Authority as an additional insured. Such insurance shall contain a provision that the insurer shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.

(p) Unless otherwise set forth herein, each policy of insurance described in paragraphs (m) and (n) of this Section shall be subject to the applicable provisions of Section 19 of this Agreement.

(q) Title to and property in all improvements and fixtures placed, constructed or installed in or on the Premises, including all such improvements and fixtures as shall constitute Lessee's Construction Work (but excepting all personal property, trade fixtures and equipment, including all cranes), shall vest in the Port Authority upon placement, construction, or installation thereof, provided, however, that title to and property in any and all equipment and trade fixtures removable without substantial injury to the Premises placed in or installed upon the Premises, the cost of which has been reimbursed by the Port Authority to Lessee, shall vest in Lessee upon installation thereof. No equipment or trade fixtures shall be removed by Lessee prior to the Expiration Date unless replaced with substantially similar property (unless such equipment or trade fixture is obsolete or otherwise unnecessary for operation of the Premises). Subject to the following sentence, upon notice given by the Port Authority prior to the expiration or earlier termination of the letting of the Premises under this Agreement, Lessee shall remove from the Premises any improvements, fixtures, trade fixtures, or equipment as the Port Authority may specify in its notice, and shall promptly repair any damage to the Premises caused by such removal.

(r) Lessee shall pay to the Port Authority a fee as compensation for its review and oversight of Lessee's Construction Work (the "Review Fee"). The Review Fee shall be an amount equal to one percent (1%) of the actual cost of Lessee's Construction Work. Upon final completion of Lessee's Construction Work to be performed by Lessee as set forth in Lessee's approved plans and specifications, Lessee shall certify to the Port Authority by final written certification signed by a responsible officer of Lessee certifying that Lessee's Construction Work has been completed and the final cost of such work. Upon receipt of Lessee's certification, the Port Authority shall, in good faith, make a final determination of the cost of Lessee's Construction Work after the Port Authority has examined and approved Lessee's final certificate of cost and such records and other documentation of Lessee as the Port Authority shall deem necessary to substantiate such cost; Lessee shall permit the Port Authority by its agents, employees and representatives at all reasonable times prior to a final determination of the cost of Lessee's Construction Work to examine and audit the records and other documentation of Lessee which pertain to and will substantiate such cost. After such final determination, the Port Authority shall render a bill to Lessee setting forth the Review Fee for any such portion of Lessee's Construction Work and Lessee shall pay the Review Fee for such Lessee Construction Work to the Port Authority within fifteen (15) days of receipt of said bill.

(s) No contractor or third party shall or shall be deemed to have acquired any rights against the Port Authority by virtue of the execution of this Agreement and nothing contained herein shall operate or give to any such contractor or third party any claim or right of action against the Port Authority and its Commissioners, officers, agents and employees.

(t) Without limiting any of the terms and conditions hereof, Lessee understands and agrees that it shall put into effect prior to the commencement of Lessee's Construction Work an affirmative action program and MBE program and WBE program in accordance with the provisions of Schedule C attached hereto and hereby made a part hereof. The provisions of Schedule C shall be applicable to Lessee's contractor or contractors and subcontractors at any tier of construction as well as to Lessee, and Lessee agrees to include the provisions of Schedule C in all of its construction contracts so as to make the provisions and undertakings set forth in Schedule C the direct obligation of the construction contractor or contractors and subcontractors at any tier of construction. Lessee agrees to and shall require its contractors and subcontractors to furnish to the Port Authority such data, including but not limited to compliance reports, relating to the operation and implementation of the affirmative action, MBE, and WBE programs of Lessee and its contractor, contractors, and subcontractors at any tier of construction called for under the provisions of this paragraph and Schedule C annexed hereto as the Port Authority may request at any time and from time to time and Lessee agrees to and shall also require that its contractors and subcontractors at any tier of construction make and put into effect such modifications and additions thereto as may be directed by the Port Authority pursuant to the provisions of this paragraph and Schedule C annexed hereto to effectuate the goals of affirmative action, MBE, and WBE programs. The



obligations imposed on Lessee under this paragraph and Schedule C annexed hereto shall not be construed to impose any greater requirements on Lessee than those which may be imposed on Lessee under applicable law.

(u) In addition to and without limiting any terms and provisions hereof, Lessee shall provide in all of its contracts and subcontracts covering Lessee's Construction Work, or any portion thereof, that:

(1) The contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeships and on-the-job training;

(2) At the request of either the Port Authority or Lessee, the contractor shall request such employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with Lessee to furnish a written statement that such employment agency, labor union or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will cooperate in the implementation of the contractor's obligations hereunder;

(3) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor in the performance of the contract, that all qualified applicants will be afforded equal employment opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status; and

(4) The contractor will include the provisions of subparagraphs (1), (2) and (3) of this paragraph (u) in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract.

(v) Lessee shall cause all of Lessee's Construction Work to be performed in compliance with all applicable laws, rules, orders, ordinances, enactments, resolutions, regulations, statutes, requirements, codes, directions, and executive orders.

#### Section 11. Minimum Capital Expenditure Requirement

(a) Lessee will invest: (i) prior to December 31, 2013, not less than an aggregate amount of \$50,000,000 of Qualifying Expenditures and (ii) prior to November 30, 2029, not less than an additional aggregate amount of \$450,000,000 of Qualifying

Expenditures for a total required aggregate investment of \$500,000,000 for the construction of capital improvements and acquisition and installation or placement of capital fixtures, equipment or other capital items at the Premises (the "Minimum Capital Expenditure Requirement"). Lessee represents to the Port Authority that it currently intends to invest Six Hundred Eighteen Million Dollars and No Cents (\$618,000,000.00) at and in the Premises in the following amounts and toward the following purposes: Site - \$130 million, Wharf - \$41 million, Buildings - \$11 million, Technology - \$16 million, and Equipment - \$420 million. It is the understanding of the parties hereto that a significant portion of the Lessee's intended capital expenditures shall relate to the Development Parcels and other Added Parcels as part of the Premises and that the timing of such capital expenditures related to such Added Parcels is dependent upon the delivery of such Added Parcels by the Port Authority by the dates projected in Section 3 hereof.

(b) Any capital improvements to be performed by Lessee pursuant to this Section that involve construction shall be performed in accordance with Section 10 of this Agreement.

(c) In the event that \$500,000,000 in Qualifying Expenditures has not been invested on or before November 30, 2029, the Extended Term of this Agreement (if so exercised by Lessee) shall be reduced by one (1) year for each \$10,000,000, or any fraction thereof, of shortfall in required Qualifying Expenditures; provided, however, that Lessee may cure such shortfall and re-extend the term of this Agreement by investing all or a portion of such shortfall into the Premises no later than two (2) years prior to the expected lease expiration date assuming such shortfall investment had not been made, in which case the Extended Term will be re-extended by one (1) year for each \$10,000,000 so invested up to the full amount required hereunder, up to (but in no event beyond) the Extended Expiration Date of November 30, 2050; and provided further, however, if Lessee has completed its Qualified Expenditures in all five areas as identified above, i.e. Site, Wharf, Buildings, Technology and Equipment, and Lessee's resulting construction and capital investments are satisfactory to the Port Authority in all material respects but, due to favorable pricing, conditions or efficiencies, said Qualified Expenditures do not equal the required \$500,000,000, then the Port Authority in its sole and absolute discretion shall have the right not to enforce the term-reduction formula set forth in this paragraph (c).

(d) In the event that \$320,000,000 ("Minimum Investment") in Qualifying Expenditures has not been invested on or before November 30, 2028 (the "Minimum Investment Date"), Lessee shall be in default of its obligations under this Section 11 and shall have twelve (12) months from the Minimum Investment Date to cure any such shortfall by investing additional Qualifying Expenditures to reach the aggregate amount of \$320,000,000. If Lessee fails to timely and fully cure the shortfall, the Port Authority's exclusive remedies shall be (i) to terminate this Agreement as of November 30, 2030 (provided, that Lessee shall not be relieved from any of its other obligations under this Agreement, including, without limitation, the payment of Rent to the Port Authority, at any time prior to the termination of the Lease) and (ii) Lessee shall pay to the Port Authority liquidated damages in an amount equal to the difference between (1)

Lessee's total Qualifying Expenditures invested on or prior to such termination date and (2) \$320,000,000 and Lessee will cooperate with the Port Authority's efforts to re-let the Premises. For clarification, in the event Lessee has made exactly the Minimum Investment on the Minimum Investment Date, or during the 12 month cure period ending November 30, 2029, the Term of this Agreement shall be extended to November 30, 2032, at Lessee's option and subject to further extension in accordance with paragraph (c) above.

(e) Lessee shall, on or before April 30, 2011, and on or before April 30 in each subsequent Lease Year throughout the Term of this Agreement, deliver to the Port Authority a statement detailing Lessee's aggregate investment in capital expenditures made by Lessee in connection with the Premises from and after the Commencement Date, together with the written opinion of an Acceptable Accounting Firm indicating the amount of such investment in or on the Premises is acceptable for treatment as a capital expenditure under GAAP or such other standard form of accounting as reasonably approved by the Port Authority, and indicating that the Port Authority may rely on such opinion. Upon delivery of such opinion, Lessee's obligation to make Qualifying Expenditures shall be reduced by the amount of Qualifying Expenditures identified in such statement. Acceptable Accounting Firm shall mean any or the largest four international accounting firms, or such other nationally recognized accounting firm as the Port Authority may approve in its reasonable discretion. For the avoidance of doubt, capital improvements shall exclude (1) the cost of any environmental remediation performed by or on behalf of Lessee for which it is responsible under this Agreement (except to the extent the same is acceptable for treatment as a capital expenditure under GAAP), (2) the cost of maintaining dredging during the term of this Agreement or the cost of any other item of maintenance and repair for which Lessee is obligated under this Agreement (except to the extent the same is acceptable for treatment as a capital expenditure under GAAP), (3) any payment of administrative or other overhead costs or payment to employees of Lessee except to the extent the same is acceptable for treatment as a capital expenditure under GAAP), and (4) any payment to an Affiliate of Lessee except that portion, if any, which represents the amount which would otherwise have been incurred absent such affiliation.

(f) The Port Authority and Lessee agree that the Port Authority shall be regarded as the owner of improvements and fixtures placed, constructed or installed in or on the Premises, except all personal property, trade fixtures and equipment, including all cranes.

(g) In the event that the Port Authority has not delivered all of the Added Parcels to Lessee in accordance with the terms of this Agreement by January 1, 2025, and such inability to deliver a portion of the Added Parcels results in a material inability for Lessee to timely achieve the Minimum Capital Expenditure Requirement or Minimum Investment, the parties agree to enter into good faith negotiations regarding a possible adjustment of the timing of the Minimum Capital Expenditure Requirement or Minimum Investment.

Section 12. Equipment

Lessee agrees to install and/or maintain on the Premises initially and continuously throughout the Term, all such equipment, including container cranes, as it deems necessary to operate the Premises as an efficient Marine Container Terminal Facility and, subject to the reasonable phasing-in of the installation of equipment, to allow for the full utilization of the Premises at all times for said purpose. With respect to container cranes and associated container crane equipment, Lessee shall give the Port Authority not less than one hundred eighty (180) days' notice of the manufacturer and specifications of such container cranes prior to the installation thereof, and shall submit to the Port Authority a construction or tenant alteration application covering any installation or construction work required in connection with any such container crane or associated crane equipment, including, without limitation, any such work required for its attachment, connection to, or integration with any mechanical, electrical or other system or any structure at the Premises. Notwithstanding anything to the contrary contained in this Agreement, all such container cranes and associated container crane equipment shall remain the property of Lessee.

Section 13. Environmental Responsibilities

(a) [Intentionally Omitted].

(b) (1) Except as set forth in paragraph (b)(2) below, Lessee hereby expressly agrees to assume all responsibility for and to relieve the Port Authority from and reimburse the Port Authority for any and all risks, claims, penalties, costs and expenses of any kind whatsoever (including without limitation, natural resource damages and/or LSRP expenses) relating to, caused by, arising out of or in connection with the conditions of the Existing Terminal Facility and/or the Added Parcels, whether any aspect of such conditions existed prior to, on or after the effective date of the letting of the Existing Terminal Facility and/or the Added Parcels, as applicable, to Lessee hereunder, including without limitation, all Environmental Requirements which Lessee is obligated to comply with pursuant to this Agreement and all Environmental Damages.

(2) (i) It is hereby agreed and understood that except as set forth in this paragraph and paragraph (k)(1) of this Section 13, Lessee shall not be responsible for the Condition Exceptions on the Premises. To the extent that a clean-up or remediation obligation arises under an Environmental Requirement with regard to a Condition Exception, the Port Authority shall be responsible for such remediation or clean-up. Once such remediation or clean-up obligation arises under an Environmental Requirement, the Port Authority shall, at its option, have the right to either undertake such remediation itself (or by and through its agents, representatives, employees or contractors), at its cost and expense, or shall require that the Lessee undertake such remediation (through its agents, representatives, employees or contractors), in which case the Port Authority shall reimburse the Lessee for all reasonable and acceptable costs and expenses associated with such remediation, to the extent that the costs and expenses are solely associated with a Condition Exception.

(ii) Lessee shall not be liable for the condition of the Premises under this Section 13 existing or created prior to (x) December 1, 2000 (as to the Existing Terminal Facility) or (y) the commencement of the Term as to any Added Parcel as determined in accordance with Section 3 hereof (as to any Added Parcels), unless the Lessee exacerbates such condition as follows: Lessee shall be responsible for all Environmental Damage involving any Hazardous Substance whose presence on, about, under or migrating from the Premises occurred prior to the commencement of the Term as a result of (1) any violation by the Lessee or the Lessee's Representative of any Environmental Requirements pertaining to such Hazardous Substance, the Premises and/or the activities thereon, or any failure by the Lessee or the Lessee's Representative to observe and comply with any Port Authority requirements, directives and procedures regarding any Hazardous Substance on, about or under the Premises, including specifically those set forth in any design guidelines, best management practices, agreements (including voluntary agreements) with Governmental Authorities, or construction guidelines, all of the foregoing which have been or may be established by the Port Authority for the Port Newark Facility and/or the Premises and submitted to the Lessee, and/or are subsequently provided to Lessee in the future, which violation creates a clean-up, removal or remediation obligation as to such Hazardous Substance where one previously did not exist, or (2) any act or omission by the Lessee or the Lessee's Representative with respect to such Hazardous Substance, which act or omission creates a clean-up, removal or remediation obligation as to such Hazardous Substance where one previously did not exist (an "Exacerbation"). An Exacerbation does not include the Lessee's Construction Work (as such term is defined in Section 10 of this Agreement) but only provided that Lessee's Construction Work is not performed by Lessee in a negligent or careless manner, so as to create a clean-up, removal or remediation obligation as to such Hazardous Substance where one previously did not exist. Lessee shall be fully responsible for having caused an Exacerbation if Lessee's Construction Work undertaken pursuant to Section 10 of this Agreement is performed negligently or carelessly so as to create a clean-up, removal or remediation obligation as to such Hazardous Substance where one previously did not exist. Notwithstanding anything herein to the contrary, as to any construction activity undertaken by Lessee at the Premises that is other than Lessee's Construction Work pursuant to Section 10, Lessee shall be responsible at its cost and expense for any required remediation, cleanup and removal of the Hazardous Substances or environmental condition at, under or about the Premises, in connection with such construction activity, regardless of whether the contamination is an Existing Condition or a Condition Exception and regardless of whether the Lessee receives approval from the Port Authority to undertake such construction activity.

(iii) In connection with any remediation hereunder undertaken by the Port Authority, the Lessee and the Port Authority shall each reasonably cooperate with the other in order to efficiently comply with the applicable Environmental Requirements in a cost effective manner, including without limitation, (x) the Lessee providing the Port Authority with access to the Premises for remediation purposes in accordance with paragraph (l) hereunder, and (y) both parties making available to each other such documents, reports, information and materials necessary for the completion of the other party's portion of the remediation.

(3) Notwithstanding anything to the contrary, the obligations of the Port Authority under this Section 13 with respect to the Condition Exceptions shall not apply, and Lessee shall be fully liable, in the event that the Lessee conducts soil borings on the Premises that are not in connection with the Initial Environmental Survey or construction in accordance with this Agreement (the Initial Environmental Survey and construction exception shall only apply provided such soil borings are not undertaken by Lessee in a negligent manner), discovers contamination requiring remediation under any Environmental Requirement, regardless of whether such contamination is an Condition Exception or not. The Lessee shall be solely responsible for the clean-up or remediation of any such contamination that is discovered as a consequence of such soil borings.

(c) Compliance with Environmental Requirements. Without limiting Lessee's obligations elsewhere under this Agreement to comply with all laws, ordinances, governmental rules, regulations and orders which were or at any time are in effect during the Term of this Agreement, Lessee understands and agrees that, except with respect to the Condition Exceptions which Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, Lessee shall be obligated, at its cost and expense, to comply with and relieve the Port Authority from compliance with all Environmental Requirements which are applicable to or which affect (i) the Premises, (ii) the operations of Lessee or others with the consent of Lessee at the Premises, (iii) the occupancy and use of the Premises by Lessee or by others with its consent, (iv) any Hazardous Substance which has migrated from the Premises that is not a part of the Condition Exceptions, and (v) any Hazardous Substance located above the surface (including on or within all structures and improvements) of the Premises. Nothing in the foregoing shall be construed as a submission by the Port Authority to the application to itself of any Environmental Requirements; provided, however, that no immunity or exemption of the Port Authority from any Environmental Requirements shall excuse compliance or be grounds for noncompliance on the part of Lessee. Without limiting the generality of the foregoing and as part of Lessee's fulfillment of the foregoing obligations, except with respect to the Condition Exceptions, Lessee shall be responsible, at its sole cost and expense and subject to the direction of the Port Authority, for:

(1) the preparation of and submission to all applicable Governmental Authorities of any notice, negative declaration, remedial action workplan,

no further action letter, remediation agreement or any other documentation or information;

(2) the obtaining of any surety bond or the giving of any other financial assurances;

(3) the obtaining from any Governmental Authority, if applicable, of an approval of a negative declaration or no further action letter, response action outcome (or other final remediation document) or other form of release or mitigation; and

(4) complying with the provisions of all Environmental Requirements becoming effective on or relating to the termination, expiration or surrender of the letting of the Premises or of any portion thereof under this Agreement, or on the closure or transfer of Lessee's operations at the Premises.

(d) In addition to and without limiting the generality of the obligations of Lessee set forth above and elsewhere in this Agreement, Lessee shall, at its sole cost and expense and in accordance with and subject to the provisions of Section 10 of this Agreement, upon notice from the Port Authority, promptly take all actions to:

(1) completely remove and remediate all Hazardous Substances in, on or under the Premises resulting from or in connection with the use and occupancy of the Premises by Lessee, Lessee's Representative or any affiliated company of Lessee or which have been or permitted to be disposed of, released, discharged or otherwise placed in, on or under the Premises by Lessee, Lessee's Representative, or any affiliated company of Lessee or which have been disposed of, released, discharged or otherwise placed in, on or under the Premises during the Term of this Agreement or during the term of the Existing Lease with respect to the Existing Terminal Facility or during the term of any other agreement between Lessee and the Port Authority for the use and occupancy of any portion of the Premises;

(2) except with respect to the Condition Exceptions (including Migrated Hazardous Substances) which Lessee is not responsible for pursuant to paragraph (b)(2) of this Section 13, remove and remediate all Hazardous Substances in, on or under the Premises or which have migrated from or from under the Premises to any other property which any Governmental Authority or any Environmental Requirement or any violation thereof required to be remediated or removed;

(3) except with respect to the Condition Exceptions (including Migrated Hazardous Substances) which Lessee is not responsible for pursuant to paragraph (b)(2) of this Section 13, remove and remediate all Hazardous Substances in, on or under the Premises or which have migrated from or from under the Premises necessary to mitigate any Environmental Damages; and

(4) remove and remediate all Hazardous Substances in, on or under the Premises or which are related to any and all improvements, buildings or other structures including, but not limited to asbestos, lead paint and any other building materials that are Hazardous Substances; provided, however, the Port Authority will use commercially reasonable efforts to enforce any and all provisions relating to surrender of Premises and remediation of Hazardous Substances in any agreements with current or former tenants or occupants of any of the Added Parcels.

(e) The obligations set forth in paragraph (d) of this Section shall include but not be limited to the investigation of the environmental condition of the area to be remediated, the preparation of feasibility studies, reports and remedial plans and the performance of any removal, remediation, containment, operation, maintenance, monitoring or restoration work to the applicable environmental standards in accordance with this Agreement and shall be performed in a good, safe and workmanlike manner. Prior to retaining or dismissing any consultant or LSRP in connection with remediation of the Premises, the Lessee shall give notice of such retention or dismissal to the Port Authority. The Lessee shall comply with any and all timeframes set forth in any Environmental Requirements in connection with the filing of remediation documents and/or completion of remediation.

(f) Without limiting the Port Authority's remedies under this Agreement or at law or in equity the Port Authority shall have the right during and after the term of the letting of the Premises under this Agreement to such equitable relief, including restraining injunctions and declaratory judgments, to enforce compliance by Lessee of its environmental obligations under this Agreement including without limitation all Lessee's obligations under this Section 13. In the event that Lessee fails to comply with or perform any of such obligations, the Port Authority (subject to the application of the provisions of Section 29 to the extent such application would not result in the violation of any Environmental Requirement by the Port Authority or by Lessee) at any time during the Term, or subsequent to the termination or expiration of this Agreement, or surrender of the Premises or any portion thereof, may elect (but shall not be required) to perform such obligations and upon demand Lessee shall pay to the Port Authority as additional rent its Costs thereof, as determined by the Port Authority.

(g) Without limiting any other of Lessee's obligations under this Agreement and except with respect to the Condition Exceptions which Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Port Newark Facility, at the cost and expense of Lessee and at any time during or subsequent to the Term of this Agreement, with such information, documentation, records, correspondence, notices, reports, test results, certifications and any other information as the Port Authority shall request in connection any Environmental Damages for which Lessee is responsible hereunder or as shall be required to comply with or discharge any Environmental Requirement which Lessee is obligated to comply with under this Agreement, and Lessee shall promptly acknowledge, swear to, sign or otherwise fully execute the same when and as directed by the Port Authority. Lessee agrees that any of the foregoing may be filed by



the Port Authority with the appropriate Governmental Authority on behalf of Lessee at Lessee's cost and expense.

(h) Without limiting the generality of any other provision contained in this Agreement and except with respect to Condition Exceptions which Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, Lessee shall indemnify, hold harmless and reimburse the Port Authority, its Commissioners, officers, employees and representatives from all claims, demands, penalties, fines, liabilities (including strict liability), settlements, attorney and consultant fees, investigation and laboratory fees, removal and remediation costs, court costs and litigation expenses, damages (including natural resource damages), judgments, losses, costs and expenses of whatsoever kind or nature and whether known or unknown, contingent or otherwise, just or unjust, groundless, unforeseeable or otherwise, arising or alleged to arise out of or in any way related to any Environmental Damages for which Lessee is responsible hereunder or any Environmental Requirement which Lessee is obligated to comply with pursuant to this Agreement, or the risks and responsibilities assumed hereunder by Lessee for the condition of the Premises or a breach or default of Lessee's obligations under this Section 13. If so directed, Lessee shall at its own expense defend any suit based upon the foregoing, and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority.

(i) (1) Without limiting the generality of any provision of this Agreement, in the event that Environmental Requirements set forth more than one compliance standard, Lessee agrees that the standard or standards to be applied in connection with any obligation it may have under this Agreement with respect to any remediation hereunder shall be the most stringent applicable cleanup standards required pursuant to applicable Environmental Requirements that will not involve the use of any restriction on the possible use of the Premises or such other property and which will not require the use of any institutional or engineering controls. Without limiting the foregoing obligation of Lessee to remediate to the most stringent standards, in the event institutional or engineering controls are utilized at the Premises in order for Lessee to satisfy its obligations hereunder, Lessee further agrees, subject to paragraph (t)(1) of this Section 13, to execute any declaration of environmental restrictions, Deed Notice, permit application, or other document necessary to effectuate the implementation or recordation of institutional or engineering controls, as applicable, to the extent such an institutional or engineering control is sought to be placed against the Premises, and, in such event, Lessee shall be fully responsible for and shall (i) maintain such controls, (ii) conduct any compliance monitoring as required under all applicable Environmental Requirements, (iii) obtain any permits in connection with such controls required by applicable Environmental Requirements, (iv) establish all required funding sources in connection with the maintenance of such institutional or engineering controls, and (v) file with

applicable Governmental Authorities all applicable certifications and reports. Lessee's compliance obligations under (i) through (v) above to maintain such institutional and/or engineering controls located on the Premises shall be limited to the Term of this Agreement except if in the determination of the Port Authority (which determination shall not be arbitrary or capricious), an institutional or engineering control placed on the Premises by Lessee and/or the obligations associated therewith are extraordinary (i.e., such control is not customarily utilized), in which case, Lessee shall have a continuing obligation subsequent to the Term of this Agreement to continue, to be obligated to comply with the obligations of (i) through (v) above, or such portion of these obligations as required by the Port Authority, and further provided the required establishment of a funding source shall not be limited to the Term of this Agreement, but shall be the full amount required for the term of the control.

(2) Lessee further agrees that, notwithstanding the terms and conditions of subparagraph (i)(1) above, but subject to paragraph (i)(3) below, the Port Authority shall have the right at any time and from time to time, to designate any other level or levels or standard or standards of remediation for the Premises, to the extent that (i) such standard is required under any Environmental Requirement and (ii) such standard is applied to all similarly situated tenants on the Port Newark Facility, and such designation shall be binding upon Lessee with respect to its obligations under this Agreement with respect to Environmental Requirements.

(3) Nothing in this paragraph (i) shall require or be construed to require Lessee to remediate any Analyzed Item below the Existing Condition.

(j) The methodology to be used for the purpose of this Section to determine for any Existing Condition the level of an Analyzed Item at any location in, on or under the Premises shall be for ground water straight line interpolation methodology utilizing principles of hydrogeologic interpretation, and for soil, the EPA geostatistical software system applicable at any particular time and, notwithstanding any other evidence to the contrary, the Existing Condition as so determined shall set forth and constitute for all purposes as between Lessee and the Port Authority the levels of the Analyzed Items in the soil and ground water in, on and under the Premises, except, however, for each location from which soil and/or water samples have been taken and the tests results thereof constitute a part of the Existing Condition, for each Analyzed Item that was tested at such location and the test result for such Analyzed Item is a part of the Existing Condition, the level of such Analyzed Item at such location shall be the test result of such Analyzed Item at such location.

(k) (1) It is expressly understood and agreed that, the proper handling, delivery, treatment, storage, transportation, disposal and depositing, whether on or off the Port Newark Facility (all of the foregoing being hereinafter collectively called "Disposal"), of any asbestos, lead, PCBs, demolition or construction debris, soil dirt, sand silt, dredged material, water or any other matter, including without limitation, Hazardous Substances (all of the foregoing being hereinafter generically called "Matter"), which Matter has been disturbed or removed by Lessee (or by any contractor or contractors of

Lessee) from a building, structure or any other type of improvement on the Premises (hereinafter specifically called the "Building Debris Matter") at any time or times, and regardless of the nature or composition of such Building Debris Matter, including without limitation, in connection with the performance of Lessee's Construction Work, the Phase 1 Development Work, the Phase 2 Development Work, the Phase 3 Development Work, the Phase 4 Development Work, the Starboard Street Property Development Work, the Marsh Street Development Work or the Waterfront-Shimizaki Property Development Work, or the repair, replacement or rebuilding of the Premises as required under this Agreement, and any and all remediation and Disposal of said Building Debris Matter and the taking or doing of any and all other action or actions necessary, required or appropriate in connection therewith, shall be the sole and complete responsibility of Lessee including, without limitation, all costs and expenses thereof and any and all Environmental Damages, Environmental Requirements, claims, penalties and other expenses relating thereto. The foregoing obligations of Lessee shall apply with full force and effect irrespective of the nature or source of any contaminant, pollutant, chemical, waste or other substance and regardless of whether such Building Debris Matter or a portion thereof is an Existing Condition, it being understood that the Port Authority shall not have any responsibility as to Building Debris Matter, regardless of when such Building Debris Matter came to be located on the Premises. Lessee shall perform all of the foregoing in accordance with and subject to all the terms, provisions, covenants and conditions of this Agreement. Without limiting the generality of any other term or condition of this Agreement, title to any Building Debris Matter on the Premises disturbed or removed by Lessee and not re-used at the Premises shall vest in the Lessee upon the disturbance or removal thereof and all such material shall be delivered and deposited by the Lessee at the Lessee's sole cost and expense to a location off the Port Newark Facility in accordance with the terms and conditions of this Agreement and all Environmental Requirements. The entire proceeds, if any, of the sale or other disposition of the Building Debris Matter shall belong to the Lessee. Promptly upon final disposition of any Hazardous Substance contained in Building Debris Matter disturbed or removed by Lessee from the Premises, pursuant to this paragraph (k)(1), Lessee shall submit to the Port Authority a "Certification of Final Disposal" stating the type and amount of material disposed, the method of disposal and the owner and location of the disposal facility. The format of such certification shall follow the requirements, if any, of governmental agencies having jurisdiction as if the Port Authority were a private organization and the name of the Port Authority shall not appear on any certificate or other document as a generator or owner of such material.

(2) It is further agreed that Matter disturbed, excavated or removed by Lessee (or by any contractor or contractors of Lessee) from the Premises at any time or times, that is other than Building Debris Matter (which shall be the sole responsibility of the Lessee, and shall be governed by paragraph (k)(1) above), to the extent that such Matter constitutes a portion of or is an Existing Condition ("Previously Contaminated Matter"), the remediation and Disposal of said Previously Contaminated Matter, but only to the extent that it is an Existing Condition, shall be the responsibility of the Port Authority, as shall the taking or doing of such other actions necessary, required

or appropriate in connection therewith. To the extent that any clean-up or remediation obligations with regard to such Previously Contaminated Matter arise under an Environmental Requirement, the Port Authority shall, at its option, either undertake such remediation itself (or by and through its agents, representatives, employees or contractors), at its cost and expense, or shall require that the Lessee shall undertake such remediation (through its agents, representatives, employees or contractors), in which case the Port Authority shall reimburse the Lessee for the reasonable and acceptable costs and expenses associated with such remediation, to the extent that the costs and expenses are associated with the Existing Condition. To the extent that the Previously Contaminated Matter is contaminated by a combination of an Existing Condition and a condition for which Lessee is responsible under this Agreement, any costs and clean-up obligation associated with such condition shall be the Lessee's responsibility, and any incremental costs and clean-up obligations associated with such Existing Condition shall be the responsibility of the Port Authority. The Port Authority and/or Lessee shall perform all of their respective foregoing obligations in accordance with and subject to the terms, provisions, covenants and conditions of this Agreement. Without limiting the generality of any other term or condition of this Agreement, title to any Previously Contaminated Matter on the Premises shall vest in the Port Authority upon the excavation or removal thereof and all such material shall be delivered and deposited by the Port Authority at the Port Authority's cost and expense to a location on or off the Port Newark Facility in accordance with the terms and conditions of this Agreement and all Environmental Requirements. The entire proceeds, if any, of the sale or other disposition of the Previously Contaminated Matter shall belong to the Port Authority. In any dispute between the Port Authority and the Lessee with regard to whether Matter is Previously Contaminated Matter, or a condition for which the Lessee is responsible, the Lessee shall have the burden of proof, as hereinafter defined, as to any and all issues of fact with respect to (x) whether the presence of any Hazardous Substance in such Matter occurred prior or subsequent to on or after December 1, 2000 (as to the Existing Terminal Facility) or after the commencement of the Term as to an Added Parcel as determined in accordance with Section 3 hereof; (y) whether any Hazardous Substance disposed of or released from the Existing Terminal Facility and/or any Added Parcel or which migrated from the Existing Terminal Facility and/or any Added Parcel came to be present in the Matter prior or subsequent to December 1, 2000 (as to the Existing Terminal Facility) or after the commencement of the Term as to an Added Parcel as determined in accordance with Section 3 hereof; and (z) whether the Lessee Exacerbated any Existing Condition or created a new condition that combined with an Existing Condition so as to cause additional costs, penalties, clean up obligations, or expenses to be incurred in connection with the remediation and/or Disposal of the Matter. For purposes of this Section, "burden of proof" shall mean both the legal burden of going forward with the evidence and the legal burden of establishing the truth of any fact by a preponderance of the evidence.

(i) The foregoing obligations of the Port Authority shall apply to such Previously Contaminated Matter; provided, however, that, to the extent that the Previously Contaminated Matter reflects an Analyzed Item Increase (as hereinafter defined in paragraph (w)) above

the Existing Condition (other than in connection with a Condition Exception), any costs, penalties, expenses, clean-up obligations, or Environmental Damages associated with such Analyzed Item Increases shall be the Lessee's sole responsibility; and

(ii) To the extent that the Port Authority shall undertake any remediation in accordance with this Section 13, such shall be conducted in a manner, by such employees or contractors, and on such timetable as the Port Authority shall determine in its sole discretion provided the same is in compliance with Environmental Requirements

(3) In the event Lessee discovers any Hazardous Substance in, on or under the Premises, Lessee in reporting such Hazardous Substance shall direct such report to the attention of such individual at the subject Governmental Authority as the Facility Manager shall require in order to assure consistency in the environmental management of the Facility, provided, however, notwithstanding the foregoing in no event shall Lessee be required by this paragraph (k)(3) to violate any Environmental Requirement.

(l) Without limiting the generality of the provisions of Section 26 of this Agreement, the Port Authority and its designees shall have the right but not the obligation to enter upon the Premises upon forty-eight (48) hours' notice to Lessee to conduct testing and related activities from any existing wells, to install additional wells and borings and to conduct testing and related activities therefrom and to perform such activities as shall be necessary to remediate the Existing Condition and to remove any underground storage tanks existing on the Existing Terminal Facility after December 1, 2000 or on any Added Parcel after the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof and in the exercise of the foregoing rights the Port Authority and its designees shall minimize to the extent practicable the interference with Lessee's use and occupancy of the Premises. In the event that as a result of the performance of such remediation of the Existing Condition Lessee shall be denied the use of any open area constituting a part of the Premises then in such event Lessee shall be entitled to an abatement of basic rental with respect to such affected area until Lessee is once again able to use such part of the Premises.

(m) After any person performs any remediation on the Premises (whether or not with respect to the Existing Terminal Facility, such remediation is performed prior to December 1, 2000, or, with respect to any of the Added Parcels, whether or not such remediation is performed prior to the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof), such person, including without limitation, Lessee (subject to the terms and provisions of Section 26 hereof) or the Port Authority may but shall not be obligated to, sample and test the soil and/or aquifer of the Premises or portions thereof and set forth the results of such samplings and tests in a report. Provided that such report and test results meet the criteria set forth below, such report shall be referred to for purposes of this Agreement as a "Remediation Completion Report". Upon delivery of a Remediation Completion Report

to the Lessee and the Port Authority, such Remediation Completion Report shall (x) supersede and replace the existing Initial Environmental Survey, or the applicable portions thereof, to the extent such test results and report are of samples of Analyzed Items taken from the same well or boring or a new well or boring immediately adjacent to such well or boring, and such test results show levels of an Analyzed Item that are lower than the existing Initial Environmental Survey, and (y) supplement the existing Initial Environmental Survey, or the applicable portions thereof to the extent the test results and report would not supersede (pursuant to the foregoing clause (x)) any test results and reports in the existing Initial Environmental Survey, as applicable; but only provided, however, that said sampling and testing produced a fair and representative sampling of the Premises, have been analyzed by a New Jersey State approved independent laboratory and an LSRP, as applicable, and have been performed in accordance with a methodology approved by the Port Authority.

(n) Without limiting the generality of the provisions of Section 20 of this Agreement, Lessee agrees to protect and maintain any wells installed on the Premises and shall repair any damage thereto not caused by the activities of the Port Authority or its employees, agents or contractors.

(o) Without limiting the generality of any other term or provision of this Agreement, all of the obligations of Lessee under this Section shall survive the expiration or earlier termination of this Agreement.

(p) The terms and conditions of this Section are intended to allocate obligations and responsibilities between Lessee and the Port Authority, and nothing in this Section shall limit, modify or otherwise alter the rights and remedies which the Port Authority or Lessee may have against third parties at law, equity or otherwise.

(q) Subject to the terms and conditions of this Agreement, it is hereby understood and agreed if a Condition Exception or any portion thereof, must be remediated or removed in whole or in part in the fulfillment of any of Lessee's obligations under this Agreement, whether due to the fact Lessee cannot remediate or remove one or more Hazardous Substances for which it is responsible to remediate or remove without also remediating or removing one or more Analyzed Items for which it is not responsible for remediating or removing or due to cost or expedience or for any other reason, to the extent that the Port Authority has a clean-up or remediation obligation under an Environmental Requirement, the Port Authority shall have the option to either undertake such removal or remediation itself at its cost and expense, or shall require that the Lessee undertake such remediation, in which case the Port Authority will reimburse the Lessee for all reasonable and acceptable costs associated with such remediation or removal, to the extent that the costs or expenses are associated with a Condition Exception.

(r) The Port Authority has advised Lessee that it is the intention of the Port Authority, with respect to the application of pollution prevention programs, "best management practices plans" and other voluntary programs adopted and agreements

made by the Port Authority with any governmental agencies, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof constituting Environmental Requirements that the Port Authority will treat Lessee in a similar manner as similarly situated persons at the Port Newark Facility.

(s) Upon expiration or earlier termination of this Agreement, no level of any Analyzed Item shall exceed the level of such Analyzed Item as set forth in an Existing Condition, except if such increase is due to a Condition Exception (the amount of the increase, if any, of each and every Analyzed Item above the Existing Condition unrelated to a Condition Exception being hereinafter collectively called "Analyzed Item Increases"). Lessee covenants and agrees on or before the cessation of the letting under this Agreement or any portion thereof to remove and/or remediate all Analyzed Item Increases down to the Existing Condition in accordance with paragraph (w).

(t) (1) It is hereby acknowledged that because of the levels of one or more Hazardous Substances in the soil of the Premises, a Governmental Authority and/or an Environmental Requirement may require that a Deed Notice (formerly a Declaration of Environmental Restriction) be recorded with respect to the Premises by the fee owner of the Premises and that the recording of such Deed Notice may further require that the Basic Lease be amended to permit the recording of such Deed Notice. Further, Lessee acknowledges the fee owner of the Premises is the City of Newark and that the Port Authority has advised Lessee that the City of Newark may never record any Deed Notice with respect to the Premises or execute a supplement to the Basic Lease permitting the recording of such Deed Notice. Lessee, in executing this Agreement, agrees that neither the Port Authority nor the City of Newark shall have any obligation to Lessee under this Agreement or otherwise with respect to the recording of or failure to record such Deed Notice or to the entering into or failure to enter into any amendment to the Basic Lease, except, however, the Port Authority shall not object to Lessee making a petition to the municipal council of the City of Newark to adopt an ordinance which would authorize appropriate officials to execute on behalf of the City of Newark a Supplemental Agreement to the Basic Lease and to record a Deed Notice which has the approval of the New Jersey Department of Environmental Protection and if required the approval of the United States Environmental Protection Agency, relating to the Premises and no other portion of the Facility, to implement the provisions of the New Jersey Brownfields and Contaminated Site Remediation Act, N.J.S.A. 58:20B-1 et. seq., provided, however, Lessee shall have consulted with the Port Authority on the content and requirements of such proposed Deed Notice and shall have given the Port Authority an opportunity to provide Lessee, the New Jersey State Department of Environmental Protection, the United States Environmental Protection Agency and the City of Newark the Port Authority's comments on such proposed Deed Notice and that the terms, provisions and requirements of any such proposed Supplemental Agreement and Deed Notice shall be acceptable to the Port Authority, provided, further, however, that such Deed Notice shall not permit the presence on, include or be required by any Hazardous Substance whose presence in, on or under the Premises was caused by or resulted from the use and occupancy of the Premises by Lessee, Lessee's Representative, or by any

affiliated company of Lessee, or the performance of any work by any of them, or the acts or omissions of Lessee, Lessee's Representative, of any affiliated company of Lessee or of any sublessees or others who occupied the Premises with the permission of Lessee, Lessee's Representative, or with the permission of an affiliated company of Lessee or their officers, agents or employees, or whose presence in, on or under the Existing Terminal Facility occurred after December 1, 2000 or whose presence in, on or under any Added Parcel occurred after the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof. The Port Authority and the Lessee further agree that neither the failure to record any such Deed Notice (in the event that the consent of the City of Newark to such Deed Notice cannot be obtained despite commercially reasonable efforts to obtain such consent) or the execution of a supplement to the Basic Lease permitting such recording or failure of such Deed Notice to be recorded or failure of the Basic Lease to be supplemented to permit such recording, shall be or shall be deemed to be a breach of this Agreement by either the Port Authority or the Lessee, including without limitation, any breach of any implied or express covenant of quiet enjoyment.

(2) It is contemplated that the installation and maintenance of engineering controls may be required and other conditions imposed in connection with any permission to record and the recording of a Deed Notice. Without limiting any other term or provision of this Agreement, the Port Authority shall have the right to enter upon the Premises for the purpose of installing any such engineering controls or for the taking of any other action necessary to record, as a condition of or required by, such Deed Notice, provided, however, nothing in this paragraph (t) is intended to nor shall relieve Lessee of any of its obligations under this Agreement. Further, it is hereby agreed that this Agreement and Lessee's letting and use and occupancy of the Premises shall be subject to the requirements of any Deed Notice recorded with respect to the Premises and Lessee shall comply with all the requirements of any such Deed Notice to the extent of Lessee's obligations set forth elsewhere in this Agreement other than in this subparagraph (t)(2).

(3) To the extent that the Port Authority installs any institutional or engineering controls on any portion of the Premises in connection with the remediation of an Existing Condition or Historic Fill, Lessee shall not disturb, damage or interfere with, any such controls, and, to the extent such controls would be under this Agreement an item that Lessee is obligated to maintain, repair or replace pursuant to Section 20 hereunder, Lessee shall be responsible for such controls. For example, to the extent the pavement in the parking area is determined to be an engineering control, and Lessee pursuant to Section 20 is responsible to maintain the parking lot area, Lessee shall be responsible to maintain such control. Furthermore, during the Term of this Agreement, Lessee shall be responsible for (i) conducting any compliance monitoring as required under all applicable Environmental Requirements with respect to said control and (ii) filing with applicable Governmental Authorities, all applicable certifications and reports. Lessee shall not be responsible for obtaining any permits in connection with



such controls nor shall Lessee be responsible for establishing any required funding source in connection with such control.

(u) Lessee agrees that it shall not use any underground storage tanks which were located in, on or under the Existing Terminal Facility on December 1, 2000 or which were located in, on or under any of the Added Parcels on the commencement of the Term as to such Added Parcel as determined in accordance with Section 3 hereof.

(v) (1) Without limiting any other term or provision hereof (except as expressly provided in paragraph (i)(1) hereof, all the obligations of the Lessee under this Agreement shall survive the expiration or termination of the use/occupancy of the Premises or any portion thereof;

(2) Following the commencement of the fifth (5th) calendar year preceding the Expiration Date or, in the case of an earlier termination of the letting under this Agreement, within three (3) months after the effective date of such termination, as the case may be, the Lessee shall at its sole cost and expense sample and test the soil and ground water in, on and under the Premises in accordance with such standards, methods, protocol and procedures as shall be required by the Port Authority in its sole discretion after consultation with the Lessee (such sampling and testing of the soil and groundwater (the "Exit Baseline"). All such sampling, testing and the preparation of any associated report shall be performed by a Port Authority approved independent consultant and New Jersey State certified laboratory under the supervision of and certified by a New Jersey LSRP, said sampling and testing shall produce a fair and representative sampling of the Premises and said sampling and testing shall be performed in accordance with methodology approved by the Port Authority and be in compliance with all Environmental Requirements.

(3) The Exit Baseline and the test results therefrom may be used by the Lessee to evidence that a Hazardous Substance in, on or under the Premises occurred after the date that the Lessee shall have surrendered the Premises to the Port Authority.

(4) Lessee shall provide a complete copy of the Exit Baseline to the Port Authority. Lessee shall certify the copy to the Port Authority to be a true and complete copy thereof and the Exit Baseline shall provide that the Port Authority shall have the right to rely thereon.

(w) The results of sampling from the Exit Baseline, as applicable, shall be compared against the Initial Environmental Survey to determine if there are any Analyzed Item Increases. Lessee shall be responsible for, at its sole cost and expense, to the satisfaction of the Port Authority and in compliance with all Environmental Requirements, the remediation of all Analyzed Item Increases (except to the extent that any increase is due to a Condition Exception). Such work shall be in compliance with the provisions of this Section 13 and in particular paragraphs (d) and (e) herein. Accordingly, the Lessee hereby covenants and agrees that it shall, on or before the

cessation of the letting under this Agreement or any portion thereof (whether such cessation be by termination, expiration or otherwise), commence and undertake to completion the remediation of all Analyzed Item Increases, as necessary, to a level that at a minimum meets the level of such Analyzed Item constituting a part of an Existing Condition, to the satisfaction of the Port Authority, in accordance with all Environmental Requirements and this Section 13

Section 14. Ingress and Egress

Lessee shall have the non-exclusive right of ingress and egress between the Premises and the city streets outside the Premises. Such right shall be exercised by means of such pedestrian or vehicular ways to be used in common with others having rights of passage within the Marine Container Terminal Facility, as may from time to time be designated by the Port Authority for the use of the public. The use of any such way shall be subject to the rules and regulations of the Port Authority which are now in effect or which may hereafter be promulgated for the safe and efficient operation of the Existing Terminal Facility. The Port Authority may, as reasonably necessary, at any time temporarily or permanently close, or consent to or request the closing of, any such way or any other area at, in or near the Premises presently or hereafter used as such, so long as a means of ingress and egress as provided above remains available to Lessee. Lessee hereby releases and discharges the Port Authority and its successors and assigns, of and from any and all claims, demands, or causes of action which Lessee may now or at any time hereafter have against any of the foregoing, arising or alleged to arise out of the closing of any way or other area whether within or outside the Premises, provided that a reasonably equivalent means of ingress and egress remains available to Lessee. Lessee shall not do or permit anything to be done which will interfere with the free access and passage of others to space adjacent to the Premises or in, along, across or through any streets, ways and walks near the Premises.

Section 15. Governmental and Other Requirements

(a) Lessee shall be responsible for seeking and shall procure, from all governmental authorities having jurisdiction over the operations of Lessee hereunder, all licenses, certificates, permits and other authorization which may be necessary for the conduct of such operations.

(b) Lessee shall observe, comply with and execute all laws and ordinances and governmental rules, regulations, requirements, orders and similar items, including without limitation all Environmental Requirements (to the extent Lessee is obligated for such compliance under Section 13 of this Agreement), now or at any time during the occupancy of the Premises by Lessee which as a matter of law are applicable to or affect (i) the Premises, (ii) the operations of Lessee at the Premises or the Marine Container Terminal Facility and/or (iii) the use and occupancy of the Premises. Lessee, at its sole cost and expense, shall make any and all structural and non-structural improvements, repairs or alterations of the Premises required in order to fully satisfy the compliance obligations set forth in this Agreement.

(c) The obligation of Lessee to comply with governmental requirements is provided herein for the purpose of assuring proper safeguards for the protection of persons and property in or near the Marine Container Terminal Facility, and proper operation by Lessee. Such provisions provided for herein are not to be construed as a submission by the Port Authority to the application to itself of such requirements. The Port Authority, after written notice to Lessee and the expiration of any applicable cure period and upon no less than ten (10) business days' prior notice to Lessee, shall have the right to cause Lessee, the Premises, and/or the Marine Container Terminal to come into compliance with the legal requirements to the extent the Port Authority reasonably determines that Lessee has failed to do so; provided Lessee is not actively contesting such requirement in accordance with paragraph (d) below. Lessee shall indemnify the Port Authority for any Costs and any actual out of pocket expenses including attorney's fees incurred in connection with bringing Lessee, the Premises and or the Marine Container Terminal Facility into compliance or with respect to any claims or damages as a result of Lessee's failure to comply with legal requirements.

(d) Lessee, at its expense, after notice to the Port Authority, may contest, by appropriate proceedings prosecuted diligently and in good faith, the validity or applicability of any legal requirement, provided that: (a) the Port Authority shall not be subject to civil or criminal penalty or to prosecution for a crime, nor shall the Marine Container Terminal Facility or any part thereof be subject to being condemned or vacated, or subject to any lien or encumbrance, by reason of non-compliance or otherwise by reason of such contest; (b) before the commencement of such contest, Lessee shall furnish to the Port Authority a letter of credit or surety bond satisfactory to the Port Authority, in form substance and amount, and shall indemnify the Port Authority against the cost of such compliance and liability resulting from or incurred in connection with such contest or non-compliance (including the costs and expenses in connection with such contest); and (c) Lessee shall keep the Port Authority regularly advised as to the status of such proceedings. The Port Authority shall be deemed subject to prosecution for a crime if the Port Authority or any of its Commissioners, officers, employees or agents is charged with a crime of any kind whatsoever unless such charge is withdrawn five (5) days before such party is required to plead or answer thereto.

#### Section 16. Rules and Regulations

(a) Lessee covenants and agrees to observe and obey, (and to compel its officers, employees and others on the Premises with its consent, to observe and obey) the rules and regulations of the Port Authority now in effect, and such further reasonable rules and regulations (including amendments and supplements thereto) for the governing of the conduct and operations of Lessee as may from time to time during the Term be promulgated by the Port Authority, and applicable to marine container terminal operators or users of such facilities owned or leased by the Port Authority, for reasons of safety, health, or preservation of property, for the maintenance of the good and orderly appearance of the Premises, for the safe or efficient operation of the Marine Container Terminal Facility or (as further described in paragraph (d) below) for the reimbursement of the Port Authority of capital or operating costs incurred or anticipated in connection

with improvements benefiting users of the Port Authority facilities. The Port Authority agrees that, except in cases of emergency, it will give notice to Lessee of every such further rule or regulation at least ten (10) days before Lessee shall be required to comply therewith.

(b) For purposes of this Agreement, the rules and regulations now in effect are set forth in the Tariff. A copy of the Tariff can be found on the Port Authority's website, [www.panynj.gov](http://www.panynj.gov).

(c) The Port Authority hereby agrees to apply the rules and regulations set forth in the Tariff and any further rule or regulation hereafter promulgated by the Port Authority equitably and without discrimination against Lessee and all other similarly situated tenants of the Port Authority at any marine container terminal facility.

(d) Lessee covenants and agrees that, pursuant to paragraphs (a) and (b) above, it shall collect from users of the Marine Container Terminal Facility on behalf of the Port Authority and remit the Port Authority such user, facility or security fees (a "User Fee") as the Port Authority may impose from time to time provided such User Fees are imposed on all similar users in the Port and such collection obligation is imposed on all marine terminal facilities in the Port. In the event that any user does not pay such User Fee to Lessee (or any other marine terminal operator in the Port) (a "Delinquent User"), upon notice to the Port Authority from Lessee of such failure, the Port Authority agrees to deliver a letter ("User Fee Notice") to each marine terminal operator in the Port advising each such facility to cease loading or unloading containers for such Delinquent User until the fee is paid to the Port Authority. If Lessee, or any other container terminal facility operator, shall (after the receipt of a User Fee Notice but prior to such user's payment of the outstanding fee) load or unload containers for such Delinquent User, Lessee or such other operator that loaded or unloaded the user's containers, as applicable, will be liable to the Port Authority for the amount of the User Fee with respect to all containers loaded or unloaded for such Delinquent User after the User Fee Notice has been issued, until such time as the Delinquent User shall have paid any and all outstanding fees owed to the Port Authority. The payment of the User Fee to the Port Authority shall be the Port Authority's sole remedy against Lessee for Lessee's handling of a Delinquent User's containers. The amount of the User Fee due from Lessee with respect to a Delinquent User following a User Fee Notice shall constitute additional Rent hereunder and Lessee's failure to pay such User Fee, if any shall be due from Lessee in accordance with this subsection (d) and the Tariff, shall entitle the Port Authority to seek any remedies allowed under this Agreement for the non-payment of Rent.

(e) No statement or provision in the rules and regulations of the Port Authority shall be deemed a representation or promise by the Port Authority that the services or privileges described shall be or remain available, or that the charges, prices, rates or fees stated therein shall be or remain in effect throughout the Term, all of the same being subject to change by the Port Authority from time to time whenever it deems a change advisable.

Section 17. Method of Operation

(a) In the performance of its obligations hereunder and in the use of the Premises, Lessee shall conduct its operations in an orderly and proper manner so as not to unnecessarily annoy, disturb or be offensive to others near or at the Premises, and if requested by Port Authority in writing, as soon as reasonably possible Lessee shall remove the cause of any reasonable objection made by the Port Authority relative to the improper conduct of any of the employees of Lessee or of any others on the Premises to the extent Lessee is legally able to do so.

(b) Lessee shall not allow any garbage, debris or other waste materials (whether solid or liquid) to collect or accumulate on the Premises outside of what is ordinary and customary for a property of this type and Lessee shall remove from the Premises all garbage, debris and other waste materials (whether solid or liquid) arising out of its operations hereunder on a regular basis. Any such material which may be temporarily stored shall be kept in suitable waste receptacles, the same to be made of metal and equipped with tight-fitting covers, and in any case to be designed and constructed to safely contain the waste material placed by Lessee therein. Said receptacles shall be provided and maintained by Lessee and shall be kept covered except when being filled or emptied. Lessee shall use commercially reasonable care when effecting removal of all such material, and shall in no event make use of any facilities or equipment of the Port Authority for the removal of such material except with the prior consent of the Port Authority.

(c) Lessee shall not do or permit to be done anything which may interfere with the effectiveness or accessibility of the utility, mechanical, electrical and other systems installed or located anywhere at the Premises.

(d) Lessee shall use reasonable effort not to commit any nuisance or permit its employees or others on the Premises to commit or create any nuisance in or near the Premises.

(e) Lessee shall take all reasonable measures to eliminate vibrations which could reasonably be expected to cause material damage to the improvements at the Premises or any part thereof.

(f) Lessee shall use reasonable efforts not to produce or cause to be produced permeate, or emanate from the Premises, any unusual, noxious or objectionable smokes, gases, vapors or odors.

(g) Lessee shall use reasonable efforts not to do or permit to be done any act or thing at the Premises which shall or may subject the Port Authority to any liability or responsibility for injury to any person or persons or damage to any property.

(h) Lessee shall not overload any floor, roof, land surface, bulkhead, pavement, landing, pier or wharf at the Premises and shall repair, replace or rebuild any such, including but not limited to supporting members, damaged by overloading.

(i) Lessee shall permit the use of the Premises (not excluding the berthing area) at any time and from time to time for the installation, maintenance and operation of such navigation lights as may be required by the United States Coast Guard or other governmental authority having jurisdiction, and Lessee shall furnish such electricity as may be required for use by navigation lights which may be so installed.

(j) Lessee shall not do or permit to be done any act or thing on the Premises which (i) will invalidate or conflict with any fire insurance policies covering the Premises or any part thereof, or (ii) which, in the opinion of the Port Authority, may constitute an extra-hazardous condition, so as to increase the risks normally attendant upon the operations permitted by this Agreement, or (iii) which will increase the rate of any fire insurance, extended coverage or rental insurance on the Premises or the Port Newark Facility or any part thereof or upon the contents of any building thereon. Lessee shall promptly observe, comply with and execute the provisions of any and all present and future rules and regulations, requirements, orders and directions of the Insurance Services Office of New Jersey, or of any other board or organization exercising or which may exercise similar functions, which may pertain or apply to the operations of Lessee on the Premises, and Lessee shall, subject to and in accordance with the provisions of this Agreement relating to construction by Lessee and Section 15(d), make all improvements, alterations and repairs of the Premises that may be required at any time hereafter by any such present or future rule, regulation, requirement, order or direction. If by reason of any failure on the part of Lessee to comply with the provisions of this paragraph, any rate for fire insurance, extended coverage or rental insurance on the Premises or any part thereof, shall at any time be higher than it otherwise would be, then Lessee shall pay to the Port Authority that part of any premiums paid by the Port Authority under any insurance policies which may be maintained by the Port Authority, if any, which shall have been charged because of such violation or failure by Lessee.

(k) From time to time and as often as required by the Port Authority (but without interfering in any material respect with Lessee's business operations), Lessee shall conduct pressure, water-flow and other appropriate tests of the fire-extinguishing system and fire-fighting equipment on the Premises, whether furnished by the Port Authority or by Lessee. Lessee shall keep all fire-fighting and fire-extinguishing equipment well supplied with a fresh stock of chemicals and with sand, water or other materials as the case may be, for the use of which such equipment is designed, and shall train the appropriate number of its employees in the use of all such, equipment, including in such training periodic drills.

(l) Lessee shall promptly raise and remove or cause to be raised and removed any and all objects of any kind, including vessels or other floating structures and equipment (whether or not intended to be floating), owned or operated by Lessee, or by a corporation, company or other organization or person associated, affiliated or connected

with Lessee or for which Lessee acts as agent, stevedore or terminal operator (or of others going to or from the Premises on business with Lessee), which shall have sunk, settled or become partially or wholly submerged at the berthing area or any part of the Premises. The provisions of the immediately preceding sentence shall be applicable whether or not the aforesaid object is owned by Lessee or is connected in any way with Lessee or its occupancy of or operations at the Premises. Notwithstanding the foregoing, Lessee shall have no obligation to raise or remove any such object to the extent its presence in the berthing area predates the effective date of the Existing Lease or is the result of the sole negligence or willful act of the Port Authority.

(m) Lessee shall not throw, discharge or deposit or permit to be thrown, discharged or deposited any cargo, refuse, ashes or any material whatsoever, into or upon the waters of or about the Premises.

#### Section 18. Signs

(a) Except with the prior consent of the Port Authority, Lessee shall not erect, maintain or display any advertising, signs, posters or similar devices at or on the Premises. Notwithstanding the foregoing, Lessee may, without the consent of the Port Authority, erect advertising signs directly related to its permitted operations under this Agreement, safety instruction signs, direction signs and signs setting forth public service information issued by the City of Newark.

(b) Upon demand by the Port Authority, Lessee shall remove, obliterate, or paint out any and all advertising, signs, posters, and similar devices placed by Lessee on the Premises and in connection therewith at the expiration or earlier termination of the letting, shall restore the Premises to the condition thereof prior to the placement of such advertising, sign, poster or device. In the event of a failure on the part of Lessee so to remove, obliterate or paint out each and every such piece of advertising, sign, poster or device and so to restore the Premises after receipt of written notice from the Port Authority, the Port Authority may perform the necessary work and Lessee shall pay the costs thereof to the Port Authority on demand.

#### Section 19. Indemnity and Liability Insurance

(a) Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, agents, employees and representatives, from all claims and demands of third persons including but not limited to claims and demands for death, personal injuries, and for property damages, arising out of the use or occupancy of the Premises by Lessee or by its officers, agents, employees, or representatives, contractors, subcontractors or their employees, or by others on the Premises, or out of any other acts or omissions of Lessee, its officers, agents or employees on or with respect to, the Premises, or out of the acts or omissions of others on the Premises, including claims and demands of the party, if any, from which the Port Authority derives its rights in the Premises for indemnification arising by operation of law or through agreement of the Port

Authority with such party, excepting only claims and demands which result solely from the negligent or willful acts of the Port Authority.

(b) If so directed by the Port Authority, Lessee shall at its own expense defend any suit based upon any such claim or demand in which event it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or its provisions of any statutes respecting suits against the Port Authority.

(c) Lessee, in its own name as assured, shall maintain and pay the premiums on the following described policies of liability insurance with an insurer:

(1) Commercial General Liability Insurance including but not limited to coverage for Premises operations and products liability-completed operations, which coverage shall not exclude claims arising out of or in connection with operations conducted within fifty (50) feet of railroad property, with a minimum combined single limit coverage for bodily injury and property damage of \$25,000,000.00. Said insurance shall also include coverage for explosion, collapse and underground property damage hazards. If Lessee's operations entail the ownership, maintenance, operation, or use of any watercraft, whether owned, non-owned, or hired, Lessee shall have any exclusion for such watercraft deleted or shall purchase equivalent coverage under a policy of Protection and Indemnity Insurance and shall provide the Port Authority with a certificate of insurance evidencing such coverage.

(2) Commercial Automobile Liability Insurance covering all owned, non-owned or hired vehicles used in connection with its operations hereunder with a minimum combined single limit coverage for bodily injury and property damage of \$3,000,000.00.

(3) Environmental Liability Insurance, with a minimum combined single limit coverage for bodily injury and property damage for both gradual, accidental and sudden occurrences, both on-site and off-site cleanup, of \$5,000,000.00 including coverage for environmental clean-up on land, in air, and on water. The environmental impairment liability policy(ies) and any certificate of insurance submitted pursuant to this Agreement in relation to such policy(ies) shall (i) be expressly endorsed for the Port Newark Facility and each transfer location, travel route and material disposition location selected by Lessee, (ii) state that claims disputes and coverage shall be litigated in United States courts having jurisdiction, and not be limited to arbitration, and (iii) acknowledge Lessee's disclosure to the insurance carrier that the material may be considered a Hazardous Substance under applicable law including, but not limited to, RCRA and/or CERCLA and/or the Toxic Substances Control Act, 15 U.S.C. Section 2601 et seq. It should be noted that the substances may be considered "hazardous" under CERCLA, but not necessarily "hazardous" under RCRA and that such materials if RCRA "hazardous" would require a manifest and disposal certificate under RCRA at a Subtitle



C hazardous waste disposal facility. A copy of this Agreement, including all schedules and documents attached hereto, shall be provided to the insurance carrier.

(4) **Workers' Compensation and Employer's Liability**

Insurance with limits of not less than \$1,000,000, and otherwise in accordance with the requirements of law. The Workers' Compensation Policy shall be specially endorsed to include coverage afforded by (i) the U.S. Longshoremen's and Harbor Workers' Compensation Act and Coverage B - Jones Act, maritime (including coverage for Masters or Members of the Crew of Vessels), if applicable, and (ii) Coverage B under the Federal Employers' Liability Act.

(5) Such other insurance in such amounts as from time to time may be required by the Port Authority during the Term against such other insurance hazards as at that time are required by the Port Authority of all other lessees of the Port Authority operating marine container terminals similar to the Premises.

(d) With the exception of the Workers' Compensation and Employers' Liability Insurance Policy, each policy of insurance described in Section 19(c) above shall include the Port Authority as an additional insured (including, without limitation, for purposes of Premises operations and completed-operations) and each such policy shall contain a provision that the insurer shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority. Each such policy shall contain a contractual liability endorsement covering the indemnity obligations of Lessee under this Section and such policies shall not contain any care, custody or control exclusions. Such insurance shall also contain an endorsement with respect to providing that the protection afforded Lessee thereunder with respect to any claim or action against Lessee by a third party shall pertain and apply with like effect with respect to any claim or action against Lessee by the Port Authority and against the Port Authority by Lessee, but said endorsement shall not limit, vary, change or affect the protections afforded the Port Authority as an additional insured.

(e) All insurance provided for herein shall be issued by financially sound and responsible insurance providers authorized to do business in the State in which the Premises is located. Any insurance provider providing the required coverages must have a claims paying ability/financial strength rating of "A-" (or its equivalent) or better by Standard & Poor's, A.M. Best or an equivalent rating by a comparable insurance rating agency. On or before the date hereof, the Port Authority has reviewed certificates of insurance evidencing Lessee's various coverages and confirmed that the same are acceptable to the Port Authority and in conformance with the requirements of this Section 19.

(f) As to insurance of any type whatsoever required or permitted by any provision of this Agreement, a certified copy of each of the policies or a certificate evidencing the existence thereof, or a binder, shall be delivered to the Port Authority within fifteen (15) days after the execution of this Agreement by the Port Authority and Lessee. In the event any binder is delivered it shall be replaced with due diligence by a certified copy of the policy or by a certificate. Each such copy or certificate shall contain a valid provision or endorsement that the policy may not be cancelled, terminated, changed or modified, without giving thirty (30) days, written advance notice thereof to the Port Authority. A binder evidencing each renewal policy shall be delivered to the Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy, except for any policy expiring after the Expiration Date, and a certificate or a certified copy of each such renewal policy shall be delivered to the Port Authority with due diligence. If at any time any policy shall be or become unsatisfactory to the Port Authority as to form or substance or as to coverages or minimum limits, or if any carrier issuing any one or more such policies shall be or become unsatisfactory to the Port Authority, and in each such case the Port Authority's requirements shall be applied to the Premises in a manner consistent with the Port Authority's application of such requirements at the other leases from the Port Authority made with respect to the operation of marine container terminal facilities, Lessee shall promptly obtain one or more new and satisfactory policies in replacement to the extent commercially available.

Section 20. Maintenance and Repair

(a) Lessee shall at all times keep the Premises clean, and in an orderly condition and appearance, together with all the fixtures, equipment and personal property of Lessee located in or on the Premises.

(b) Lessee shall promptly and at its sole expense repair, replace, rebuild and paint all or any part of the Premises or of the Marine Container Terminal Facility which may be damaged or destroyed by the acts or omissions of Lessee or by those of its officers or employees, or of other persons on or at the Premises.

(c) Subject to the provisions of paragraph (f) of this Section and Section 21 of this Agreement, throughout the Term, Lessee shall assume the entire responsibility for, and shall relieve the Port Authority from all responsibility from, all care, maintenance, repair and rebuilding whatsoever in the Premises, whether such care, maintenance, repair, or rebuilding be ordinary or extraordinary, partial or entire, inside or outside, foreseen or unforeseen, structural or otherwise; and without limiting the generality of the foregoing Lessee shall maintain and make repairs and replacements, structural or otherwise to all improvements located on the Premises and all other fixtures, machinery, or equipment now or hereafter belonging to or connected with said Premises or Lessee's operations being conducted thereon, including without limitation thereto all maintenance, repair and replacement of the following items: (1) paving, which shall mean maintenance paving, crack sealing, weed removal, repair of damaged or overstressed surfaces, manholes, catch basins, underground storm water pipes, and grate support systems, including repairs required above the structural concrete chamber of

catch basins and manholes; such repairs shall include the concrete brick collar, concrete collar, brick collar, asphalt concrete pavement, Portland cement concrete pavement, the frame and grate or manhole cover and silt bucket when and where applicable; for the purpose of manhole and catch basin repair, the top of the structural chamber shall be the top of the concrete slab that covers the vertical walls of the underground manhole structure, and for the purpose of catch basin and manhole repair, the top of the structural chamber shall be the top of the (cast-in-place or pre-cast) vertical walls of the underground catch basin and manhole structure); (2) crane rails and rail foundations; (3) scales; (4) rail tracks on the Premises (5) lights, light poles and light pole foundations; (6) sprinkler systems; (7) gas and electric from the meter (utility companies are responsible up to the meter); (8) container cranes; (9) the electrical system, equipment and fixtures, including, without limitation, lighting fixtures, switches, outlets, receptacles and other electrical devices and accessories, and all relamping and fuse replacement; (10) the plumbing system, fixtures and equipment, and all finished plumbing; (11) buildings and all parts thereof; (12) special mooring devices and special loading devices, whether mechanical, electrical, hydraulic or otherwise; (13) fencing, (14) signs; (15) fire extinguishers; (16) all painting; and (17) any means of ingress, egress or other access, whether pedestrian or vehicular, within the Premises. Lessee shall maintain all such improvements, fixtures, machinery and equipment at all times in good condition, and shall perform all necessary preventive maintenance thereto so that at the expiration or termination of the letting and all times during the letting, the same (or a reconstruction of all or any part thereof) will be in as good condition as at the commencement of the term of the letting thereof (or, in the case of improvements made during the letting hereunder, in as good condition as at the time of the installation or construction thereof), except for reasonable wear which does not adversely affect the watertight condition or structural integrity of the buildings or other structures on the Premises or adversely affect the efficient or the proper utilization of any part of the Premises or the environmental condition thereof. Lessee shall make frequent periodic inspections of the Premises and shall make all repairs and replacements, and do all rebuilding, inside and outside, ordinary and extraordinary, partial and entire, foreseen and unforeseen, structural or otherwise, regardless of the cause of the condition requiring such repairs, rebuilding or replacements, which repairs, rebuilding and replacements by Lessee shall be in quality and class not inferior to the original in materials and workmanship. With respect to anything originally supplied or installed by the Port Authority in which title does not vest in the Port Authority, Lessee shall have the benefit of the warranty, if any, running to the Port Authority, to the extent assignment thereof does not impair or void the same.

(d) Without limiting the obligations of Lessee stated elsewhere in this Agreement, Lessee shall be solely responsible to the Port Authority for loss or theft of or damage to any and all personal property, equipment and fixtures belonging to the Port Authority or for which it is responsible, located or to be located in or on the Premises, excepting only loss, theft or damage which result solely from the affirmative negligent or willful acts of the Port Authority, its Commissioners, officers, employees and representatives, and shall promptly replace or repair the same within twenty (20) days after such loss, theft or damage (except that if any such repair requires activity over a

period of time, then Lessee shall commence to perform such repair within such twenty (20) day period and shall diligently proceed therewith without interruption); and Lessee shall yield and deliver the same or replacements thereof to the Port Authority at the expiration or earlier termination of the letting under this Agreement in the same condition as at the commencement of the letting, reasonable wear not materially affecting the efficient use and functioning of the same excepted.

(e) (1) Upon sixty (60) days' notice from Lessee to the Port Authority that any portion of the berthing area that has been previously deepened and strengthened by Lessee to a specified number of feet below Mean Low Water (the "Existing Depth"), has shallowed to a depth of two (2) feet above the Existing Depth of such portion of the berthing area, then upon Lessee's making such part of the berthing area available for dredging operations, the Port Authority, at no expense to Lessee, shall proceed (to the extent permitted by governmental authorities having jurisdiction, which permission the Port Authority shall use commercially reasonable efforts to obtain) to dredge such part of the berthing area specified in the said notice (or such portion thereof as may be necessary), either directly or through a contractor, to the Existing Depth of such portion of the berthing area, as applicable. Notwithstanding the foregoing, any dredging required under this subparagraph shall be only such as shall produce (or leave in place) such depths and slopes as may be required in the sole opinion of the Port Authority for underwater support of structures, which opinion shall be controlling. Notwithstanding the foregoing, Lessee shall be solely responsible for all dredging costs associated with the strengthening, deepening, or construction of a berth to the Existing Depth.

(2) Notwithstanding any other provision of this Section, in the event that the Port Authority shall determine that the Estimated Cubic Yard Cost will exceed One Hundred and Ten Dollars and No Cents (\$110.00), subject to adjustment as provided in this Section 20 (the "Base Cost"), the Port Authority shall not be obligated to perform the dredging work set forth in subparagraph (1) of this paragraph (e) unless Lessee shall pay for any amount of the Estimated Cubic Yard Cost in excess of the Base Cost. The "Estimated Cubic Yard Cost" shall mean the cost on average of dredging the portion of the berthing area described in Lessee's notice given to the Port Authority under the aforesaid subparagraphs per cubic yard calculated from the difference in bottom elevations as determined by pre-dredge soundings and the bottom elevations (including normal over dredge amounts) called for hereunder, with such estimate to include, but not be limited to, the cost of dredging, transportation, processing (including amendment, separation, removal, transportation and disposal of trash and debris), disposal (including mobilization at disposal sites) of any dredged material, insurances, compliance with environmental laws and obtaining necessary permits, work to address unanticipated site conditions, and an amount equal to one hundred fifteen percent (115%) of all of the direct staff costs to the Port Authority attributable to all of the foregoing. In the event that the Port Authority shall determine that the Estimated Cubic Yard Cost of any such dredging will exceed the Base Cost, the Port Authority shall so notify Lessee and Lessee shall have the right to elect to have the dredging performed subject to its obligation to pay for any

such excess cost. In the event that Lessee shall not elect to pay such excess cost of the dredging, the Port Authority shall be relieved of its obligation to perform such dredging until such time, if ever, that it shall determine that the Estimated Cubic Yard Cost of such dredging does not exceed the Base Cost. The Base Cost shall be subject to adjustment during the term of the letting under this Agreement in accordance with the provisions of subparagraph (4) of this paragraph.

(3) Commencing on each Anniversary Date and for the period commencing with such Anniversary Date and continuing through the day preceding the next Anniversary Date, or the expiration date of the term of the letting under this Agreement, as the case may be, the Base Cost set forth in subparagraph (2) of this paragraph (e) shall be adjusted by adding to or subtracting from the Base Cost, as the case may be, the product obtained by multiplying the Base Cost by the Construction Cost Percentage Change for such Anniversary Date. For purposes of any adjustment under this subparagraph, the Base Cost employed in the calculation described in the immediately preceding sentence shall be the Base Cost as previously adjusted under this paragraph.

(4) In the event the index shall hereafter be converted to a different standard reference base or otherwise revised or ENR Magazine shall cease to publish the Construction Cost Index, then for the purposes hereof there shall be substituted for the index such other appropriate index or indices properly reflecting changes in construction costs in a manner similar to that established in the Construction Cost Index used in the latest adjustment as the Port Authority may in its discretion determine. If after an adjustment in the Base Cost shall have been fixed for any period, the Construction Cost Index used for computing such adjustment shall be changed or adjusted, then the adjustment of the Base Cost for that period shall be recomputed accordingly.

(5) Notwithstanding any other provision of this Section, the Port Authority shall not be obligated to perform the dredging work set forth in subparagraph (1) of this paragraph (e) as to any part of the portion of the berthing area described in Lessee's notice given to the Port Authority under the aforesaid subparagraph as long as any vessel or other floating structure, equipment or other personal property (whether or not intended to be floating) is sunk, settled or partially or wholly submerged in such part of the berthing area. The provisions of this subparagraph shall be applicable whether or not the aforesaid object is owned by Lessee or is connected in any way with Lessee or its occupancy of or operations at the Premises. The Port Authority shall have no obligation to raise or remove any such object unless its presence in the berthing area predates the effective date of the Existing Lease or is the result of the sole negligence or willful act of the Port Authority.

(f) Except under circumstances as to which paragraph (b) of this Section applies, and subject to paragraph (g) of this section, upon receipt of notice that repair or replacement of such of the following as are located in or are a part of the Premises is required: (1) the structure of the wharf, including wharf decking and wharf

and crane rail foundation piles, fender systems (but not backing logs or bumpers), and standard mooring devices; (2) the water distribution system; and (3) underground sanitary systems; the Port Authority will make such repairs and replacements to the extent necessary to keep such part of the Premises in a reasonably good condition for the operations of Lessee hereunder, but the Port Authority shall not be obligated to make any repairs or replacements to bring the Premises to a better condition than that existing on the Commencement Date (or in the case of improvements made during the Term, the condition as at the time of the installation or construction thereof). The Port Authority's responsibilities under this paragraph shall be limited to bearing the expense of repair or replacement, and without limiting the foregoing the Port Authority shall have no responsibility with respect to any repairs or replacements which are the obligation of Lessee under any other provision of this Agreement. The Port Authority shall have no responsibility with respect to any repairs or replacements which are required because of any casualty whether or not insured or insurable, except as expressly provided in Section 21 of this Agreement. If the Port Authority shall fail, after a reasonable period of time to perform its repair and replacement obligations under this paragraph, Lessee, as its sole remedy, shall, following written notice to the Port Authority, perform the work, and the Port Authority shall on demand pay Lessee its actual certified cash expenditures to third parties therefor, or, at the option of the Port Authority, shall extend to Lessee a credit against its rental obligations under this Agreement in an amount equal to such expenditures. Furthermore, prior to the commencement by the Port Authority of any work set forth in Lessee's notice to the Port Authority, Lessee shall take all precautions necessary to protect persons or property at the Premises, including the immediate performance by Lessee of any work required to correct conditions which involve danger to persons or property, and the Port Authority will reimburse Lessee for such work as provided in this paragraph. Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, agents, and representatives, from and against all claims and demands, including but not limited to claims and demands for death, claims and demands for personal injuries, and claims and demands for property damages, of any third persons whatsoever, including, but not limited to, Lessee's officers, employees, agents, and representatives which may arise from the condition of the Premises or any part thereof, or from the failure of Lessee to notify the Port Authority of conditions requiring repair or replacement, or from the failure of Lessee to make timely corrections of dangerous or potentially dangerous conditions at the Premises. Except as set forth above, Lessee hereby releases and discharges the Port Authority, its Commissioners, officers, employees, agents, and representatives from any liability for damages to Lessee, consequential, or otherwise, in connection with any of the provisions of this paragraph concerning repairs or replacements to any portion of the Premises, including without limitation thereto any failure on the part of the Port Authority for any reason whatsoever to make any repair or replacement, and including without limitation thereto any act or omission of the Port Authority, its officers, agents, employees, contractors or their employees, connected with the performance of such repairs or replacements.

(g) The obligation of Lessee as set forth in paragraphs (b) and (c) of this Section and in Section 21 in the event of damage or destruction covered by any

contract of insurance under which the Port Authority is the insured (including, but not limited to, fire, extended coverage or pier and wharf insurance) is hereby released to the extent that the loss is recouped by actual payment to the Port Authority of the proceeds of such insurance; provided, however, that if at any time because of this release the insurance carrier of any policy covering the Premises or any part thereof shall increase the premiums otherwise payable for fire, extended coverage or rental coverage applicable to the Premises Lessee shall pay to the Port Authority an amount equivalent to such increase or increases on demand; and provided further that if at any time this release shall invalidate any such policy of insurance or reduce, limit, or void the rights of the Port Authority thereunder, or if because of this release, any such insurance carrier shall cancel such endorsement or refuse to renew the same or shall take any other action to alter, decrease or diminish the benefits of the Port Authority under the policy, then the release shall be void and of no effect.

Section 21. Casualty

(a) In the event that as a result of a casualty, whether or not insured or insurable, the Premises are damaged in any material respect, Lessee shall proceed in a timely manner to repair and/or rebuild the same with all due diligence subject to Force Majeure and the terms and conditions of this Agreement, including, without limitation, Section 10 hereof. Subject to the notice and cure periods provided for in Section 29 hereof, the Port Authority shall have the right to terminate this Agreement by notice given to Lessee, in the event of Lessee's failure to repair and/or rebuild in a timely manner and with due diligence, any damage to the Premises or any improvements thereon as a result of a casualty. Without in any way limiting the obligations of Lessee set forth in the first sentence of this paragraph, with respect to all portions of the Premises, Lessee shall secure and maintain in its own name as assured and shall pay the premiums on the following policy of insurance in the limit set forth below, which policy shall be effective during the term of the letting under this Agreement:

(1) All risk property damage insurance covering the full replacement cost of any property owned, leased, or within the care, custody or control of Lessee and now or in the future located on or constituting a part of the Premises, except for any personal property owned by the Port Authority. Full replacement cost shall be reasonably determined by the Port Authority. No omission on the part of the Port Authority to make such determination shall relieve Lessee of its obligations to maintain the appropriate insurance under this paragraph. Such insurance shall cover and insure against such hazards and risks as at least would be insured against under the Standard Form of Fire Insurance policy in the State of New Jersey, or any successor thereto, and the broadest form of extended coverage endorsement prescribed as of the effective date of said insurance by the rating organization having jurisdiction, including without limitation hazards and risks of flood, earthquake, windstorm, cyclone, tornado, hail, explosion, riot, civil commotion, aircraft, vehicles, smoke, and boiler and machinery hazards and risks, and, if the Port Authority so requests, also covering nuclear property losses and contamination.

(2) The property damage insurance policy required by Section 21(a)(1) shall name the Port Authority and Lessee (with insurance clauses consistent with the provisions of this Agreement) as the insureds, as their respective interests may appear, and shall provide that loss, if any, shall be adjusted with and payable to the Port Authority and naming the Port Authority as additional insured and loss payee. As to any insurance required by Section 21(a)(1), a certificate of insurance, or binders, shall be delivered by Lessee to the Port Authority on or before the Commencement Date. In the event any binder is delivered, it shall be replaced within ten (10) days by a certificate of insurance. Each such policy shall contain a valid provision or endorsement that the policy may not be cancelled, terminated, changed or modified, without giving at least thirty (30) days' written advance notice thereto to the Port Authority and an endorsement to the effect that the insurance as to the interest of the Port Authority shall not be invalidated by any act or negligence of Lessee or any other insured. Each policy of insurance shall have attached thereto an endorsement that the Port Authority will be given at least thirty (30) days' prior notice of any material change in the policy. A certificate of insurance with respect to a renewal policy shall be delivered to the Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy, except for any policy expiring after the Expiration Date. If at any time the policy required by Section 21(a)(1) shall be or become unsatisfactory to the Port Authority as to form or substance, or if the carrier issuing such policy shall be or become unsatisfactory to the Port Authority, Lessee shall promptly obtain a new and satisfactory policy in replacement.

The proceeds of insurance from coverages secured in accordance with Section 21(a)(1) shall be made available to Lessee and shall be applied by Lessee strictly and solely to the repair, replacement, or rebuilding of the Premises as provided in this Agreement. The procedures for such rebuilding shall be the same as for Lessee's Construction Work as set forth in Section 10 hereof. Lessee shall not be entitled to any abatement of the Rent payable hereunder at any time by reason of such casualty.

(b) If there shall be an excess of the proceeds of insurance over the cost of the repair, replacement or rebuilding of the Premises as required under paragraph (a) of this Section, then Lessee shall identify to the Port Authority other capital improvements on the Premises beyond the aforesaid work required in connection with the casualty, including, without limitation, any portion of Lessee's Construction Work, and the Port Authority shall make such excess proceeds available to Lessee for such capital improvements; provided, however, that Lessee shall commence such capital improvements within one (1) year of the Port Authority's receipt of the proceeds of insurance, and if Lessee shall not so proceed in a timely manner, all of such proceeds shall be returned to the Port Authority regardless of any expenditure by Lessee on such capital improvements.

(c) The Port Authority and Lessee hereby stipulate that neither the provisions of Titles 46:8-6 and 46:8-7 of the Revised Statutes of New Jersey nor those of any other similar statute shall extend or apply to this Agreement.



(d) In the event of damage to or a partial or total destruction of the Premises or improvements thereon, Lessee shall within thirty (30) days after the occurrence commence to remove from the Premises or from the portion thereof destroyed, all damaged property (and all debris thereof) including damaged buildings and structures, and all damaged property belonging to Lessee or to any third person whatsoever, and thereafter shall diligently continue such removal, and if Lessee does not perform its obligation hereunder, the Port Authority may, upon no less than ten (10) business days' notice to Lessee, remove such debris and dispose of the same and may remove such property to a public warehouse for deposit or may retain the same in its own possession and sell the same at public auction, the proceeds of which shall be applied first to the expenses of removal, storage and sale, and second to any sums owed by Lessee to the Port Authority, with any balance remaining to be paid to Lessee; if the expenses of such removal, storage and sale shall exceed the proceeds of sale, Lessee shall pay such excess to the Port Authority on demand without limiting any term or provision of this Agreement, and Lessee shall indemnify and save harmless the Port Authority, its Commissioners, officers, agents, representatives, employees, contractors and subcontractors, from and against any and all claims of third persons arising out of the exercise by the Port Authority of its right to remove property as hereinabove provided including all claims for conversion, all claims for damage or destruction of property, all claims for injuries to persons (including death), and all other claims for damages, consequential or otherwise, excepting the affirmative negligent or willful acts of the Port Authority, its Commissioners, officers, agents, representatives, employees, contractors and subcontractors.

Section 22. Assignment and Sublease

(a) Except as otherwise set forth or permitted in this Lease (including the provisions of Section 48), neither this Agreement nor the term and estate hereby granted, nor any part hereof or thereof, shall be assigned, mortgaged, pledged, encumbered or otherwise transferred by Lessee voluntarily, involuntarily, by operation of law or otherwise (any of the foregoing, an "Assignment"; and the assignee or other transferee pursuant to an Assignment, an "Assignee") without the prior written consent of the Port Authority, and neither the Premises, nor any part thereof, shall be subleased, licensed, franchised, used or occupied by any person or entity other than Lessee or encumbered in any manner by reason of any act or omission on the part of Lessee, nor shall Lessee part with possession of all or any portion of the Premises (any of the foregoing being referred to herein as a "Sublease"; and the sublessee, licensee, franchisee, occupant or other party obtaining the right to possession pursuant to a Sublease being a "Sublessee") without the prior written consent of the Port Authority, and no rents or other sums receivable by Lessee under any Sublease of all or any part of the Premises shall be assigned or otherwise encumbered. No Assignment of this Agreement and the term and estate hereby granted and no Sublease of all or any portion of the Premises, shall relieve Lessee of its obligation to obtain the Port Authority's prior written consent to any further Assignment or Sublease.

(b) If Lessee shall enter into an Assignment or Sublease in violation of Section 22(a), the Port Authority may collect rent directly from any Assignee or Sublessee, or anyone who claims a right to this Agreement or to the letting or who occupies the Premises, and shall apply the net amount collected to the Rent herein reserved; and no such collection shall be deemed a waiver by the Port Authority of the covenants contained in Section 22(a), nor an acceptance by the Port Authority of any such Assignee, Sublessee, claimant or occupant as tenant, nor a release of Lessee by the Port Authority from the further performance by Lessee of the covenants contained in this Agreement. Lessee hereby authorizes the exercise by the Port Authority of its rights under this subsection (b), and any Assignee or Sublessee may rely on this provision.

(c) Lessee further covenants and agrees that it will not use or permit any Sublessee whatsoever to use the Premises or any portion thereof for any purpose other than as provided in Section 9 of this Agreement.

### Section 23. Condemnation

(a) Upon the acquisition by condemnation or the exercise of the power of eminent domain by any Person having a superior power of eminent domain, including the Port Authority (the "Condemning Agency") of an interest in all or any part of the Premises, or in the case of any deed, lease or other conveyance in lieu thereof (any such acquisition under this Section 23 being hereinafter referred to as a "taking" or "conveyance"), Lessee shall be entitled to assert any claim with respect to its leasehold interest in the Premises to any compensation, award or part thereof made or to be made therein or therefor or any claim with respect to its leasehold interest in the Premises to any consideration or rental or any part thereof paid therefor, or to institute any action or proceeding or to assert any such claim against the Condemning Agency, provided that (i) such claim is then allowed by law, (ii) unless the Port Authority is the Condemning Agency, such claim shall not reduce the amount of compensation payable to the Port Authority solely with respect to its leasehold interest in the Premises or interfere with any claim made or action brought by the Port Authority against the Condemning Agency in connection therewith, and (iii) unless the Port Authority is the Condemning Agency, Lessee shall not be entitled to assert any such claim, or bring any such action, against the Port Authority for any such taking.

(b) In the event of the taking of all of the Premises then this Agreement and all rights granted by this Agreement to Lessee to use or occupy the Premises for its exclusive use and all rights, privileges, duties and obligations of the parties in connection therewith or arising thereunder shall terminate as of the date of the taking, provided, that such termination shall not constitute a waiver of Lessee's right to any claim which it is entitled to maintain against the Condemning Agency as specified in subsection (a) above.

(c) In the event that the taking covers fifty percent (50%) or more of the total usable area of the Premises, then Lessee and the Port Authority shall each have an option exercisable by notice given within ten (10) days after the effective date of such

taking to terminate the letting hereunder with respect to the Premises not taken, as of the date of such taking and such termination shall be effective as if the date of such taking were the original date of expiration hereof.

(d) Except as set forth in paragraph (b) of this Section, in the event that the taking or conveyance covers only a part of the Premises, or in the event that the letting is terminated pursuant to paragraph (c) of this Section with respect to only a part of the Premises, then the letting as to such part shall, as of the date possession thereof is taken by such agency or agencies, or as of the effective date of such termination, cease and determine in the same manner and with the same effect as if the term of the letting had on that date expired.

(e) In the event that all or any portion of the Premises is required by the Port Authority to comply with any present or future governmental law, rule, regulation, requirement, order or direction, the Port Authority may by notice, which if practicable shall be given ninety (90) days in advance, to Lessee terminate the letting with respect to all or such portion of the Premises so required. Such termination shall be effective on the date specified in the notice. Lessee hereby agrees to deliver possession of all or such portion of the Premises so required upon the effective date of such termination in the same condition as that required for the delivery of the Premises upon the date originally fixed by this Agreement for the expiration of the term of the letting. No taking by or conveyance to any governmental authority as described in paragraph (a) of this Section, nor any delivery by Lessee nor taking by the Port Authority pursuant to this paragraph, shall be or be construed to be an eviction of Lessee or a breach of this Agreement or be made the basis of any claim by Lessee against the Port Authority for damages, consequential or otherwise, other than those claims for any award to which Lessee may be entitled as expressly provided in this Section 23.

#### Section 24. Port Authority's Lessee Capital Improvement Fund

From and after January 1, 2016, Lessee may request, and the Port Authority will consider and may, in its sole and absolute discretion, create a fund in a total amount up to \$150,000,000 (available in equal, one-third amounts over such three year period) toward the cost of capital improvements undertaken as part of Lessee's Construction Work, commencing during the calendar year 2016 and on the date on which the Port Authority agrees in writing, if at all, to provide such fund. The amount of funds used by Lessee from such funding, should the Port Authority decide to provide the funding, will be repaid over a twenty (20) year period at an interest rate to be determined by the Port Authority. In the event that the Term of this Agreement terminates or expires for any reason prior to the full and complete repayment of the amounts (together with interest) described herein, the entire then outstanding unpaid principal amount, together with all interest accrued thereon to the date of repayment, shall be due and payable in immediately available funds on the date of such earlier termination or expiration. All of the amount to be repaid by Lessee pursuant to this Section shall be in addition to, and not in substitution of, any other damages payable under this Agreement including, but not limited to, Section 32 hereof.

Section 25. Additional Rent and Charges

(a) If the Port Authority has paid any sum or sums or has incurred any obligations or expense which Lessee has agreed to pay or reimburse the Port Authority for, or if the Port Authority is required or elects to pay any sum or sums or incurs any obligations or expense by reason of the failure, neglect or refusal of Lessee to perform or fulfill any one or more of the conditions, covenants or agreements contained in this Agreement or as a result of an act or omission of Lessee contrary to the said conditions, covenants and agreements (after any applicable notice and grace period as expressly provided herein), Lessee shall pay to the Port Authority the sum or sums so paid or the expense so incurred, including all interest, Costs, damages and penalties, and the same may be added to any installment of Base Rent thereafter due hereunder, and each and every part of the same shall be and become Rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of any of the rentals set forth in this Agreement. If practicable, and except in case of emergency, the Port Authority will provide Lessee with fifteen (15) days notice prior to the Port Authority's making any such payment or incurring any such obligation or expense. No payment made by Lessee to the Port Authority under this Section shall be or be deemed a waiver by Lessee of any right to contest its making of such payment.

(b) Should the Port Authority elect to use its operating and maintenance staff in performing any work and to charge Lessee with the Cost thereof, any time report of any employee of the Port Authority showing hours of work or labor allocated to such work, or any stock requisition of the Port Authority showing the issuance of materials for use in the performance thereof, shall be prima facie evidence against Lessee that the amount of such charge was necessary.

Section 26. Rights of Entry Reserved

(a) The Port Authority, by its officers, employees, agents, representatives and contractors shall have the right at all reasonable times to enter upon the Premises for the purpose of inspecting the same, for observing the performance by Lessee of its obligations under this Agreement, and for the doing of any act or thing which the Port Authority may be obligated or have the right to do under this Agreement or otherwise. In the case of an emergency, the Port Authority may enter the Premises at any time.

(b) Without limiting the generality of the foregoing, the Port Authority, by its officers, employees, agents, representatives, and contractors, and on behalf of furnishers of utilities and other services, shall have the right but not the obligation, for its own benefit, for the benefit of Lessee, or for the benefit of others than Lessee at the Premises, to maintain existing and future utility, mechanical, electrical and other systems and to enter upon the Premises at all reasonable times to make such repairs, replacements or alterations as the Port Authority shall deem necessary or advisable and, from time to time, to construct or install over, in or under the Premises new systems or parts thereof; provided, however, that in the exercise of such rights of access, repair,

alteration or new construction the Port Authority shall not interfere in any material respect with the use and occupancy of the Premises by Lessee.

(c) Prior to exercising any right of entry reserved to it under this Section (in which event the Port Authority shall give such oral or written notice as may be appropriate under the circumstances), the Port Authority agrees, other than in the case of an emergency, to give Lessee reasonable prior notice of its intention to enter the Premises.

(d) Lessee shall cause such office and parking space within the Premises as the Port Authority may reasonably request and in such locations as are acceptable to Lessee, to be made available for use by the Port Authority police and its other representatives that are engaged in official duties on behalf of the Port Authority on the Premises. In addition, Lessee shall cause such space within the Premises as the Port Authority may reasonably request, to be made available for use as a field office by the Port Authority's engineers required or deemed advisable by the Port Authority to be present on the Premises in connection with Lessee's Construction Work or any other issue related to the Premises.

(e) In the event that any property of Lessee shall unreasonably obstruct the access of the Port Authority, its employees, agents or contractors to any of the existing or future utility, mechanical, electrical and other systems and thus shall interfere with the inspection, maintenance or repair of any such system, Lessee shall promptly move such property, as directed by the Port Authority, in order that the access may be had to the system or part thereof for its inspection, maintenance or repair, and, if Lessee shall fail so to move such property after written direction from the Port Authority to do so, the Port Authority may move it and Lessee hereby agrees to pay the cost of such moving upon demand.

(f) Nothing in this Section 26 shall impose, or shall be construed to impose upon the Port Authority any obligations so to construct or maintain or to make repairs, replacements, alterations or additions, or shall create any liability for any failure so to do. Lessee is and shall be in exclusive control and possession of the Premises and the Port Authority shall not in any event be liable for any injury or damage to any property or to any person happening on or about the Premises or for any injury or damage to the Premises or to any property of Lessee or of any other person located therein or thereon (other than those occasioned by the acts of the Port Authority).

(g) At any time and from time to time during ordinary business hours within the twelve (12) months preceding the Expiration Date, the Port Authority, by its agents and employees, whether or not accompanied by prospective lessees, occupiers or users of the Premises, shall have the right to enter thereon for the purpose of exhibiting and viewing all parts of the same, and during such three (3) month period the Port Authority may place and maintain on the Premises, the usual "To Let" signs, which signs Lessee shall permit to remain without molestation.

(h) If, during the last month of the Term, Lessee shall have removed all or substantially all its property from the Premises and shall have discontinued operations, the Port Authority may immediately enter and alter, renovate and redecorate the Premises.

(i) The exercise of any or all of the foregoing rights by the Port Authority or others shall not be or be construed to be an eviction of Lessee nor be made the grounds for any abatement of Rent nor any claim or demand for damages, consequential or otherwise.

Section 27. Limitation of Rights and Privileges Granted

(a) The Premises are let to Lessee and Lessee takes the same subject to all the following: (i) easements, restrictions, reservations, covenants and agreements, if any, to which the Premises may be subject; rights of the public in and to any public street; (ii) rights, if any, of any enterprise, public or private, which is engaged in furnishing heating, lighting, power, telegraph, telephone, steam, or transportation services and of the municipality and State in which the Premises are located; (iii) permits, licenses, regulations and restrictions, if any, of the United States the municipality or State in which the Premises are located, or other governmental authority.

(b) No greater rights or privileges with respect to the use of the Premises or any part thereof are granted or intended to be granted to Lessee by this Agreement, or by any provision thereof, than the rights and privileges expressly and specifically granted.

(c) Nothing in this Agreement contained shall grant to Lessee any rights whatsoever in the air space above the roof of any building or buildings or portion of any building or buildings, if any are included in the Premises (except to the extent required in either case for the performance of any of the obligations of Lessee hereunder), or more than twenty (20) feet above the present ground level of any open area included in the Premises (except to the extent required for the operation of the container cranes and equipment on the Premises and the movement and storage of containers and other cargo).

Section 28. Prohibited Acts

(a) Subject to all the applicable terms and provisions of this Agreement, Lessee may install vending machines or devices designed to dispense or sell food, beverages, tobacco or tobacco products, or arrange for the installation and operation of such machines, subject to the Port Authority's reasonable approval of the type and method of installation thereof and Lessee may use an independent contractor, operator or supplier for such machines selected by Lessee unless the Port Authority reasonably determines that said contractor, operator or supplier will materially adversely affect or materially interfere with operations at the Premises or will cause or contribute to the causing of labor problems or disturbances thereat. Such vending machines shall be installed and operated solely for use by Lessee's officers, members, employees,

contractors, customers, guests and invitees. Lessee's agreement with any contractor, operator or supplier of vending machines shall permit cancellation by Lessee in the event the Port Authority notifies Lessee that such contractor, operator or supplier fails to meet the standards described in this paragraph. Lessee shall be fully responsible for insuring that its contractor, operator or supplier shall comply with all of the applicable provisions of this Agreement and all acts and omissions of such contractor, operator or supplier shall be deemed acts and omissions of Lessee and Lessee and the contractor, operator or supplier shall be jointly and severally responsible therefor to the Port Authority only.

(b) Subject to all of the provisions of this Agreement, and pursuant to an approved tenant construction or alteration application under Section 10 of this Agreement, Lessee may install a coffee shop, and may arrange for the presence at the Premises of a mobile coffee wagon, and may operate such facilities with its own employees, or arrange for the operation thereof by an independent contractor or operator selected by Lessee unless the Port Authority reasonably determines that said contractor or operator will materially adversely affect or materially interfere with operations at the Premises or will cause or contribute to the causing of labor problems or disturbances thereat. Such coffee shop and mobile coffee wagon shall be installed and operated solely for use by Lessee's officers, members, employees, contractors, customers, guests, and invitees. Lessee shall be fully responsible for insuring that its contractor or operator shall comply with all of the applicable provisions of this Agreement and all acts and omissions of such contractor or operator shall be deemed acts and omissions of Lessee and Lessee and the contractor or operator shall be jointly and severally responsible therefor to the Port Authority only.

(c) Lessee shall not do or permit to be done anything which may interfere with the effectiveness or accessibility of the drainage and sewerage system, water system, communications system, fuel system, electrical, fire-protection system, sprinkler system, alarm system, fire hydrants and hoses and other systems, if any, installed or located on, under, or in the Premises.

(d) Lessee shall not dispose of nor permit any one to dispose of any waste material (whether liquid or solid) by means of the toilets, manholes, sanitary sewers or storm sewers in the Premises except after treatment in installations or equipment included in plans and specifications submitted to and approved by the Port Authority.

(e) Lessee shall not operate any engine or any item of automotive equipment in any enclosed space on the Premises unless such space is adequately ventilated and unless such engine or item of automotive equipment is equipped with a proper spark arresting device which has been approved by the Port Authority.

(f) Lessee shall not overload any floor and shall repair any floor, including supporting members, and any paved area damaged by overloading. Nothing in this paragraph or elsewhere in this Agreement shall be or be construed to be a representation by the Port Authority of the weight any floor will bear.

(g) Lessee shall not fuel or defuel its automotive vehicles or other a equipment in the enclosed portions of the Premises without the prior approval of the Port Authority.

(h) Lessee shall not keep or store in the Premises, explosives, inflammable liquids or solids or oxidized materials or use any cleaning materials having a harmful corrosive effect on any part of the Premises, except for those materials normally used in the operation of a marine terminal and stored in a structure normally used for the storage of such materials and made safe for the storage thereof.

(i) Lessee shall not use or permit the use of any truss or structural supporting member of the building or roof or any part thereof for the storage of any material or equipment, or to hoist, lift, move or support any material or equipment or other weight or load, by means of said trusses or structural supporting members.

(j) Lessee shall not dispose or, release or discharge nor permit anyone to dispose of, release or discharge any Hazardous Substance on or from the Premises, and shall not dispose of, release or discharge any Hazardous Substance at the Port Newark Facility. Any Hazardous Substance disposed of, released or discharged by Lessee (or permitted by Lessee to be disposed or, released or discharged) on or from the Premises or at the Port Newark Facility, shall upon notice by the Port Authority to Lessee and subject to the provisions of Section 13 hereof, be completely removed, cleaned up and/or remediated by Lessee. The obligations of Lessee pursuant to this paragraph (j) shall survive the expiration or termination of this Agreement.

Section 29. Termination

(a) If any one or more of the following events shall occur (each of which shall be referred to as an "Event of Default"):

(1) Lessee shall become insolvent, or shall take the benefit of any present or future insolvency statute, or shall make a general assignment for the benefit of creditors, or file a voluntary petition in bankruptcy (or fail to object to any involuntary petition within ninety (90) days of the filing thereof) or a petition or answer seeking an arrangement or its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any other law or statute of the United States or of any State thereof, or consent to the appointment of a receiver, trustee, or liquidator of all or substantially all of its property, or otherwise liquidate or dissolve whether or not in connection with any bankruptcy proceeding; or

(2) By order or decree of a court Lessee shall be adjudged bankrupt or an order shall be made approving a petition filed by any of its creditors or, if Lessee is a corporation, by any of its stockholders, seeking its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any law or statute of the United States or of any State thereof, that in each case, is not stayed or dismissed within ninety (90) days; or



(3) A petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute shall be filed against Lessee that is not stayed or dismissed within ninety (90) days; or

(4) This Agreement shall be assigned, sublet or transferred in violation of Sections 22 or 48; or

(5) The occurrence of any Change of Control without the prior written consent of the Port Authority as provided in Section 48; or

(6) If Lessee is a partnership, limited liability company or corporation, the said partnership, limited liability company or corporation shall be dissolved as the result of any act or omission of its partners, members or shareholders or any of them; or by operation of law or the order or decree of any court having jurisdiction, or for any other reason whatsoever; or

(7) By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of Lessee, and such possession or control shall continue in effect for a period of thirty (30) days; or

(8) (i) Lessee shall voluntarily abandon, desert or vacate the Premises or discontinue its operations at the Premises or a substantial portion of the Premises for a period of sixty (60) days or (ii) after exhausting or abandoning any right of further appeal, Lessee shall be prevented for a period of sixty (60) consecutive days by action of any governmental agency from conducting its operations on the Premises, regardless of the fault of Lessee; or

(9) Lessee shall fail duly and punctually to pay when due any installment of Rent owing pursuant to this Agreement, or any part of the same, and such default shall continue for five (5) days after the scheduled payment date, in the case of regular payments of Base Rent or Container Throughput Rental, or five (5) days after written notice from the Port Authority for any other Rent; or

(10) Lessee shall fail to obtain any insurance policy required to be maintained by Lessee under this Agreement within ten (10) days after notice from the Port Authority of such failure, or shall allow any such policy to lapse without renewing same within thirty (30) days after such lapse; or

(11) If Lessee shall default in or fail to keep, perform and observe each and every other covenant and agreement set forth in this Agreement on its part to be kept, performed or observed (other than those referred to in Section 29(a)(1) – (10) above), and either such default or failure shall continue for a period of thirty (30) days after Lessee's receipt of notice from the Port Authority, or, in the case of a default or a contingency which is susceptible of being cured but which cannot with due diligence

be cured within such period of thirty (30) days, Lessee fails to proceed with all due diligence within such period of thirty (30) days to commence the cure of the same and thereafter to prosecute the curing of such default with all due diligence (it being intended that in connection with a default susceptible of being cured but which cannot with due diligence be cured within such period of thirty (30) days that the time period will be extended as may be necessary to complete the curing thereof with all due diligence); provided, however, that if the default or noncompliance is not susceptible of being cured with due diligence but such default shall not materially affect Lessee's performance of this Agreement or the value of the Premises, Lessee shall be obligated in all events to take all reasonable acts to prevent reoccurrence;

then upon the occurrence of any such Event of Default or at any time thereafter during the continuance thereof, the Port Authority may upon ten (10) days written notice, and provided such Event of Default remains uncured during such ten (10) day period, terminate the letting under this Agreement upon the date specified in such notice.

(b) No acceptance by the Port Authority of rentals, fees, charges or other payments in whole or in part for any period or periods after a default of any of the terms, covenants and conditions hereof to be performed, kept or observed by Lessee shall be deemed a waiver of any right on the part of the Port Authority to terminate the letting. No waiver by the Port Authority of any default on the part of Lessee in performance of any of the terms, covenants or conditions hereof to be performed, kept or observed by Lessee shall be or be construed to be a waiver by the Port Authority of any other or subsequent default in performance of any of the said terms, covenants and conditions.

(c) The rights of termination described above shall be in addition to any other rights of termination provided in this Agreement and in addition to any rights and remedies that the Port Authority would have at law or in equity consequent upon any breach of this Agreement by Lessee, and the exercise by the Port Authority of any right of termination shall be without prejudice to any other such rights and remedies.

#### Section 30. Right of Re-entry

The Port Authority shall, as an additional remedy upon the giving of a notice of termination as provided in Section 29 of this Agreement, have the right to re-enter the Premises and every part thereof upon the effective date of termination without further notice of any kind, and may regain and resume possession by way of summary or other appropriate legal proceedings. Such re-entry, or regaining or resumption of possession, however, shall not in any manner affect, alter or diminish any of the obligations of Lessee under this Agreement, and shall in no event constitute an acceptance of surrender.

#### Section 31. Waiver of Redemption

Lessee hereby waives any and all rights to recover or regain possession of the Premises and all rights of redemption, granted by or under any present or future law

in the event it is evicted or dispossessed for any cause, or in the event the Port Authority obtains possession of the Premises in any lawful manner.

Section 32. Survival of the Obligations

(a) In the event that the letting shall have been terminated in accordance with a notice of termination as provided in Section 29 of this Agreement, or in the event that the Port Authority has re-entered, regained or resumed possession of the Premises in accordance with the provisions of Section 30 of this Agreement, Lessee shall pay to the Port Authority, upon such termination or cancellation, re-entry, regaining or resumption of possession, subject to the provisions of Section 33 hereof, the damages set forth in paragraph (b) of this Section. The Port Authority may maintain separate actions from time to time to recover the damage or deficiency then due, if any (less the proper discount), or at its option and at any time may sue to recover the full deficiency, if any, (less the proper discount) for the entire unexpired portion of the Term.

(b) The amount or amounts of damages for the period of time subsequent to termination or cancellation (or re-entry, regaining or resumption of possession) shall be:

(1) the amount of all unfulfilled monetary obligations of Lessee under this Agreement, including, without limitation thereto, all sums constituting the Rent, including but not limited to under Sections 4, 6 and 8 of this Agreement (and including Container Throughput Rental for the remainder of the Term of this Agreement based on the 12 month period immediately preceding the date of termination) and all sums constituting additional rental under Section 25 of this Agreement, whether accrued prior to the effective date of termination or which would have accrued after such date, through the end of the Term of this Agreement, and the cost to and expenses of the Port Authority for fulfilling all other obligations of Lessee which would have accrued or matured during the balance of the Term or on the Expiration Date or within a stated time after expiration or termination; and

(2) Without duplication of any amount set forth in (1) above, an amount equal to the cost and the expenses of the Port Authority in connection with the termination, cancellation, regaining possession and restoring and reletting the Premises, the Port Authority's legal expenses and costs, and the Port Authority costs and expenses for the care and maintenance of the Premises during any period of vacancy; and

(c) Notwithstanding any other provision of this Section, and without limiting the generality thereof, Lessee shall pay to the Port Authority liquidated damages in the amounts set forth below in this paragraph. The aforesaid liquidated damages shall be payable in full by Lessee to the Port Authority on the first day of the first calendar month next following the termination or cancellation (or re-entry, regaining or resumption of possession), and, assuming such amount is timely paid to the Port Authority, shall be credited back to Lessee against other amounts due under this Section 32 as and when all such other amounts have been paid in full to the Port Authority. The

said liquidated damages shall not be subject to reduction under the provisions of Section 33 hereof:

(1) On account of Lessee's Base Rent and additional rental obligations, an amount equal to the Base Rent payable under Section 4 and additional rental due for the twelve-month period commencing on the first day of the first calendar month next following the earlier of the date of termination or cancellation (or re-entry, regaining or resumption of possession); and

(2) Without duplication of any amount set forth in subsection (c) (1) above, on account of Lessee's obligations under this Agreement with respect to the Container Throughput Rental and the Non-Container Cargo Throughput rental, an amount equal to the amount of each such rental payable by Lessee during the period of twelve full calendar months immediately preceding the earlier of the date of termination or cancellation (or re-entry, regaining or resumption of possession).

(d) Without limiting the generality of any other provision of this Section, in the event that the letting shall have been terminated in accordance with a notice of termination as provided in Section 29 of this Agreement, or in the event that the Port Authority has re-entered, regained or resumed possession of any portion of the Premises in accordance with the provisions of Section 30 of this Agreement, the Port Authority shall have the right to require Lessee to assign to the Port Authority any then outstanding contract or contracts entered into by Lessee for the performance of Lessee's Construction Work or any other construction work being performed on such portion of the Premises. The contract or contracts to be so assigned, if any, shall be determined by the Port Authority acting in its sole discretion and designated by written notice from the Port Authority to Lessee. In the event that Lessee shall assign any such contract to the Port Authority under the provisions of this paragraph, Lessee shall be fully responsible and liable for the payment of any amounts accrued under such contract through the date that the letting shall have been terminated in accordance with a notice of termination as provided in Section 29 of this Agreement, or the Port Authority has re-entered, regained or resumed possession of the Premises in accordance with the provisions of Section 30 of this Agreement. Lessee agrees that it shall include in each contract entered into by it for the performance of Lessee's Construction Work or any other construction work provisions allowing the assignment of said contract to the Port Authority. Nothing contained in this paragraph shall be or be deemed an agreement by the Port Authority to accept an assignment and/or to perform any contract entered into by Lessee for the performance of Lessee's Construction Work or any other construction work or shall create or be deemed to create any rights against the Port Authority in any contractor or other third party with respect to any such contract.

(e) Nothing contained above in this Section 32 or in Section 33 shall or shall be construed to lessen, limit, mitigate, release or in any way affect any of the obligations of Lessee or the Port Authority, as applicable, under Sections 13 and 35 of this Agreement, which obligations shall remain in full force and effect notwithstanding any such termination or cancellation, re-entry, regaining or resumption of possession.

Section 33. Reletting by the Port Authority

The Port Authority, upon termination pursuant to Section 29 of this Agreement, or upon any re-entry, regaining or resumption of possession pursuant to Section 30 of this Agreement, may occupy the Premises or may relet the Premises and shall have the right to permit any person, firm or corporation to enter upon the Premises and use the same. Such reletting may be of only part of the Premises or of the entire Premises, and for a period of time the same as or different from the balance of the Term remaining, and on terms and conditions the same as or different from those set forth in this Agreement. The Port Authority shall also, upon termination pursuant to Section 29 of this Agreement, or upon re-entry, regaining or resumption of possession pursuant to Section 30 of this Agreement, have the right to repair and to make structural or other changes in the Premises, including changes which alter the character of the Premises and the suitability thereof for the purposes of Lessee under this Agreement, without affecting, altering or diminishing the obligations of Lessee hereunder. In the event either of any reletting or of any actual use and occupancy by the Port Authority (the mere right to use and occupy not being sufficient however) there shall be credited to the account of Lessee against its survived obligations hereunder any net amount remaining after deducting from the amount actually received from any lessee, licensee, permittee or other occupier in connection with the use of the Premises (or portion thereof) during the balance of the Term as the same is originally stated in this Agreement, or from the market value of the occupancy of such portion of the Premises as the Port Authority may itself during such period actually use and occupy, all reasonable expenses, reasonable costs and reasonable disbursements incurred or paid by the Port Authority in connection therewith. Neither any such letting nor any such other use or occupancy shall be or be construed to be an acceptance of a surrender. It is understood by the Port Authority and Lessee that the Port Authority has no obligation to relet the Premises or any portion thereof or to use or occupy the Premises or any portion thereof itself, except to the extent as may be required by law; provided, however, that the Port Authority will use its commercially reasonable efforts to lease the Premises or portions thereof in the general maritime real estate rental market promptly upon the cessation of Lessee's operations and removal by Lessee of its equipment and trade fixtures to the extent required hereunder.

Section 34. Remedies to Be Nonexclusive

All remedies provided in this Agreement shall be deemed cumulative and additional and not in lieu of or exclusive of each other or of any other remedy available to the Port Authority at law or in equity, and neither the exercise of any remedy, nor any provision in this Agreement for a remedy or an indemnity shall prevent the exercise of any other remedy.

Section 35. Surrender

(a) Lessee covenants and agrees to yield and deliver peaceably to the Port Authority possession of the Premises on the date of the cessation of the letting, whether such cessation be by termination, expiration or otherwise, promptly and in the

condition required by the provisions of Section 20 regarding the condition of the Premises at the expiration or termination of the letting hereunder.

(b) Unless required for the performance by Lessee of its obligations hereunder, Lessee shall have the right at any time during the Term to remove from the Premises, all its equipment, removable fixtures and other personal property (including, without limitation, its container cranes, regardless of whether such cranes are attached or affixed to the Premises), and all property of third persons for which Lessee is responsible, and on or before the expiration or earlier termination of the letting it shall remove all of the same from the Premises, repairing all damage caused by any removal; provided, however, that, except with respect to any of Lessee's container cranes located on the Premises that the Port Authority has exercised its right to purchase such cranes, to the extent such right then exists under Section 59, if Lessee shall fail to remove all other property within forty-five (45) days after the expiration or earlier termination of the letting, the Port Authority may remove such property to a public warehouse for deposit or may retain the same in its own possession and in either event may sell the same at public auction, provided further that the Port Authority shall have given Lessee ten (10) days' notice of the Port Authority's intent to sell such property at public auction, the proceeds of which shall be applied: first to the expenses of removal, including repair required thereby, and of storage and sale; second, to any sums owed by Lessee to the Port Authority, with any balance remaining to be paid to Lessee; if the expenses of such removal, repair, storage and sale shall exceed the proceeds of sale, Lessee shall pay such excess to the Port Authority upon demand. Without limiting any other term or provision of this Agreement, Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, agents, employees and contractors from all claims of third persons arising out of the Port Authority's removal and disposition of property pursuant to this Section, including claims for conversion, claims for loss of or damage to property, claims for injury to persons (including death), and claims for any other damages, consequential or otherwise.

Section 36. Acceptance of Surrender of Lease

No agreement of surrender or to accept a surrender shall be valid unless and until the same shall have been reduced to writing and signed by the duly authorized representatives of the Port Authority and of Lessee. Except as expressly provided in this Section 36, neither the doing of, nor any omission to do, any act or thing, shall be deemed an acceptance of a surrender of the letting or of this Agreement.

Section 37. Notices

(a) All notices, permissions, requests, consents and approvals given or required to be given to or by either the Port Authority or Lessee, except as otherwise expressly provided herein, shall be in writing, and all such notices and requests shall be (i) personally delivered to the party or to the duly designated officer or representative of such party; or (ii) delivered to an office of such party, officer or representative during regular business hours; or (iii) delivered to the residence of such party, officer or

representative at any time; (iv) forwarded to such party, officer or representative at the office or residence address by registered or certified mail, or delivered to such party at such address by "Federal Express" or similar courier service or (v) sent by facsimile with transmittal receipt. In addition, notice to Lessee may be delivered to the Premises at any time to the offices of the terminal manager; provided, however, that said notice shall also be delivered to Lessee as set forth in subdivision (i), (ii), (iii), (iv) or (v) of the immediately preceding sentence. Lessee shall designate an office within the Port of New York District and an officer or representative whose regular place of business is at such office. Until further notice, the Port Authority hereby designates its Executive Director, and Lessee designates the person whose name appears on the first page of this Agreement as their respective officers or representatives upon whom notices and requests may be served, and the Port Authority designates its office at 225 Park Avenue South, 15th Floor, New York, New York 10003-1604, and Lessee designates its office, the address of which is set forth in Page 1 of this Agreement, as their respective offices where notices and requests may be served.

(b) If any notice is mailed or delivered, the giving of such notice shall be complete upon receipt or, in the event of a refusal by the addressee, upon the first tender of the notice to the addressee or at the permitted address.

#### Section 38. General

(a) Wherever in this Agreement Lessee agrees or is required to do or has the right to do, any act or thing, the following shall apply:

(1) If Lessee is a corporation or limited liability company, its obligations shall be performed by it and its rights shall be exercised only by its officers, managers and employees; or

(2) If Lessee is a partnership, its obligations shall be performed and its rights shall be exercised by its partners and employees only; or

(3) If Lessee is an individual, his obligations shall be performed and his rights shall be exercised by himself and his employees only;

except that Lessee may use contractors, in the performance of its obligations to maintain and repair the Premises, to perform Lessee's Construction Work, to conduct environmental assessments and to supply watching and stevedoring services, including, cooperating, clerking, checking, and extra labor functions at the Premises provided that if separate contractors are engaged to perform any of the foregoing services, nevertheless, the active management, direction, administration and executive action involved in the operations of Lessee shall all be performed at all times during the letting solely by Lessee, its officers and employees, and provided further that Lessee shall be fully responsible to the Port Authority for the acts and omissions of such contractors and their officers, agents, representatives, employees and persons on the Premises with their consent to the same extent as if the same were the employees of Lessee. None of the

provisions of this Section 38(a) shall be taken to alter, amend or diminish any obligation of Lessee assumed in relation to its invitees, business visitors, agents, representatives, contractors, customers, guests, or other persons, firms or corporations doing business with it or using or on or at the Premises with its consent.

(b) If more than one individual or other legal entity is Lessee under this Agreement, each and every obligation hereof shall be the joint and several obligation of each such individual or other legal entity.

(c) Unless otherwise stated in this Agreement, in its use of the Premises, Lessee shall act only for its own account and, without limiting the generality of the foregoing, shall not act as agent, representative, factor, broker, forwarder, bailee, or consignee without legal title to the subject matter of the consignment, except to the extent necessary for exercise of the rights of user granted by this Agreement.

(d) Lessee's representative, hereinbefore specified in this Agreement (or such substitute as Lessee may hereafter designate in writing), shall have full authority to act for Lessee in connection with this Agreement and any things done or to be done hereunder and to execute on Lessee's behalf any amendments or supplements to this Agreement or any extension thereof.

(e) The Section headings in this Agreement are inserted only as a matter of convenience and for reference, and they in no way define or limit or describe the scope or intent of any provision hereof.

(f) This Agreement does not constitute Lessee the agent or representative of the Port Authority for any purpose whatsoever. Neither a partnership nor any joint venture is hereby created, notwithstanding the fact that all or a portion of the rental to be paid hereunder may be determined by gross receipts from the operations of Lessee hereunder.

(g) As used in Sections 17 and 26, the phrase "utility, mechanical, electrical and other systems" shall mean and include (without limitation thereto) the following: machinery, engines, dynamos, boilers, elevators, escalators, incinerators and incinerator flues, systems for the supply of fuel, electricity, water, gas and steam, plumbing, heating, sewerage, drainage, ventilating, air-conditioning, communications, fire-alarm, fire-protection, sprinkler, telephone, telegraph and other systems, fire hydrants and fire hoses, and their respective wires, mains, switches, conduits, lines, tubes, valves, pipes, motors, cables, fixtures and other equipment.

(h) All designations of time herein contained shall refer to the time-system then officially in effect in the municipality wherein the Premises are located.

(i) In the event that obstruction lights are now or in the future shall be installed on the Premises, Lessee agrees to furnish the Port Authority without charge, electricity for energizing such obstruction lights daily for a period commencing thirty



(30) minutes before sunset and ending thirty (30) minutes after sunrise (as sunset and sunrise may vary from day to day throughout the year) and for such other periods as may be requested by the Port Authority.

(j) No designation in this Agreement of any area as a street, highway, roadway or other comparable characterization, whether or not by name, shall be or be deemed to be an admission, recognition or acknowledgement of public or private rights in the area so designated, or as a dedication for or a consent to any public or private use of the same. All use in this Agreement of names and designations in connection with such areas is merely for the purpose of fixing geographical locations.

(k) So long as Lessee shall pay all rentals provided for in this Agreement and shall observe and perform all the terms, covenants and conditions on Lessee's part to be observed and performed under this Agreement, Lessee may peaceably and quietly enjoy the Premises, during the term of the letting, without hindrance or molestation by anyone claiming by, through or under the Port Authority, subject, nevertheless, to the terms, covenants and conditions of this Agreement, it being understood that the Port Authority's liability hereunder shall obtain only so long as it remains the ground lessee of the Premises.

(l) The Port Authority, for the benefit of itself and designated third parties, shall have the right of access and passage for vessels along, upon and across the waters of the berthing area or any part thereof, to the extent only that such right may be exercised without interfering in any material respect with the operations of Lessee.

(m) Without in any way limiting the obligations of Lessee as elsewhere stated in this Agreement, Lessee shall be liable to the Port Authority for any damage done to the Premises or to any part thereof, or to any property of the Port Authority thereon through any act or omission of those in charge of any one or more vessels, steamers, tugboats, barges, lighters, or other floating equipment, or highway or other vehicles, or other transportation equipment while the same are at, coming to or leaving the Premises, except for damages to any property of the Port Authority (other than the Premises) caused by any one or more of such vessels, steamers, tugboats, barges, lighters, or other floating equipment, or highway or other vehicles, or other transportation equipment as may be coming to or leaving the Premises without previous knowledge or permission on the part of the Lessee and not owned or operated by one of Lessee's customers or invitees.

(n) Lessee recognizes that the Premises are subject to certain height restrictions, due primarily to the proximity to Newark Liberty Airport. The Port Authority agrees to use commercially reasonable efforts to assist Lessee in discussions and filings with the FAA to determine or establish appropriate height restrictions at the Premises.

(o) The rights of the Port Authority in the Port Newark Facility are those acquired by it pursuant to the Basic Lease, and no greater rights are granted or intended to be granted to Lessee hereunder than the Port Authority has power thereunder

to grant. The letting shall in any event terminate simultaneously with the termination or expiration of the Basic Lease. Lessee shall have no surviving obligations to pay any then unpaid rents to the Port Authority in the event of a termination of the letting under this Agreement as a result of a termination or expiration of the Basic Lease.

(p) Nothing herein contained shall prevent the Port Authority from entering into an agreement with The City of Newark pursuant to which the Basic Lease is surrendered, canceled or terminated; provided, that, The City of Newark, at the time of such agreement, assumes the obligations of the Port Authority under this Agreement.

(q) Nothing contained herein shall be deemed or construed to be an undertaking or covenant for the benefit of any third party.

(r) The parties agree that any rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be applicable to the interpretation of this Agreement or any amendments, addenda or supplements hereby or any Exhibits or Schedules hereto.

(s) This Agreement and any claim, dispute or controversy arising out of, under or related to this Agreement shall be governed by, interpreted and construed in accordance with the laws of the State of New Jersey, without regard to choice of law principles.

Section 39. Payments

All payments required of Lessee by this Agreement shall be made by mail to the Port Authority at P. O. Box 95000, Philadelphia, Pennsylvania, 19195-1517, or to such other address as may be substituted therefor. Alternatively, with the advance written permission of the Port Authority, Lessee may make such payments via wire transfer to the Port Authority to such bank and to such account number as the Port Authority shall advise Lessee in writing from time to time. Until such time as the Port Authority shall advise Lessee differently, the Port Authority designates TD Bank as the bank to which payments should be wired as follows:

Bank: TD Bank  
ABA Number:  
Account Number:

Section 40. Premises

(a) Subject to Section 58 of this Agreement and except as otherwise expressly set forth herein, the Port Authority shall deliver the Premises to Lessee in its presently existing "as is" condition. Lessee agrees to and shall take the Premises in its "as is" condition and, except as set forth herein, the Port Authority shall have no obligations under this Agreement for finishing work or preparation of any portion of the Premises for Lessee's use.

(b) Lessee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of the Premises or the suitability thereof for the operations permitted on the Premises by this Agreement. Lessee, prior to the execution of this Agreement, has thoroughly examined the Premises as existing and has found the same to be suitable and satisfactory for the operations of Lessee contemplated and permitted under this Agreement. Without limiting any obligation of Lessee to commence operations under this Agreement at the time and in the manner stated elsewhere in this Agreement, Lessee agrees that no portion of the Premises will be used initially or at any time during the Term which is in a condition unsafe or improper for the conduct of the operations of Lessee, so that there is possibility of injury or damage to life or property, and Lessee further agrees that before any use it will immediately correct any such unsafe or improper condition.

(c) Except for claims and demands which result solely from the negligent or willful acts of the Port Authority, the Port Authority shall not be liable to Lessee for injury or death to any person or persons whomsoever, or for damage to any property whatsoever at any time in the Premises, including but not limited to any such injury, death or damage from falling material, water, rain, hail, snow, gas, steam, or electricity, whether the same may leak into, or flow from any part of the Premises or from any other place or quarter.

#### Section 41. Force Majeure

(a) Neither the Port Authority nor Lessee shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder by reason of strikes, boycotts, labor disputes, embargoes, shortages of material, acts of God, acts of the public enemy, acts of superior governmental authority, weather conditions, tides, riots, rebellion, sabotage or any other circumstances for which it is not responsible and which are not within its control; provided, however, that this paragraph shall not apply to failures by Lessee to pay any Rent.

(b) The Port Authority shall be under no obligation to supply any service or services if and to the extent and during any period that the supplying of any such service or services or the use of any component necessary therefor shall be prohibited or rationed by any federal, state or municipal law, rule, regulation, requirement, order or direction and if the Port Authority deems it in the public interest to comply therewith, even though such law, rule, regulation, requirement, order or direction may not be mandatory on the Port Authority as a public agency.

(c) Except as otherwise set forth herein, no abatement, diminution of reduction of the Rent or other charges payable by Lessee shall be claimed by or allowed to Lessee for any inconvenience, interruption, cessation or loss of business or other loss caused, directly or indirectly, by any present or future law, rule, requirement, order, direction, ordinance or regulation of the United States of America, or of the state, county or city government, or of any other municipal, governmental or lawful authority

whatsoever, or by priorities, rationing or curtailment of labor or materials, or by war or any matter or thing resulting therefrom, or by any other cause or causes beyond the control of the Port Authority, nor shall this Agreement be affected by any such causes.

Section 42. Brokerage

Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Port Authority represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. Each party shall indemnify and save harmless the other of and from any and every claim for commission or brokerage made by any and all persons, firms or corporations whatsoever for services to such party in connection with the negotiation and execution of this Agreement based on such party's act or omission.

Section 43. Non-Liability of Individuals

Neither the Commissioners of the Port Authority nor any members of Lessee, nor any of them, nor any officer, agent or employee of the Port Authority or any officer, manager, agent or employee of Lessee shall be charged personally by either party with any liability, or held liable to either party under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach or attempted or alleged breach, thereof.

Section 44. Services

(a) The Port Authority shall be under no obligation to supply Lessee with any services provided by utility companies and other service providers, including but not limited to water, gas, electricity, sewer service, heat, steam, air-conditioning, telephone, telegraph, cable, or electrical guard or watch service.

(b) Lessee shall promptly pay all water-bills covering its own consumption, including but not limited to water delivered and sold by Lessee to vessels berthing at the Premises. In the event that any such water-bill or bills shall remain unpaid for a period of six (6) months after the same becomes due and payable, or in the event that any such bill remains unpaid at the date of expiration or earlier termination of the letting under this Agreement, the Port Authority may pay the same and any interest or penalties thereon, and the total payment or payments shall constitute an item of additional Rent, payable to the Port Authority on demand.

(c) Lessee agrees to heat the enclosed portions of the Premises to a sufficient temperature, or to bleed pipes, so that the plumbing, fire-protection and sprinkler system, if any, will not be damaged by reason of low temperatures.

(d) If any federal, state, municipal or other governmental body, authority or agency, or any public utility or other entity providing any service, assesses, levies, imposes, makes or increases any charge, fee, rent or assessment on the Port Authority, for any service, system or utility now or in the future supplied to or available at the Premises or to any tenant, lessee, occupant or user thereof, or to the structures or buildings, which, or a portion or portions of which, are included in the Premises, Lessee shall, at the option of the Port Authority exercised at any time and from time to time by notice to Lessee, pay, in accordance with any such notice, such charge, fee, rent or assessment or such increase thereof for the portion thereof allocated by the Port Authority to the Premises (or to the operations of Lessee under this Agreement) either directly to the governmental body, authority or agency, or to the public utility or other entity, or directly to the Port Authority, as such notice may direct. All such payments shall constitute items of additional Rent.

(e) No failure, delay or interruption in any service or services, whether such service or services shall be supplied by the Port Authority or by others, shall relieve or be construed to relieve Lessee of any of its obligations hereunder, or shall be or be construed to be an eviction of Lessee, or shall constitute grounds for any diminution or abatement of the rental or rentals payable under this Agreement, or grounds for any claim by Lessee for damages, consequential, or otherwise.

(f) Without in any way affecting the obligations of Lessee elsewhere stated in this Agreement, Lessee shall, subject to the provisions of Section 17 of this Agreement, provide, maintain and keep in good order, condition and repair any and all meters (to be located as designated by the Port Authority, other governmental authority or utility), ship-filling lines and other water-using equipment and facilities.

#### Section 45. Reporting Obligations

(a) Lessee will (i) maintain books, records and accounts with respect to the business and operations of Lessee on a separate stand-alone basis from the overall operations of Lessee's Parent and any other direct or indirect subsidiaries thereof, in accordance with good business practice and applicable law; and (ii) make available to the Port Authority, during normal business hours upon the Port Authority's reasonable prior notice to Lessee, at the office of Lessee or one of its agents or advisors solely for review by the Port Authority and its agents at such location and without taking any copies, that portion of such books, records and accounts relating to security matters at the Premises or as may reasonably be required for the Port Authority to verify calculations relating to Container Throughput Rental and reimbursement requests made from time to time.

(b) The Port Authority agrees that (i) all information delivered pursuant to paragraph (a) above, and (ii) all notes, reports and analyses prepared by the Port Authority, its representatives or its advisors in connection with their review of materials provided or made available pursuant to paragraph (a) above, will, to the fullest extent permitted by applicable law, be treated confidentially and protected from disclosure by the Port Authority, including, without limitation, pursuant to any available

exceptions or exemptions under the Port Authority's "Freedom of Information Policy and Procedure". If the Port Authority receives any request to disclose any of the information provided hereunder, the Port Authority agrees to provide Lessee with prior written notice of such requirement so that Lessee may seek a protective order or other appropriate remedy, and/or waive compliance with the terms of this provision. If such protective order or other remedy is not obtained, or if Lessee waives compliance with the provisions hereof, the Port Authority agrees to disclose only that portion of the information that it is advised by counsel is legally required and it will exercise its commercially reasonable efforts to obtain assurance that confidential treatment will be accorded to such information.

Section 46. Security Deposit

(a) Upon the Commencement Date and subsequently as set forth in Section 46(h), Lessee shall deliver to the Port Authority as security for the full, faithful and prompt performance of and compliance with, on the part of Lessee, all of the terms, provisions, covenants and conditions of this Agreement on its part to be fulfilled, kept, performed or observed, clean, irrevocable letters of credit issued to and in favor of the Port Authority by a banking institution satisfactory to the Port Authority and having its main office within the Port of New York District, in the respective amounts set forth in Section 46(h) for the respective periods therein indicated. The form and terms of each letter of credit, as well as the institution issuing it, shall be subject to the prior and continuing approval of the Port Authority, which approval shall not be unreasonably withheld, conditioned or delayed. Such letter of credit shall provide that it shall continue throughout the Term and for a period of not less than six (6) months thereafter. Such continuance may be by provision for automatic renewal or by substitution of a subsequent satisfactory clean, irrevocable letter of credit. Upon notice of cancellation of a letter of credit, Lessee agrees that unless, by a date twenty (20) days prior to the effective date of cancellation, the letter of credit is replaced by another letter of credit satisfactory to the Port Authority, the Port Authority may draw down the full amount thereof and thereafter the Port Authority will hold the same as security under this Section 46.

(b) In addition to any and all other remedies available to it, the Port Authority shall have the right, at its option at any time and from time to time, with or without notice, to draw upon said letter of credit or any part thereof in whole or partial satisfaction of any of its claims or demands against Lessee. There shall be no obligation on the Port Authority to exercise such right and neither the existence of such right nor the holding of a letter of credit shall cure any default or breach of any obligation of Lessee under this Agreement.

(c) If at any time any bank shall fail to make any payment to the Port Authority in accordance with any letter of credit issued by any such bank in favor of the Port Authority as herein provided, Lessee shall cause to be delivered to the Port Authority on demand another clean, irrevocable letter of credit satisfactory to the Port

Authority and issued by another banking institution in favor of the Port Authority and satisfactory to it, in an amount equal to the original amount of the said letter of credit.

(d) Failure to provide a letter of credit in accordance with the terms and provisions of this Section at any time during the Term and for a period of six (6) months thereafter valid and available to the Port Authority and any failure of any banking institution issuing a letter of credit in favor of the Port Authority to make one or more payments as provided in such letter of credit, shall be and be deemed to be a breach of Lessee's obligations under this Agreement. If at any time and from time to time during the Term and for a period of six (6) months thereafter a payment is made to the Port Authority under any letter of credit running in its favor as provided in this Section, Lessee shall cause to be delivered to the Port Authority on demand and within two (2) days thereafter, an additional clean, irrevocable letter of credit satisfactory to and issued in favor of the Port Authority by a banking institution satisfactory to the Port Authority, in such an amount so that at all times during the Term and for a period of six (6) months thereafter the Port Authority shall have a clean, irrevocable letter of credit in the amount required by Section 46(h). The form and content of said letter of credit shall have been approved by the Port Authority in advance.

(e) No action by the Port Authority pursuant to the terms of any letter of credit, or receipt by the Port Authority of funds from any bank issuing any such letter of credit, shall be or be deemed to be a waiver of any default by Lessee of any obligation under this Agreement and all remedies under this Agreement consequent upon such default shall not be affected by the existence of or recourse to any such letter of credit.

(f) Upon the expiration of the Term and a period of six (6) months thereafter, and upon the condition that Lessee shall then be in no wise in default after applicable notice and cure periods of any of its obligations under this Agreement the Port Authority will return the letter of credit to Lessee less the amount of any and all unpaid claims and demands (included estimated damages) of the Port Authority by reason of default or breach by Lessee of any of its obligations under this Agreement.

(g) In addition to any and all other remedies available to it, the Port Authority shall have the right, at its option, at any time and from time to time, with or without notice, to use any deposit or any part thereof resulting from a draw down of all or any part of a letter of credit provided by Lessee under this Section 46 in whole or partial satisfaction of any of the Port Authority's claims or demands against Lessee arising under this Agreement. There shall be no obligation on the Port Authority to exercise such right and neither the exercise of such right nor the holding of the deposit itself shall cure any default or breach of this Agreement on the part of Lessee.

(h) The letter of credit to be provided by Lessee to the Port Authority under this Section 46 shall be maintained in an amount equal, at all times, to the Base Rent payable (on the date payment of Base Rent commences for each such acre comprising the Premises) on either the applicable portion of the Premises on which Base Rent is due or the entire Premises, as applicable, for twelve (12) months (the "Security

Deposit”); the Security Deposit shall be adjusted, from time to time, upon the addition or subtraction of acreage to the Premises as Lessee commences payment of Base Rent on the applicable additional acreage pursuant to Section 4, by an amount which is equal to the then Base Rent payable by Lessee for a period of twelve (12) months on such acreage, provided however, that Lessee shall not be required to adjust the amount of the letter of credit at any time other than as of an anniversary of the issuance of the letter of credit and provided that additional acreage was added to the Premises during the preceding one year period (for example, if the letter of credit was issued on March 1, 2011, and additional acreage was included in the Premises on July 1, 2011, Lessee shall not be required to adjust the amount of the letter of credit until March 1, 2012).

Section 47. Affirmative Action

(a) Lessee shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons and women are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeship and on-the-job training.

(b) In addition to and without limiting the foregoing and without limiting the provisions of Schedule C attached hereto and hereby made a part hereof, it is hereby agreed that Lessee, in connection with its continuing operation, maintenance and repair of the Premises, or any portion thereof, and in connection with every award or agreement for concessions or consumer services at the Premises, shall throughout the Term commit itself to and use good faith efforts to implement an extensive program of Affirmative Action, including specific affirmative action steps to be taken by Lessee, to ensure maximum opportunities for employment and contracting by minorities and women. In meeting the said commitment Lessee agrees to submit its said extensive Affirmative Action program, including the specific affirmative action steps to be taken by Lessee to meet its aforesaid commitment, within sixty (60) days after the commencement of the Term to the Port Authority for its review and approval. Lessee shall incorporate in its said program such revisions and changes as the Port Authority and Lessee may agree upon from time to time. Lessee throughout the Term shall document its efforts in implementing the said program, shall keep the Port Authority fully advised of Lessee's progress in implementing the said program and shall supply to the Port Authority such information, data and documentation with respect thereto as the Port Authority may from time to time and at any time request, including but not limited to, annual reports. The obligations imposed on Lessee under this paragraph shall not be construed to impose any greater requirements on Lessee than those which may be imposed on Lessee under applicable law.

(c) In the implementation of this Section the Port Authority may consider compliance by Lessee with the provisions of any federal, state or local law



concerning affirmative action equal employment opportunity which are at least equal to the requirements of this Section, as effectuating the provisions of this Section. If the Port Authority determines that by virtue of such compliance with the provisions of any such federal, state or local law that the provisions hereof duplicate or conflict with such law the Port Authority may waive the applicability of the provisions of this Section to the extent that such duplication or conflict exists.

(d) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

(e) Nothing in this Section shall grant or be deemed to grant to Lessee the right to make any agreement or award for concessions or consumer services at the Premises.

**Section 48. Right of Termination - Ownership and Control**

(a) Lessee hereby represents, as of the date hereof, knowing that the Port Authority is relying on the accuracy of such representation, that it is a limited liability company organized and existing under the laws of the State of Delaware, that one thousand (1,000) membership interests constitute all of its existing membership interests, and that five hundred (500) of its membership interests are owned by Ports America and five hundred (500) of its membership interests are owned by TIL, a company incorporated in Guernsey, that there are no other membership interests in Lessee, and that there are no other individuals or corporations and no partnerships or other entities, except as later set forth in this Section, having any direct beneficial ownership of Lessee, and that each of Lessee, and to the knowledge of Lessee, Ports America and TIL, is a duly organized and validly existing corporation, partnership or other entity in good standing under the laws of the jurisdiction of its incorporation or organization and is duly qualified or authorized to do business as a foreign corporation or entity and is in good standing under the laws of each jurisdiction in which the conduct of its business or the ownership of its properties requires such qualification or authorization.

(b) Lessee hereby further represents that there are (i) no existing options, warrants, calls, rights, or other contracts of any nature to which Lessee, or its direct or indirect ownership interests, is subject requiring, and (ii) no securities of the Lessee outstanding upon which conversion or exchange would require, the issuance of any direct or indirect interest in Lessee, or other securities convertible into or exchangeable for or evidencing the right to subscribe for or purchase any direct or indirect interest in Lessee.

(c) Lessee hereby further represents that:

(1) On the date hereof, one hundred percent (100%) of the outstanding capital stock of Ports America is owned by PAH.

(2) On the date hereof, (A) one hundred percent (100%) of the outstanding capital stock of PAH is owned indirectly by the Highstar Funds; and (B) each of the Highstar Funds is managed and controlled by Highstar Capital LP.

(3) On the date hereof, one hundred percent (100%) of the outstanding ownership interests of TIL is owned by TIL Parent and one hundred percent (100%) of TIL Parent is owned and controlled in accordance with the TIL Parent Ownership.

(d) Lessee recognizes the fact that a direct or indirect transfer of the securities, membership interests or partnership interests, in Lessee or of a substantial part thereof, or any other act or transaction involving or resulting in a Change of Control of Lessee would be for practical purposes a transfer or disposition of the rights obtained by Lessee through this Agreement. Lessee further recognizes that because of the nature of the obligations of Lessee hereunder, the qualifications and identity of Lessee and its indirect controlling owners are of particular concern to the Port Authority. Lessee also recognizes that it is because of such qualifications and identity that the Port Authority is entering into this Agreement and, in doing so, is willing to accept and rely on Lessee for the faithful performance of all obligations and covenants hereunder.

(e) Upon or following the consummation of any transaction (or series of transactions in the aggregate) constituting a Change of Control of Lessee undertaken without the consent of the Port Authority, the Port Authority shall have the right to terminate this Agreement in accordance with Section 29 hereof.

(f) In the event that either Lessee or any of its direct or indirect owners enters into a binding agreement to engage in a transaction that is likely to result in a Change of Control, Lessee shall provide the Port Authority written notice of such proposed transaction, as soon as permissible, but in no event later than three (3) business days following the execution of a definitive agreement. Such notice shall contain a description of the transaction and copies of any and all definitive transaction agreements. Following receipt by the Port Authority of such written notice, the Port Authority shall have thirty (30) days to notify Lessee as to whether or not it will consent to such Change of Control, and the terms of such consent; if the Port Authority does not notify Lessee of its decision within such thirty (30) day period, the Port Authority will be deemed to have consented to such transfer of ownership or control of Lessee. The parties acknowledge and agree that, in determining whether to terminate this Agreement upon a Change of Control, the Port Authority may act in its discretion, and may determine to terminate this Agreement, or not to terminate this Agreement in accordance with the Consent Criteria; provided however, that any commitment to maintain (i) the existing management structure at Lessee, including a management continuity plan instituted at Lessee, or at Ports America or PAH, as applicable and (ii) the existing business plan (including capital expenditure amounts contemplated by Section 11 of this Lease) will be taken into account by the Port Authority when applying the Consent Criteria and its determination of Lessee's satisfaction of such Consent Criteria.

(g) In the event that the Port Authority consents or is deemed to have consented to a Change of Control, Lessee or its successor shall pay a fee (the "Consent Fee") to the Port Authority in an amount equal to the product of (x) the actual number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the immediately preceding Lease Year times (y) \$0.85 times (z) the number of full lease years remaining until the Initial Expiration Date (or, if the notice is given during the Extended Term, until the Extended Expiration Date). In the event that such Change of Control shall take place with respect to a disposition of the direct or indirect interests in or control of Lessee of either solely Highstar Capital LP or solely TIL Parent, but not both of them, the Consent Fee shall be equal to 50% of the fee calculated in accordance with the preceding sentence.

(h) In determining whether or not a Person is a Prohibited Person, Lessee (1) may rely on the certificate or report of a nationally recognized independent investigation agency reasonably acceptable to the Port Authority indicating that a Person is not a Prohibited Person and (2) shall request from any Person acquiring any interest meeting a Prohibited Person Threshold; a certificate containing representations and warranties that such Person is not a Prohibited Person. In the event that Lessee or the Port Authority determines that any holder of an interest meeting a Prohibited Person Threshold is or has become a Prohibited Person, Lessee (or its members and affiliates if applicable), upon notice from the Port Authority, will promptly take such actions as are reasonably required by the Port Authority to divest such Prohibited Person of their interest in Lessee or take such other actions as the Port Authority may reasonably require. Lessee shall have a period of 180 days from receipt of notice from the Port Authority to comply with the requests of the Port Authority before the ownership of such Prohibited Person shall be deemed a Change of Control.

(i) It is expressly acknowledged and agreed by the Port Authority that

(1) the Highstar Funds may be comprised of one or more limited partnerships or other investment vehicles as Highstar Capital LP deems may be necessary to conduct their business and, provided that such does not result in a Change of Control, the creation or termination of such limited partnerships or investment vehicles, or the alteration of their relative indirect ownership percentages in PAH, shall not constitute an Event of Default under Section 29, or any other provision, hereof, nor require the consent of the Port Authority or the payment of a Consent Fee.

(2) at any time after the date hereof, the Highstar Funds may decide to consolidate all of their ports-related businesses and, in connection therewith, to combine PAH or Ports America and/or its subsidiaries with, or move them under, one or more wholly owned subsidiaries of the Highstar Funds controlled by Highstar Capital LP, whether by merger, consolidation or other such business combination and provided such consolidation does not result in a Change of Control and that the Highstar Funds shall give the Port Authority written notice of any such transaction including a description of any resulting changes in the representation in clause (a) or (b) of this Section, such consolidation shall not constitute an Event of Default under Section 29, or any other

provision, hereof, nor require the consent of the Port Authority or the payment of a Consent Fee.

(3) it is contemplated that Ports America or TIL may become a Publicly Owned Entity, or that a parent entity of Ports America, owning a majority of the voting securities of and controlling Ports America, or TIL (which parent corporation(s) or partnership(s) are hereinafter individually and collectively, as to Ports America or TIL, called the "Parent Company" and include, in the case of Ports America PAH and intermediate holding companies controlled by the Highstar Funds) may become a Publicly Owned Entity. Notwithstanding any other provision of this Section 48, in the event that Ports America or TIL or the Parent Company of either shall become a Publicly Owned Entity and, as a result of such transaction, the ownership of Ports America or TIL set forth above in this Section 48 shall cease to be in effect, such failure to so maintain said ownership interests (in connection with any such entity becoming a Publicly Owned Entity only) shall not be an event of default under this Section 48 or a Change of Control granting the Port Authority the right to terminate this Agreement under Section 29 hereof; provided that Ports America or TIL or the relevant Parent Company, as a Publicly Owned Entity, shall be listed on a Major Stock Exchange; and provided further that, no individual, corporation, partnership or other entity (other than, in the case of Ports America, PAH or the Highstar Funds, or in the case of TIL, TIL Parent or TIL Parent Ownership) or a Publicly Owned Entity listed on a major stock exchange in the event and so long as no individual, corporation, partnership or other entity shall have Control of any class of outstanding voting securities of such Publicly Owned Entity) shall Control any class of the outstanding voting securities of Ports America or TIL or of the relevant Parent Company unless the Port Authority shall have given its prior written consent thereto, and if any such event shall occur and be continuing then the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of Section 29 hereof.

(j) Lessee acknowledges that the covenants and termination rights set forth in this Section 48 constitute a special inducement for the Port Authority to enter into this Agreement. Noncompliance on the part of Lessee with the provisions contained in this Section 48 shall constitute an Event of Default under Section 29 of this Agreement, and the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of said Section 29 hereof.

(k) The foregoing right of termination shall be in addition to all other rights of termination the Port Authority has under this Agreement and the failure of the Port Authority to exercise its right of termination under this Section at any time in which it may have such right shall not affect, waive or limit its right to exercise said right of termination at any subsequent time.

(l) Lessee shall promptly advise the Port Authority of any change in the representations made in Section 48(a) and (b).

#### Section 49. Late Charges

If Lessee should fail to pay any amount required under this Agreement when due to the Port Authority, including without limitation any payment of Rent or any payment of utility fees or charges, or other charges or fees, or if any such amount is found to be due as the result of an audit, then, in such event, the Port Authority may impose (by statement, bill or otherwise) a late charge with respect to each such unpaid amount for each late charge period herein below described during the entirety of which such amount remains unpaid, each such late charge not to exceed an amount equal to eight tenths of one percent (0.8%) of such unpaid amount for each late charge period. There shall be twenty-four late charge periods during each calendar year; each late charge period shall be for a period of at least fifteen (15) calendar days except one late charge period each calendar year may be for a period of less than fifteen (but not less than thirteen) calendar days. Without limiting the generality of the foregoing, late charge periods in the case of amounts found to have been owing to the Port Authority as the result of Port Authority audit findings shall consist of each late charge period following the date the unpaid amount should have been paid under this Agreement. Each late charge shall be payable immediately upon demand made at any time there for by the Port Authority. No acceptance by the Port Authority of payment of any unpaid amount or of any unpaid late charge amount shall be deemed a waiver of the right of the Port Authority to payment of any late charge or late charges payable under the provisions of this Section, with respect to such unpaid amount. Each late charge shall be and become additional rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of the rentals as set forth in this Agreement. Nothing in this Section is intended to, or shall be deemed to, affect, alter, modify or diminish in any way (i) any rights of the Port Authority under this Agreement, including without limitation the Port Authority's rights set forth in Section 29 of this Agreement entitled "Termination" or (ii) any obligations of Lessee under this Agreement. In the event that any late charge imposed pursuant to this Section shall exceed a legal maximum applicable to such late charge, then, in such event, each such late charge payable under this Agreement shall be payable instead at such legal maximum.

Section 50. Labor Matters

During the Term, and to the extent within its reasonable control, Lessee shall not permit any situation or condition to arise or continue that causes any Labor Troubles at, or emanating from, the Premises which interferes in any material respect with the operations (including any construction work) at the Premises. Upon written notice from the Port Authority (and provided the Port Authority has obtained a corresponding understanding and agreement from the New York Shipping Association with respect to the actions requested in such notice), Lessee will (or will cause its contractor to, as applicable) take such actions as are within its control and commercially reasonable under the circumstances to rectify any condition causing or contributing to Labor Troubles as specified in such notice. In the event of failure by Lessee (or any of its contractors, as applicable) to timely comply with the requirements of this paragraph, the Port Authority, after consultation with, and approval by, the New York Shipping Association, will have the right, by notice from the Port Authority to Lessee, to require

Lessee to (1) suspend the Port Authority's permission to Lessee to proceed with the applicable portion of each specific construction project of Lessee's Construction Work or other construction work being performed by or on behalf of Lessee (i.e. the portion to which the underlying Labor Trouble relates, or suspend the Port Authority's permission to Lessee to continue such other specific operations as reasonably necessary to immediately terminate such Labor Troubles, and Lessee will thereupon immediately cease the same, and/or (2) take such other actions, supported by the New York Shipping Association, as reasonably necessary to terminate such Labor Troubles. When Labor Troubles will be so settled that such interference no longer exists and the danger thereof has been substantially mitigated, the Port Authority by notice to Lessee will (i) reinstate the permission to Lessee to perform the subject specific construction project of Lessee's Construction Work or other construction work on all the same terms and conditions as before the suspension and/or (ii) permit Lessee to resume such other suspended activities at the Premises.

Section 51. Holdover Rent

Unless otherwise notified by the Port Authority in writing at least ninety (90) days prior to the expiration or earlier termination of the Term, in the event that Lessee remains in possession of the Premises after the expiration or earlier termination of the Term, Lessee shall be deemed a "holdover tenant" and upon notice from the Port Authority shall be obligated to pay holdover rent in accordance with applicable law as a result of Lessee's status as a holdover tenant. Nothing herein contained will be deemed to give Lessee any right to remain in possession of the Premises after the expiration or earlier termination of the Term.

Section 52. Audit Fee

(a) In the event that upon conducting an examination and audit under the provisions of this Agreement, the Port Authority determines that unpaid amounts are due to the Port Authority by Lessee (the "Audit Findings"), Lessee will be obligated, and hereby agrees, to pay to the Port Authority a service charge in the amount equal to five percent (5%) of the Audit Findings. Each such service charge will be payable within ten (10) days of demand (by notice, bill or otherwise) made at any time therefor by the Port Authority. Such service charge(s) will be exclusive of, and in addition to, any and all other monies or amounts due to the Port Authority by Lessee under this Agreement or otherwise. No acceptance by the Port Authority of payment of any unpaid amount or of any unpaid service charge will be deemed a waiver of the right of the Port Authority of payment of any late charge(s) or other service charge(s) payable under the provisions of this Agreement with respect to such unpaid amount. Each such service charge will be and become additional rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of the rentals to be paid hereunder. Nothing in this Section is intended to, or will be deemed to, affect, alter, modify or diminish in any way (1) any rights of the Port Authority under this Agreement, including, without limitation, the Port Authority's rights to terminate this Agreement or (ii) any obligations of Lessee under this Agreement.

(b) Any right of the Port Authority to conduct an audit with respect to any Lease Year shall expire on the third anniversary of the expiration of such Lease Year. Lessee shall not be required to keep or maintain such books or records of account for any Payment Period subsequent to three (3) years after the expiration of any Lease Year unless the Port Authority is engaged in an audit of such books and records, in which event such books and records shall be kept and maintained by Lessee until such audit has been completed and any amounts due as a result thereof have been paid.

Section 53. Release and Covenant Not To Sue

(a) Lessee and the Port Authority confirm that the Base Rental Rate, Container Throughput Rental rate and all other business, economic and legal terms provided for in this Agreement during the Term (the "Agreed Rental Terms") were determined by the parties in arms-length negotiations on the basis of the unique circumstances of the transactions contemplated in this Agreement, including, without limitation, the Port Authority's agreement to significantly extend the term of the Existing Lease by this Agreement as well as the agreement by the Port Authority to lease to Lessee the Added Parcels allowing for expansion of the Existing Terminal Facility.

(b) Lessee acknowledges and agrees that Lessee will derive substantial benefits from the Port Authority's agreement to enter into this Agreement, that the terms hereof represent significant and costly concessions by the Port Authority, and that without the release, agreements and acknowledgements set forth in this Section, the Port Authority likely would not have obtained the approval of its Board to enter into this Agreement. Lessee acknowledges and agrees that were it to violate the terms of this Section it would be depriving the Port Authority of a material benefit of the bargain to which Lessee and the Port Authority have agreed.

(c) Lessee acknowledges that it had the opportunity to review the rental terms of the leases as listed on Schedule D attached hereto for all other marine container terminals owned by the Port Authority and has fully considered the terms of this Agreement as well as the rental terms of such other leases as Lessee deemed relevant. The Port Authority represents that it has made available for inspection true and complete copies of (i) each of the leases contained on the compact disc, previously provided to Lessee and included as Schedule D attached hereto and (ii) a draft of that certain Consolidated Amended and Restated Agreement of Lease between the Port Authority and Maher Terminals, LLC (subdivisions (i) and (ii) collectively referred to herein as the "Port Leases"), and that the Port Leases represent all other leases from the Port Authority with marine terminal tenants in the Port. In accepting the concessions and benefits it is receiving hereunder Lessee believes and expressly agrees that the Agreed Rental Terms are fair and not unreasonably or unduly discriminatory or preferential, and that any differences between the Agreed Rental Terms and the economic, business and legal terms of the Port Leases are justified by legitimate transportation considerations, policy objectives and reasonable business judgments.

(d) In consideration of the above, Releasors, for themselves and for their respective representatives, successors, and assigns, hereby release and forever discharge the Port Authority, and its representatives, successors, and assigns of and from any and all actions, causes of action and claims arising from or relating to any attempt to challenge or otherwise invalidate the Agreed Rental Terms pursuant to the Shipping Act, or any other law, on any grounds, including, but not limited to, that such Agreed Rental Terms result in any undue or unreasonable prejudice or disadvantage to Lessee when compared with the Port Leases.

(e) In agreeing to the release set forth in this Section, each Releasor hereby covenants and agrees not to sue the Port Authority on any claim challenging the Agreed Rental Terms on any theory including, that such rates constitute an alleged violation of the Shipping Act. Releasors agree that the Port Authority shall have the right to assert any claim for breach of this Section in the federal or state courts of New York or, sitting in New York County, or the courts of New Jersey, sitting in Hudson County, and Releasors hereby consent to the jurisdiction of such courts.

(f) Releasors and Lessee and the Port Authority acknowledge and agree that the damages the Port Authority would suffer in the event that any of the Releasors was to commence a lawsuit against the Port Authority in breach of paragraph (e) above would be uncertain in amount and/or difficult to calculate and, therefore, if said breach is established, Lessee:

(1) consents to the issuance of a temporary and permanent injunction against prosecution of any suit brought in violation of the release set forth in this Section;

(2) agrees to pay the reasonable costs and attorneys' fees in connection with such suit; and

(3) agrees that the Port Authority will be entitled to one of the following options, to be determined by Lessee in its sole discretion by written notice to the Port Authority delivered within thirty (30) days following receipt by it of the Port Authority's notice specifically invoking this Section and requesting that Lessee advise the Port Authority of its choice, either:

(i) Lessee will agree to pay the Port Authority liquidated damages in the amount of Twenty Million Dollars and No Cents (\$20,000,000.00), which amount shall not be deemed to be a penalty, or

(ii) Lessee will agree that the Port Authority may terminate this Agreement and therefore Lessee's right to use and occupy the Premises; provided, however, that in order to exercise the termination right the Port Authority must deliver written notice of termination not later than thirty (30) days from receipt of



Lessee's notice of election of this subdivision (ii) and the termination shall be effective on the date specified in such notice.

**Section 54. Offsite Capital Improvements**

The Port Authority agrees to construct or cause the construction of a flyover bridge spanning over Corbin Street at Port Newark to provide direct access for the transport of containers from Lessee's on-dock container terminal on the Premises to ExpressRail Port Newark (an interim facility operated by Lessee pursuant to Port Authority Permit No. MNS-338). It is presently intended that such bridge would include a drilled pile foundation system, concrete piers, structural steel bridge structure, concrete deck, grading, drainage and associated electrical lighting. The Port Authority shall use commercially reasonable efforts to complete the afore-described bridge on or before December 31, 2012, it being understood and agreed by Lessee that, in order to accomplish same, the Port Authority will need to enter upon and use both the Premises and the area located at ExpressRail Port Newark, including, without limitation, use of these areas to store materials, supplies and equipment used in connection with construction of the bridge, without interference, interruption or hindrance by Lessee. The Port Authority shall exercise its rights pursuant to Section 26 of this Agreement and, in addition, Lessee hereby grants to the Port Authority the same rights at the area located at ExpressRail Port Newark. The date that the flyover bridge is made available to Lessee for the use intended in this Section shall be referred to as the "Rail Fly-over Completion Date".

**Section 55. [Reserved]**

**Section 56. Terminal Guarantee**

(a) Lessee shall be subject to the payment of a guaranteed rental (hereinafter called the "Guaranteed Rental") for each Lease Year during the term of the letting under this Agreement as follows: in the event that the number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during any such Lease Year shall not exceed the Terminal Guarantee Number for that Lease Year, Lessee shall pay to the Port Authority a Guaranteed Rental equal to the product obtained by multiplying (1) the difference between the Terminal Guarantee Number for that Lease Year and the actual number of Qualified Containers loaded onto or discharged from vessels berthing, at the premises during that Lease Year by (2) the Tier 1 Rental Rate in effect on the last day of that Lease Year pursuant to the provisions hereof. Any Guaranteed Rental owed under this Section shall be paid by Lessee to the Port Authority on the twentieth (20th) day of the month following the last month of the applicable Lease Year.

(b) On the twentieth (20th) day of the each month, Lessee shall render to the Port Authority a statement certified by a responsible officer of Lessee showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the preceding month and the cumulative number of Qualified

Containers loaded onto or discharged from vessels berthing at the Premises from the date of the commencement of the Lease Year for which the report is made through the last day of the preceding month; each monthly statement shall be accompanied by monthly vessel activity reports to substantiate the statement, showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the month for which the report is made, and such statement shall also include terminal statistics and measures relating to containers handled at and discharged to and from the Premises as detailed and reasonably required from time to time by the Port Authority.

(c) Upon any termination of the letting hereunder prior to the Expiration Date (even if stated to have the same effect as expiration), the number of Qualified Containers shall be reported and the Guaranteed Rental shall be paid on the last day of the first month following the month in which the effective date of such termination occurs, as follows: Lessee shall render to the Port Authority a statement certified by a responsible officer of Lessee showing the total number of Qualified Containers loaded onto or discharged from vessels berthing at the Premises during the Lease Year in which the effective date of termination falls; the payment then due on account of all Guaranteed Rental for the Lease Year in which the effective date of termination falls shall be computed based on adjusting of the Terminal Guarantee Number pro-rata based on the number of days elapsed during the relevant Lease Year through the effective termination date divided by 365 days. Any amount of the Guaranteed Rental determined to be owed to the Port Authority pursuant to such calculation shall be paid by Lessee at the time of rendering the statement.

(d) The amounts payable under this Section shall not be subject to abatement or suspension or reduction for any reason whatsoever. Termination under the provisions of this Section shall be governed by Section 29 hereof, and, without limiting any other rights of the Port Authority under this Agreement, the Port Authority shall have all of its rights hereunder upon any such termination of the letting.

#### Section 57. Railroad Operating Agreement

(a) Contemporaneously with the execution of this Agreement, Lessee and the Port Authority are entering into the Railroad Operating Agreement, pursuant to which Lessee shall be granted rights to use the area identified on "Exhibit A" attached thereto as a temporary intermodal rail facility in connection with its operations under this Agreement. The parties acknowledge that these rights were heretofore set forth in the Existing Lease and that Lessee's use and occupancy of area at the Port Newark facility to exercise its rights have been continuous and uninterrupted and there has been no reversion to the Port Authority of Lessee's interest in and to the said area. Upon full execution of the Railroad Operating Agreement, and from and after the effective date of the Railroad Operating Agreement, the provisions in the Existing Lease relating to the use of the area marked on Exhibit A-2 to the Existing Lease, the obligation to pay a Rail Facility Container Lift Fee in connection with its use of such area as an intermodal rail facility, and all other liabilities and obligations ancillary thereto, shall be deemed to be contained in the Railroad Operating Agreement; provided, however, that all obligations

and liabilities of Lessee that accrued under the Existing Lease shall survive the execution of the Railroad Operating Agreement.

(b) Without limiting the generality of paragraph (a), above, the parties acknowledge that the terms and conditions of Paragraph 8 to Supplement No.1 to the Existing Lease, made as of August 31, 2001, concerning payment of a "Rail Container Lift Fee", as said Paragraph and Rail Container Lift Fee have been amended and adjusted, respectively, from time to time, shall have no force and effect on and after the effective date of the subrules of Section H of FMC Schedule PA-10, i.e., the Tariff (as herein defined). Nothing in this paragraph shall relieve Lessee from the obligation to pay whatever the amount of the Rail Container Lift Fee that accrued, and became due and payable to the Port Authority, prior to said effective date of said subrules.

Section 58. Existing Lease Superseded

(a) The parties hereby acknowledge that the Existing Terminal Facility was occupied by Lessee pursuant to the Existing Lease. It is hereby acknowledged that Lessee has remained in continuous and uninterrupted occupancy of the Existing Terminal Facility under the Existing Lease, there has been no reversion prior to the Commencement Date, and at no time did Lessee surrender any portion of the Premises to the Port Authority.

(b) The terms, provisions and conditions of the Existing Lease shall apply to the letting of the Premises, Lessee and the rights and obligations of the parties thereto prior to the Commencement Date, and from and after the Commencement Date, the terms, provisions and conditions of this Agreement shall apply to the letting of the Premises, Lessee and the rights and obligations of the parties hereto. Accordingly, and without limiting the generality of any of the foregoing, any of the obligations under the Existing Lease which were to mature upon the expiration or termination thereof, shall be deemed to have survived and shall mature upon the expiration or termination of this Agreement.

(c) All obligations of Lessee under the Existing Lease that arose or accrued during or with respect to the period prior to the Commencement Date shall survive the execution and delivery of this Agreement. Lessee shall not, by virtue of this Agreement, be or be deemed to be released or discharged from any liabilities or obligations whatsoever arising under the Existing Lease or any other Port Authority permits or agreements including, but not limited to, any permits to make alterations all of which shall survive.

(d) All references in this Agreement to the condition of the Premises at the beginning of the term of the letting shall mean and be deemed to mean, with respect to the Existing Terminal Facility, the condition of the Premises as they existed at the beginning of the term under the Existing Lease. Further, the obligation of Lessee to remove any alterations or improvements made during the letting hereunder shall apply and pertain to any alterations and improvements made during the term of the Existing

Lease, as well as to alterations and improvements made by Lessee during the term of this Agreement.

Section 59. Container Cranes

Lessee shall use commercially reasonable efforts with respect to Lessee's container cranes located on the Premises to cause Ports America to request, in connection with any amendment, restatement, modification, refinancing or financing that occurs after the Commencement Date, that its creditors which hold a security interest in Lessee's container cranes, permit a grant by Lessee to the Port Authority of a right to purchase such container cranes. Lessee agrees that, at the expiration or termination of the letting hereunder, the Port Authority shall have a right to purchase any of Lessee's container cranes located on the Premises, which are, at such time, not subject to any restriction on Lessee's ability to grant such purchase right, if any. The purchase price for such cranes shall be, at Lessee's option, either (a) on the same terms as the best bona fide third party offer to buy such container cranes, received by Lessee after conducting a public process to solicit bids, or (b) at the fair market value of such container cranes.

Section 60. Sustainable Design

The Lessee agrees that in the performance of any work that is subject to the Section 10 of this Agreement entitled "Lessee's Construction Work," it will comply with the Port Authority's policy on sustainable design as set forth in the sustainable design guidelines promulgated by the Port Authority Engineering Department from time to time; provided that all marine container terminal tenants within the Port will be required to comply with the sustainable design guidelines, as the same may be modified or replaced from time to time.

Section 61. Entire Agreement

The within Agreement consists of pages number 1 through 114, together with Exhibits A, A-1, A-2, B, C, D-1, D-2, D-3, D-3(i), E, F and G and Schedules A, B, C and D. It constitutes the entire agreement regarding the letting of the included areas between the Port Authority and Lessee on the subject matter, and may not be changed, modified, discharged or extended, except by written instrument duly executed on behalf of both the Port Authority and Lessee. Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in this Agreement.

[Signatures on next page]

IN WITNESS WHEREOF, the Port Authority and Lessee have executed this Agreement as of the date first above written.

ATTEST:

*Richard M. Larrabee*

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

By *Richard M. Larrabee*

Name Richard M. Larrabee  
(Title) Director, Port Commerce Dept.

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

\_\_\_\_\_

By \_\_\_\_\_

Name David F. Adam  
(Title) President

IN WITNESS WHEREOF the undersigned have executed this Agreement, solely for the purpose of making those representations and covenants of such entity under Section 53(d), (e) and (f) only, as of the date first above written.

PORTS AMERICA, INC.

By: \_\_\_\_\_  
Name: Christian B.H.M. Dirx  
Title: Treasurer

TERMINAL INVESTMENT LIMITED

By: \_\_\_\_\_  
Name: Vikram Sharma  
Title: CEO



IN WITNESS WHEREOF, the Port Authority and Lessee have executed this Agreement as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

\_\_\_\_\_

By \_\_\_\_\_

Name Richard M. Larrabee  
(Title) Director, Port Commerce Dept.

WITNESS:

C.K. Darrell

Charles K. Darrell  
V.P.

PORT NEWARK CONTAINER  
TERMINAL LLC

By \_\_\_\_\_

Name David F. Adam  
(Title) President

IN WITNESS WHEREOF the undersigned have executed this Agreement, solely for the purpose of making those representations and covenants of such entity under Section 53(d), (e) and (f) only, as of the date first above written.

PORTS AMERICA, INC.

By: \_\_\_\_\_  
Name: Christian B.H.M. Dirx  
Title: Treasurer

TERMINAL INVESTMENT LIMITED

By: \_\_\_\_\_  
Name: Vikram Sharma  
Title: CEO

IN WITNESS WHEREOF, the Port Authority and Lessee have executed this Agreement as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

\_\_\_\_\_  
Secretary

By \_\_\_\_\_  
Name Richard Larrabee  
(Title) Director Port Commerce

WITNESS:

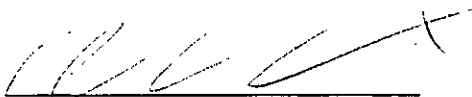
PORT NEWARK CONTAINER TERMINAL, LLC

\_\_\_\_\_

By \_\_\_\_\_  
Name David F. Adam  
(Title) President

IN WITNESS WHEREOF the undersigned have executed this Agreement, solely for the purpose of making those representations and covenants of such entity under Section 53(d), (e) and (f) only, as of the date first above written.

PORTS AMERICA, INC.

By:   
Name: Christian B.H.M. Dirx  
Title: Treasurer

TERMINAL INVESTMENT LIMITED

By: \_\_\_\_\_  
Name:  
Title:

IN WITNESS WHEREOF, the Port Authority and Lessee have executed this Agreement as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

\_\_\_\_\_

By \_\_\_\_\_

Name Richard M. Larrabee  
(Title) Director, Port Commerce Dept.

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

\_\_\_\_\_

By \_\_\_\_\_

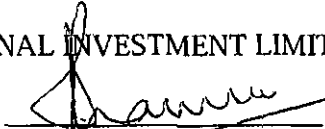
Name David F. Adam  
(Title) President

IN WITNESS WHEREOF the undersigned have executed this Agreement, solely for the purpose of making those representations and covenants of such entity under Section 53(d), (e) and (f) only, as of the date first above written.

PORTS AMERICA, INC.

By: \_\_\_\_\_  
Name:  
Title:

TERMINAL INVESTMENT LIMITED

By:   
Name: Vikram Sharma  
Title: CEO



**Exhibits A & A-1**

**Existing Terminal Facility**

Metes and Bounds:

1 N 678199.53 E 2141320.04	18 S65°52'44"E 259.96'	35 N 676735.91 E 2142845.61	52 S07°26'07"E 100.98'
2 S65°58'03"E 242.44'	19 N 677438.62 E 2142417.05	36 S24°20'11"W 57.23'	53 N 674580.08 E 2144062.71
3 N 678100.79 E 2141541.46	20 S24°01'57"W 250.27'	37 N 676683.77 E 2142822.03	54 S51°12'00"E 287.39'
4 S24°01'57"W 198.84'	21 N 677667.20 E 2142518.98	38 S65°58'03"E 839.35'	55 N 674400.00 E 2144286.68
5 N 677919.19 E 2141460.48	22 S65°58'03"E 190.65'	39 N 676341.94 E 2143588.62	56 S38°48'00"W 629.47'
6 S65°58'03"E 121.26'	23 N 677589.56 E 2142693.10	40 S20°01'44"E 74.21'	57 N 673909.43 E 2143892.25
7 N 677869.81 E 2141571.23	24 Radius = 300' 51.69'	41 N 676272.22 E 2143614.04	58 S51°12'00"E 369.05'
8 N24°01'57"E 23.99'	25 N 677539.71 E 2142706.56	42 S24°01'57"W 824.30'	59 N 673678.18 E 2144179.87
9 N 677891.72 E 2141581.00	26 S10°10'26"E 62.01'	43 N 675519.37 E 2143278.34	60 S38°48'00"W 94.44'
10 S65°58'03"E 235.91'	27 N 677478.68 E 2142717.51	44 S65°58'03"E 530.17'	61 N 673604.58 E 2144120.69
11 N 677795.64 E 2141796.66	28 Radius = 300' 169.88'	45 N 675303.45 E 2143762.55	62 N51°12'00"W 4431.41'
12 N24°01'57"E 174.85'	29 N 677311.99 E 2142699.85	46 S24°01'57"W 160.00'	63 N 676381.32 E 2140667.13
13 N 677955.33 E 2141867.67	30 S65°52'44"E 110.39'	47 N 675157.33 E 2143697.30	64 N51°12'00"W 248.94'
14 S65°58'03"E 452.46'	31 N 677266.88 E 2142800.61	48 S65°58'03"E 516.02'	65 N 676537.31 E 2140473.12
15 N 677771.06 E 2142280.91	32 S24°01'57"W 464.69'	49 N 674947.17 E 2144168.68	66 N26°59'57"E 1865.54'
16 S24°05'04"W 247.78'	33 N 676842.47 E 2142611.36	50 S24°01'57"W 292.30'	
17 N 677544.86 E 2142179.79	34 S65°32'23"W 257.35'	51 N 674680.21 E 2144049.64	

Initialed:

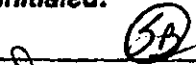

  
 For the PORT AUTHORITY  
  
 For the Lessee

EXHIBIT :



Sheet 5

THE PORT AUTHORITY OF NY & NJ

**PORT NEWARK**

Date : March 1, 2011

**Exhibit A-2**

**Existing Terminal Facility**

**Exhibit B**

**Polaris Street Property**

**Exhibit C**

**Marsh Street Property**

**Exhibit D-1**

**Phase 1 Development Parcel**

**Exhibit D-2**  
**Phase 2 Development Parcel**

**Exhibit D-3**

**Phase 3 Development Parcel**



**Exhibit D-3(i)**

**50-foot Access Roadway**

**Exhibit D-4**

**Phase 4 Development Parcel**

**Exhibit E**

**Starboard Street Property**

**Exhibit F**

**Waterfront-Shimizaki Property**

**Exhibit G**

**Initial Environmental Survey**

**EXHIBIT I**

**to Lease No. L-PN-264**

**Between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**Initialed:**

LCB  
**For the Port Authority**

MB  
**For the Lessee**

**SUBSURFACE BASELINE REPORT  
PORT NEWARK CONTAINER TERMINAL, LLC**

**OCTOBER 2000**

**PORT NEWARK CONTAINER TERMINALS LLC/P&O PORTS  
ENVIRONMENTAL BASELINE ASSESSMENT**

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## **1.0 INTRODUCTION**

In July 2000, a subsurface investigation was conducted at the former Maersk/Universal terminal at Port Newark. P&O Ports has commenced negotiations with the Port Authority regarding the leasing of this terminal area, referred to here as the Port Newark Container Terminal LLC. As part of their leasing process, P&O Ports initiated the baseline investigation. This report presents the field methods and the results of the investigation as conducted by Foster Wheeler Environmental Corporation (Foster Wheeler).

## **2.0 FIELD ACTIVITIES**

The purpose of the field investigation was to establish current environmental conditions of subsurface soils and groundwater for the area located upland of Berths 51 to 61 at Port Newark at specific locations designated by the Port Authority. The area encompassing the terminal is approximately 154 acres. Figure 1 presents the Site Plan as provided by GEOD Corporation, a NJ licensed land surveyor.

As an important part of the planning process for conducting site activities, Foster Wheeler developed a site specific work plan prior to mobilizing to the field. Included in the investigation were the drilling of 32 soil borings and installation of 12 groundwater monitoring wells at the locations shown in Figure 1. Table 2-3 provides details concerning the protocols for all analyses performed. All investigative work conducted for the baseline program was performed in accordance with details presented in the Foster Wheeler work plan and the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual, May 1992.

## 2.1 SOIL SAMPLING PROGRAM

To implement the soil sampling program, one drill rig and one earthprobe rig were mobilized on separate occasions. The soil sampling program was conducted at the site from July 13 to July 25. A hollow stem auger (HAS) drill rig and an earthprobe were utilized for the performance of the sampling. Continuous samples were collected with this earthprobe rig using 1-inch inside diameter carbon steel split-spoons. Soil borings were advanced with the HAS utilizing 4 1/4-inch inside diameter hollow stem augers. Continuous samples were collected with 2-inch inside diameter carbon steel split-spoons with all samples collected from beneath the asphalt cover and subbase to the water table. Standard penetration tests were performed on samples, per ASTM-D-1586-84 (1992) Standard Method for Penetration Test and Split-barrel Sampling of Soils.

A total of 66 soil samples, including four duplicate samples, were collected for laboratory analysis. Sample intervals for laboratory analysis in each boring were at depths of 18 to 24 inches below the soil surface and at 0 to 6 inches above the water table, where possible. Actual sample depth intervals varied depending on several factors, as follows:

- Sample recovery amount needed to be sufficient to fill sample jars. At times, an amount covering greater than a six-inch interval was collected to fulfill this requirement.
- In instances where a confining layer was encountered before reaching the water table, a sample was collected directly above the confining layer in the interests of not drilling through it.
- When elevated PID readings or a non-organic odor was detected in other split-spoon sample intervals, these samples were also sent for analysis. (Only in MW-2 and MW-5 did slight odors warrant collection of one additional sample from each soil boring.)

Soil sampling was conducted in accordance with Section 2.1 of the work plan. All sampling equipment was decontaminated according to the procedures found in Section 2.3 of this document before use at each new sample location. All soil samples were analyzed for the parameters found in Table 2-1, which also displays sample names and depths. All soil boring logs are included in Appendix A.

All residual drummed waste (17 drums in all) generated during the investigation was turned over to the Port Authority.

## 2.2 GROUNDWATER SAMPLING PROGRAM

The groundwater investigation program involved the installation of 12 groundwater monitoring wells at the terminal. Although 15 well installations were intended, a confining clay layer was found to be present at three locations prior to encountering the water table. Thus three planned monitoring well locations were abandoned after initial drilling as a result of being dry. This was done by simply placing the drill cuttings back into the dry hole from which they were obtained, and sealing the surface with asphalt "cold patch" material.

Following the previous soil boring/sampling activities at those locations to be converted to monitoring wells, well installations began approximately July 25 and completed on August 1. Well development was finished at all 12 monitoring wells by August 7 and, after the requisite two week waiting period for stabilization, groundwater sampling began on August 21. Groundwater sampling of the 12 wells was completed by August 24.

Wells were installed in 12 of the boreholes completed during the preceding soil boring/sampling program. Locations of these wells are shown on Figure 1. Tabasco Drilling Corporation, a licensed driller in the State of New Jersey, installed the wells with a Foster Wheeler geologist providing oversight. Prior to the initiation of well installation, Tabasco obtained well permits for 15 wells. However, at the time of the investigation, MW-2, MW-4, and MW-10 locations were characterized by having the confining clay layer stratigraphically higher than the water table; therefore, wells were not installed at these locations.

Wells were screened across the water table with screens extending from three feet above the water table (if possible) to seven feet below (or to the confining layer), and constructed of 2-inch diameter, Schedule 40 PVC. All wells were installed with flush mount locking caps and constructed according to NJDEP monitoring well specifications found in the May 1992 Field Sampling Procedures Manual. Well Construction Diagrams providing as-built well specifications are found in Appendix B.

Each well was developed by the pumping and surging method. Wells were allowed to stabilize for two weeks after development prior to collecting groundwater samples.

Groundwater samples were collected via low-flow sampling techniques according to the procedures outlined in Section 2.2 of the Foster Wheeler project work plan.

The submersible pump used for groundwater sampling was decontaminated prior to use on each well according to the procedures described in Section 2.3.3 of this document. Dedicated teflon-lined tubing was used for sampling each separate well, with the exception of MW-14. MW-14 was purged and sampled using a polypropylene bailer since the pump control box malfunctioned, making the pump temporarily unavailable.

To purge the well, the bailer was carefully lowered into the well, and groundwater was removed from the well and measured for the indicator parameters of pH, turbidity, conductivity, temperature, dissolved oxygen and oxidation-reduction potential. Groundwater samples were collected for MW-14 after parameter stabilization by transferring water directly from the bailer into the sample bottles. This sampling technique is considered to yield accurate analytical results, the same as might be obtained by sampling directly from a pump discharge. Foster Wheeler used a disposable, dedicated bailer for sampling MW-14, to eliminate any cross contamination concerns. NJDEP and USEPA have recognized manual bailer sampling of groundwater as being acceptable on other projects. Groundwater samples were analyzed for the parameters found in Table 2-2.

## **2.3 EQUIPMENT DECONTAMINATION**

### **2.3.1 Sampling Equipment Decontamination**

All sampling equipment, except heavy machinery and submersible pumps, were decontaminated according to the following procedure:

1. Equipment was washed with a non-phosphate detergent and potable water.
2. Equipment was rinsed with potable water.
3. Equipment was rinsed with deionized water.
4. Equipment was allowed to air dry.
5. Equipment was wrapped with aluminum foil.

All decontaminated sampling equipment was stored and handled in a manner to prevent contamination.

### **2.3.2 Heavy Machinery Decontamination**

Prior to use on-site, heavy equipment was steam cleaned. Equipment that came into contact with contaminated media, such as augers and split spoons, were decontaminated between sampling locations to prevent cross-contamination of samples collected.

### **2.3.3 Pump Decontamination**

The submersible pump used for low-flow sampling was decontaminated between well locations to prevent cross-contamination. The following decontamination procedure was used:

1. The pump was submerged into a potable water and non-phosphate detergent rinse. Water was allowed to flush through the pump.
2. The pump was then flushed with potable water.
3. The pump was then flushed with deionized water.

## **2.4 SURVEYING**

GEOD Corporation, a New Jersey licensed professional land surveyor, located all sampling points and surveyed each monitoring well and soil boring location to the nearest 0.1 foot. The top of outer casing, top of inner casing, and ground elevations for all wells were measured to the nearest 0.01 foot. The New Jersey State Plane Coordinate System (1983 version for horizontal measurements and the Port Authority system for vertical measurements) was used for reference.

### **3.0 QUALITY ASSURANCE/QUALITY CONTROL**

#### **3.1 Quality Assurance/Quality Control for the Soil Sampling Program**

Six field blanks and six trip blanks were analyzed in order to ensure the validity of the data. The field blanks and trip blanks were only analyzed for TCL VOCs. Table 3-3 presents the results for all the QA/QC samples.

The FIELDBLANK and TRIPBLANK results are utilized for validating laboratory and sampling techniques. Constituents such as methylene chloride and chloroform are typically laboratory artifacts, such as residuals from cleaning analytical equipment. Since field data were not subject to a rigid data validation process against NJDEP and/or USEPA data validation criteria, the precise source of these constituents in the blanks, and their impact, if any, is currently unknown.

#### **3.2 Quality Assurance/Quality Control for the Groundwater Sampling Program**

Four field blanks and four trip blanks were analyzed in order to ensure the validity of the data. The field blanks were analyzed for TCL VOCs, TCL SVOCs, Pesticides, PCBs, Metals, Chloride, Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Total Dissolved Solids, and Cyanide. The trip blanks were only analyzed for TCL VOCs. The results are presented in Table 3-4.

### **4.0 FIELD MEASURED PARAMETERS**

Field parameter measurements were collected and recorded during groundwater sampling activities. Depth-to-water values were collected prior to well purging. These values are found in Table 3-5. As well purging began and after each three-minute interval, field parameter measurements were collected with a HORIBA U-22 Water Quality Monitoring System. These measurements collected include pH, specific conductivity, temperature, dissolved oxygen, Eh, and turbidity. All field measured parameters are shown on Table 3-6 and the well purge data sheet for each well sampled (Appendix C).

### **5.0 FIELD OBSERVATIONS**

All soil borings were drilled through asphalt and sub-base cover. Fill material observed in the borings varied, depending on location. In some places, an orange-brown sand was found. In other locations, a gray silt and gravel layer was found. The depths for these layers varied from approximately 2 feet in the interior area of the site to greater than 18 feet near the bulkhead on the Elizabeth Channel. Below this fill material was additional fill material in the form of a semi-confining gray silt and silty clay layer. This unit varied in thickness as well, from being not present in some locations to being of an unknown thickness in others (although it is believed to be at least several feet thick in some areas). Because this unit is semi-confining, Foster Wheeler refrained from drilling through it to

avoid creating a potential pathway for contaminant migration. Where this silt and clay unit was not present, a black organic layer, or peat, was encountered. Drilling was likewise halted whenever this material was encountered.

The water table was found at varying depths below grade. In general, its gradient is toward the Elizabeth Channel, with groundwater flow moving perpendicular to the channel and toward it. The water table was not encountered before the confining layer at borings MW-4 and SB-7. Where groundwater was encountered, however, its depth varied from approximately two to ten feet below grade, with a deeper water table existing adjacent to the channel.

**TABLES**

TABLE 2-4  
 PORT NEWARK CONTAINER TERMINAL LLC/ AND PORTS NORTH AMERICA  
 SOIL SAMPLING PROGRAM

	SOIL SAMPLE	ACTUAL DEPTHS	TCL VOCs	TCL SVOCs	PESTICIDES	PCBs	TAL METALS	OTHER
1	MW-1(1-2)	1-1.67	√	√	√	√	√	√
2	MW-1(4-5)	4.33-4.75	√	√	√	√	√	√
3	MW-2(1-2)	1-1.75	√	√	√	√	√	√
4	MW-2(4-5)	4-4.75	√	√	√	√	√	√
5	MW-2(11-11.5)	10.67-11.42	√	√	√	√	√	√
6	MW-3 (1.5-2)	1.5-2	√	√	√	√	√	√
7	MW-3 (5-5.5)	5-5.5	√	√	√	√	√	√
8	MW-04(0.75-1.25)	0.75-1.25	√	√	√	√	√	√
9	MW-04(2-2.5)	2-2.33	√	√	√	√	√	√
10	MW-05(1-1.5)	1.08-1.42	√	√	√	√	√	√
11	MW-05(3.5-4)	3.33-3.83	√	√	√	√	√	√
12	MW-05(4.5-5)	4.5-4.67	√	√	√	√	√	√
13	MW-6(1.5-2)	1.5-2	√	√	√	√	√	√
14	MW-6(9.5-10)	9.5-10	√	√	√	√	√	√
15	MW-07(1-1.5)	1-1.33	√	√	√	√	√	√
16	MW-07(3.5-4)	3.42-4	√	√	√	√	√	√
17	MW-09(1-2)	0.83-1.92	√	√	√	√	√	√
18	MW-09(4-5)	4-4.83	√	√	√	√	√	√
19	MW-10(1.5-2)	1.5-2	√	√	√	√	√	√
20	MW-10(3.5-4)	3.5-4	√	√	√	√	√	√
21	MW-11(2-3)	2-3	√	√	√	√	√	√
22	MW-11(3-4)	3-4	√	√	√	√	√	√
23	MW-12(0.5-1.5)	0.5-1.58	√	√	√	√	√	√
24	MW-12(10-11)	10-11.25	√	√	√	√	√	√
23	MW-13 (1.5-2)	1.5-2	√	√	√	√	√	√
24	MW-13 (6.5-7)	6.5-7	√	√	√	√	√	√
25	MW-14(1.5-2)	1.5-2	√	√	√	√	√	√
26	MW-14(4.5-5)	4.5-5	√	√	√	√	√	√
27	MW-15(1.5-2)	1.5-2	√	√	√	√	√	√
28	MW-15(7.5-8)	7.5-8	√	√	√	√	√	√
29	SB-01(1-1.5)	0.83-1.58	√	√	√	√	√	√
30	SB-01(4-5)	4-4.83	√	√	√	√	√	√
31	SB-02(1-2)	1-1.58	√	√	√	√	√	√
32	SB-02(2.5-3)	2.58-3.08	√	√	√	√	√	√
33	SB-03(1-1.5)	1.17-1.67	√	√	√	√	√	√
34	SB-03(2-2.5)	2-2.83	√	√	√	√	√	√
35	SB-4 (1.5-2)	1.5-2	√	√	√	√	√	√
36	SB-4 (3.5-4)	3.5-4	√	√	√	√	√	√
37	SB-5 (1.5-2)	1.5-2	√	√	√	√	√	√
38	SB-5 (3.5-4)	3.5-4	√	√	√	√	√	√
39	SB-6(1-2)	1-1.75	√	√	√	√	√	√
40	SB-6(3-3.5)	2.92-3.42	√	√	√	√	√	√
41	SB-7(1-2)	1-1.75	√	√	√	√	√	√
42	SB-7(2-2.5)	2-2.42	√	√	√	√	√	√
43	SB-8 (1.5-2)	1.5-2	√	√	√	√	√	√

TCL VOCs - Target Compound List Volatile Organic Compounds

TCL SVOCs - Target Compound List Semi-Volatile Organic Compounds

TAL METALS - Target Analyte List Metals

PCBs - Polychlorinated Biphenyls

OTHER - Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Percent Solids, Cyanide



**TABLE 2-1  
PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SOIL SAMPLING PROGRAM**

	SOIL SAMPLE	ACTUAL DEPTHS	TCL VOCs	TCL SVOCs	PESTICIDES	PCBs	TAL METALS	OTHER
44	SB-8 (3.5-4)	3.5-4	√	√	√	√	√	√
45	SB-10(1.5-2)	1.17-1.67	√	√	√	√	√	√
46	SB-10(2-2.5)	2-2.58	√	√	√	√	√	√
47	SB-11(1.5-2)	1.5-2	√	√	√	√	√	√
48	SB-11(9-9.5)	9-9.5	√	√	√	√	√	√
49	SB-12(0.5-2)	0.5-1.67	√	√	√	√	√	√
50	SB-12(3-4)	3.08-4.33	√	√	√	√	√	√
51	SB-13(0.5-1.5)	0.5-1.58	√	√	√	√	√	√
52	SB-13(10-11)	10-11.25	√	√	√	√	√	√
53	SB-13A(1.5-2)	1.5-2	√	√	√	√	√	√
54	SB-13A(8.5-9)	8.5-9	√	√	√	√	√	√
55	SB-14 (1.5-2)	1.5-2	√	√	√	√	√	√
56	SB-14 (5.5-6)	5.5-6	√	√	√	√	√	√
57	SB-15 (1.5-2)	1.5-2	√	√	√	√	√	√
58	SB-15 (5.5-6)	5.5-6	√	√	√	√	√	√
59	SB-16(0.5-1)	0.5-1.08	√	√	√	√	√	√
60	SB-16(8-9)	8-8.83	√	√	√	√	√	√
61	SB-17(1.5-2)	1.5-1.92	√	√	√	√	√	√
62	SB-17(8-9)	8.33-8.67	√	√	√	√	√	√

TCL VOCs - Target Compound List Volatile Organic Compounds

TCL SVOCs - Target Compound List Semi-Volatile Organic Compounds

TAL METALS - Target Analyte List Metals

PCBs - Polychlorinated Biphenyls

OTHER - Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Percent Solids, Cyanide

TABLE 2-2  
 PORT NEWARK CONTAINER TERMINAL LLC/P AND G PORTS NORTH AMERICA  
 GROUNDWATER SAMPLING PROGRAM

	WELL ID	TCL VOCs	TCL SVOCs	PESTICIDES	PCBs	TOTAL PP METALS	OTHER	FIELD PARAMETERS*
1	MW-3	√	NA	NA	NA	NA	√*	√
2	MW-5	√	√	√	√	√	√	√
3	MW-6	√	√	√	√	√	√	√
4	MW-7	√	√	√	√	√	√	√
5	MW-8A	√	√	√	√	√	√	√
6	MW-9A	√	√	√	√	√	√	√
7	MW-11	√	√	√	√	√	√	√
8	MW-12	√	√	√	√	√	√	√
9	MW-14	√	√	√	√	√	√	√
10	MW-15	√	√	√	√	√	√	√

\* - Parameters to include temperature, pH, dissolved oxygen, turbidity, oxidation-reduction potential, specific conductivity, and flow rate.

TCL VOCs - Target Compound List Volatile Organic Compounds

TCL SVOCs - Target Compound List Semi-Volatile Organic Compounds

PCBs - Polychlorinated Biphenyls

PP - Priority Pollutant

OTHER - Chloride, Total Petroleum Hydrocarbons, Total Recoverable Phenolics, Total Dissolved Solids, and Cyanide

NA - Not Analyzed due to not enough water.

√ - Analyzed

√\* - Analyzed for Total Recoverable Phenolics only

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SOIL AND GROUNDWATER ANALYTICAL PROTOCOLS**

Parameter Name	Matrix	Container	Analytical Method	Preservatives	Maximum Holding Time
Volatile Organic Compounds +10	Water	(2) 40-mL VOA vials w/Teflon lined septums	USEPA 624	HCl to pH<2; Cool to 4°C	14 days
Semi-volatile Organic Compounds +30	Water	(2) 1L Amber glass bottles	USEPA 625	Cool to 4°C	7 days extract; 40 days analyze
Pesticides/PCBs	Water	(2) 1L Amber glass bottles	USEPA 608	Cool to 4°C	7 days extract; 40 days analyze
Metals	Water	(1) 500 ml Polyethylene bottle	USEPA 200.7/245.2	HNO <sub>3</sub> to pH<2; Cool to 4°C	6 months (Hg - 28 days)
Cyanide	Water	(1) 500 ml Polyethylene bottle	USEPA 335.2	NaOH to pH>12; Cool to 4°C	14 days
Phenolics	Water	(1) 1L Glass bottle	USEPA 420.1		28 days
Total Petroleum Hydrocarbons	Water	(1) 1L Amber glass bottle	USEPA 418.1	H <sub>2</sub> SO <sub>4</sub> or HCl to pH<2; Cool to 4°C	28 days
Total Dissolved Solids	Water	(1) 500 ml Polyethylene	USEPA 160.1	Cool to 4°C	7 days
Total Chloride	Water	(1) 500 ml Polyethylene	USEPA 325.3	Cool to 4°C	28 days
Volatile Organic Compounds +10	Soil	(1) 4 oz. Amber glass jar	SW846 8260B	Methanol; Cool to 4°C	14 days
Semi-volatile Organic Compounds +30 and	Soil	(1) 16 oz. Glass jar	SW846 8270C	Cool to 4°C	7 days extract 40 days analyze
Pesticides/PCBs	Soil		SW846 8081A/8082		7 days extract 40 days analyze
Metals	Soil		SW846 6010B/7000		6 months (Hg - 28 days)
Cyanide	Soil		SW846 9013/9010B		14 days
Phenolics	Soil		SW846 9065		28 days
Total Petroleum Hydrocarbons	Soil		USEPA 418.1M		28 days

**Note:**

All holding times listed are from time of sample collection.

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-1(1-2) O29519 Soil 7/19/00	MW-1(4-5) O29520 Soil 7/19/00	MW-2(1-2) O29516 Soil 7/19/00	MW-2(4-5) O29517 Soil 7/19/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	420 J	340 J	330 J	500 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	820	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	760	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	1400 J	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-1(1-2) O29519 Soil 7/19/00	MW-1(4-5) O29520 Soil 7/19/00	MW-2(1-2) O29516 Soil 7/19/00	MW-2(4-5) O29517 Soil 7/19/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				640 J	1380 J	1400 J	4110 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2150	4520	1980	6050
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	0.74 B	4.6	0.54 B	6.9
Barium	700	47,000	NC	12.5 B	63.6	10.2 B	51.4
Beryllium	2	2	NC	0.14 B	0.63	0.16 B	0.27 B
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	815	4630	709	1270
Chromium	240	6100	NC	3.2	9.7	5.9	18.3
Cobalt	NC	NC	NC	2.1 B	9.8	3.6 B	4.5 B
Copper	600	600	NC	2.8	22.1	5.4	19.4
Iron	NC	NC	NC	4300	27100	7250	13500

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-1(1-2) O29519 Soil 7/19/00	MW-1(4-5) O29520 Soil 7/19/00	MW-2(1-2) O29516 Soil 7/19/00	MW-2(4-5) O29517 Soil 7/19/00
Lead	400	600	NC	3.3	56.1	3.2	31.2
Magnesium	NC	NC	NC	526 B	2440	1180	2400
Manganese	NC	NC	NC	70.4	643.0	50.2	105.0
Mercury	14	270	NC	U	0.35	0.02 B	0.16
Nickel	230	4,200	100	3.3 B	20.1	12.4	8.9
Potassium	NC	NC	NC	220 B	1130	399 B	1220
Silver	110	4,100	NC	U	0.51 B	U	0.23 B
Sodium	NC	NC	NC	137 B	175 B	152 B	359 B
Thallium	2	2	NC	U	2.9	U	0.97 B
Vanadium	370	7,100	NC	6.3	15.6	9.6	20.8
Zinc	1,500	1,500	NC	11.3	55.9	16.7	42.4
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93.9	91	94.7	77.1

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

T...E 3..

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-2(11-11.5) O29518 Soil 7/19/00	MW-3 (1.5-2) O29085 Soil 7/17/00	MW-3 (5-5.5) O29086 Soil 7/17/00	MW-04(0.75-1.25) O30041 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	750 J	U	U	740 J
2-Butanone	1,000,000	1,000,000	50,000	U	2,400	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				20500 J	U	U	2450 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	37 J	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	49 J	U	370
Fluoranthene	2,300,000	10,000,000	100,000	150 J	96 J	U	U
Pyrene	1,700,000	10,000,000	100,000	120 J	120 J	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	76 J	63 J	U	U
Chrysene	9,000	40,000	500,000	98 J	75 J	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	42 J
Benzo(b)fluoranthene	900	4,000	50,000	91 J	98 J	U	U

T...E 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID	Residential	Non-Residential	Impact to	MW-2(11-11.5)	MW-3 (1.5-2)	MW-3 (5-5.5)	MW-04(0.75-1.25)
Laboratory ID	Direct	Direct	Groundwater	O29518	O29085	O29086	O30041
Matrix	Contact Soil	Contact Soil	Soil	Soil	Soil	Soil	Soil
Date	Cleanup	Cleanup	Cleanup	7/19/00	7/17/00	7/17/00	7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	69 J	U	U	U
Benzo(a)pyrene	660	660	100,000	74 J	67 J	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				5000 J	2406 J	1540 J	155 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	7240	3910	7710	1720
Antimony	14	340	NC	1.9 B	0.81 B	0.74 B	U
Arsenic	20	20	NC	29.1	5.2	8.6	7.35 B
Barium	700	47,000	NC	672	53.7	146	10.1 B
Beryllium	2	2	NC	0.58 B	0.59	0.89	0.25 B
Cadmium	39	100	NC	0.92	1	0.72	U
Calcium	NC	NC	NC	16700	1660	12800	1930
Chromium	240	6100	NC	308	27.6	39.1	6.4
Cobalt	NC	NC	NC	8.2 B	5.6	8.4	3.2 B
Copper	600	600	NC	153	34.8	37	9.7
Iron	NC	NC	NC	23300	10800	17300	5760



**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-2(11-11.5) O29518 Soil 7/19/00	MW-3 (1.5-2) O29085 Soil 7/17/00	MW-3 (5-5.5) O29086 Soil 7/17/00	MW-04(0.75-1.25) O30041 Soil 7/24/00
Lead	400	600	NC	317	43.4	52	8.9
Magnesium	NC	NC	NC	5570	2290	5120	1820
Manganese	NC	NC	NC	425.0	101.0	365.0	52.7
Mercury	14	270	NC	5.0	0.16	0.11	0.07
Nickel	230	4,200	100	21.3	16.1	19.3	11.9
Potassium	NC	NC	NC	2330	1150	2350	412 B
Silver	110	4,100	NC	3	1.1	1.6	U
Sodium	NC	NC	NC	3560	493 B	738	318 B
Thallium	2	2	NC	2.1	U	U	U
Vanadium	370	7,100	NC	28	14.3	23.5	6.4
Zinc	1,500	1,500	NC	532	70.5	83.4	23.2
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	670	U	U	2500
Total Recoverable Phenolics (ppm)	NC	NC	NC	1.4	U	U	U
Percent Solids (%)	NC	NC	NC	56.4	93.4	86.2	95.9

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-04(2-2.5) O30051 Soil 7/24/00	MW-05(1-1.5) O30050 Soil 7/24/00	MW-05(3.5-4) O30046 Soil 7/24/00	MW-05(4.5-5) O30044 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	700 J	660 J	590 J	780 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				1000 J	1300 J	1200 J	1000 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	78 J	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	50 J
Fluoranthene	2,300,000	10,000,000	100,000	140 J	U	U	U
Pyrene	1,700,000	10,000,000	100,000	130 J	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	74 J	U	U	U
Chrysene	9,000	40,000	500,000	78 J	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	62 J	U	U	U

TABLE 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-04(2-2.5) O30051 Soil 7/24/00	MW-05(1-1.5) O30050 Soil 7/24/00	MW-05(3.5-4) O30046 Soil 7/24/00	MW-05(4.5-5) O30044 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	62 J		U	U
Benzo(a)pyrene	660	660	100,000	49 J	70 J		U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1057 J	1908 J	837 J	1992 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	13700	2370	2050	2200
Antimony	14	340	NC	0.79 B	U	U	U
Arsenic	20	20	NC	3.3	0.91 B	0.63 B	2.1
Barium	700	47,000	NC	205	9.7 B	5.7 B	6.9 B
Beryllium	2	2	NC	1.2	0.28 B	0.26 B	0.3 B
Cadmium	39	100	NC	0.49 B	U	U	U
Calcium	NC	NC	NC	22700	633	504 B	645
Chromium	240	6100	NC	26.5	10.1	12.8	10.1
Cobalt	NC	NC	NC	15.6	4.1 B	3.7 B	5.4 B
Copper	600	600	NC	30.3	6.1	6	7.4
Iron	NC	NC	NC	33700	9620	7700	8120

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-04(2-2.5) O30051 Soil 7/24/00	MW-05(1-1.5) O30050 Soil 7/24/00	MW-05(3.5-4) O30046 Soil 7/24/00	MW-05(4.5-5) O30044 Soil 7/24/00
Lead	400	600	NC	31.2	3.6	3.3	3.4
Magnesium	NC	NC	NC	11400	1200	1080	1240
Manganese	NC	NC	NC	772.0	63.5	45.8	39.3
Mercury	14	270	NC	0.07	0.23	0.04	0.29
Nickel	230	4,200	100	28.1	14.1	13.7	19.8
Potassium	NC	NC	NC	4440	522	501 B	410 B
Silver	110	4,100	NC	0.27 B	U	0.14 B	0.18 B
Sodium	NC	NC	NC	902	279 B	300 B	614
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	32.1	11.5	9.7	6.3
Zinc	1,500	1,500	NC	83.2	18.3	16.3	19.8
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	90	90	120	57
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	0.96
Percent Solids (%)	NC	NC	NC	81.9	96.9	96.3	83

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

T...E 3..

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-6(1.5-2) O28789 Soil 7/14/00	MW-6(9.5-10) O28790 Soil 7/14/00	MW-07(1-1.5) O30043 Soil 7/24/00	MW-07(3.5-4) O30042 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	360 J	350 J	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	62 J	39 J	61 J	110 J
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	53 J	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	54 J	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID	Residential	Non-Residential	Impact to	MW-6(1.5-2)	MW-6(9.5-10)	MW-07(1-1.5)	MW-07(3.5-4)
Laboratory ID	Direct	Direct	Groundwater	O28789	O28790	O30043	O30042
Matrix	Contact Soil	Contact Soil	Soil	Soil	Soil	Soil	Soil
Date	Cleanup	Cleanup	Cleanup	7/14/00	7/14/00	7/24/00	7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				3900 J	2657 J	1894 J	2484 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2490	2420	2290	1890
Antimony	14	340	NC	U	0.52 B	U	U
Arsenic	20	20	NC	1.4	1.1	1.5	0.55 B
Barium	700	47,000	NC	10.9 B	7.7 B	16.4 B	6.9 B
Beryllium	2	2	NC	0.52 B	0.51 B	0.27 B	0.28 B
Cadmium	39	100	NC	0.11 B	U	0.12 B	U
Calcium	NC	NC	NC	8450	347 B	573	569
Chromium	240	6100	NC	7.9	19.3	10.3	8.3
Cobalt	NC	NC	NC	4.2 B	5 B	3.5 B	3.1 B
Copper	600	600	NC	9.9	14	9.3	5.8
Iron	NC	NC	NC	8280	8240	7930	6720

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-6(1.5-2) O28789 Soil 7/14/00	MW-6(9.5-10) O28790 Soil 7/14/00	MW-07(1-1.5) O30043 Soil 7/24/00	MW-07(3.5-4) O30042 Soil 7/24/00
Lead	400	600	NC	6.1	3.9	8.3	3.2
Magnesium	NC	NC	NC	5840	1680	1150	906
Manganese	NC	NC	NC	73.8	48.0	58.2	42.3
Mercury	14	270	NC	0.0 B	U	0.1	U
Nickel	230	4,200	100	14.6	16.1	13	13.1
Potassium	NC	NC	NC	463 B	507 B	560	397 B
Silver	110	4,100	NC	0.17 B	0.23 B	0.28 B	U
Sodium	NC	NC	NC	122 B	757	873	383 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	11.5	12.6	8.9	7.6
Zinc	1,500	1,500	NC	23.8	22.6	25.4	15.7
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	530	U	U	300
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93.7	94	96.1	90

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-09(1-2) O28408 Soil 7/13/00	MW-09(4-5) O28409 Soil 7/13/00	MW-10(1.5-2) O28797 Soil 7/14/00	MW-10(3.5-4) O28800 Soil 7/14/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	300 J	570 J	700	620 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	1,500	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	1,900
1,2,3-Trichlorobenzene	NC	NC	NC	U	870 J	U	1,500
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	36 J	47 J	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	36 J	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	49 J	U	48 J	46 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U



TABLE 3-  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-09(1-2) O28408 Soil 7/13/00	MW-09(4-5) O28409 Soil 7/13/00	MW-10(1.5-2) O28797 Soil 7/14/00	MW-10(3.5-4) O28800 Soil 7/14/00
Benzo(k)fluoranthene	900	4,000	500,000	51 J	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2450 J	3700 J	693 J	1590 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	3	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1650	2460	1630	2080
Antimony	14	340	NC	U	U	U	0.57 B
Arsenic	20	20	NC	1.6	2.1	0.38 B	0.85 B
Barium	700	47,000	NC	8.1 B	7.5 B	8.2 B	10.3 B
Beryllium	2	2	NC	0.67	0.82	0.53	0.68
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	11200	1860	320 B	1060
Chromium	240	6100	NC	5.8	8.1	3.9	6.2
Cobalt	NC	NC	NC	2.7 B	3.5 B	2.5 B	3.3 B
Copper	600	600	NC	5	5.6	3.7	4.3
Iron	NC	NC	NC	5390	8900	4580	5590

**TABLE 3-  
PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-09(1-2) O28408 Soil 7/13/00	MW-09(4-5) O28409 Soil 7/13/00	MW-10(1.5-2) O28797 Soil 7/14/00	MW-10(3.5-4) O28800 Soil 7/14/00
Lead	400	600	NC	9	5.7	2.4	3.2
Magnesium	NC	NC	NC	953	1140	673	916
Manganese	NC	NC	NC	73.0	46.7	33.1	54.7
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	9.5	7.1	4.5	6.1
Potassium	NC	NC	NC	375 B	556	276 B	393 B
Silver	110	4,100	NC	U	U	U	0.29 U
Sodium	NC	NC	NC	195 B	350 B	405 B	725
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	6.5	11	5 B	6.8
Zinc	1,500	1,500	NC	22.3	23	16.9	19.2
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	0.88	0.96	U	U
Percent Solids (%)	NC	NC	NC	97.1	88.1	97.1	90

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

T...E 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-11(2-3) O28799 Soil 7/14/00	MW-11(3-4) O28805 Soil 7/14/00	MW-13 (1.5-2) O29080 Soil 7/17/00	MW-13 (6.5-7) O29081 Soil 7/17/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	590	570 J	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
<b>VOC TICs</b>							
				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	54 J
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	240 J	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	99 J
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	39 J	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	98 J
Chrysene	9,000	40,000	500,000	U	U	U	120 J
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	220 J	140 J	37 J	81 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	130 J

T...E 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-11(2-3) O28799 Soil 7/14/00	MW-11(3-4) O28805 Soil 7/14/00	MW-13 (1.5-2) O29080 Soil 7/17/00	MW-13 (6.5-7) O29081 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	110 J
Benzo(a)pyrene	660	660	100,000	U	U	U	130 J
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	48 J
SVOC TICs				1958 J	1625 J	637 J	3050 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	1.2
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	4.6
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1690	1520	2200	9190
Antimony	14	340	NC	U	U	U	2.9 E
Arsenic	20	20	NC	0.48 B	0.39 B	1.4	40.1
Barium	700	47,000	NC	6.1 B	10.9 B	13.5 B	281
Beryllium	2	2	NC	0.55	0.67	0.39 B	0.88
Cadmium	39	100	NC	U		0.14 B	4.3
Calcium	NC	NC	NC	541	487 B	592	5300
Chromium	240	6100	NC	7.9	10.2	7.5	421
Cobalt	NC	NC	NC	3 B	2.9 B	3.1 B	8
Copper	600	600	NC	4.8	5.1	5.4	190
Iron	NC	NC	NC	5690	5060	6620	22600

**TABLE 3**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-11(2-3) O28799 Soil 7/14/00	MW-11(3-4) O28805 Soil 7/14/00	MW-13 (1.5-2) O29080 Soil 7/17/00	MW-13 (6.5-7) O29081 Soil 7/17/00
Lead	400	600	NC	3.8	3.3	4	308
Magnesium	NC	NC	NC	1000	851	1280	5790
Manganese	NC	NC	NC	38.2	31.7	44.2	270.0
Mercury	14	270	NC	U		0.04	1.5
Nickel	230	4,200	100	11.8	12.7	13.2	24
Potassium	NC	NC	NC	358 B	300 B	440 B	2220
Silver	110	4,100	NC	U	U	0.55 B	6
Sodium	NC	NC	NC	313 B	485 B	378 B	985
Thallium	2	2	NC	U	U	U	J
Vanadium	370	7,100	NC	8.3	6.2	7.9	46.6
Zinc	1,500	1,500	NC	13.8	13.5	17.6	239
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	150	U	480
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	95.2	92.2	97.6	69.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-14(1.5-2) O28801 Soil 7/14/00	MW-14(4.5-5) O28802 Soil 7/14/00	MW-15(1.5-2) O28796 Soil 7/14/00	MW-15(7.5-8) O28798 Soil 7/14/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	540 J	600	670 J	640
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	330 J	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	170 J	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	990	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	590 J	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	700	U	U	U
Naphthalene	230,000	4,200,000	100,000	16,000	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	1000	U	U	U
Naphthalene	230,000	4,200,000	100,000	300 J	U	U	U
2-Methylnaphthalene	NC	NC	NC	140 J	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	890	U	U	U
Dibenzofuran	NC	NC	NC	390	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	170 J
Fluorene	2,300,000	10,000,000	100,000	840	U	U	U
Phenanthrene	NC	NC	NC	6000 D	U	U	U
Anthracene	10,000,000	10,000,000	100,000	1300	U	U	U
Di-n-butyl phthalate	NC	NC	NC	190 J	U	290 J	U
Fluoranthene	2,300,000	10,000,000	100,000	8200 D	U	U	U
Pyrene	1,700,000	10,000,000	100,000	6900 D	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	1600	U	U	U
Benzo(a)anthracene	900	4,000	500,000	3600 D	U	U	U
Chrysene	9,000	40,000	500,000	3800 D	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	2400 ID	87 J	U	U
Benzo(b)fluoranthene	900	4,000	50,000	2300 ID	U	U	U

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PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-14(1.5-2) O28801 Soil 7/14/00	MW-14(4.5-5) O28802 Soil 7/14/00	MW-15(1.5-2) O28796 Soil 7/14/00	MW-15(7.5-8) O28798 Soil 7/14/00
Benzo(k)fluoranthene	900	4,000	500,000	2600	U	U	U
Benzo(a)pyrene	660	660	100,000	2800	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	510	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	590	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	950	U	U	U
SVOC TICs				15930 J	3030 J	2777 J	3100 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	14	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	35	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	34	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	1800	U	U	U
Aroclor-1254	NC	NC	NC	1600	U	U	U
Aroclor-1260	NC	NC	NC	730	U	U	U
Total PCBs	490	2,000	50,000	4130	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	7800	976	1360	1770
Antimony	14	340	NC	29.4	U	U	0.45 B
Arsenic	20	20	NC	16.5	1.4	0.28 B	0.53 B
Barium	700	47,000	NC	376	3.2 B	7.5 B	5.6 B
Beryllium	2	2	NC	0.66	0.56	0.48 B	0.54
Cadmium	39	100	NC	20.2	U	U	U
Calcium	NC	NC	NC	18500	6870	566	289 B
Chromium	240	6100	NC	204	5.3	5.2	6.6
Cobalt	NC	NC	NC	21.1	1.6 B	2.7 B	2.4 B
Copper	600	600	NC	866	2.5 B	4.8	3.8
Iron	NC	NC	NC	96500	3700	4440	5500

**TABLE 3-**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	MW-14(1.5-2) O28801 Soil 7/14/00	MW-14(4.5-5) O28802 Soil 7/14/00	MW-15(1.5-2) O28796 Soil 7/14/00	MW-15(7.5-8) O28798 Soil 7/14/00
Lead	400	600	NC	2250	3.9	4.3	2.9
Magnesium	NC	NC	NC	5770	641	863	882
Manganese	NC	NC	NC	724.0	90.8	30.5	31.9
Mercury	14	270	NC	26.8	0.07	U	U
Nickel	230	4,200	100	141	4.5	9.2	8.8
Potassium	NC	NC	NC	786	258 B	270 B	321 B
Silver	110	4,100	NC	9	U	0.14 B	U
Sodium	NC	NC	NC	1100	532 B	473 B	425 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	60.4	5.1 B	5.9	7.3
Zinc	1,500	1,500	NC	1360	14.6	15.9	15
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	16000	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	1.9	U	U	U
Percent Solids (%)	NC	NC	NC	93.8	93.5	96.6	95.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.



**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-01(1-1.5) O28407 Soil 7/13/00	SB-01(4-5) O28406 Soil 7/13/00	SB-02(1-2) O30052 Soil 7/24/00	SB-02(2.5-3) O30045 Soil 7/24/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	450 J	480 J	730 J	430 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	320 J	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	990 J	930 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	48 J	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	50 J	57 J	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	41 J	U
Pyrene	1,700,000	10,000,000	100,000	U	U	55 J	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	42 J	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

## TABLE 3.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-01(1-1.5) O28407 Soil 7/13/00	SB-01(4-5) O28406 Soil 7/13/00	SB-02(1-2) O30052 Soil 7/24/00	SB-02(2.5-3) O30045 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				610 J	2320 J	525 J	2336 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	3	U	U	U
Delta-BHC	NC	NC	NC	U	3	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1690	2160	2700	2060
Antimony	14	340	NC	U	0.54 B	U	U
Arsenic	20	20	NC	1.3	1.3	2.4	0.79 B
Barium	700	47,000	NC	9.9 B	8.6 B	13.5 B	6.8 B
Beryllium	2	2	NC	0.7	0.26 B	0.27 B	0.29 B
Cadmium	39	100	NC	U	U	0.14 B	U
Calcium	NC	NC	NC	2070	1480	822	685
Chromium	240	6100	NC	6.4	9.5	10.6	10.2
Cobalt	NC	NC	NC	2.7 B	3.1 B	4.5 B	3.3 B
Copper	600	600	NC	4.7	5.2	9.1	6.2
Iron	NC	NC	NC	5560	8690	8720	7560

T E 3 .

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-01(1-1.5) O28407 Soil 7/13/00	SB-01(4-5) O28406 Soil 7/13/00	SB-02(1-2) O30052 Soil 7/24/00	SB-02(2.5-3) O30045 Soil 7/24/00
Lead	400	600	NC	5.4	5.1	6.6	3.6
Magnesium	NC	NC	NC	800	1060	1550	1150
Manganese	NC	NC	NC	58.0	58.0	65.0	46.9
Mercury	14	270	NC	U	U	0.06	0.04
Nickel	230	4,200	100	6.7	6.6	14.4	12.4
Potassium	NC	NC	NC	337	429 B	538	509 B
Silver	110	4,100	NC	U	U	0.18 B	0.16 B
Sodium	NC	NC	NC	246 B	369 B	20.1 B	282 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	7.9	9.7	9.3	8
Zinc	1,500	1,500	NC	16.3	22.3	24.7	17.9
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	480	100
Total Recoverable Phenolics (ppm)	NC	NC	NC	0.95	U	U	U
Percent Solids (%)	NC	NC	NC	95.1	88.9	97.1	95.9

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-03(1-1.5) O30079 Soil 7/25/2000	SB-03(2-2.5) O30081 Soil 7/25/2000	SB-03(3-3.5) O30080 Duplicate of SB-03(2-2.5)	SB-4 (1.5-2) O29089 Soil 7/17/2000
Indeno(1,2,3-cd)pyrene	900	4,000	500,000		U	U	U
Dibenzo(a,h)anthracene	660	660	100,00		U	U	U
Benzo(g,h,i)perylene	NC	NC	NC		U	U	U
SVOC TICs				2010 J	2455 J	3684 J	2648 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC		U	U	U
Delta-BHC	NC	NC	NC		U	U	U
alpha-Chlordane	NC	NC	NC		U	U	U
4,4'-DDE	2,000	9,000	50,000		U	U	U
Endrin	17,000	310,000	50,000		U	U	U
4,4'-DDD	3,000	12,000	50,000		U	U	U
4,4'-DDT	2,000	9,000	500,000		U	U	1.3
Endrin ketone	NC	NC	NC		U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC		U	U	U
Aroclor-1254	NC	NC	NC		U	U	U
Aroclor-1260	NC	NC	NC		U	U	U
Total PCBs	490	2,000	50,000		U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2810		1950	1800
Antimony	14	340	NC		U	U	U
Arsenic	20	20	NC	1.4		0.9 B	0.54 B
Barium	700	47,000	NC	8.5 B		6.5 B	6 B
Beryllium	2	2	NC	0.27 B		0.26 B	0.25 B
Cadmium	39	100	NC	0.09 B		U	U
Calcium	NC	NC	NC	445 B		364 B	272 B
Chromium	240	6100	NC	8.6		8.6	8
Cobalt	NC	NC	NC	4.1 B		3.1 B	2.9 B
Copper	600	600	NC	6.5		7.9	4.8
Iron	NC	NC	NC	8370		7320	6500
Lead	400	600	NC	3.4		3.1	3.3
Magnesium	NC	NC	NC	1340		946	855
Manganese	NC	NC	NC	58.4		41.6	38.0
Mercury	14	270	NC	0.04		0.04	0.04

TABLE 3-  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-03(1-1.5) O30079 Soil 7/25/00	SB-03(2-2.5) O30081 Soil 7/25/00	SB-03(3-3.5) O30080 Duplicate of SB-03(2-2.5)	SB-4 (1.5-2) O29089 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2010 J	2455 J	3684 J	2648 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	1.3
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2810	1950	1800	1830
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	1.4	0.9 B	0.54 B	0.58 B
Barium	700	47,000	NC	8.5 B	6.5 B	6 B	6 B
Beryllium	2	2	NC	0.27 B	0.26 B	0.25 B	0.14 B
Cadmium	39	100	NC	0.09 B	U	U	0.13 B
Calcium	NC	NC	NC	445 B	364 B	272 B	316 B
Chromium	240	6100	NC	8.6	8.6	8	7.7
Cobalt	NC	NC	NC	4.1 B	3.1 B	2.9 B	2.8 B
Copper	600	600	NC	6.5	7.9	4.8	4.8
Iron	NC	NC	NC	8370	7320	6500	5470

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-03(1-1.5) O30079 Soil 7/25/00	SB-03(2-2.5) O30081 Soil 7/25/00	SB-03(3-3.5) O30080 Duplicate of SB-03(2-2.5)	SB-4 (1.5-2) O29089 Soil 7/17/00
Lead	400	600	NC	3.4	3.1	3.3	5
Magnesium	NC	NC	NC	1340	946	855	893
Manganese	NC	NC	NC	58.4	41.6	38.0	37.4
Mercury	14	270	NC	0.04	0.04	0.04	U
Nickel	230	4,200	100	13.6	13.2	13.2	11.1
Potassium	NC	NC	NC	570	394 B	378 B	383 B
Silver	110	4,100	NC	0.26 B	U	0.19 B	0.13
Sodium	NC	NC	NC	105 B	270 B	295 B	367 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	10.1	10.2	7.6	8.4
Zinc	1,500	1,500	NC	22.2	18.6	16	15.6
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	560	760	640	330
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93.5	95.2	94	97.8

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-54 (1.5-2) O29093 Duplicate of SB-4 (1.5-2)	SB-4 (3.5-4) O29090 Soil 7/17/00	SB-5 (1.5-2) O29091 Soil 7/17/00	SB-5 (3.5-4) O29092 Soil 7/17/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	44 J	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	42 J	U	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

T...E 3..

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-54 (1.5-2) O29093 Duplicate of SB-4 (1.5-2)	SB-4 (3.5-4) O29090 Soil 7/17/00	SB-5 (1.5-2) O29091 Soil 7/17/00	SB-5 (3.5-4) O29092 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				2010 J	1680 J	1676 J	1930 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1770	2260	1810	1920
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	0.78 B	0.46 B	0.76 B	0.41 B
Barium	700	47,000	NC	6 B	9.7 B	8.6 B	9.8 B
Beryllium	2	2	NC	0.18 B	0.17 B	0.14 B	0.16 B
Cadmium	39	100	NC	0.1 B	U	0.12 B	U
Calcium	NC	NC	NC	323 B	567 B	389 B	509 B
Chromium	240	6100	NC	10.6	7.1	6.5	6.8
Cobalt	NC	NC	NC	3 B	3.4 B	3 B	3 B
Copper	600	600	NC	4.6	5.7	5.3	5.8
Iron	NC	NC	NC	6840	5930	6370	5270



T...E 3..

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-54 (1.5-2) O29093 Duplicate of SB-4 (1.5-2)	SB-4 (3.5-4) O29090 Soil 7/17/00	SB-5 (1.5-2) O29091 Soil 7/17/00	SB-5 (3.5-4) O29092 Soil 7/17/00
Lead	400	600	NC	3.7	4.5	3.2	3.8
Magnesium	NC	NC	NC	837	1070	874	1040
Manganese	NC	NC	NC	41.5	37.8	37.8	33.8
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	13.9	14	13.1	14.9
Potassium	NC	NC	NC	408 B	454 B	359 B	395 B
Silver	110	4,100	NC	U	U	U	U
Sodium	NC	NC	NC	336 B	623	349 B	403 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	9.8	8.5	8.3	6.8
Zinc	1,500	1,500	NC	14.4	17.9	15.5	15.5
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	97.6	84.4	96.5	90.7

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-6(1-2) O29515 Soil 7/19/00	SB-6(3-3.5) O29514 Soil 7/19/00	SB-7(1-2) O29521 Soil 7/19/00	SB-7(2-2.5) O29522 Soil 7/19/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	290 J	340 J	410 J	580 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	1100 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	40 J
Pyrene	1,700,000	10,000,000	100,000	U	U	U	47 J
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	44 J
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	73 J	U	U	56 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	50 J

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-6(1-2) O29515 Soil 7/19/00	SB-6(3-3.5) O29514 Soil 7/19/00	SB-7(1-2) O29521 Soil 7/19/00	SB-7(2-2.5) O29522 Soil 7/19/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	43 J
Benzo(a)pyrene	660	660	100,000	U	U	U	41 J
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1790 J	500 J	1157 J	8607 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	2.5	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	19	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	3770	1750	3230	6250
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	2	4	1.4	6.5
Barium	700	47,000	NC	33.6	29	16.1 B	149
Beryllium	2	2	NC	0.22 B	0.21 B	0.21 B	0.41 B
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	8050	2360	2270	15100
Chromium	240	6100	NC	7.6	5.4	8.8	48.8
Cobalt	NC	NC	NC	3.2 B	4.1 B	3.3 B	6.5
Copper	600	600	NC	7	16	7.6	44.2
Iron	NC	NC	NC	8700	5040	7160	15700

TABLE 3-1  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-6(1-2) O29515 Soil 7/19/00	SB-6(3-3.5) O29514 Soil 7/19/00	SB-7(1-2) O29521 Soil 7/19/00	SB-7(2-2.5) O29522 Soil 7/19/00
Lead	400	600	NC	6.7	32.6	11.1	65.4
Magnesium	NC	NC	NC	4350	1130	1520	4750
Manganese	NC	NC	NC	82.7	83.9	126.0	383.0
Mercury	14	270	NC	0.08	0.12	U	0.48
Nickel	230	4,200	100	3.9 B	6.7	15.3	64.7
Potassium	NC	NC	NC	367 B	370 B	358 B	1700
Silver	110	4,100	NC	U	U	U	0.62 B
Sodium	NC	NC	NC	193 B	272 B	369 B	1180
Thallium	2	2	NC	U	U	U	0.99 B
Vanadium	370	7,100	NC	13.3	12.2	12.8	23.4
Zinc	1,500	1,500	NC	14.3	66.5	19.4	92.4
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	260	1200
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	93	86.2	92.4	87.2

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-8 (1.5-2) O29087 Soil 7/17/00	SB-8 (3.5-4) O29088 Soil 7/17/00	SB-10(1.5-2) O30083 Soil 7/25/00	SB-10(2-2.5) O30082 Soil 7/25/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	8230 J	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	50 J	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	44 J	U	U
Phenanthrene	NC	NC	NC	U	350 J	U	U
Anthracene	10,000,000	10,000,000	100,000	U	89 J	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	45 J	U
Fluoranthene	2,300,000	10,000,000	100,000	U	340 J	U	U
Pyrene	1,700,000	10,000,000	100,000	U	370 J	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	170 J	U	U
Chrysene	9,000	40,000	500,000	U	190 J	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	37 J	48 J	U	U
Benzo(b)fluoranthene	900	4,000	50,000	U	160 J	U	U

TABLE 3.1

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-8 (1.5-2) O29087 Soil 7/17/00	SB-8 (3.5-4) O29088 Soil 7/17/00	SB-10(1.5-2) O30083 Soil 7/25/00	SB-10(2-2.5) O30082 Soil 7/25/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	130 J	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	56 J	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	69 J	U	U
SVOC TICs				1357 J	1756 J	2335 J	3185 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	150
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	150
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2790	4360	2970	2790
Antimony	14	340	NC	U	U	U	0.56 B
Arsenic	20	20	NC	0.9 B	5.1	0.88 B	3.1
Barium	700	47,000	NC	5.8 B	84.2	11.7 B	10 B
Beryllium	2	2	NC	0.65	0.72	0.29 B	0.53 B
Cadmium	39	100	NC	0.21 B	1	0.08 U	0.26 B
Calcium	NC	NC	NC	1880	5480	603	526 B
Chromium	240	6100	NC	39.5	37.3	9.1	29.3
Cobalt	NC	NC	NC	7.5	5.9	4.3 B	7
Copper	600	600	NC	5.9	32.4	6.2	5.6
Iron	NC	NC	NC	12000	11100	8590	21200

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-8 (1.5-2) O29087 Soil 7/17/00	SB-8 (3.5-4) O29088 Soil 7/17/00	SB-10(1.5-2) O30083 Soil 7/25/00	SB-10(2-2.5) O30082 Soil 7/25/00
Lead	400	600	NC	4.2	38.4	3.8	4.4
Magnesium	NC	NC	NC	2320	3070	1540	956
Manganese	NC	NC	NC	58.4	167.0	58.0	71.7
Mercury	14	270	NC	0.09	0.13	0.04	0.05
Nickel	230	4,200	100	48.1	24.2	17.6	28.6
Potassium	NC	NC	NC	429 B	1160	729	516 B
Silver	110	4,100	NC	1 B	1.1 B	U	0.21 B
Sodium	NC	NC	NC	490 B	626	437 B	499 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	11.8	17	9.9	27.7
Zinc	1,500	1,500	NC	25.5	86.4	21.2	32
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	270	1400
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	96.1	86.8	95.3	93

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

TABLE 3-  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-11(1.5-2) O28792 Soil 7/14/00	SB-11(9-9.5) O28793 Soil 7/14/00	SB-12(0.5-2) O28414 Soil 7/13/00	SB-12(3-4) O28415 Soil 7/13/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	620 J	480 J	550 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	390 J	350 J
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	43 J	U	58 J
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	U	U	58 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U



**TABLE 3-1  
PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-11(1.5-2) O28792 Soil 7/14/00	SB-11(9-9.5) O28793 Soil 7/14/00	SB-12(0.5-2) O28414 Soil 7/13/00	SB-12(3-4) O28415 Soil 7/13/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,00	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1734 J	3890 J	5850 J	1100 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	2	2
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2270	1500	2050	2520
Antimony	14	340	NC	0.43 B	U	0.44 B	U
Arsenic	20	20	NC	0.99 B	0.51 B	0.75 B	0.81 B
Barium	700	47,000	NC	11.3 B	6.7 B	9.3 B	17.4 B
Beryllium	2	2	NC	0.49 B	0.5 B	0.21 B	0.3 B
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	1880	301 B	472 B	519 B
Chromium	240	6100	NC	11.8	7.3	8	11.9
Cobalt	NC	NC	NC	3.6 B	2.8 B	3.8 B	3.8 B
Copper	600	600	NC	6.7	4	5.9	10.8
Iron	NC	NC	NC	10000	5050	7280	7390

TABLE 3--

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-11(1.5-2) O28792 Soil 7/14/00	SB-11(9-9.5) O28793 Soil 7/14/00	SB-12(0.5-2) O28414 Soil 7/13/00	SB-12(3-4) O28415 Soil 7/13/00
Lead	400	600	NC	5.7	2.7	4.9	5.3
Magnesium	NC	NC	NC	2100	729	1100	1210
Manganese	NC	NC	NC	63.8	29.2	43.2	39.7
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	13.8	11	13.4	16.3
Potassium	NC	NC	NC	446 B	275 B	421 B	550
Silver	110	4,100	NC	0.28 B	0.17 B	U	U
Sodium	NC	NC	NC	624	471 B	245 B	226 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	11.2	6.9	10	11
Zinc	1,500	1,500	NC	19.6	12.9	19.3	21.7
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	0.78	U	0.77	U
Percent Solids (%)	NC	NC	NC	96.2	91.3	96.9	89.3

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-13(0.5-1.5) O28410 Soil 7/13/00	SB-13(10-11) O28411 Soil 7/13/00	SB-13A(1.5-2) O28803 Soil 7/14/00	SB-13A(8.5-9) O28804 Soil 7/14/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	550 J	390 J	490 J	560 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	70 J	52 J	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	160 J	44 J	53 J	U
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-13(0.5-1.5) O28410 Soil 7/13/00	SB-13(10-11) O28411 Soil 7/13/00	SB-13A(1.5-2) O28803 Soil 7/14/00	SB-13A(8.5-9) O28804 Soil 7/14/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1270 J	2480 J	2220 J	2740 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	1	2	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	2000	2050	2190	1700
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	1.2	0.89 B	0.88 B	0.69 B
Barium	700	47,000	NC	9.5 B	5.5 B	9.4 B	5.4 B
Beryllium	2	2	NC	0.75	0.82	0.66	0.65
Cadmium	39	100	NC	U	U	U	U
Calcium	NC	NC	NC	913	415 B	525	432 B
Chromium	240	6100	NC	9	9.6	8.1	9.6
Cobalt	NC	NC	NC	3.5 B	3.9 B	3.3 B	3.2 B
Copper	600	600	NC	5.4	3.7	4.3	4.2
Iron	NC	NC	NC	7290	6650	7450	6110

T E 3

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-13(0.5-1.5) O28410 Soil 7/13/00	SB-13(10-11) O28411 Soil 7/13/00	SB-13A(1.5-2) O28803 Soil 7/14/00	SB-13A(8.5-9) O28804 Soil 7/14/00
Lead	400	600	NC	5.4	3.9	4.4	4.1
Magnesium	NC	NC	NC	1360	1010	1180	916
Manganese	NC	NC	NC	42.7	41.0	47.7	34.4
Mercury	14	270	NC	U	U	0.02 B	U
Nickel	230	4,200	100	13.4	11.3	13	16.7
Potassium	NC	NC	NC	396 B	390 B	468 B	386 B
Silver	110	4,100	NC	U	U	U	0.2 B
Sodium	NC	NC	NC	498 B	260 B	340 B	437 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	9.9	9.7	10.3	8.6
Zinc	1,500	1,500	NC	17.4	19	17.5	15.6
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	110
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	95.5	88	97.2	95.5

• - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**TABLE 3-i**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-14 (1.5-2) O29082 Soil 7/17/00	SB-14 (5.5-6) O29083 Soil 7/17/00	SB-44 (5.5-6) O29084 Duplicate of SB-14 (5.5-6)	SB-15 (1.5-2) O29077 Soil 7/17/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	U	U
2-Butanone	1,000,000	1,000,000	50,000	3,100	U	2,800	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	750 J
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	39 J	46 J	50 J	61 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

TABLE 3-

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-14 (1.5-2) O29082 Soil 7/17/00	SB-14 (5.5-6) O29083 Soil 7/17/00	SB-44 (5.5-6) O29084 Duplicate of SB-14 (5.5-6)	SB-15 (1.5-2) O29077 Soil 7/17/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1819 J	1230 J	4538 J	1305 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	3200	2260	2090	869
Antimony	14	340	NC	U	U	U	U
Arsenic	20	20	NC	2.6	1.4	2	1.3
Barium	700	47,000	NC	20.8	8.8 B	8.5 B	8.1 B
Beryllium	2	2	NC	0.52	0.48 B	0.48 B	0.26 B
Cadmium	39	100	NC	0.45 B	0.13 B	U	0.25 B
Calcium	NC	NC	NC	1090	580	878	373 B
Chromium	240	6100	NC	13	6.6	5.7	5.3
Cobalt	NC	NC	NC	4.1 B	2.9 B	2.3 B	1.2 B
Copper	600	600	NC	11.9	7	5.3	5.5
Iron	NC	NC	NC	8560	6760	6310	2140

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-14 (1.5-2) O29082 Soil 7/17/00	SB-14 (5.5-6) O29083 Soil 7/17/00	SB-44 (5.5-6) O29084 Duplicate of SB-14 (5.5-6)	SB-15 (1.5-2) O29077 Soil 7/17/00
Lead	400	600	NC	10.6	5.4	3.6	4.6
Magnesium	NC	NC	NC	1450	1020	974	510 B
Manganese	NC	NC	NC	60.8	43.9	42.1	53.3
Mercury	14	270	NC	0.09	0.09	U	0.2
Nickel	230	4,200	100	9.5	5.7	5.7	3.5 B
Potassium	NC	NC	NC	576	457 B	440 B	221 B
Silver	110	4,100	NC	0.59 B	0.62 B	0.41 B	0.23 B
Sodium	NC	NC	NC	336 B	445 B	444 B	153 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	12.1	8.7	8.4	3.5 B
Zinc	1,500	1,500	NC	32.6	21	19.8	16.2
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	U	U
Percent Solids (%)	NC	NC	NC	96.4	91.1	90.3	94.9

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.



**TABLE 3-**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-45 (1.5-2) O29079 Duplicate of SB-15(1.5-2)	SB-15 (5.5-6) O29078 Soil 7/17/00	SB-16(0.5-1) O28412 Soil 7/13/00	SB-16(8-9) O28413 Soil 7/13/00
<b>VOCs - ug/kg</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	310 J	350 J
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				U	U	U	U
<b>SVOCs - ug/kg</b>							
Isophorone	1,100,000	10,000,000	50,000	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
2-Methylnaphthalene	NC	NC	NC	U	U	U	U
Acenaphthylene	NC	NC	NC	U	U	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U	U	U
Dibenzofuran	NC	NC	NC	U	U	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U	U	U
Phenanthrene	NC	NC	NC	U	U	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U	59 J	42 J
Fluoranthene	2,300,000	10,000,000	100,000	U	U	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U	U	U
Chrysene	9,000	40,000	500,000	U	U	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	58 J	100 J	160 J	110 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U	U	U

T...E 3..

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-45 (1.5-2) O29079 Duplicate of SB-15(1.5-2)	SB-15 (5.5-6) O29078 Soil 7/17/00	SB-16(0.5-1) O28412 Soil 7/13/00	SB-16(8-9) O28413 Soil 7/13/00
Benzo(k)fluoranthene	900	4,000	500,000	U	U	U	U
Benzo(a)pyrene	660	660	100,000	U	U	U	U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	U	U	U	U
Dibenzo(a,h)anthracene	660	660	100,000	U	U	U	U
Benzo(g,h,i)perylene	NC	NC	NC	U	U	U	U
SVOC TICs				1517 J	2340 J	1030 J	730 J
<b>Pesticides - ug/kg</b>							
Beta-BHC	NC	NC	NC	U	U	U	U
Delta-BHC	NC	NC	NC	U	U	U	U
alpha-Chlordane	NC	NC	NC	U	U	U	U
4,4'-DDE	2,000	9,000	50,000	U	U	U	U
Endrin	17,000	310,000	50,000	U	U	U	U
4,4'-DDD	3,000	12,000	50,000	U	U	U	U
4,4'-DDT	2,000	9,000	500,000	U	U	U	U
Endrin ketone	NC	NC	NC	U	U	U	U
<b>PCBs - ug/kg</b>							
Aroclor-1248	NC	NC	NC	U	U	U	U
Aroclor-1254	NC	NC	NC	U	U	U	U
Aroclor-1260	NC	NC	NC	U	U	U	U
Total PCBs	490	2,000	50,000	U	U	U	U
<b>Metals - mg/kg</b>							
Aluminum	NC	NC	NC	1330	1180	2260	3160
Antimony	14	340	NC	1.3 B	U	U	U
Arsenic	20	20	NC	1.9	1.1 B	1 B	1.6
Barium	700	47,000	NC	11.2 B	4.4 B	8.4 B	8.4 B
Beryllium	2	2	NC	0.34 B	0.34 B	0.84	0.27 B
Cadmium	39	100	NC	0.41 B	U	U	U
Calcium	NC	NC	NC	335 B	485 B	776	543
Chromium	240	6100	NC	8.2	4.3	8.2	19.6
Cobalt	NC	NC	NC	1.8 B	1.3 B	4.1 B	4.4 B
Copper	600	600	NC	6.3	2.3 B	7.2	7
Iron	NC	NC	NC	3560	2540	7350	12500

**TABLE 3-**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-45 (1.5-2) O29079 Duplicate of SB-15(1.5-2)	SB-15 (5.5-6) O29078 Soil 7/17/00	SB-16(0.5-1) O28412 Soil 7/13/00	SB-16(8-9) O28413 Soil 7/13/00
Lead	400	600	NC	6.7	2.7	6.8	4.7
Magnesium	NC	NC	NC	689	676	1360	1420
Manganese	NC	NC	NC	72.9	37.5	52.9	65.9
Mercury	14	270	NC	U	U	U	U
Nickel	230	4,200	100	4.9	3.6 B	12.7	16.8
Potassium	NC	NC	NC	331 B	342 B	431 B	638
Silver	110	4,100	NC	0.36 B	U	U	U
Sodium	NC	NC	NC	96.5 B	U	416 B	235 B
Thallium	2	2	NC	U	U	U	U
Vanadium	370	7,100	NC	4.6 B	4 B	10	17.2
Zinc	1,500	1,500	NC	22.1	10.8	23.7	24
<b>Other</b>							
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	U	U	U	U
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U	0.96	0.79
Percent Solids (%)	NC	NC	NC	94.3	78.5	93.8	94.5

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**FORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-17(1.5-2) O30048 Soil 7/24/00	SB-17(8-9) O30049 Soil 7/24/00
<b>VOCs - ug/kg</b>					
Methylene Chloride	49,000	210,000	1,000	560 J	570 J
2-Butanone	1,000,000	1,000,000	50,000	U	U
Chloroform	19,000	28,000	1,000	U	U
Toluene	1,000,000	1,000,000	500,000	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U
Naphthalene	230,000	4,200,000	100,000	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U
VOC TICs				1000 J	1000 J
<b>SVOCs - ug/kg</b>					
Isophorone	1,100,000	10,000,000	50,000	U	U
Naphthalene	230,000	4,200,000	100,000	U	U
2-Methylnaphthalene	NC	NC	NC	U	U
Acenaphthylene	NC	NC	NC	U	U
Acenaphthene	3,400,000	10,000,000	100,000	U	U
Dibenzofuran	NC	NC	NC	U	U
Diethyl phthalate	10,000,000	10,000,000	50,000	U	U
Fluorene	2,300,000	10,000,000	100,000	U	U
Phenanthrene	NC	NC	NC	U	U
Anthracene	10,000,000	10,000,000	100,000	U	U
Di-n-butyl phthalate	NC	NC	NC	U	U
Fluoranthene	2,300,000	10,000,000	100,000	U	U
Pyrene	1,700,000	10,000,000	100,000	U	U
Butylbenzylphthalate	1,100,000	10,000,000	100,000	U	U
Benzo(a)anthracene	900	4,000	500,000	U	U
Chrysene	9,000	40,000	500,000	U	U
Bis(2-Ethylhexyl) phthalate	49,000	210,000	100,000	U	150 J
Benzo(b)fluoranthene	900	4,000	50,000	U	U

**TABLE 3-1**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-17(1.5-2) O30048 Soil 7/24/00	SB-17(8-9) O30049 Soil 7/24/00
Benzo(k)fluoranthene	900	4,000	500,000		U
Benzo(a)pyrene	660	660	100,000		U
Indeno(1,2,3-cd)pyrene	900	4,000	500,000		U
Dibenzo(a,h)anthracene	660	660	100,00		U
Benzo(g,h,i)perylene	NC	NC	NC		U
SVOC TICs				1414 J	260 J
<b>Pesticides - ug/kg</b>					
Beta-BHC	NC	NC	NC		U
Delta-BHC	NC	NC	NC		U
alpha-Chlordane	NC	NC	NC		U
4,4'-DDE	2,000	9,000	50,000		U
Endrin	17,000	310,000	50,000		U
4,4'-DDD	3,000	12,000	50,000		U
4,4'-DDT	2,000	9,000	500,000		U
Endrin ketone	NC	NC	NC		U
<b>PCBs - ug/kg</b>					
Aroclor-1248	NC	NC	NC		U
Aroclor-1254	NC	NC	NC		U
Aroclor-1260	NC	NC	NC		U
Total PCBs	490	2,000	50,000		U
<b>Metals - mg/kg</b>					
Aluminum	NC	NC	NC	2080	2440
Antimony	14	340	NC		U
Arsenic	20	20	NC	1.7	1.5
Barium	700	47,000	NC	8.2 B	10.9 B
Beryllium	2	2	NC	0.29 B	0.3 B
Cadmium	39	100	NC		U
Calcium	NC	NC	NC	4240	3740
Chromium	240	6100	NC	6.3	8
Cobalt	NC	NC	NC	3.3 B	3.7 B
Copper	600	600	NC	5.4	6.5
Iron	NC	NC	NC	7120	7370

**TABLE 3.**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**SUMMARY OF ALL DETECTIONS FOUND IN SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	SB-17(1.5-2) O30048 Soil 7/24/00	SB-17(8-9) O30049 Soil 7/24/00
Lead	400	600	NC	3.5	3.6
Magnesium	NC	NC	NC	1400	2890
Manganese	NC	NC	NC	76.1	62.8
Mercury	14	270	NC	0.04	0.04 B
Nickel	230	4,200	100	10.1	11.4
Potassium	NC	NC	NC	470 B	564
Silver	110	4,100	NC	0.16 B	U
Sodium	NC	NC	NC	89.7 B	167 B
Thallium	2	2	NC	U	U
Vanadium	370	7,100	NC	7.7	9.7
Zinc	1,500	1,500	NC	19	18.2
<b>Other</b>					
Total Petroleum Hydrocarbons (ppm)	NC	NC	NC	110	50
Total Recoverable Phenolics (ppm)	NC	NC	NC	U	U
Percent Solids (%)	NC	NC	NC	97.5	89.1

\* - Total Xylenes

Shading - Exceedance of Standard

J - Estimated

U - Undetected

B - Concentration is less than contractual detection limit  
but greater than instrument detection limit.

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	MW-3 O32972 Groundwater 8/22/2000	MW-5 O32899 Groundwater 8/21/2000	MW-6 O33035 Groundwater 8/23/2000	MW-7 O32969 Groundwater 8/22/2000	MW-77 O32970 Duplicate of MW-7	MW-8A O33040 Groundwater 8/23/2000
<b>VOCs</b>							
Carbon Disulfide	NC	U	U	U	U	U	U
Chloroform	6	U	U	U	U	2.2	U
VOC TICs		U	U	U	U	U	U
<b>SVOCs</b>							
Phenol	4,000	NA	U	U	U	U	U
Dimethylphthalate	10	NA	U	U	U	U	U
Acenaphthene	400	NA	U	U	U	U	U
Di-n-butylphthalate	NC	NA	U	3	U	1.4	2.2
Bis(2-Ethylhexyl)phthalate	30	NA	U	U	U	U	U
SVOC TICs		NA	15.7	U	U	U	U
<b>Pesticides</b>							
Heptachlor	0.4	NA	U	U	U	U	0.003
Dieldrin	0.03	NA	U	0.003	U	U	U
4,4'-DDT	0.1	NA	U	U	U	U	U
<b>PCBs</b>							
Total PCBs	0.5	NA	U	U	U	U	U
<b>Metals</b>							
Silver	NC	NA	U	U	U	U	U
Arsenic	8	NA	U	U	U	U	U
Beryllium	20	NA	U	U	U	U	U
Cadmium	4	NA	U	U	U	U	U
Chromium	100	NA	U	2.7	U	U	U
Copper	1,000	NA	U	U	U	U	U
Thallium	10	NA	U	U	U	U	U
Nickel	100	NA	U	U	U	U	U
Lead	10	NA	U	U	U	U	U
Antimony	20	NA	U	9.6	U	U	U
Selenium	50	NA	U	U	5.1	U	3.1
Zinc	5,000	NA	U	45.2	25.8	29.1	70.9

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID	New Jersey	MW-3	MW-5	MW-6	MW-7	MW-77	MW-8A
Lab ID	Groundwater	O32972	O32899	O33035	O32969	O32970	O33040
Matrix	Quality	Groundwater	Groundwater	Groundwater	Groundwater	Duplicate of	Groundwater
Date	Standards	8/22/00	8/21/00	8/23/00	8/22/00	MW-7	8/23/00
<b>Other</b>							
Chloride (mg/L)	250	NA	2400	6700	36	36	480
Total Petroleum Hydrocarbons (mg/L)	NC	NA	2.7	2.5	2.4	2.3	1.6
Total Dissolved Solids (mg/L)	500	NA	4800	8700	160	160	1100
Cyanide (mg/L)	0.2	NA	U	U	0.066	0.058	U

NA - Not Analyzed due to not enough water.

NC - No Criteria

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

Results are in ug/L unless otherwise stated.



TABLE 3-2  
 PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
 SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	MW-9A O32973 Groundwater 8/22/00	MW-11 O32900 Groundwater 8/21/00	MW-12 O33038 Groundwater 8/23/00	MW-14 O33139 Groundwater 8/24/00	MW-15 O33039 Groundwater 8/23/00
<b>VOCs</b>						
Carbon Disulfide	NC	12		U	U	28
Chloroform	6	U	U	U	U	U
VOC TICs		U	U	U	11.8 J	U
<b>SVOCs</b>						
Phenol	4,000	1.8		U	U	U
Dimethylphthalate	10	U		U	U	4.6
Acenaphthene	400	U	1.8		U	U
Di-n-butylphthalate	NC	2.6		U	2.6	U
Bis(2-Ethylhexyl)phthalate	30	1.1		U	U	U
SVOC TICs		8.2 J	7 J	U	U	471 J
<b>Pesticides</b>						
Heptachlor	0.4	U		U	U	U
Dieldrin	0.03	U		U	U	U
1,4'-DDT	0.1	0.1		U	U	U
<b>PCBs</b>						
Total PCBs	0.5	U		U	U	U
<b>Metals</b>						
Silver	NC	U	U	7.6 B	0.92 B	1.3 B
Arsenic	8	6.1 B	U	12.9	13.0	3.9 B
Beryllium	20	U	U	0.11 B	U	U
Cadmium	4	U	U	1.5 B	1.0 B	U
Chromium	100	4.1 B	U	6.9 B	16.5	U
Copper	1,000	U	U	2.6 B	14.4 B	U
Thallium	10	U	U	13.0	U	2.9 B
Nickel	100	U	U	16.6 B	11.4 B	5.1 B
Lead	10	3.0 B	U	2.7 B	29.6	2.8 B
Antimony	20	U	U	24.6 B	U	U
Selenium	50	U	U	U	U	2.3 B
Zinc	5,000	30.0	U	56.3	106	39.4

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
SUMMARY OF ALL DETECTIONS FOUND IN GROUNDWATER SAMPLES**

Sample ID	New Jersey	MW-9A	MW-11	MW-12	MW-14	MW-15
Lab ID	Groundwater	O32973	O32900	O33038	O33139	O33039
Matrix	Quality	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date	Standards	8/22/00	8/21/00	8/23/00	8/24/00	8/23/00
<b>Other</b>						
Chloride (mg/L)	250	920	410	1300	500	340
Total Petroleum Hydrocarbons (mg/L)	NC	2.6	2.2	3.2	1.3	3.5
Total Dissolved Solids (mg/L)	500	1500	940	1800	1200	930
Cyanide (mg/L)	0.2	U	U	U	U	U

NA - Not Analyzed due to not enough water.

NC - No Criteria

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

Results are in ug/L unless otherwise stated.

**TABLE 3-5**  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA**  
**QUALITY ASSURANCE/QUALITY CONTROL FOR SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	FieldBlank O28417 Water 7/13/00	Field Blank O28794 Water 7/14/00	FB-71700 O29095 Water 7/17/00	FIELDBLANK O29523 Water 7/19/00		
<b>VOCs - ug/L</b>									
Methylene Chloride	49,000	210,000	1,000		U		U	2.4	J
2-Butanone	1,000,000	1,000,000	50,000		U		U		U
Chloroform	19,000	28,000	1,000		U		U		U
Toluene	1,000,000	1,000,000	500,000		U		U		U
Ethylbenzene	1,000,000	1,000,000	100,000		U		U		U
m/p-Xylenes	410,000*	1,000,000*	67,000*		U		U		U
o-Xylenes	410,000*	1,000,000*	67,000*		U		U		U
1,2,4-Trimethylbenzene	NC	NC	NC		U		U		U
Naphthalene	230,000	4,200,000	100,000		U		U		U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000		U		U		U
1,2,3-Trichlorobenzene	NC	NC	NC		U		U		U
VOC TICs				0		0		0	0

\* - Total Xylenes  
U - Undetect  
J - Estimated  
NC - No Criteria

TABLE 3-3  
**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
 QUALITY ASSURANCE/QUALITY CONTROL FOR SOIL SAMPLES**

Sample ID Laboratory ID Matrix Date	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	FB-07-24-00 O30040 Water 7/24/00	Field Blank O30078 Water 7/25/00	TB-07-13-00 O28416 Methanol 7/13/00	TB071400 O28795 Methanol 7/14/00
<b>VOCs - ug/L</b>							
Methylene Chloride	49,000	210,000	1,000	U	U	360 J	690
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	290 J	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				0	0	0	0

\* - Total Xylenes  
 U - Undetect  
 J - Estimated  
 NC - No Criteria

TABLE 3-3

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR SOIL SAMPLES**

Sample ID	Residential	Non-Residential	Impact to	TB-71700	TRIPBLANK	TB-07-24-00	TB-07-25-00
Laboratory ID	Direct	Direct	Groundwater	O29094	O29513	O30047	O30077
Matrix	Contact Soil	Contact Soil	Soil	Methanol	Methanol	Methanol	Methanol
Date	Cleanup	Cleanup	Cleanup	7/17/00	7/19/00	7/24/00	7/25/00
<b>VOCs - ug/L</b>							
Methylene Chloride	49,000	210,000	1,000	U	310 J	U	U
2-Butanone	1,000,000	1,000,000	50,000	U	U	U	U
Chloroform	19,000	28,000	1,000	U	U	U	U
Toluene	1,000,000	1,000,000	500,000	U	U	U	U
Ethylbenzene	1,000,000	1,000,000	100,000	U	U	U	U
m/p-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
o-Xylenes	410,000*	1,000,000*	67,000*	U	U	U	U
1,2,4-Trimethylbenzene	NC	NC	NC	U	U	U	U
Naphthalene	230,000	4,200,000	100,000	U	U	U	U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	U	U	U	U
1,2,3-Trichlorobenzene	NC	NC	NC	U	U	U	U
VOC TICs				0	0	0	0

\* - Total Xylenes

U - Undetect

J - Estimated

NC - No Criteria

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES**

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	FIELDBLANK O32902 Aqueous 8/21/00	FIELDBLANK O32974 Aqueous 8/22/00	FIELDBLANK O33036 Aqueous 8/23/00	FIELDBLANK O33140 Aqueous 8/24/00
<b>VOCs</b>					
Carbon Disulfide	NC	U	U	U	U
Chloroform	6	U	U	U	U
VOC TICs		U	105 J	U	14.8 J
<b>SVOCs</b>					
Phenol	4,000	U	U	U	1.6
Dimethylphthalate	10	U	U	U	U
Acenaphthene	400	U	U	U	U
Di-n-butylphthalate	NC	U	U	1.6	1.1
Bis(2-Ethylhexyl)phthalate	30	U	U	U	U
SVOC TICs		6.2 J	U	U	8.5 J
<b>Pesticides</b>					
Heptachlor	0.4	U	U	U	U
Dieldrin	0.03	U	U	U	U
4,4'-DDE	0.1	U	U	U	U
<b>PCBs</b>					
Total PCBs	0.5	U	U	U	U
<b>Metals</b>					
Silver	NC	U	U	1.0 B	3.1 B
Arsenic	8	U	U	4.4 B	4.8 B
Beryllium	20	U	U	U	U
Cadmium	4	U	U	0.52 B	0.54 B
Chromium	100	U	U	U	U
Copper	1,000	U	U	U	2.7 B
Thallium	10	5.7 B	U	U	U
Nickel	100	U	U	U	U
Lead	10	U	U	U	U
Antimony	20	U	U	U	U
Selenium	50	U	U	4.7 B	U
Zinc	5,000	U	U	U	U

**PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES**

Sample ID	New Jersey	FIELDBLANK	FIELDBLANK	FIELDBLANK	FIELDBLANK
Lab ID	Groundwater	O32902	O32974	O33036	O33140
Matrix	Quality	Aqueous	Aqueous	Aqueous	Aqueous
Date	Standards	8/21/00	8/22/00	8/23/00	8/24/00
<b>Other</b>					
Chloride (mg/L)	250	U	U	2.0	U
Total Petroleum Hydrocarbons (mg/L)	NC	U	U	U	U
Total Dissolved Solids (mg/L)	500	U	U	U	U
Cyanide (mg/L)	0.2	U	U	U	U

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
limit but greater than instrument detection limit.

NC - No Criteria

NA - Not Analyzed; Trip Blanks are only analyzed for VOCs.  
Results are in ug/l. unless otherwise stated.

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
 QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES

Sample ID Lab ID Matrix Date	New Jersey Groundwater Quality Standards	TRIPBLANK O32901 Aqueous 8/18/00	TRIPBLANK O32971 Aqueous 8/18/00	TRIPBLANK O33037 Aqueous 8/18/00	TRIPBLANK O33141 Aqueous 8/18/00
<b>VOCs</b>					
Carbon Disulfide	NC	U	U	U	U
Chloroform	6	U	U	U	U
VOC TICs		U	U	U	3.1
<b>SVOCs</b>					
Phenol	4,000	NA	NA	NA	NA
Dimethylphthalate	10	NA	NA	NA	NA
Acenaphthene	400	NA	NA	NA	NA
Di-n-butylphthalate	NC	NA	NA	NA	NA
Bis(2-Ethylhexyl)phthalate	30	NA	NA	NA	NA
SVOC TICs		NA	NA	NA	NA
<b>Pesticides</b>					
Heptachlor	0.4	NA	NA	NA	NA
Dieldrin	0.03	NA	NA	NA	NA
4,4'-DDT	0.1	NA	NA	NA	NA
<b>PCBs</b>					
Total PCBs	0.5	NA	NA	NA	NA
<b>Metals</b>					
Silver	NC	NA	NA	NA	NA
Arsenic	8	NA	NA	NA	NA
Beryllium	20	NA	NA	NA	NA
Cadmium	4	NA	NA	NA	NA
Chromium	100	NA	NA	NA	NA
Copper	1,000	NA	NA	NA	NA
Thallium	10	NA	NA	NA	NA
Nickel	100	NA	NA	NA	NA
Lead	10	NA	NA	NA	NA
Antimony	20	NA	NA	NA	NA
Selenium	50	NA	NA	NA	NA
Zinc	5,000	NA	NA	NA	NA



T. E 3-

PORT NEWARK CONTAINER TERMINAL LLC/P AND O PORTS NORTH AMERICA  
 QUALITY ASSURANCE/QUALITY CONTROL FOR GROUNDWATER SAMPLES

Sample ID	New Jersey	TRIPBLANK	TRIPBLANK	TRIPBLANK	TRIPBLANK
Lab ID	Groundwater	O32901	O32971	O33037	O33141
Matrix	Quality	Aqueous	Aqueous	Aqueous	Aqueous
Date	Standards	8/18/00	8/18/00	8/18/00	8/18/00
<b>Other</b>					
Chloride (mg/L)	250	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NC	NA	NA	NA	NA
Total Dissolved Solids (mg/L)	500	NA	NA	NA	NA
Cyanide (mg/L)	0.2	NA	NA	NA	NA

U - Undetected

J - Estimated

B - Concentration is less than contractual detection  
 limit but greater than instrument detection limit.

NC - No Criteria

NA - Not Analyzed; Trip Blanks are only analyzed for VOCs.

Results are in ug/l. unless otherwise stated.

**TABLE 3-5  
PORT NEWARK CONTAINER TERMINAL LLC  
GROUNDWATER ELEVATIONS  
AUGUST 2000**

<b>WELL ID</b>	<b>TOTAL DEPTH OF WELL (ft-bgs)</b>	<b>TOP OF INNER CASING (ft-msl)</b>	<b>DEPTH TO WATER (ft-bgs)</b>	<b>WATER LEVEL ELEVATION (ft-msl)</b>
MW-1	2.82		2.65	-2.65
MW-3	3.96		1.17	-1.17
MW-5	6.00		4.10	-4.10
MW-6	14.95		10.92	-10.92
MW-7	6.16		4.36	-4.36
MW-8A	5.76		4.79	-4.79
MW-9A	6.52		3.70	-3.70
MW-11	15.98		8.99	-8.99
MW-12	14.55		10.14	-10.14
MW-13	4.77		Dry	NK
MW-14	7.70		4.92	-4.92
MW-15	14.79		8.76	-8.76

bgs - BELOW GROUND SURFACE  
msl - MEAN SEA LEVEL  
ft - FEET  
NK - NOT KNOWN

TABLE 3-6  
 PORT NEWARK CONTAINER TERMINAL LLC  
 DEPTH TO WATER, PURGE AND SAMPLE DATA, AND GROUNDWATER QUALITY PARAMETERS  
 AUGUST 2000

	WELL ID	TIC (ft-msl)	DTW (ft)	GWE (ft-msl)	TDW (ft)	DTS (ft)	VOL (gal)	TOT (gal)	pH Final	Conductivity Final (mW/cm)	Temperature Final (°C)	DO Final (mg/L)	Eh Final (mu)	Turbidity Final (NTU)
1	MW-1		2.65	-2.65	2.82	1.0	NS	NS	NS	NS	NS	NS	NS	NS
2	MW-3		1.17	-1.17	3.96	1.0	0.45	1	7.16	0.286	24.9	1.62	71	106
3	MW-5		4.10	-4.10	6.00	3.0	0.31	11	6.77	0.96	24.7	0.00	-166	10.3
4	MW-6		10.92	-10.92	14.95	5.0	0.66	4	7.16	1.83	19.9	5.15	91	2.4
5	MW-7		4.36	-4.36	6.16	2.0	0.29	6	7.24	37.3	26.3	0.00	-99	8.8
6	MW-8A		4.79	-4.79	5.76	2.0	0.16	8	6.64	0.295	25.1	0.00	-22	-0.8
7	MW-9A		3.70	-3.70	6.52	3.0	0.46	3.5	6.47	0.412	26.4	0.00	-126	21.2
8	MW-11		8.99	-8.99	15.98	6.0	1.14	6.5	7.22	0.235	19.7	0.35	-115	2.1
9	MW-12		10.14	-10.14	14.55	5.0	0.72	5.5	7.04	0.450	20.6	0.00	-71	4.1
10	MW-13		Dry	NK	4.77	2.0	NS	NS	NS	NS	NS	NS	NS	NS
11	MW-14		4.92	-4.92	7.70	1.0	0.45	10	7.34	0.273	23.5	5.44	-213	7.4
12	MW-15		8.76	-8.76	14.79	5.0	0.98	6	7.05	0.209	20.0	0.00	22	1.7

TIC - TOP OF INNER CASING  
 DTW - DEPTH TO WATER FROM TIC  
 GWE - GROUNDWATER ELEVATION  
 TDW - TOTAL DEPTH OF WELL FROM TIC  
 DTS - DEPTH TO TOP OF SCREENED INTERVAL FROM TIC  
 VOL - ONE VOLUME  
 TOT - TOTAL VOLUME PURGED  
 ft - FEET  
 msl - MEAN SEA LEVEL  
 gal - GALLONS  
 NS - Not Sampled due to lack of water.  
 NK - Not Known

**FIGURE**

1  
2  
3  
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15

APPENDIX A

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-1  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: ~2.17ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
MW-1 (1-2)	1		0.67'			0-1.0': Asphalt				
	8					Tan m SAND; dense; wet.	1011	07/19/00	0.0	
	2	20								
	5		0.75'			0-0.42': Same as above.				Water table at ~2.17ft.
	3	8				0.42'-0.75': Black CLAY; dense; wet to satd.	1015	07/19/00	0.0	
	10									
	4	11								
MW-1 (4-5)	3		0.75'			0-0.33': Black m sandy CLAY; semi-dense - dense; satd.				
	5	7				0.33'-0.75': Coal-like material; trace rounded f gravel; loose; wet.	1021	07/19/00	0.0	
	6	24								
	3		0.92'			Black m-c SAND; some round-ang. f gravel; trace clay; semi-dense; satd. trace silt.				
	7	9					1029	07/19/00	0.0	
	10									
	8	10								
	2		0.58'			0-0.33': Black m-c SAND; semi-loose - semi-dense; satd.				
	9	3				0.33'-0.58': Black clayey m-c SAND; trace ang. c gravel; semi-loose - semi-dense; satd.	1033	07/19/00	0.0	
	4									
	10	3								
	11					Boring complete at 10ft.				
	12									
	13									
	14									
	15									

NOTES:

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LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-2  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: ~4.75ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-2 (1-2)	0									
	1	7	0.75'			0-1.0': Asphalt. Orange m SAND; trace ang f gravel; semi-dense; wet	1054	07/19/00	0.0	
	2	13								
	3	21	1.67'			0-0.5': Same as above, except wet-satd.	1058	07/19/00	0.0	
	4	25			0.5'-1.67': Olive silty m SAND; little ang f gravel; dense; wet.					
	5	17								
MW-2 (4-5)	6	2				0-0.58': Black clayey m SAND; dense; wet.	1104	07/19/00	0.0	Water table at ~4.75ft.
	7	3	1.58'		0.58'-1.58': Black clayey f SAND; dense; wet, satd. at -4.75'.					
	8	8								
	9	1				Pink CLAY; dense; dry.	1111	07/19/00	0.0	
	10	4	0.92'							
	11	5								
MW-2 (11-11.5)	12	9	1.42'			Pink CLAY; dense; dry-wet; 1' becomes c Sandy and ang f gravelly.	1115	07/19/00	0.0	
	13	4			0.75'-0.79': Piece of coal-like gravel					
	14	5								
	15	1				0-0.42': Pink c sandy and ang f gravelly CLAY; dense; dry-wet.	1119	07/19/00	0.0	
	16	3	1.42'		0.42'-0.67': Pink CLAY; dense; dry-wet.					
	17	3			0.67'-1.42': Olive silty CLAY; some base mottling; dense; dry-wet; trace color					
	18					Boring complete at 12ft.				
	19									
	20									
	21									
	22									
	23									
	24									
	25									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports, Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-3  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~5.42ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECD. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-3 (U.S-2)	0 1 7		1.08'			0-1.0': Asphalt and Gravel, Brown f-c SAND;	1351	07/17/00	NAB	
	2 9 3 15 18 4 13		0.5'			Brown f-c SAND;	1355	07/17/00	NAB	
MW-3 (S-5.5)	1 5 3 7 6 7		1.08'			Reddish-Brown CLAY; little m-c SAND.	1400	07/17/00	NAB	Water table at -5.42ft.
	6 7 4 2 8 1		1.0'			Reddish-Brown CLAY; trace gravel.	1405	07/17/00	NAB	
	1 9 3 3 10 3		0.25'			Reddish-Brown CLAY and GRAVEL; little f-c sand.	1410	07/17/00	NAB	
	1 11 1 1 12 3		1.17'			Reddish-Brown CLAY.	1423	07/17/00	NAB	
	13 14 15					Boring complete at 12ft.				

NOTES: NAB: Not Above Background



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports, Port Newark Facility  
 GEOLOGIST: A. Rai  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-4  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: Not obtained.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-4 (0.75-1.25)	1	7	0.75'			0-0.5': Asphalte. 0-0.25': Grey ang. f (tralem) GRAVEL; trace brown silt; loose; dry.	1502	07/24/00	0.0	
	2	15				0.25'-0.75': Red-Brown m SAND; trace f sand; loose; dry				
MW-4 (2-2.5)	3	9	0.33'			Red-Brown CLAY; dense; dry	1506	07/24/00	0.0	
	4	10								
	5	16				0-0.42': Same as above. 0.42'-1': Red f-e GRAVEL; some silt, little grey organics; loose; dry	1510	07/24/00	0.0	
	6									
	7					Boring complete at 5ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports, Port Newark Facility  
 GEOLOGIST: A. Rai  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-5  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/31/00  
 GROUNDWATER DEPTH: ~4.0ft  
 ELEVATION:

SAMPLE ID	DEPTH (ft)	BLOWS per 6"	RECO VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-5 (1-1.5)	1	31	0.92'			0-0.5': Asphalt	1320	07/24/00	0.0	
	32			0-0.58': Grey ang f GRAVEL and SILT; dense; dry						
	2	43		0.58'-0.92': Red-brown f. CL SAND; loose; dry.						
MW-5 (3.5-4)	3	11	1.83'			Light Reddish-brown f.c SAND; loose; moist.	1327	07/24/00	0.0	Water table at ~4.0ft.
	34									
	4	18								
MW-5 (4.5-5)	4	4	1.0'			Med. Brown c-m SAND; some f sand; semi-loose; satd.	1335	07/24/00	0.0	
	5	5								
	6	5								
	7	2	1.67'			0-0.88': Brown silty f-c SAND; little ang f gravel; loose; satd.	1400	07/31/00	0.0	acc 0.58': organic add.
	1			0-0.58': some black organics; semi-loose; satd.						
	8	1		c. 0.58'-1.01': pink CLAY and SILT.						
	9					Boring Complete at 8ft.				
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg, R. Cartagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push  
 BORING NUMBER: MW-6  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/31/00  
 GROUNDWATER DEPTH: ~10ft on 07/14/00, ~7.75ft on 07/31/00  
 ELEVATION:  
 4 1/4" id Hollow Stem Augers / 2" Split Spore  
 on 07/31/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECD. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		DVA ppm	COMMENTS
							Time	Date		
MW-6 (1.5-2)	0									
	1		1.33'			0-0.5' Asphalt Reddish-brown c SAND; some silt	1515	07/14/00	0.0	
	2									
	3		1.33'			Top 0.33' grayish-reddish brown c sand; some gravel. Rest reddish-brown c SAND; some silt; moist	1525	07/14/00	0.0	
	4									
	5		1.33'			Reddish-brown c SAND; some silt and gravel; moist.	1530	07/14/00	0.0	
	6									
	7		0.83'			0-0.8' wh. CLAY; some red gravel in gray sandy silt 0.42' at bottom reddish-brown c SAND with some gravel	1540	07/14/00	0.0	Water table at ~7.75 ft on 07/31/00
	8									
MW-6 (9.5-10)	9		1.5'			Reddish-brown c silty SAND; some gravel/pebbles, moist.	1545	07/14/00	0.0	
	10									
	11		1.67'			Reddish-brown c silty SAND; some gravel; satd.	1600	07/14/00	0.0	Water table at ~10ft on 07/14/00.
	12									
	13	2	1.25'			Orange-brown m-c SAND; little f sand and silt; semi-loose; satd.	0900	07/31/00	0.0	
	14	1/2								
	15	3	1.0'			0-0.5' Brown f SAND; semi-dense; satd.	0914	07/31/00	0.0	

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg, R. Centagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push  
 on 07/14/00

BORING NUMBER: MW-6  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/31/00  
 GROUNDWATER DEPTH: ~10ft on 7/14/00  
 ELEVATION:  
 4" id Hollow Stem Augers / 2" Split Spacers  
 on 07/31/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	4									
	16	5				0.5'-1.0': Brown m-c SAND; semi-dense; satd.				
	5									
	17	6				Brown m-c SAND; trace black ang gravel; semi-loose; satd.	0925	07/31/00	0.0	
	8									
	18	6								
						Boring Complete at 18ft.				

NOTES:

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LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: A. Rqi  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-7  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: ~ 4.0ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-7 (1-1.5)	0 1 2	21 28 39	0.83'			0-0.5': Asphalt. 0-0.5': Olive ang f-m GRAVEL and SILT; dense; dry. 0.5'-0.63': Org. f-m SAND; loose; moist.	1403	07/24/00	0.0	
MW-7 (3.5-4)	3 4	7 9 14 22	1.17'			m SAND; little f-m brown Sand; loose; wet.	1407	07/24/00	0.0	Water table at ~4.0ft.
	5 6	7 7	1.17'			0-1': Orange m SAND; trace f sand; dense; satd. 1'-1.17': Gray f SAND; dense; satd.	1411	07/24/00	0.0	
	7 8	1 2	0.92'			0-0.42': Grey m-c SAND; semi-dense; satd. 0.42'-0.92': Orange CLAY; trace organic material; semi-loose; moist-wet.	1410	07/24/00	0.0	
	9 10 11 12 13 14 15					Boring complete at 8ft.				

NOTES:

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LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-8A  
 DATE STARTED: 08/01/00  
 DATE COMPLETED: 08/01/00  
 GROUNDWATER DEPTH: ~4.42 ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
0										
1	7-9		0.75'			0-0.08': Lt. Brown SILT and gray ang f-m gravel; loose; dry 0.08'-0.75': Orange f-m silty SAND; semi-loose; moist.	1434	08/01/00	0.0	
2	9-11					Orange-brown f-m SAND; at 0.25' becomes m-c; very dense; wet.	1440	08/01/00	0.0	
3	11-13		1.17'			Orange-brown f-c SAND; at 0.83' becomes f sand; dense; wet; at 4.42' becomes silt.	1447	08/01/00	0.0	Water table at ~4.42 ft.
4	13-14					0-0.17': Gray f SAND and SILT; loose; silt. 0.17'-1.75': Gray silty CLAY; gradually becomes pink; trace organics; semi-compact; wet; some organic matter present.	1453	08/01/00	0.0	
5	14-15					Boring complete at 8ft.				
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

NOTES.

PAGE 1 of 1

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-9  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/13/00  
 GROUNDWATER DEPTH: ~ 4.83 ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-9 (1-2)	0					0-0.5': Asphalt				
	1	1.92'				0.5'-1.92': Orange-brown m SAND; semi-loose - semi-dense; dry	0940	07/13/00	0.0	
2										
	3	1.75'				0-1.42': Same as above; except moist.				
	4					1.42'-1.67': Med. Brown m SAND; moist 1.67'-1.75': Dark Brown CLAY; semi-dense; wet	0946	07/13/00	0.0	
MW-9 (4-5)	5	2.0'				Brown-red m-c SAND; semi-dense; wet; at 0.83' becomes sctd.	0951	07/13/00	0.0	Water table at ~4.83 ft.
	6									
	7					Boring complete at 6 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: MW-9A  
 DATE STARTED: 08/01/00  
 DATE COMPLETED: 08/01/00  
 GROUNDWATER DEPTH: ~6.32ft.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS			
							Time	Date					
	0												
	1	9	1.08'			0-0.46': Olive SILT; trace ang f gravel; loose; dry 0.46'-1.08': Orange f-m SAND; very dense; dry	0926	08/01/00	0.0				
	2	13											
	3	9	1.08'			Brown f-m SAND; some c sand; very dense; wet; at 0.93' became semi-satd.	0937	08/01/00	0.0				
	4	14											
	5	17											
	6	4	1.42'			0-1' Brown-red m-c SAND; little f sand; semi-dense; satd. 1-1.42': Black SILT, CLAY, and f SAND; semi-loose. - semi-dry; satd; little organic odor	0942	08/01/00	0.0				
	7	4											
	8	4											
	9	1/2	1.67'			0-0.67': Med. Brown SILT and f SAND; some clay; semi-dense; satd. 0.67'-1.67': Black CLAY; dense; wet some organic odor	0950	08/01/00	0.0	Water table at ~6.32ft.			
	10	1/2											
	11					Boring complete at 8ft.							
	12												
	13												
	14												
	15												

NOTES:

PAGE 1 OF



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push to 0 ft.

BORING NUMBER: MW-10  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 08/01/00  
 GROUNDWATER DEPTH: ~4 ft on 07/14/00  
 ELEVATION:  
 4 1/4" id Hollow Stem Augers / 2" split spawns to 8 ft.

SAMPLE ID	DEPTH (feet)	BLOWS per 6'	RECD. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-10 (LS-2)	0					0-0.5': Asphalt. 0.5'-1.0': Crushed Stone.				
	1		1.67'			Reddish-brown to lt. brown f-m SAND; loose; dry.	0811	07/14/00	0.0	
MW (35-4)	2					Lt. brown f-m SAND; firm; moist.				
	3		1.83'				0825	07/14/00	0.0	
	4					Brown Clayey SILT. Brownish-gray f-c SAND.				Water table at ~4.0 ft.
	5		1.75'				0820	07/14/00	0.0	
	6									
	7	2	1.75'			0-0.42': Gray SILT and CLAY; some organics; semi-dense; wet. 0.42'-1.75': Pink CLAY, loose; wet-satd.	0839	08/01/00		
	8	1				Boring complete at 8 ft.				
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

PAGE 1 OF 1

LOG OF BORING

PROJECT: Port Newark Containers Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push 4 1/4" id Hollow Stem Augers / 2" split spoons  
 on 07/14/00

BORING NUMBER: MW-11  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/28/00  
 GROUNDWATER DEPTH: ~4.0ft on 07/14/00  
 ELEVATION:  
 on 07/28/00

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		DVA ppm	COMMENTS
							Time	Date		
	0					0-0.5': Asphalt.				
	1		1.08'			Brown SAND; firm; moist.	0734	07/14/00	0.0	
	2									
MW-11 (2-3)	3		1.75'			Brown f-c SAND.	0736	07/14/00	0.0	Water table at ~4.0ft on 7/14/00
MW-11 (3-4)	4									
	5									
	5		1.0'			Brown f-m SAND; semi-dense, wet.	1450	07/28/00	0.0	
	6									
	6									
	7									
	7		1.17'			Same as above.	1500	07/28/00	0.0	
	8									
	8									
	9		1.58'			0-0.5': Brown m-c SAND; some f sand; dense; wet. 0.05'-1.58': Brown m-c SAND; some f sand; dense; sat.	1570	07/28/00	NM	Water table at 6.5' ft on 07/28/00
	10									
	11									
	11		1.25'			Orange-brown m-c SAND; some f sand; trace silt; trace rounded f gravel; semi-dense-dense; sat.	1520	07/28/00	1.1	
	12									
	13									
	13		1.58'			Same as above; except semi-loose.	1526	07/28/00	1.5	
	14									
	14									
	15									
	15		1.0'			Same as above.	1534	07/28/00	1.2	

NOTES: NM: Not Measured.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push  
 BORING NUMBER: MW-11  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/28/00  
 GROUNDWATER DEPTH: -4.0ft on 07/14/00  
 ELEVATION:  
 4" id Hollow Stem Augers / 2" Split Spacers on 07/25/00

SAMPLE ID	DEPTH (feet)	BLOWS per 6'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	1									
	16					Boring complete at 16ft.				

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push on 07/13/00

BORING NUMBER: ~~2341~~  
 DATE STARTED: 07/13/00 (MW-12)  
 DATE COMPLETED: 07/27/00  
 GROUNDWATER DEPTH: ~10 ft  
 ELEVATION:  
 4 1/4" id Hollow Stem Augers / 2" split spoons on 07/27/00

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-13 (0.5-1.5)	0					0-5' Asphalt.	1401	07/13/00	0.0	
	1		1.25'			Orange m-c SAND; semi-loose; dry.				
	2									
	3		1.66'			Orange m-c SAND; dense; dry.	1405	07/13/00	0.0	
	4									
	5		1.92'			White-tan m-c SAND; dense; moist.	1408	07/13/00	0.0	
	6									
	7		1.58'			White and tan c SAND; dense; moist.	1417	07/13/00	0.0	
	8									
	9		1.58'			White and tan c SAND; dense; dry; becomes wet at 1.29'.	1428	07/13/00	0.0	
	10									
SB-13 (10-11)	11		1.25'			Orange c SAND; dense; satd.	1437	07/13/00	0.0	water table at ~10ft.
	12									
	13	5	1.25'			Orange m-c SAND; trace f sand; dense; satd.	1447	07/27/00	0.0	
	14	7								
	15	8								
	16	5								
	17	3				Same as above.	1455	07/27/00	0.0	
	18	3								

NOTES: MW-12 installed where SB-13 is located.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILING/SAMPLING METHOD: Earthprobe Direct Push on 07/13/00

BORING NUMBER:  (MW-12)  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/27/00  
 GROUNDWATER DEPTH: ~10 ft.  
 ELEVATION:  
 4 1/2" id Hollow Stem Augers / 2" split spoons on 07/27/00

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
15		3								
16		4								
17		1	1.25'			Same as above	15D	07/27/00	0.0	
18		3								
19						Boring complete at 18 ft.				
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers/2" split spoons

BORING NUMBER: MW-13  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~7 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					Asphalt.				
	1					Gravel.				
MW-13 (1.5-2)	2	10	.75'			Lt brown f-c SAND	1124	07/17/00	NAB	
	3	36								
	5	5	1.5'			0-.83' Red-brown v-f SAND.	1127	07/17/00	NAB	
	20					.83-1.25' Red-brown f silty SAND; dense.				
	15					1.25-1.5' Dk brown silty CLAY.				
	4	11								
	2		1.33'			0-.66' Red-brown f-c SAND; trace gravel.	1135	07/17/00	NAB	Black stain; slight odor.
	7					.66-1.33' Dk brown to black CLAY.				
	12									
	6	7								
MW-13 (6.5-7)	5		1.75'			0-1.17' Red-brown to black CLAY; v stiff.	1140	07/17/00	NAB	Black stain; slight odor. Water table at ~7 ft.
	7	5				1.17-1.75' Red-brown to brown CLAY.				
	4									
	8	4								
	1		2.0'			Brown to red-brown CLAY.	1146	07/17/00	NAB	Black stain; slight odor.
	1									
	1									
	10	2								
	2		1.75'			Brown to red-brown CLAY.	1150	07/17/00	NAB	Black stain; slight odor.
	3					Tip: Gray f-c SAND.				
	4									
	12	6								
	3		1.5'			0-.83' Gray to dk gray v-f SAND.	1155	07/17/00	NAB	Slight odor.
	4					.83-1.42' Brown to gray SILT; laminated.				
	5					1.42-1.5' Peat.				
	14	2								
	15					Boring complete at 14 ft.				

NOTES: NAB: Not above background.

PAGE 1 OF 1

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantuallio  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-14  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/14/00  
 GROUNDWATER DEPTH:  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
	1		1.0'			0-0.5' Asphalt. Asphalt; Brown silt, and gravel.	1105	07/14/00	0.0	
	2									
	3		0.5'			Crushed concrete in tip of spoon; dk. Brown SILT and asphalt.	1108	07/14/00	0.0	
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES: First Attempt at boring MW-14.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Funk  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-14  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/25/00  
 GROUNDWATER DEPTH: ~5.0 ft on 07/14/00  
 ELEVATION: ~3.5 ft on 07/25/00

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-14 (1.5-2)	1	1.08'				0-0.5': Asphalt.	1122	07/14/00	0.0	
	2					Brownish-gray gravelly sand; Some silt. Dark brown silt; little gravel.				
	3	2.0'				lt. gray-brown m-c SAND; rust-colored staining; loose.	1135	07/14/00	0.0	
	4					lt. gray w/c SAND; trace. rust-colored staining				
MW-14 (4.5-5)	5	2.0'				Gray-brown f-vc SAND; very firm.	1140	07/14/00	0.0	Water table at ~5.0 ft on 07/14/00
	6					lt. gray-dk. gray f-vc SAND; little shell hash; trace gravel.				
	7	1.25'				Gray m SAND; dense; sulf. organic odor present.	1341	07/25/00	0.0	
	5									
	8									
	9	1.5'				0-0.33': Same as above. 0.23'-1.5': Black CLAY; high plasticity; sulf. heavy organic odor.	1350	07/25/00	0.0	Water table at ~3.5 ft on 07/25/00
	1									
	10									
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES:



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: MW-15  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/27/00  
 GROUNDWATER DEPTH: ~8 ft on 07/14/00  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
MW-15 (1.5-2)	0					0-0.5': Asphalt.				
	1		1.08'			Reddish-brown f-m SAND.	1002	07/14/00	0.0	
	2									
	3		1.75'			Reddish-brown f-vc SAND; trace gravel.	1005	07/14/00	0.0	
	4									
	5		1.83'			Reddish-brown f-vc SAND; trace gravel.	1017	07/14/00	0.0	
	6									
MW-15 (7.5-8)	7		1.67'			Brown f-vc SAND; trace gravel.	1022	07/14/00	0.0	
	8									
	9		2.0'			Same as above, except wet.	1030	07/14/00	0.0	Water table at ~8.0 ft.
	10									
	11	5	1.33'			Orange-brown m-c SAND; trace sand; semi-loose, satd.	1033	07/27/00	0.0	
	12	9								
	13	10								
	13	13	1.25'			0-1.17': same as above, except dense.	1148	07/27/00	0.0	
	14	7				1.17'-1.25': orange-brown f SAND; dense; satd.				
	15	1	1.0'			Orange-brown f-m SAND; dense; satd.	1149	07/27/00	0.0	
	15	2								

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC	BORING NUMBER: MW-15
PROJECT NO: 2341	DATE STARTED: 07/14/00
LOCATION: P20 Ports Port Newark Facility	DATE COMPLETED: 07/27/00
GEOLOGIST: R. Cantagallo	GROUNDWATER DEPTH: -8ft on 07/14/00
DRILLER: Tabasco Drilling	ELEVATION:
DRILLING/SAMPLING METHOD: Earthprobe Direct Push	

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0	4								
	16	3				Boring Complete at 16ft.				

NOTES:

PAGE 2 of 2

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-1  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/13/00  
 GROUNDWATER DEPTH: ~4.88 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-1 (1-1.5)	0					0-5' Asphalt.				
	1		1.08'			.5-1.59' M brown m SAND; semi-dense; moist	0902	07/13/00	0.0	
	2									
	3		1.5'			M brown m-c SAND; semi-dense; moist.	0906	07/13/00	0.0	
	4									
	5		1.17'			0-.88' M brown m-c SAND; Semi-dense; wet. .98-1.17' Black and red-brown CLAY; wet to sat'd.	0910	07/13/00	0.2	Water table at 4.88 ft. Slight odor present.
	6					Boring Complete at 6 ft.				
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-2  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: ~4 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-2 (1-2)	0									
	1	9	1.08'			0-.5' Asphalt. 0-.5' Dk olive SILT; some org f gravel; loose; dry.	1605	07/24/00	0.0	
	2	22				.5-7.08' Orange f-m SAND; loose; dry.				
SB-2 (2.5-3)		11	1.08'			Lt brown f-m SAND; loose; dry; becomes dense and m-c at .5'; becomes moist at .92'	1610	07/24/00	0.0	
	3	17								
	4	21								
	5	5	1.42'			Orange m-c SAND; semi-dense; satd; becomes gray at .75'.	1617	07/24/00	0.0	Water table at ~4 ft.
	6	7								
	7	7								
	8	9				Boring complete at 6 ft.				
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-3  
 DATE STARTED: 07/25/00  
 DATE COMPLETED: 07/25/00  
 GROUNDWATER DEPTH: ~ 2.83 ft  
 ELEVATION:

SAMPLE ID	DEPTH (1001)	BLOWS per 5'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-3 (1-1.5)	1	7	1.17'			0-.5' Asphalt. 0-.33' Olive SILT and ang of gravel; semi-loose; dry; .33-1.17' Orange f-m SAND; little silt; semi-base.	0826	07/25/00	0.0	
	2	13								
SB-3 (2-2.5)	3	7	1.25'			Orange f-m SAND; little silt; semi-loose; becomes sand at .83'.	0836	07/25/00	0.0	water table at ~2.83 ft.
	4	8								
	5	11								
	6	16								
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-4  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~4 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-4 (1.5-2)	0					0-1.0 Asphalt				
	1									
	2	12	1.0'			Brown f-c SAND; trace gravel.	1510	07/17/00	0.0	
	3	18								
SB-4 (2.5-4)	4	6	1.33			Brown f-c SAND; trace gravel.	1517	07/17/00	0.0	Water table at ~4 ft.
	5	10								
	6	10								
	7	12				Boring complete at 4 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC PROJECT NO: 2341 LOCATION: P&O Ports Port Newark Facility GEOLOGIST: R. Contagallo DRILLER: Tabasco Drilling DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons	BORING NUMBER: SB-5 DATE STARTED: 07/17/00 DATE COMPLETED: 07/17/00 GROUNDWATER DEPTH: ~4 ft ELEVATION:
--	---

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-5 (1.5-2)	0					0-1.0' Asphalt.				
	1									
	11		0.92'			Red-brown wf-c SAND; trace gravel.	1534	07/17/00	0.0	
	2	11								
SB-5 (3.5-4)	14		1.42'			Brown to red-brown f-c SAND; trace gravel.	1540	07/17/00	0.0	Water table at ~4 ft.
	3	25								
	24									
	4	26								
	5					Boring complete at 4 ft.				
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-6  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: ~3.42 ft  
 ELEVATION:

SAMPLE ID	DEPTH (ft)	BLOWS per 5'	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
SB-6 (1-2)	1					0-1.0' Asphalt,				
	2	18 26	.75'			Tan and olive m SAND; trace rounded to semi-rounded gravel; low clay.	1249	07/17/00	0.0	
SB-6 (3-5)	3	3	1.83'			0-1.17' Gray tan m SAND; semi-dense; wet.	255	07/17/00	0.0	Water table at ~3.42 ft.
	4	10 20 33				1.17-1.83' Gray f-m SAND; little subrounded m gravel; wet; becomes semi-dense and satd.				
	5					Boring complete at 4 ft.				
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES.



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-7  
 DATE STARTED: 07/19/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: Not encountered.  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0									
SB-7 (1-2)	1					0-1.0' Asphalt.				
	2	7	.75'			11 ton m SAND; trace rounded f gravel; semi-loose to semi-dense; moist.	0935	07/19/00	0.0	
SB-7 (2-2.5)	3	50/4	.33'			0-.17' Same as above. .17-.33' Pink CLAY; trace ang f gravel; dense; dry.	0939	07/19/00	0.0	Refusal at 2.33 ft.
	4									
	5					Boring complete at 2.33 ft.				
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

PAGE 1 OF 1

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Contagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-8  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~4 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					0-1.0' Asphalt.				
SB-8 (15-2)	1					lit brown to brown f-m SAND; trace gravel.	1492	07/17/00	0.0	
	2	14	.75'							
SB-8 (3.5-4)	3	5	1.17'			0-.5' Brown f-c SAND; trace gravel.	1446	07/17/00	0.0	Water table at ~4 ft.
	4	5			.5-.83' Brown sandy CLAY and f-m SAND.					
	5	5			.83-1.17' Brown clayey f-c SAND					
	6					Boring complete at 4 ft.				
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

PAGE 1 OF 1

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P20 Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-10  
 DATE STARTED: 07/25/00  
 DATE COMPLETED: 07/25/00  
 GROUNDWATER DEPTH: ~2.58 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-10 (1.5-2)	0					Asphalt.				
	1	10	1.17'			Orange brown f-m SAND; loose; moist.	0926	07/25/00	0.0	
	2	15								
3	9	.92'								Orange m-c SAND; dense; wet; becomes sat'd at .58'.
4	7									
5	9									
	6					Boring complete at 4 ft.				
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-11  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/19/00  
 GROUNDWATER DEPTH: ~9.5 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECOVERED	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-11 (1.5-2)	0									
	1		1.25'			0-5' Asphalt Red-brown c SAND; some silt.	1342	07/19/00	0.0	
	2									
	3		2.00'			Red-brown c SAND; some silt.	1355	07/14/00	0.0	
	4									
	5		1.83'			Red-brown c SAND; some silt; trace m gravel; moist.	1400	07/14/00	0.0	
	6									
	7		2.0'			Same as above.	1407	07/14/00	0.0	
	8									
SB-11 (9-9.5)	9		1.58'			Same as above.	1414	07/14/00	0.0	Water table at ~9.5 ft.
	10									
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-12  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/13/00  
 GROUNDWATER DEPTH: ~4.33 ft  
 ELEVATION:

SAMPLE ID	DEPTH (100')	BLOWS per 5'	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-12 (0.5-2)	0 1		1.17'			0-5' Asphalt. M brown-orange mSAND; dense; dry.	1621	07/13/00	0.0	
SB-12 (3-4)	2 3		1.50'			0-4.2' Orange-brown c SAND; dense; wet.	1626	07/13/00	0.0	
	4 5 6		1.0'			0-3.3' M brown-orange c SAND; dense; wet. 3.3-1.0' M brown-orange c SAND; dense; satd.	1630	07/13/00		Water table at ~4.33 ft.
	7					Boring complete at 6 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-13A  
 DATE STARTED: 07/14/00  
 DATE COMPLETED: 07/14/00  
 GROUNDWATER DEPTH: ~9 ft  
 ELEVATION:

SAMPLE ID	DEPTH (1000)	BLOWS per 6'	RECO. VERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-13A (1.5-2)	0					0-5' Asphalt. .5-1.0' Gravel.				
	1		1.25'			Red-brown f-c SAND; trace gravel.	0842	07/14/00	0.0	
	2		1.75'			Red-brown f-c SAND; trace gravel.	0846	07/14/00	0.0	
	3									
	4									
	5		1.66'			Same as above.	0908	07/14/00	0.0	
	6									
	7		1.75'			Same as above.	0911	07/14/00	0.0	
	8									
SB-13A (8.5-9)	9		1.83'			Same as above.	NR	07/14/00	NM	Water table at ~9ft.
	10									
	11					Boring complete at 10ft.				
	12									
	13									
	14									
	15									

NOTES: NR: Not recorded.  
 NM: Not measured.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P20 Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-14  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~6 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-14 (115-2)	0					Asphalt.	1225	07/17/00		
	1									
	2	17 24	.66'			Brown f-m SAND; trace gravel.			0.0	
	3	12 20 23	1.25'			Lt brown to brown f-m SAND.	1231	07/17/00	0.0	
	4	24								
	5	3 6 11	1.0'			Brown f-m SAND; trace gravel.	1238	07/17/00	NM	Water table at ~6 ft.
SB-14 (55-6)	6	13								
	7					Boring complete at 6 ft.				
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES: NM: Not measured.

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: R. Cantagallo  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-15  
 DATE STARTED: 07/17/00  
 DATE COMPLETED: 07/17/00  
 GROUNDWATER DEPTH: ~5.5 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 5'	RECO-VERY	PRO-FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
	0					Asphalt.				
	1					Gravel.				
SB-15 (1.5-2)	2	24	.83'			Lt brown vt-f SAND.	1045	07/17/00	NAB	
	3	29								
	4	10	1.17'			Lt brown vt-f SAND, loose, dry.	1055	07/17/00	NAB	
	5	26								
	6	14								
SB-15 (5.5-6)	7	7	1.25'			0-42' Gray to lt brown SAND; trace gravel. 42-1.25' Gray f-m SAND.	1105	07/17/00	NAB	Water table at ~5.5 ft.
	8					Boring complete at 6 ft.				
	9									
	10									
	11									
	12									
	13									
	14									
	15									

NOTES: NAB: Not above background.



LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P&O Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: Earthprobe Direct Push

BORING NUMBER: SB-16  
 DATE STARTED: 07/13/00  
 DATE COMPLETED: 07/13/00  
 GROUNDWATER DEPTH: ~8.83 ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-16 (0.5-1)	0					0-5' Asphalt.				
	1		.5B'			.5-1.0B' Orange-brown m SAND; semi-loose to semi-dense; moist.	1509	07/13/00	0.0	
	2		1.5B'			Tan and white m-c SAND; dense; moist.	1512	07/13/00	0.0	
	3									
	4									
	5		2.0'			Red-brown c SAND; v dense; wet.	1520	07/13/00	0.0	
	6									
	7		1.5'			Red-brown c SAND; dense; wet.	1530	07/13/00	0.0	
	8									
SB-16 (8-9)	9		1.5'			Red-brown c SAND; dense; wet; sat'd at .83'.	1535	07/13/00	0.0	Water table at ~8.83 ft.
	10									
	11					Boring complete at 10 ft.				
	12									
	13									
	14									
	15									

NOTES:

LOG OF BORING

PROJECT: Port Newark Container Terminal LLC  
 PROJECT NO: 2341  
 LOCATION: P20 Ports Port Newark Facility  
 GEOLOGIST: M. Greenberg  
 DRILLER: Tabasco Drilling  
 DRILLING/SAMPLING METHOD: 4 1/4" id Hollow Stem Augers / 2" split spoons

BORING NUMBER: SB-17  
 DATE STARTED: 07/24/00  
 DATE COMPLETED: 07/24/00  
 GROUNDWATER DEPTH: ~8.33ft  
 ELEVATION:

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO. VELOCITY	PRO. FILE	USCS CLASS	MATERIAL DESCRIPTION	COLLECTION		OVA ppm	COMMENTS
							Time	Date		
SB-17 (15-2)	1	19	1.42'			Asphalt. orange f SAND; trace ang f gravel; loose; dry	1124	07/24/00	0.0	
	2	13								
	3	15 28	1.42'			Same as above.	1128	07/24/00	0.0	
	4	21 32								
	5	19 48	2.00'			0-1.25' same as above. 1.25'-2.00' grey f. SAND; ang f-m gravel; loose; dry	1132	07/24/00	0.0	
	6	39 33								
	7	17 21	2.00'			Dark orange f-m SAND. Semi-loose; Moist.	1151	07/24/00	0.0	
	8	22 38								
SB-17 (8-9)	9	9	1.25'			Dark orange m SAND. some f sand; dense; moist; satd. at 8.33'.	1155	07/24/00	0.0	Water table at ~8.33ft.
	10	20								
	11					Boring complete at 10ft.				
	12									
	13									
	14									
	15									

NOTES:

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**APPENDIX B**

1  
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APPENDIX C

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-15 Date 8-23-00  
 Well Depth (from TOC) = 14.79 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 8'76" ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 4.79 - 8.76  
 T = 6.13 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times 6.13 \times 1^2$$

$$= 0.98 \text{ gallons}$$

Total Water Purged

Design = 2.95 gallons  
 Actual = 6 gallons

Water Quality

Rate (gpm)	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	Tur
0.96	Initial	7.10	0.198	19.8	0.00	-19	71.8
1.0	Volume 1	7.10	0.196	19.9	0.00	-6	31.
0.61	Volume 2	7.10	0.195	17.9	0.00	9	149.
0.20	Volume 3	7.07	0.2	20.0	0.00	12	5.
0.47	Volume 4	7.02	0.205	20.6	0.00	20	7.2
0.55	Volume 5	7.05	0.208	20.1	0.00	23	2
0.6		7.05	0.209	20.0	0.00	22	1.

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: See logbook for rest. 1425 stated purging well. Water is clear, no

Sampler(s): 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-6 Date 08/22/08 and 08/23  
 Well Depth (from TOC) = 14.95 ft 14.95  
 Well Diameter (d) = 2 in 2  
 Static Water Level (from TOC) = 7.59 ft 10.92  
 Well Radius (d/2) = 1 in 1

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 14.95 - 7.59 = 7.36 ft 14.95 - 10.92  
7.36 ft 4.03

Gallons of Water per Well Volume

Volume =  $0.163 \times T(\text{ft}) \times r(\text{in})^2$   
 =  $0.163 \times \frac{7.36}{120} \times \frac{1}{1}$  =  $0.163 \times 4.03 \times 1^2$   
 = 0.66 gallons

Total Water Purged

Design = 3.60 gallons 1.97 gal  
 Actual = 4.0 gallons

Water Quality

Re (Yr)	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (OC)	DO (ppm)	En (mu)	Tm	
0.23	Initial	0806	6.94	1.89	19.6	5.38	162	8.1
0.23	Volume 1	0809	7.04	1.89	19.9	5.19	142	29
0.23	Volume 2	0812	7.11	1.98	20.1	5.19	122	8
0.27	Volume 3	0815	7.14	1.87	20.1	5.14	111	4
0.22	Volume 4	0818	7.15	1.87	20.2	5.12	105	3
0.64	Volume 5	0821	7.16	1.87	20.1	5.22	101	3
0.49	Volume 6	0824	7.16	1.86	19.8	5.13	98	4

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 15:00 Start purging Well 2904 start purging Well  
Water purged has no odor at visible stream. It is clear.

Sampler(s): M. Greenberg, R. Rabler

0.49	7	0827	7.16	1.86	19.8	5.15	96	3.3
0.61	8	0830	7.16	1.85	19.7	5.16	94	2.8
0.39	9	0833	7.14	1.84	19.8	5.16	93	3.2
0.40	10	0836	7.16	1.83	19.7	5.15	91	2.4

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-7 Date 8-22-00

Well Depth (from TOC) = 6.16 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.86 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
~~T = 6.16 - 4.86~~  
 T = 1.30 ft

Gallons of Water per Well Volume

Volume = 0.163 x T(ft) x r(in)<sup>2</sup>  
 = 0.163 x 1.30 x 1<sup>2</sup>  
 = 0.29 gallons

Total Water Purged

Design = 0.88 gallons  
 Actual = ~5 gallons

Water Quality

rate (l/min)		TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (oC)	DO (ppm)	En (mu)	Tu
	Initial	0954	7.22	43.1	26.0	0.50	-106	3
0.55	Volume 1	0957	7.21	39.7	25.9	0.07	-94	15
0.37	Volume 2	1000	7.22	39.5	26.0	0.00	-96	15
0.50	Volume 3	1003	7.22	39.0	26.2	0.00	-96	11
0.55	Volume 4	1006	7.21	39.0	26.2	0.00	-96	1
0.53	Volume 5	1009	7.22	39.2	26.2	0.00	-97	6
0.43	Volume 6	1012	7.23	37.9	26.2	0.00	-98	8

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 0954 start purging well. water appears clear and odor free

Sampler(s): M. Greenberg, R. Robles

1.47	Time 7	1015	7.24	37.8	26.3	0.00	-99	8
0.55	Time 8	1018	7.24	37.9	26.3	0.00	-99	5
0.45	Time 9	1021	7.24	37.3	26.3	0.00	-97	8

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. W-8A Date 8/23/00

Well Depth (from TOC) = 5.76 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.79 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 5.76 - 4.79  
 T = 0.97 ft

Gallons of Water per Well Volume

Volume =  $0.163 \times T(\text{ft}) \times r(\text{in})^2$   
 =  $0.163 \times 0.97 \times 1^2$   
 = 0.16 gallons

Total Water Purged

Design = 0.47 gallons  
 Actual = \_\_\_\_\_ gallons

Water Quality

Rate  
( $\frac{1}{4}$  min)  
0.77  
0.74  
0.91  
0.68  
0.94  
0.55  
0.52

	TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	T <sub>w</sub>
Initial	16.17	6.42	0.253	24.7	0.00	-36	-1
Volume 1	16.21	6.51	0.254	24.8	0.00	-30	2
Volume 2	16.24	6.60	0.260	24.8	0.00	-26	3
Volume 3	16.27	6.62	0.261	25.0	0.00	-26	4
Volume 4	16.30	6.60	0.253	25.0	0.00	-23	2
Volume 5	16.33	6.66	0.255	24.9	0.00	-26	1
6	16.36	6.65	0.251	25.0	0.00	-21	0.

Purge Method SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER   
 (SPECIFY)

Notes/Observations: 16.15 Start Purging W-8A. Water is clear, but after some time visible water has been yellowish tint.

1.83

Sampler	TIME	pH	SPEC. CONDC.	TEMPERATURE	DO	En	T <sub>w</sub>
7	16.38	6.44	0.255	25.1	0.00	-22	-2



EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-9A Date 08/22/00

Well Depth (from TOC) = 6.52 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 3.70 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 6.52 - 3.70  
 T = 2.82 ft

Gallons of Water per Well Volume

Volume = 0.163 x T(ft) x r(in)<sup>2</sup>  
 = 0.163 x 2.82 x 1<sup>2</sup>  
 = 0.46 gallons

Total Water Purged

Design = 1.38 gallons  
 Actual = 3.5 gallons

Water Quality

Flow (l/min)	TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	T <sub>w</sub>
	Initial	<u>6.57</u>	<u>0.830</u>	<u>26.1</u>	<u>0.03</u>	<u>-140</u>	57.
<u>2.46</u>	Volume 1	<u>6.53</u>	<u>0.510</u>	<u>26.4</u>	<u>0.00</u>	<u>-134</u>	56.
<u>2.43</u>	Volume 2	<u>6.49</u>	<u>0.463</u>	<u>26.4</u>	<u>0.07</u>	<u>-130</u>	25.
<u>0.37</u>	Volume 3	<u>6.48</u>	<u>0.456</u>	<u>26.5</u>	<u>0.00</u>	<u>-129</u>	25.
<u>2.35</u>	Volume 4	<u>6.46</u>	<u>0.445</u>	<u>26.5</u>	<u>0.02</u>	<u>-127</u>	24.
<u>2.40</u>	Volume 5	<u>6.47</u>	<u>0.439</u>	<u>26.5</u>	<u>0.00</u>	<u>-128</u>	23.
<u>0.37</u>	Time 6	<u>6.57</u>	<u>0.748</u>	<u>26.2</u>	<u>0.00</u>	<u>-143</u>	58.

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER   
 (SPECIFY)

Notes/Observations: Water is odor free and has yellowish tinge. Slight  
smell present, water has petroleum like odor

Sampler(s): M Greenberg & P. D. Doherty

<u>2.40</u>	Time 7	<u>1201</u>	<u>6.51</u>	<u>0.450</u>	<u>26.5</u>	<u>0.00</u>	<u>-134</u>	<u>25.1</u>
<u>2.40</u>	Time 8	<u>1204</u>	<u>6.48</u>	<u>0.428</u>	<u>26.6</u>	<u>0.00</u>	<u>-129</u>	<u>23.2</u>
<u>2.43</u>	Time 8.9	<u>1207</u>	<u>6.47</u>	<u>0.420</u>	<u>26.5</u>	<u>0.00</u>	<u>-127</u>	<u>21.0</u>
<u>2.40</u>	Time 10	<u>1210</u>	<u>6.47</u>	<u>0.415</u>	<u>26.4</u>	<u>0.00</u>	<u>-126</u>	<u>21.1</u>
<u>2.43</u>	Time 11	<u>1215</u>	<u>6.47</u>	<u>0.412</u>	<u>26.4</u>	<u>0.00</u>	<u>-126</u>	<u>21.1</u>

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-11 Date 08-21-00

Well Depth (from TOC) = 15.98 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 8.99 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 15.98 - 8.99  
 T = 6.99 ft

Gallons of Water per Well Volume

$$\begin{aligned} \text{Volume} &= 0.163 \times T(\text{ft}) \times r(\text{in})^2 \\ &= 0.163 \times \underline{6.99} \times \underline{1}^2 \\ &= \underline{1.14} \text{ gallons} \end{aligned}$$

Total Water Purged

Design = 3.42 gallons  
 Actual = ~6.5 gallons

Water Quality

	TIME	pH	SPEC. CONDOC. (umbos/cm)	TEMPERATURE (OC)	DO (ppm)	Ed (mu)	TWL
Initial	<u>1348</u>	<u>7.36</u>	<u>0.265</u>	<u>19.5</u>	<u>1.03</u>	<u>-91</u>	<u>30.</u>
Volume 1	<u>1351</u>	<u>7.37</u>	<u>0.243</u>	<u>19.5</u>	<u>0.00</u>	<u>-99</u>	<u>19.</u>
Volume 2	<u>1407</u>	<u>7.32</u>	<u>0.239</u>	<u>19.7</u>	<u>0.29</u>	<u>-95</u>	<u>9.</u>
Volume 3	<u>1410</u>	<u>7.30</u>	<u>0.236</u>	<u>19.6</u>	<u>0.00</u>	<u>-100</u>	<u>6.</u>
Volume 4	<u>1413</u>	<u>7.28</u>	<u>0.235</u>	<u>19.6</u>	<u>0.97</u>	<u>-104</u>	<u>5.</u>
Volume 5	<u>1416</u>	<u>7.27</u>	<u>0.239</u>	<u>19.6</u>	<u>1.16</u>	<u>-107</u>	<u>3.</u>
Volume 6	<u>1419</u>	<u>7.26</u>	<u>0.238</u>	<u>19.6</u>	<u>2.03</u>	<u>-110</u>	<u>3.</u>

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 1348 start purging well. Well water clear  
no odor, no sludge. stopped purge @ 1405 to get New PID. Resumed  
purge @ 1405

Sampler(s):

Volume 7	<u>1422</u>	<u>7.25</u>	<u>0.240</u>	<u>19.7</u>	<u>2.29</u>	<u>-112</u>	<u>3.2</u>
Volume 8	<u>1426</u>	<u>7.23</u>	<u>0.236</u>	<u>19.6</u>	<u>1.74</u>	<u>-113</u>	<u>2.1</u>
Volume 9	<u>1425</u>	<u>7.23</u>	<u>0.236</u>	<u>19.7</u>	<u>1.34</u>	<u>-114</u>	<u>2.2</u>
Volume 10	<u>1431</u>	<u>7.22</u>	<u>0.238</u>	<u>19.7</u>	<u>1.05</u>	<u>-113</u>	<u>2.1</u>
Volume 11	<u>1434</u>	<u>7.22</u>	<u>0.239</u>	<u>19.7</u>	<u>0.70</u>	<u>-114</u>	<u>2.</u>
Volume 12	<u>1437</u>	<u>7.22</u>	<u>0.235</u>	<u>19.7</u>	<u>0.35</u>	<u>-115</u>	<u>2.</u>

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-12 Date 8/23/00

Well Depth (from TOC) = 14.55 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 10.14 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 14.55 - 10.14  
 T = 4.41 ft

Gallons of Water per Well Volume

$$\text{Volume} = 0.163 \times T(\text{ft}) \times r(\text{in})^2$$

$$= 0.163 \times \underline{4.41} \times \underline{1}^2$$

$$= \underline{0.72} \text{ gallons}$$

Total Water Purged

Design = 2.2 gallons  
 Actual = 5.5 gallons

Water Quality

TIME	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	Ed (mu)	Tu
0.47 Initial	7.12	0.472	20.4	1.50	-28	10
0.59 Volume 1	7.12	0.448	20.2	0.00	-20	4.1
0.65 Volume 2	7.12	0.445	20.1	0.00	-33	3.1
0.80 Volume 3	7.12	0.440	20.0	0.00	-45	1.1
0.54 Volume 4	7.10	0.435	20.1	0.00	-57	10
0.55 Volume 5	7.09	0.439	20.2	0.00	-60	6.1
0.55 Volume 6	7.07	0.439	20.2	0.00	-65	6.1

Purge Method

SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 1305 Start purging well. water has yellowish tint with the No. 10 and No. 10.

TIME	Sampler(s)	pH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	Ed (mu)	Tu
0.47	7	7.06	0.439	20.2	0.00	-67	5.8
0.38	8	7.05	0.439	20.5	0.00	-70	5.3
0.32	9	7.04	0.441	20.7	0.00	-71	4.1
0.35	10	7.04	0.448	20.7	0.00	-71	3.7
0.35	11	7.04	0.450	20.6	0.00	-71	4.1

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-14 Date 8-24-00

Well Depth (from TOC) = 7.70 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.92 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 7.70 - 4.92  
 T = 2.78 ft

Gallons of Water per Well Volume

Volume = 0.163 x T(ft) x r(in)<sup>2</sup>  
 = 0.163 x 2.78 x 1<sup>2</sup>  
 = 0.45 gallons

Total Water Purged

Design = 1.36 gallons  
 Actual = 10 gallons

Water Quality

	TIME	PH	SPEC. CONDC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mu)	Turb (N)
Initial	<u>0850</u>	<u>7.27</u>	<u>0.286</u>	<u>22.8</u>	<u>2.98</u>	<u>-224</u>	<u>0</u>
Volume 1	<u>0853</u>	<u>7.33</u>	<u>0.274</u>	<u>23.4</u>	<u>4.76</u>	<u>-209</u>	<u>32</u>
Volume 2	<u>0855</u>	<u>7.27</u>	<u>0.288</u>	<u>23.4</u>	<u>5.32</u>	<u>-206</u>	<u>33</u>
Volume 3	<u>0857</u>	<u>7.27</u>	<u>0.284</u>	<u>23.5</u>	<u>4.46</u>	<u>-207</u>	<u>110</u>
Volume 4	<u>0859</u>	<u>7.16</u>	<u>0.356</u>	<u>23.4</u>	<u>4.99</u>	<u>-214</u>	<u>27</u>
Volume 5	<u>0901</u>	<u>7.23</u>	<u>0.314</u>	<u>23.4</u>	<u>3.94</u>	<u>-212</u>	<u>28</u>
Volume 6	<u>0904</u>	<u>7.25</u>	<u>0.295</u>	<u>23.5</u>	<u>3.74</u>	<u>-215</u>	<u>22</u>

Purge Method:  SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: Water is a gray cloudy colored; has organic odor; visible shear.

Sampler(s): M. Greenberg, R. Roberts

Volume 7	<u>0907</u>	<u>7.20</u>	<u>0.289</u>	<u>23.5</u>	<u>4.93</u>	<u>-214</u>	<u>34</u>
Volume 8	<u>0909</u>	<u>7.31</u>	<u>0.273</u>	<u>23.5</u>	<u>4.40</u>	<u>-213</u>	<u>22</u>
Volume 9	<u>0914</u>	<u>7.32</u>	<u>0.271</u>	<u>23.5</u>	<u>5.60</u>	<u>-213</u>	<u>13.5</u>
Volume 10	<u>0913</u>	<u>7.23</u>	<u>0.308</u>	<u>23.4</u>	<u>4.05</u>	<u>-219</u>	<u>12.3</u>
		<u>7.24</u>	<u>0.273</u>	<u>23.2</u>	<u>5.44</u>	<u>-213</u>	<u>7.4</u>

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-5 Date 8-21-00

Well Depth (from TOC) = 6.0 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 4.10 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 6.0 - 4.10  
 T = 1.9 ft

Gallons of Water per Well Volume

$$\begin{aligned} \text{Volume} &= 0.163 \times T(\text{ft}) \times r(\text{in})^2 \\ &= 0.163 \times \underline{1.9} \times \underline{1}^2 \\ &= \underline{0.51} \text{ gallons} \end{aligned}$$

Total Water Purged

Design = 0.93 gallons  
 Actual = 11 gallons

Water Quality

	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	En (mV)	gms
Initial	11:00	6.73	1.14	24.5	0.01	-160	0.1
Volume 1	11:07	6.74	1.08	24.6	0.00	-160	4.1
Volume 2	11:10	6.75	1.05	24.7	0.00	-158	4.2
Volume 3	11:13	6.76	1.04	24.7	0.00	-157	5.1
Volume 4	11:14	6.76	1.07	24.7	0.00	-158	5.2
Volume 5	11:19	6.77	0.95	24.7	0.00	-159	6.1
Volume 6	11:22	6.77	0.77	24.7	0.00	-161	7.1
Purge Method	<input type="checkbox"/> SUCTION PUMP <input checked="" type="checkbox"/> SUBMERSIBLE PUMP <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER (SPECIFY)						

Notes/Observations: 11:00 start purging well. Water appears clear odor free.

Sampler(s): M. Greenberg, R. Robbs

Volume 7	11:25	6.77	0.76	24.7	0.00	-164	8.1
Volume 8	11:28	6.77	0.77	24.7	0.00	-165	9.1
Volume 9	11:31	6.77	0.76	24.7	0.00	-166	10.1

EXHIBIT B-3

WELL PURGE DATA SHEET

Well I.D. MW-3 Date 8-22-00  
 Well Depth (from TOC) = 3.96 ft  
 Well Diameter (d) = 2 in  
 Static Water Level (from TOC) = 1.17 ft  
 Well Radius (d/2) = 1 in

Height of Water in Well

T = Depth (ft) - Static Water Level (ft)  
 T = 3.96 - 1.17  
 T = 2.79 ft

Gallons of Water per Well Volume

$$\begin{aligned} \text{Volume} &= 0.163 \times T(\text{ft}) \times r(\text{in})^2 \\ &= 0.163 \times \underline{2.79} \times \underline{1}^2 \\ &= \underline{0.45} \text{ gallons} \end{aligned}$$

Total Water Purged

Design = 1.36 gallons  
 Actual = 1 gallons

Water Quality

	TIME	pH	SPEC. CONDOC. (umhos/cm)	TEMPERATURE (°C)	DO (ppm)	Zn (mu)	Tur.
03 min Initial	<u>0825</u>	<u>7.16</u>	<u>0.286</u>	<u>24.9</u>	<u>1.62</u>	<u>71</u>	<u>106</u>
Volume 1							
Volume 2							
Volume 3							
Volume 4							
Volume 5							

Purge Method  
 SUCTION PUMP  SUBMERSIBLE PUMP  BAILER  OTHER (SPECIFY)

Notes/Observations: 0822 Start purging well. Water is braced product with no odor well used Dry

Sampler(s): M. Gro. Worg R. Robles

**SUBSURFACE BASELINE REPORT  
FORMER NAPORANO IRON AND METAL COMPANY  
AND HUGH NEU SCHNITZER EAST FACILITIES**

**ADDENDUM NO. 2**

**to**

**EXHIBIT I**

**to**

**Lease No. L-PN-264**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**September 2002**

**SUBSURFACE BASELINE REPORT  
FORMER NAPORANO IRON AND METAL COMPANY  
AND HUGH NEU SCHNITZER EAST FACILITIES**

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## SECTION 1.0

### INTRODUCTION

The purpose of this Subsurface Baseline Environmental Evaluation (SBEE) is to establish surface and subsurface baseline conditions for an approximately 15-acre parcel formerly occupied by the Naporano Iron and Metal Company (Naporano) and the Hugo Neu Schnitzer East (Hugo Neu). The location of the site is shown on Figure 1. The approximately 15-acre area is shown in Figure 2. The investigation on this portion of the property included the installation of 43 soil borings, five of which were completed as monitoring wells. A sixth monitoring well, MW-C5, was installed and sampled as part of the SBEE. However, MW-C5 was excavated during the remediation activities at the site. Soil analytical data for MW-C5 is not provided since the soil was excavated. However, since groundwater is not as location-specific as soil, analytical data for the groundwater samples collected from MW-C5 is included in this report. Locations of the soil borings and monitoring wells are shown on Figures 3 and 4.

The work performed as part of this investigation was conducted in accordance with *Technical Requirements for Site Remediation (TRSR)* (N.J.A.C 7:26E) and the New Jersey Department of Environmental Protection (NJDEP) *Field Sampling Procedures Manual*, May 1992.

## SECTION 2.0

### FIELD ACTIVITIES

A total of 43 borings were installed in order to characterize the site in regard to potential contaminants and provide information about the geology and hydrogeology. Thirty-three of these borings were installed by Port Authority personnel on both the former Naparano and Hugo Neu sites. Five of these borings were completed as monitoring wells. The remaining 10 borings were installed by Hugo Neus's consultant Excel Environmental Resources, Inc. (Excel) solely on the former Hugo Neu site. The locations of the soil borings and monitoring wells are presented in Figures 3 and 4. In general, the soil borings installed by Port Authority personnel were advanced until groundwater was observed in order to evaluate the potential for the presence and migration of hazardous substances or to delineate contamination seen in earlier investigative rounds. Soil borings installed by Excel were drilled and sampled at pre-determined depths. Additional information regarding sampling procedures is described below.

#### 2.1 SOIL SAMPLING PROGRAM

The soil sampling program investigation followed the requirements specified in N.J.A.C. 7:26E-3.6. All borings performed by Port Authority personnel were installed utilizing either a bucket auger or a 4 5/8-inch inside diameter hollow-stem auger. In areas where subsurface features (utilities) were a concern or proposed sampling depths were limited, a bucket auger was used to penetrate surface features or collect the samples. After subsurface features were penetrated, continuous split-spoon soil samples were collected at 2-foot intervals using a carbon steel split-spoon. All soils were characterized by the on-site geologist (from the hand-auger samples and split-spoon cores) and screened using an HNu photoionization detector. Additionally, HNu readings were recorded in the breathing zone of the on-site workers, and headspace readings were recorded from soil samples collected from each discrete sampling interval. All information was recorded on boring log forms or in bound field logbooks.

Table 1 summarizes the soil sampling program, including sample ID, sampler, site, number of samples, depth, date, and analysis.

Ten of the borings, BH-N1, BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1, BH-N5A, BH-N5B, BH-N5C, BH-N5D, and MW-N2 were installed on the former Naparano Facility portion of the site. MW-N2 was completed as a monitoring well. All ten borings were installed on the Naparano facility by Port Authority personnel. A total of 24 soil samples were collected from the six borings. Two samples were collected from both BH-N1 and MW-N2 at depths 0.5 to 1.5 feet (ft) below ground surface (bgs) and between 4.0 and 5.0 ft bgs. Four samples were collected from BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1 from depths between 2.0 and 4.0 ft bgs. Samples from BH-N5A, BH-N5B, BH-N5C, and BH-N5D were collected from 0.5 to 2.5 ft bgs.

The remaining 33 borings were installed on the former Hugo Neu portion of the facility. Port Authority personnel installed 23 of the borings on the Hugo Neu portion of the site and collected samples at various depths. The remaining 10 borings were installed by Excel. Excel collected a total of 28 soil samples. One to four samples were collected per boring by Excel. A detailed breakdown of the sampling program is presented in the sections below.

Due to logistical reasons, the soil and groundwater investigation at each of the former facilities were performed separately. Since the sampling approach for each facility was based on site-specific conditions, unique investigative methods (i.e., sampling depth and parameters) were utilized at each facility. The sampling methodology employed at each facility is presented in the sections below.

#### Summary of Investigation at Former Naporano Facility Portion of the Site

At the former Naporano Facility, 24 discrete soil samples were collected from ten soil borings for contract laboratory analysis in this portion of the site. Soil samples were collected from each boring at depths ranging from 0.5 to 5.0 ft bgs. HNu readings of the headspace from each sampling interval ranged from 0.0 to 1.5 parts per million (ppm). Field screening results along with the boring logs are provided as Appendix A. BH-N1 and MW-N2 were analyzed for total petroleum hydrocarbons (TPHC) and the complete list of priority pollutants with a forward library search (PP+40), including xylenes. A PP+40 scan is comprised of priority pollutant volatile organic compounds with a forward library search (VO+15) plus xylenes, priority pollutant base/neutral and acid extractable organics with a forward library search (BNA+25), polychlorinated biphenyls (PCBs), pesticides, and priority pollutant metals. Soil samples for Volatile Organic Compound (VOC) analysis were collected using methanol extraction methodology. Soil borings BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1, BH-N5A, BH-N5B, BH-N5C, and BH-N5D were analyzed for TPHC only. Trip blanks were submitted for laboratory analyses during the soil sampling task of this investigation. Field blanks and duplicate samples were not collected during the soil sampling phase of the investigation. All Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

#### Former Hugo Neu Facility

Within the former Hugo Neu portion of the facility, Port Authority personnel installed 23 soil borings. Hollow stem auger drilling equipment was used to install seven soil borings in this portion of site. Continuous split spoon sampling was collected at intervals of 0.0 to 0.5 ft bgs and 1.5 to 2.0 ft bgs. Bucket augers were used to collect soil samples at the other four locations. Each sample was characterized by the on-site supervisor and screened using an HNu photoionization detector. All field screening information was recorded on boring log forms (see Appendix A).

For each soil boring there was anywhere from one to three samples taken from depths ranging from 0.5 ft bgs to 9.5 ft bgs (See Table 1). HNu readings of the headspace from each sampling interval ranged from 0.0 to 2.3 ppm. Field screening results along with the boring logs are provided as

Appendix A. Samples collected from BH-N6 and BH-N7 were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), PCBs, Aldrin, Heptachlor, Dieldrin, Lead and TPHC analyses. Samples collected from MW-C1, MW-C2, MW-C3, and MW-C4 were analyzed for TPHC, Phenols, BNA+25, cyanide, PP+40, and PCBs. The remaining samples were only analyzed for TPHC.

As noted previously, in addition to the above-noted sampling, 10 additional soil borings were installed at the Hugo Neu site by Excel. These soil borings were advanced using Geoprobe<sup>®</sup> drilling equipment. The boring locations are shown on Figure 3. A total of 25 discrete soil samples were collected for contract laboratory analysis. Two to four samples were collected from each soil boring location at varying depths ranging from 0.0 to 0.5 foot bgs to 7.0–7.5 ft bgs. Each sampling sleeve was characterized by the on-site supervisor and screened using an HNu photoionization detector. All field screening information was recorded on boring log forms (see Appendix A). All soil samples were analyzed for VO+15, BNA+25, PCBs, and priority pollutant metals.

Soil samples were transferred immediately to laboratory-prepared sample containers, labeled, packed, and shipped for analysis in accordance with N.J.A.C. 7:26E 2.1. Soil samples were processed and labeled consistent with Section 2.3.3 of this document. Sample chain-of-custody forms (COCs) were prepared for all samples collected as part of this investigation. Sample documentation and COCs were prepared consistent with procedures detailed in Section 2.3.3. Each piece of sampling equipment was decontaminated prior to use at each new sample location and prior to sampling the respective soil strata. All sampling equipment was constructed of stainless steel. For additional information on equipment decontamination procedures, see Section 2.3.2.

Soil samples for volatile analysis were collected using methanol extraction methodology. Field blanks, trip blanks and duplicate samples were submitted for laboratory analyses during the soil sampling task of this investigation. Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

Upon completion of each boring location, all soils and investigation-derived waste generated were handled consistent with the site-specific Waste Management Plan detailed in the site-specific investigation work plan.

## **2.2 GROUNDWATER SAMPLING PROGRAM**

The groundwater investigation was conducted as per N.J.A.C. 7:26E-3.7. The program included the installation of six overburden on-site monitoring wells. The wells were installed in select boreholes created during the soil boring program. One of the wells (MW-N2) was installed on the former Naporano facility. Four wells (MW-C1, MW-C2, MW-C3, MW-C4) were installed on the former Hugo Neu facility. MW-C5 (its correlated boring was excavated during remedial activities) was also installed on the former Hugo Neu facility. Approximate locations of these wells are shown on Figure 3. Craig Drilling, Inc. (a New Jersey-licensed well driller) installed the monitoring wells. The well driller obtained the required NJDEP well permits. All the wells were installed under the supervision of Port Authority personnel. The monitoring well construction logs

are included in Appendix A.

### **2.2.1 Monitoring Well Installation**

Well construction materials consisted of 2-inch-diameter (Former Naporano Facility) and 4-inch-diameter (Former Hugo Neu Facility), schedule 40 PVC, well screens and riser pipe. The monitoring wells were constructed with 0.020-inch (20 slot) well screens; location-specific geologic conditions dictated well screen length. The well screens ranged from 3.5 to 8 ft in length. Groundwater was encountered during the drilling activities at 3.5 to 7 ft bgs. The annular space between the well screen and the formation was filled with filter pack to an elevation approximately 2 ft above the top of the screen. The remaining filter pack consisted of approximately 1 foot of finer sand on top of the filter pack. This finer filter pack was designed to act as a sand choke between the formation material and the well materials, and to limit the potential for grout to enter the well from above.

A bentonite seal was emplaced above the filter pack to prevent infiltration to the cement grout into the filter pack and well screen. The seal thickness was dependent on the stratigraphy at each location and ranged from 0.5 to 1.0 foot.

A cement-bentonite grout mixture was placed above the seal and extended to ground surface. All wells were completed with flush-mount construction casings. Cement pads were constructed around each well to provide drainage away from the wells. Protective PVC caps were placed on the PVC riser pipe. Locks were placed on the outside of the protective casings. Metal tags with the monitoring well I.D. number and the NJDEP well permit number were affixed to the manhole covers. Each well was given a locking vacuum cap. A concrete pad was constructed and a flush-mounted manhole cover was grouted in place to secure these locations.

### **2.2.2 Well Development**

Each monitoring well was developed in accordance with the TRSR. Monitoring well development was performed in order to meet the following objectives:

- Remove materials that may have accumulated in the openings of the well screen during installation, and key the well screen and filter pack into the formation being monitored.
- Remove fine materials from the sides of the borehole that resulted from drilling procedures.
- Stabilize the fine materials remaining in the vicinity of the well to retard their movement into the well, increasing well yield.

- Provide an estimate of the well yield.

Monitoring well development was accomplished by overpumping the well using an appropriately sized pump. The pump was field-decontaminated, and new dedicated polyethylene tubing was used for each individual discharge line. To ensure that fine materials were removed during development, the pump intake was raised and lowered across the entire length of the well screen. Additionally, the pump was turned off and on and pumped at different rates during development to cause a surge effect to remove additional fine materials.

During development, field measurements of temperature, pH, specific conductivity, turbidity, and (at some locations) salinity were obtained at the beginning of development, during development and upon completion of development. Observations related to groundwater appearance were recorded.

The development procedures for the monitoring wells continued until the following goals were met or exceeded:

- Discharge became clear.
- Flow rate stabilized.
- At least five volumes of water were removed and the well pumped for a minimum of four hours.
- Turbidity readings were less than 50 NTUs as determined by a nephelometer.

### 2.2.3 Water Sampling Procedure Summary

Groundwater sampling occurred at the former Naporano Metals Facility on 21 September 1999 and at the former Hugo Neu Facility on 12 and 13 July 1999; all sampling was at least two weeks after development of the last well installed on site. During the groundwater sampling program at the former Hugo Neu site, monitoring well MW-C1 could not be located and therefore was not sampled. During the groundwater sampling program, all monitoring wells were purged and sampled according to low-flow protocol, using a field-decontaminated pump equipped with new, dedicated polyethylene and Teflon-lined discharge tubing. During purging, wells were pumped at a low rate (lower than the recharge rate) so that the drawdown was kept to the lowest possible amount. Water level measurements were taken to ensure that the water column was not purged to dryness.

Monitoring wells were purged until water quality parameters including temperature, pH, and specific conductivity stabilized (less a 10% variation) and turbidity levels were less than 50 NTUs. Purge rates for wells did not exceed the purge rates at which the monitoring wells were

developed. During well purging, groundwater was monitored for the presence of VOCs. Additional groundwater quality parameters including Eh (millivolts), salinity, and dissolved oxygen were obtained to provide additional water quality data. The groundwater sampling procedure employed during the sampling event is provided below.

1. Measure static water level in monitoring well using an electronic water level device to minimize disturbance to the water column.
2. Check for free product or sheen floating on water surface in the well.
3. Position low-flow pump in the water column with the intake placed at a point between the middle and top of the screened interval.
4. Purge the well using a low flow rate (<0.5 l/min) until indicator parameters (i.e., pH, conductivity, oxygen, etc.) have stabilized (Note: Goal during purging is to limit drawdown to < 0.1 m).
5. Collect groundwater samples using same flow rates as established during purging.
6. Fill sample bottles directly from the pump discharge avoiding excessive agitation of sample. Fill Volatile Organic Analysis (VOA) sample vials first, then remaining sample bottles.
7. Decontaminate pumps used for groundwater sampling prior to use according to the procedures described herein. One sample was collected from each monitoring well. All samples were separate grab samples.

Each water sample at the Former Naporano Facility was analyzed for TPHC, PP+40, VOCs + 15, total dissolved solids and total chlorides. Each water sample at the Former Hugo Neu Facility was analyzed for TPHC, PP+40, total suspended solids and total chlorides. Temperature, pH, and specific conductivity were measured in the field at both facilities. Groundwater COCs and labeling procedures are detailed in Section 2.3.3.

### 2.3 QUALITY ASSURANCE AND QUALITY CONTROL

In order to generate analytical data of known and defensible standards, quality assurance (QA) and quality control (QC) protocols for sampling and laboratory analysis were complied with in accordance with the requirements specified in N.J.A.C. 7:26E-2.1. This was conducted to ensure that samples obtained in the field were representative of the particular environment from which they were collected and were of satisfactory quality to meet the project objectives.

#### 2.3.1 QA/QC Samples

##### 2.3.1.1 *Field Blanks*

A field blank composite sample was taken during the groundwater sampling portion of the investigation. A field blank was conducted using two identical sets of cleaned sample containers. One set of containers was empty and served as the sample containers to be analyzed. The second



set of containers was filled with laboratory-demonstrated analyte-free water. At the field location, the analyte-free water was poured over the clean sample equipment (pump) and placed in the empty sample containers for analysis. The field blank was handled, transported, and analyzed in the same manner as samples acquired that day. The field blank was performed at the rate of one per sampling day per type of sampling equipment, and packaged with its associated matrix. The field blank for groundwater was analyzed for all of the same parameters as the samples collected that day.

### **2.3.1.2 Trip Blanks**

Trip blanks are required only for aqueous sampling events for volatile organics and for soil samples collected with the methanol preservation method. Sample bottles for aqueous trip blanks were filled at the laboratory with laboratory-demonstrated analyte-free water. Sample bottles for trip blanks associated with the volatile soil samples collected using the methanol preservation method were filled and weighed at the laboratory with pesticide-grade methanol. The trip blanks traveled with the sample bottles and were not opened in the field. They were handled, transported, and analyzed along with the other samples. For aqueous samples, one trip blank was provided per shipment or two-day sampling event. For soil samples collected using the methanol preservation method, one trip blank accompanied each sample shipment.

## **2.3.2 EQUIPMENT DECONTAMINATION**

### **2.3.2.1 Sampling Equipment Decontamination**

All soil and groundwater sampling equipment, except heavy machinery and submersible pumps, were decontaminated using these procedures.

Soil sampling equipment was decontaminated according to the following procedure:

1. Non-phosphate detergent plus tap water wash.
2. Tap water rinse.
3. Distilled/deionized water rinse.

Groundwater sampling equipment was decontaminated and packaged in the laboratory, and dedicated for exclusive use at one sample location only. The laboratory utilized the following decontamination procedure:

1. Non-phosphate detergent plus tap water wash.
2. Tap water rinse.
3. Distilled/deionized water rinse.
4. 10% nitric acid solution rinse.
5. Distilled/deionized water rinse.
6. Methanol (pesticide-grade) rinse.\*
7. Total air dry.

8. Distilled/deionized water rinse.

\* Methanol was used in place of acetone since acetone was a target analyte.

All decontaminated sampling equipment was stored and handled as appropriate to prevent contamination. Information concerning the decontamination methodology, date, time, and personnel was recorded in the field logbook.

*2.3.2.2 Heavy Machinery Decontamination*

Prior to use on site, heavy equipment was steam cleaned or manually washed. Parts that were prone to contact with contaminated materials required more frequent cleaning to prevent cross-contamination of environmental samples. For example, augers and split-spoon sampling devices were steam cleaned between sampling locations.

*2.3.2.3 Pump Decontamination*

The pump used for evacuation of water from monitoring wells prior to sample collection was decontaminated to eliminate the possibility of contamination introduced by pump insertion.

The pump was cleaned and flushed between use at each monitoring well. The outside of the pump was manually washed using non-phosphate detergent and water, followed by a potable (tap) water rinse. The pump was then flushed with 20 gallons of potable water pumped through the housing and hose. After completion of the flushing, the exterior housing was rinsed with distilled and deionized water. Rinsate from the pump decontamination was collected in drums for disposal. After each use, the hose was cut up into manageable-sized pieces and disposed of with other investigation-derived wastes.

*2.3.2.4 Monitor Well Casing and Screen Decontamination*

Before installation, well casings and screens were manually scrubbed in the field to remove foreign material. Casings and screens were also thoroughly steam cleaned to remove all traces of oil and grease which may have been present, especially at threaded joints. Casings were carefully handled and stored to prevent cross-contamination prior to installation.

**2.3.3 SAMPLE DOCUMENTATION**

During sampling, all activities were recorded in a logbook to provide an accurate record of the sampling event and the procedures followed. Entries made by sampling personnel in the logbook included:

- Date/Time/Weather
- Sampler/Geologist/Soil Scientists' Names

- Sample Point Identification (including location, matrix, and sample depth)
- Sketch Showing the Sampling Point Location (including reference distances)
- Soil Profile
- Sample Size
- Sampling Equipment Used
- Field Measures (where appropriate)
- General Comments (e.g., odor, staining, etc.)

The field crew also labeled each sample container with the appropriate information necessary to identify the sample as listed below:

- Unique Sample Identification Number
- Date
- Time of Sampling
- Name
- Preservation
- Analyses
- Sampler's Initials

This information was then supplemented and cross-referenced on a COC form, providing documentation of the handling of each sample from collection to arrival at the laboratory.

The COC was completed by the field crew and signed by the sampler and all personnel handling the samples before the samples were relinquished to the laboratory. The COC contained the following information:

- Project Name
- Date
- Sampler's Initials
- Sample Identification Number
- Name/Description of Sample (Analytical Parameters)
- Preservation
- Number of Containers
- Holding Conditions and Locations
- Signature of all Handlers and Date and Time of Transfers
- Organization or Affiliation of all Handlers and Reason for Transfer

All samples were preserved at the time of collection and packaged in coolers of sufficient size to hold all containers, ice, and packing material to prevent breakage. Coolers were of suitable type and integrity to transport the samples.

At the laboratory, receipt of samples was recorded on the COC form by laboratory personnel. The original or a copy of the form was returned to the shipper. The COC record was checked by laboratory personnel against the information regarding the analysis requested. If any discrepancies

were discovered, they were resolved with the person requesting the analysis and recorded to provide a permanent record of the event. A record of the information detailing the handling of a particular sample through each stage of analysis was provided by completing a laboratory chronicle form. This form typically provides the following information:

- Job Reference
- Sample Matrix
- Sample Number
- Date Sampled
- Date and Time Received by Laboratory
- Holding Conditions
- Analytical Parameter
- Extraction Date/Time and Extractor's Initials
- Analysis Date/Time and Analyst's Initials
- QA Batch Number, Date Reviewed, and Reviewer's Initials

#### 2.3.4 LABORATORY ANALYTICAL QUALITY ASSURANCE PROCEDURES

Analyses of samples were performed in accordance with NJDEP and U.S. Environmental Protection Agency (USEPA) methodologies.

The contract laboratory provided sample containers for the requested analyses appropriate for analysis of each matrix. The sample containers were of sufficient size to permit replicate analyses to be run from the sample matrix. All unused portions of samples will be archived by the laboratory until written notification from the Port Authority regarding their disposition is received. The contract laboratory will also retain samples and sample extracts in a sample archive for future analyses if requested by Port Authority representatives.

Calibration and periodic inspection of laboratory instruments was in accordance with USEPA and/or the manufacturer's specifications. Reference standards and QC samples (spikes, blanks, and duplicates) were used as necessary to determine the accuracy and precision of procedures, instruments, and operators. If QC sample analysis results indicated QC values outside the control limit range, sample analysis was suspended until the instrument was recalibrated. In general, the following quality control requirements applied to all samples:

- Analysis of an appropriate blank with every set.
- Analysis of at least one standard at midrange concentration (preferably an additional standard near the detection level).
- Annual analysis of external reference samples.
- Annual analysis of split or double blind each method and parameter.
- Laboratories must keep records of the following samples.
- Determination of a detection limit for information:
  - Date, title, analytical method name, and reference
  - Time of analysis
  - Details of methods not specified in referenced procedures, sample numbers

- All raw data (measurements)
- Calculations
- Results
- Equipment used, and instrumental parameters
- Analyst signature or initials.

QC data was reported with the analytical results. The laboratory provided as a final report reduced-data deliverables as per N.J.A.C 7:26E, Appendix A, Sections III and IV.

## 2.4 WASTE MANAGEMENT

Types of waste material generated during the site investigation included soil drilling cuttings, monitoring well development groundwater, decontamination rinsates, expendable materials, and personal protective equipment (e.g., gloves, towels, etc.).

Soil cuttings from borings and holes converted to monitoring wells were inspected for contamination by field observation (visual and odor) and instruments (HNU meter). When the material was not contaminated based on field observations, the facility environmental coordinator located an area at the work site to reuse the material as backfill. The material may have been used on site in areas outside the work area, providing the area had similar subsurface characteristics or results of the soil analysis are below the residential cleanup criteria. This determination was the responsibility of the facility environmental coordinator. Material that could not be reused on site was properly disposed of off site utilizing the Port Facility Call-in Disposal Contractor.

Prior to pumping water from a monitoring well, a sample was obtained using a clear-bottom Teflon bailer. The water sample was inspected for contamination by observation (visual and odor), HNU measurements, and field tests (pH). If the water was not contaminated based on the field inspection, the water was reapplied to the ground surface in a manner not to allow water to run off site or over stained areas.

## SECTION 3.0

### SURVEYING

Table B-1 of Appendix B provides the final latitude, longitude and elevation to the nearest 0.01 foot of all borings and wells installed by Port Authority personnel. The data is presented in North American Datum (NAD) 83 format. The elevation for all monitoring wells is measured from the top of the well casing. The elevation for all soil borings is measured from ground surface. Survey data was not collected for borings installed by Excel. The locations presented in Table B-2 of Appendix B and Figure 3 were scaled off from the figure provided by Excel in their March 1999 Report (Figure 3 - Proposed Soil Boring Locations, *Preliminary Assessment Report and Site Investigation Work Scope Technical Report and Appendices*, Excel Environmental Resources, Inc., March 1999).

## SECTION 4.0

### RESULTS

#### 4.1 SOIL SAMPLING RESULTS

The analytical results of the soil samples and associated trip blanks collected by Port Authority and Excel personnel at the Former Naporano and Hugo Neu Facilities are contained in Tables 2 through 12.

- Table 2 summarizes results of VOC analyses performed on the soil samples collected by the Port Authority.
- Table 3 summarizes results of SVOC analyses performed on the soil samples collected by the Port Authority.
- Table 4 summarizes results of PCBs analyses performed on the soil samples collected by the Port Authority.
- Table 5 summarizes results of pesticide analyses performed on the soil samples collected by the Port Authority.
- Table 6 summarizes results of inorganic analyses performed on the soil samples collected by the Port Authority.
- Table 7 summarizes results of TPHC analyses performed on the soil samples collected by the Port Authority.
- Table 8 summarizes results of VOC analyses performed on the soil samples collected by Excel.
- Table 9 summarizes results of SVOC analyses performed on the soil samples collected by Excel.
- Table 10 summarizes results of PCBs analyses performed on the soil samples collected by Excel.
- Table 11 summarizes results of inorganic analyses performed on the soil samples collected by Excel.
- Table 12 summarizes results of THPC analyses performed on the soil samples collected by Excel.

## 4.2 GROUNDWATER SAMPLING RESULTS

The analytical results of the groundwater samples collected by the Port Authority personnel from the monitoring wells located at the former Naporano and Hugo Neu Facilities are contained in Tables 13-17.

- Table 13 summarizes the VOC analyses performed on the groundwater samples.
- Table 14 summarizes the results of the SVOC analyses performed on groundwater samples.
- Table 15 summarizes the PCB and pesticide analyses performed on the groundwater samples.
- Table 16 summarizes the inorganic analyses performed on the groundwater samples.
- Table 17 summarizes the results of the TPHC analyses performed on the groundwater samples.



**FIGURES**

TABLES

Table 1  
 Summary of Soil Sampling Program  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Location ID	Collected by	Site	Date
SB-1	Excel	Metro Metals	6/23/1999
SB-2	Excel	Metro Metals	6/23/1999
SB-3	Excel	Metro Metals	6/23/1999
SB-4A <sup>1</sup>	Excel	Metro Metals	6/24/1999
SB-4B <sup>1</sup>	Excel	Metro Metals	6/24/1999
SB-5A	Excel	Metro Metals	6/23/1999
SB-5B	Excel	Metro Metals	6/23/1999
SB-5C	Excel	Metro Metals	6/23/1999
SB-5D	Excel	Metro Metals	6/25/1999
SB-5E	Excel	Metro Metals	6/23/1999
SB-5F	Excel	Metro Metals	6/25/1999
MW-C1	PA	Metro Metals	6/23/1999
MW-C2	PA	Metro Metals	6/22/1999
MW-C3	PA	Metro Metals	6/23/1999
MW-C4	PA	Metro Metals	6/23/1999
MW-C5	PA	Metro Metals	12/5/2001
PA-C6	PA	Metro Metals	6/24/1999
PA-C7	PA	Metro Metals	6/24/1999
BH-N6	PA	Metro Metals	10/2/2000
BH-N7	PA	Metro Metals	10/2/2000
BH-N5A	PA	Naporano	8/25/1999
BH-N5B	PA	Naporano	8/27/1999
BH-N5C	PA	Naporano	8/27/1999
BH-N5D	PA	Naporano	8/27/1999
BH-N5F	PA	Naporano	8/11/2001
BH-N1	PA	Naporano	8/25/1999
MW-N2	PA	Naporano	8/27/1999
PA-C6-E1	PA	Metro Metals	12/3/2001
PA-C6-E2	PA	Metro Metals	12/5/2001
PA-C6-E3 <sup>2</sup>	PA	Metro Metals	12/7/2001
PA-C6-E3A <sup>2</sup>	PA	Metro Metals	12/11/2001
PA-C6-E4	PA	Metro Metals	12/11/2001
PA-C6-E5	PA	Metro Metals	4/29/2002
PA-C6-E6	PA	Metro Metals	4/29/2002

Table 1  
 Summary of Soil Sampling Program  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Location ID	Collected by	Site	Date
PA-C6-E7	PA	Metro Metals	4/29/2002
PA-C6-E8	PA	Metro Metals	4/29/2002
PA-C6-E9	PA	Metro Metals	5/16/2002
PA-C6-E10	PA	Metro Metals	5/16/2002
PA-C6-E11	PA	Metro Metals	5/16/2002
PA-C6-N1	PA	Metro Metals	12/3/2001
PA-C6-N2	PA	Metro Metals	12/5/2001
PA-C6-N3	PA	Metro Metals	12/7/2001
PA-C6-W1	PA	Metro Metals	12/3/2001
PA-C6-W2	PA	Metro Metals	12/5/2001
PA-C6-W3	PA	Metro Metals	12/7/2001
PA-C6-S1	PA	Metro Metals	12/3/2001
PA-C6-S2	PA	Metro Metals	12/5/2001
PA-C6-S3	PA	Metro Metals	12/7/2001
PA-C6-S4	PA	Metro Metals	12/11/2001
PA-C6-S5	PA	Metro Metals	4/29/2002
PA-C6-S5A	PA	Metro Metals	4/29/2002
PA-C6-S6	PA	Metro Metals	4/29/2002
PA-C6-S7	PA	Metro Metals	4/29/2002
PA-C7-N1	PA	Metro Metals	12/4/2001
PA-C7-S1	PA	Metro Metals	12/4/2001
PA-C7-E1	PA	Metro Metals	12/4/2001
PA-C7-W1	PA	Metro Metals	12/4/2001
BH-N1-N1	PA	Naporano	12/4/2001
BH-N1-W1	PA	Naporano	12/4/2001
BH-N1-S1	PA	Naporano	12/4/2001
BH-N1-E1	PA	Naporano	12/4/2001
MW-C5-N1	PA	Metro Metals	12/5/2001
MW-C5-W1	PA	Metro Metals	12/5/2001
MW-C5-S1	PA	Metro Metals	12/5/2001
MW-C5-E1	PA	Metro Metals	12/5/2001

Notes:

- <sup>1</sup> - SB-4A and SB-4B from same location
  - <sup>2</sup> - PA-C6-E3 and PA-C6-E3A from same location.
- Excel - Excel Environmental Resources, Inc.  
 PA - Port Authority

PA000000

Table 2
Summary of Volatile Organic Compounds Soil Sampling Results
Naparano and Hugs Neu Facilities
Port Newark
Newark, New Jersey

Table with columns for Sample ID, CAS Number, and various sampling locations (e.g., MW-1, MW-2, T-1, T-2). Rows list various chemical compounds like 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, etc., with corresponding numerical values.

LEGEND

NUDEP New Jersey Department of Environmental Protection
mg/kg milligrams per kilogram, equivalent to parts per million
U Not detected at the PCB
NA Analyte detected below PQL either estimated concentration
NA Not Analyzed
Shaded value exceeded the NUDEP indirect soil cleanup criteria.
Bolder value exceeded the NUDEP impact to ground water soil cleanup criteria.

Table 2  
Summary of Volatile Organic Compounds Soil Sampling Results  
Naporsco and Hugo Hess Facilities  
Port Newark  
Newark, New Jersey

Sample ID: Sampling Depth (ft) Naporsco Sample ID: Sampling Date: Inch	CAS Number	HJDEP Impact to Groundwater Soil Cleanup Criteria mg/L	HJDEP Residential Direct Contact Soil Cleanup Criteria mg/L	HJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/L	MW-C1 3-1 1.5-2.0 AA90435 6/23/1995	MW-C1 3-4 4-7 AA90434 6/23/1995	MW-C1 3-1 1.5-2.0 AA90437 6/23/1995	MW-C1 3-3 4-5 AA90438 6/23/1995	MW-C5 3-1 1-2 AA90531 6/24/1995	MW-C5 3-4 4-5 AA90532 6/24/1995	PA-C5 3-1 4-1 AA90533 6/24/1995	PA-C5 3-5 4-5 AA90534 6/24/1995	PA-C7 3-1 4-1 AA90535 6/24/1995	PA-C7 3-4 4-5 AA90536 6/24/1995	TB 4/21 NA AA90329 6/23/1995	TB 6/23 NA AA90429 6/23/1995	TB 6/24 NA AA90329 6/24/1995
1.1-Trichloroethane	71-35-8	50	210	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.87 U	0.57 U	0.83 U	0.83 U	0.83 U
1.2,2,2-Tetrachloroethane	78-34-5	1	30	70	0.88 U	0.87 U	0.89 U	0.89 U	0.59 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,1,1-Trichloroethane	74-00-5	1	70	270	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	75-35-5	10	320	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,1-Dichloroethane	75-35-4	18	8	150	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	95-50-1	50	\$100	10000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	107-06-3	1	6	24	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	78-87-3	NA	10	43	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	841-73-1	100	\$100	10000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,4-Dichloroethane	106-86-7	50	370	10000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,1-Dichloroethane	78-87-2	50	1800	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1-Chloro-2-bromyethane	105-73-4	NA	NA	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Hexapenta	881-78-6	NA	NA	NA	2.7 U	2.7 U	2.4 U	2.4 U	2.4 U	2.3 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
1-Alkyl-2-Pyridone	128-10-1	30	1000	1000	2.7 U	2.7 U	2.4 U	2.4 U	2.4 U	2.3 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
Acetylene	87-84-1	100	1000	1000	2.7 U	2.7 U	2.4 U	2.4 U	2.4 U	2.3 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
Acetylene	107-02-8	NA	NA	NA	2.7 U	2.7 U	2.4 U	2.4 U	2.4 U	2.3 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
Cybenzole	101-12-1	1	7	5	1.4 U	1.5 U	1.4 U	1.4 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
Acetylene	75-17-4	1	17	46	0.88 U	0.87 U	0.89 U	0.89 U	0.59 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Styrene	75-72-7	1	46	270	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Styrene	74-83-8	1	78	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Carbon Disulfide	75-15-2	NA	NA	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Carbon Tetrachloride	56-23-5	1	3	4	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Chlorobenzene	106-90-7	1	37	880	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Chlorobenzene	75-05-2	NA	NA	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Chlorobenzene	67-65-3	1	24	24	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Chlorobenzene	74-87-3	18	820	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,1,2-Trichloroethane	108-69-3	1	33	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2,1,2-Tetrachloroethane	1009-101-5	1	4	5	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	108-20-3	NA	NA	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	174-48-1	1	170	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	100-41-4	100	1000	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
MCP-Styrene	100-28-3	47	412	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Methyl-ethyl ether	103-34-4	NA	NA	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Methyl-ethyl ether	75-08-3	1	49	120	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Methyl-ethyl ether	92-51-4	87	610	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
Pyrene	100-52-1	100	87	22	0.33 U	0.13 U	0.63 U	0.14 U	0.12 U	0.11 U	0.2 U	0.12 U	1.0	0.11 U	0.13 U	0.13 U	0.13 U
Pyrene	72-61-0	NA	NA	NA	0.33 U	0.13 U	0.63 U	0.14 U	0.12 U	0.11 U	0.2 U	0.12 U	1.0	0.11 U	0.13 U	0.13 U	0.13 U
1,2-Dichloroethane	117-15-6	1	4	5	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	109-62-7	100	1000	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	104-55-1	35	3	1000	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	1009-102-8	1	1	1	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	76-51-6	1	33	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	72-68-4	NA	NA	NA	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U
1,2-Dichloroethane	108-91-1	NA	NA	NA	1.4 U	1.3 U	1.4 U	1.4 U	1.3 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	72-07-4	18	2	7	0.66 U	0.87 U	0.81 U	0.89 U	0.58 U	0.87 U	0.57 U	0.8 U	0.81 U	0.57 U	0.83 U	0.83 U	0.83 U

LEGEND

HJDEP New Jersey Department of Environmental Protection  
 mg/kg Milligrams per Kilogram, equivalent to parts per million  
 U Not detected at the PQL  
 J Analyte detected below PQL, water estimated concentration  
 NA Not Available  
 Shaded values exceeded the HJDEP residential soil cleanup criteria.  
 Bolded values exceeded the HJDEP impact to ground water soil cleanup criteria.

PA000003557

Table 2  
Summary of Volatile Organic Compounds Soil Sampling Results  
Naporsno and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey

Client Sample ID: Sampling Depth (ft): Larbeck Sample ID: Sampling Date: Job#:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB1 2-2.5 AA90503 6/23/1999 mg/kg	SB1 6.1 6.1 AA90504 6/23/1999 mg/kg	SB1 1-1.8 1-1.8 AA90505 6/23/1999 mg/kg	SB1 3-3.6 3-3.6 AA90506 6/23/1999 mg/kg	SB3 1-1.5 1-1.5 AA90507 6/23/1999 mg/kg	SB3 3-1.5 3-1.5 AA90508 6/23/1999 mg/kg	SB-6A 6-6.3 6-6.3 AA90509 6/23/1999 mg/kg	SB-6A 1.5-2 1.5-2 AA90510 6/23/1999 mg/kg	SB-6A 2.1-3 2.1-3 AA90511 6/23/1999 mg/kg	SB-6A 6.1-7 6.1-7 AA90512 6/23/1999 mg/kg	SB-10 0.6-1 0.6-1 AA90513 6/23/1999 mg/kg	SB-10 2.1-3 2.1-3 AA90514 6/23/1999 mg/kg	SB-10 7-7.5 7-7.5 AA90515 6/23/1999 mg/kg		
1,1,1-Trichloroethane	71-55-6	30	210	1000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1,2-Trichloroethane	71-36-3	1	24	75	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	78-00-2	1	22	70	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,4-Dichlorobenzene	72-63-2	10	328	1000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1-Dichloroethane	75-33-4	10	5	150	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichlorobenzene	95-50-1	30	1100	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
2-Dichloroethane	107-06-2	1	8	24	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
2-Dichloroethane	78-87-6	NA	10	43	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	941-73-1	100	1100	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1,1-Trichloroethane	70-133-7	100	378	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	78-33-2	30	1000	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	119-72-6	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	991-78-6	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1-Methyl-2-Propylene	105-10-1	50	1000	10000	2.4 U	2.4 U	2.4 U	3.1 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1-Methyl-2-Propylene	105-10-1	50	1000	10000	2.4 U	2.4 U	2.4 U	3.1 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Acetone	67-64-1	180	1000	10000	2.4 U	2.4 U	2.4 U	3.1 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Acetone	187-07-8	NA	NA	NA	1.8 U	1.8 U	1.8 U	2.3 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Acetylene	189-15-1	1	7	21	1.2 U	1.2 U	1.2 U	1.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Aroclor 1248	77-45-2	1	33	100	0.12 U	0.12 U	0.12 U	0.15 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Bromochloroethane	79-37-4	1	41	128	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Bromodichloroethane	75-35-2	1	86	278	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Bromochloroethane	74-45-9	1	73	222	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Carbon Disulfide	75-15-0	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Carbon Tetrachloride	56-23-5	1	2	6	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chlorobenzene	108-90-7	1	27	830	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chlorobenzene	75-00-2	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	67-68-2	1	13	38	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	78-37-3	10	300	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1,2-Trichloroethane	126-98-2	1	78	2300	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
cis-1,2-Dichloropropene	10041-01-5	1	4	5	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1-Isopropyl-ether	108-20-3	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Monochloroethane	124-46-1	110	110	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Ethyl Ether	109-91-4	100	1000	10000	0.12 U	0.12 U	0.12 U	0.15 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	75-33-4	37	1000	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	1035-06-4	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	75-33-4	1	49	148	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	75-33-4	1	218	660	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	75-33-4	97	410	10000	0.12 U	0.12 U	0.12 U	0.15 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Dyrene	100-42-3	100	97	10000	0.12 U	0.12 U	0.12 U	0.15 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
n-Butyl Alcohol	78-85-0	NA	NA	NA	1.2 U	1.2 U	1.2 U	1.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	127-18-4	1	8	24	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	108-88-2	500	1000	10000	0.12 U	0.12 U	0.12 U	0.15 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
trans-1,2-Dichloroethane	158-02-4	50	1000	10000	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
trans-1,2-Dichloroethane	10281-02-8	1	6	5	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Trichloroethane	79-01-7	1	22	56	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	75-33-4	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Methyl Acetate	79-07-4	NA	NA	NA	1.2 U	1.2 U	1.2 U	1.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Methyl Chloride	75-07-1	16	2	7	0.6 U	0.6 U	0.6 U	0.9 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U

LEGEND  
NJDEP New Jersey Department of Environmental Protection  
mg/kg Milligrams per Kilogram, equivalent to parts per million  
U Not detected at the PQL  
J Analyte detected below PQL at/or estimated concentration  
NA Not Available  
Shaded values exceeded the NJDEP residential soil cleanup criteria.  
Bottled values exceeded the NJDEP impact to ground water soil cleanup criteria.



Table 2
Summary of Volatile Organic Compounds Soil Sampling Results
Raporano and Hugo Neu Facilities
Port Newark
Newark, New Jersey

Table with columns for Client Sample ID, Sampling Depth (ft), VolTech Sample ID, Sampling Date, CAS Number, NJDEP Impact to Groundwater Soil Cleanup Criteria, NJDEP Residential Direct Contact Soil Cleanup Criteria, NJDEP Non-Residential Direct Contact Soil Cleanup Criteria, and 15 columns of SO-SC IDs with corresponding mg/kg values.

LEGEND

NJDEP New Jersey Department of Environmental Protection
mg/kg Milligrams per Kilogram, equivalent to parts per million
U Not Detected at the PQL
J Analyte detected below PQL, and/or estimates concentration
NA Not Available
Bracketed values exceeded the NJDEP residential soil cleanup criteria.
Bracketed values exceeded the NJDEP impact to ground water soil cleanup criteria.

Table 2  
 Summary of Volatile Organic Compounds Soil Sampling Results  
 Naporano and Hugo New Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Vertical Sample ID: Sampling Date: Notes:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	86-48 0.5-1 8.1-1 AA90526 6/24/1999 mg/kg	88-48 1.5-4 8.1-4 AA90527 6/24/1999 mg/kg	T8 4/23 NA AA90522 mg/kg	T8 U24 NA AA90521 6/24/1999 mg/kg	T8 U25 NA AA90530 mg/kg	PA-C6-62-01 2.8-2.5 AB56547 4/29/2002 mg/kg	PA-C6-67-02 2.8-4.9 AB56551 4/29/2002 mg/kg	PA-C6-67-03 2.8-4.9 AB56558 4/29/2002 mg/kg
1,1,1-Trichloroethane	71-55-6	80	210	1000	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1,2,2-Tetrachloroethane	78-36-8	1	34	78	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1,2-Trichloroethane	78-00-5	1	22	420	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1-Dichloroethane	75-34-3	10	370	1900	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1-Dichloroethene	78-36-4	10	10	150	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,2-Dichloroethane	78-10-1	50	100	1000	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,2-Dichloroethene	107-06-2	1	4	24	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,2-Dichloropropane	78-07-3	NA	10	43	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,3-Dichloropropane	54173-1	100	100	1000	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,4-Dichlorobenzene	106-48-7	100	370	1000	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U			
Chloroform	79-09-2	50	1000	1000	3.2 U	3.2 U	3.1 U	3.1 U	3.1 U	0.8028 U	0.8027 U	0.8027 U
1-Chloro-2,2,2-trifluoroethane	118-75-8	NA	NA	NA	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Chloroethane	78-10-1	NA	NA	NA	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8022 U	0.8021 U	0.8022 U
1,1,1,2-Tetrafluoroethane	108-10-1	80	1000	1000	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8022 U	0.8021 U	0.8022 U
Acetone	67-64-1	100	1000	1000	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8022 U	0.8021 U	0.8022 U
Acrolein	107-02-8	NA	NA	NA	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	0.8019 U	0.8018 U	0.8018 U
Acrylonitrile	107-12-1	1	1	2	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.8017 U	0.8016 U	0.8016 U
Benzene	71-43-2	1	12	12	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U	0.8017 U	0.8016 U	0.8016 U
1,1-Dichloroethene	75-37-4	1	11	48	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Bromochloroethane	75-32-2	1	88	378	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Bromomethane	74-83-9	1	1000	1000	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Carbon Disulfide	75-15-2	NA	NA	NA	0.84 U	0.58 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Carbon Tetrachloride	56-23-3	1	4	4	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Chlorobenzene	106-90-7	1	37	680	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Chloroethane	78-00-3	NA	NA	NA	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Chloroform	67-66-2	1	18	26	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Chloroethene	74-27-3	10	320	1000	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1,1,2-Tetrafluoroethane	128-20-2	1	78	1000	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1,2,2-Tetrafluoroethane	10081-01-5	1	4	3	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1,1-Trifluoroethane	128-20-2	NA	NA	NA	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Dibromochloroethane	124-48-1	1	110	1000	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Ethylbenzene	100-41-4	100	1000	1000	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U	0.8064 U	0.8063 U	0.8063 U
M,P-Xylenes	106-38-3	67	410	1000	0.58 U	0.22 U	0.25 U	0.25 U	0.25 U	0.8051 U	0.8051 U	0.8051 U
Methyl Ethyl Ketone	133-84-8	NA	NA	NA	0.73 U	0.71 U	0.73 U	0.73 U	0.73 U			
Methylene Chloride	75-09-2	1	48	210	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
O-Xylene	95-47-6	67	410	1000	0.28 U	0.11 U	0.13 U	0.13 U	0.13 U	0.8062 U	0.8060 U	0.8062 U
O-Xylene	100-47-8	100	73	67	0.67 U	0.11 U	0.13 U	0.13 U	0.13 U	0.8062 U	0.8061 U	0.8061 U
p-Xylol Alcohol	75-65-0	NA	NA	NA	1.3 U	1.1 U	1.3 U	1.3 U	1.3 U			
1,2-Dichlorobenzene	107-18-4	1	4	6	0.37 U	0.38 U	0.63 U	0.63 U	0.63 U	0.8028 U	0.8022 U	0.8017 U
Toluene	108-88-3	500	1000	1000	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U	0.8038 U	0.8021 U	0.8011 U
trans-1,2-Dichloroethene	156-60-8	50	1000	1000	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
trans-1,2-Dichloropropane	10081-02-8	1	4	6	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
Trichloroethene	72-61-8	1	23	50	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	0.8054 U
1,1-Dichloroethane	72-69-4	NA	NA	NA	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U			
Methyl Acetate	120-05-4	NA	NA	NA	1.3 U	1.1 U	1.3 U	1.3 U	1.3 U			
Methyl Chloride	72-61-4	18	2	7	0.64 U	0.56 U	0.83 U	0.83 U	0.83 U	0.8056 U	0.8053 U	140

LEGEND

NJDEP New Jersey Department of Environmental Protection  
 mg/kg Milligrams per Kilogram, equivalent to parts per million  
 U Not detected at the PCL  
 J Analyte detected below PCL, and/or estimated concentration  
 NA Not Available  
 Shaded value exceeded the NJDEP residential soil cleanup criteria.  
 Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria.

CONFIDENTIAL

Table 3
Summary of Semivolatile Organic Compounds Soil Sampling Results
Naporano and Hugo Neu Facilities
Port Newark
Newark, New Jersey

Table with columns for Compound Name, CAS Number, NJDEP Impact to Groundwater, NJDEP Residential Direct Contact Soil, NJDEP Non-Residential Direct Contact Soil, and various MW-C1 to MW-C4 soil cleanup criteria (mg/kg).

NJDEP - New Jersey Department of Environmental Protection
mg/kg - milligrams per kilogram, equivalent to parts per million
U - Not detected at the PQL
J - Analyte detected below PQL and/or estimated concentration
NR - Analyte not requested
Value exceeded the NJDEP residential and cleanup criteria
Value exceeded the NJDEP non-residential soil cleanup criteria.

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Table J
Summary of Semivolatile Organic Compounds Soil Sampling Results
Naparone and Hugo Neu Facilities
Port Newark
Newark, New Jersey

Table with columns for Compound Name, CAS Number, R/DEP Project to Groundwater, R/DEP Residential Direct Contact Soil Cleanup Criteria, R/DEP Non-Residential Direct Contact Soil Cleanup Criteria, and 15 sampling locations (SB-1 to SB-15) with their respective results.

Notes:
R/DEP - New Jersey Department of Environmental Protection
Mg/Kg - Milligrams per Kilogram, equivalent to parts per million
U - Not Detected at the PCL
J - Analyte detected below PCL, neither estimated concentration nor analysis not requested
NA - Analyte not on the R/DEP residential soil cleanup criteria
ND - Analyte not on the R/DEP non-residential soil cleanup criteria.

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Table 3
Summary of Volatile Organic Compounds Soil Sampling Results
Naporsno and Hugo Neu Facilities
Port Newark
Newark, New Jersey

Table with 16 columns: Client Sample ID, VerTech Sample ID, CAS Number, NADep Impact to Groundwater, NADep Residential, NADep Non-Residential, and 15 other sampling locations. Rows list various chemical compounds like Trichlorobenzene, Dichlorobenzene, etc., with their respective concentrations and detection status.

Notes:
NADep - New Jersey Department of Environmental Protection
mg/kg - Milligrams per Kilogram, equivalent to parts per million
U - Not detected at the PCL
A - Analyte detected below PCL and/or estimated concentration
NR - Analyte not requested
Values exceeded the NADep residential soil cleanup criteria.
Values exceeded the NADep non-residential soil cleanup criteria.

PA000003563

Table 3  
 Summary of Semivolatile Organic Compounds Soil Sampling Results  
 Naparano and Hugo Nau Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Analytical Sample ID: Sampling Date:	CAS Number	RIJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	RIJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	RIJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	RIJDEP 0.9-3.1 AS 10000 10/27/99
Units:		mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-Trichlorobenzene	120-82-1	100	82	1200	NR
1,2-Dichlorobenzene	85-50-1	50	100	1000	NR
1,3-Dichlorobenzene	541-73-1	100	100	1000	NR
1,4-Dichlorobenzene	106-46-7	100	170	1000	NR
2,3,5-Trichlorophenol	85-85-4	50	800	1000	NR
2,3,4-Trichlorophenol	88-50-2	10	82	270	NR
2,4-Dichlorophenol	120-83-3	10	170	100	NR
2,4-Dibromophenol	105-87-9	10	100	1000	NR
2,4-Dichlorophenol	51-28-3	10	100	100	NR
2,4-Dinitrophenol	121-14-2	10	1	1	NR
2,4-Dinitrophenol	608-76-7	10	1	1	NR
2,4-Dinitrophenol	81-54-7	NA	NA	NA	NR
2,4-Dichlorophenol	85-37-8	10	100	100	NR
2-Methylphenol	81-87-8	NA	NA	NA	NR
2-Methylphenol	85-11-7	NA	100	1000	NR
2-Naphthol	81-77-3	NA	NA	NA	NR
2-Naphthol	85-75-5	NA	NA	NA	NR
2,3,4-Trichlorophenol	106-47-8	NA	200	1000	NR
2,3-Dichlorobenzene	81-84-1	100	2	1000	NR
2-Naphthol	88-08-2	NA	NA	NA	NR
2,3-Dinitro-2-methylphenol	121-14-2	NA	NA	NA	NR
2-Bromophenyl phenyl ether	101-55-5	NA	NA	NA	NR
2-Bromo-3-methylphenol	81-54-7	100	NA	1000	NR
2-Chlorophenol	106-31-5	NA	NA	1000	NR
2-Chlorophenyl phenyl ether	7665-72-3	NA	NA	NA	NR
2-Naphthol	100-81-8	NA	NA	NA	NR
2-Naphthol	100-02-7	NA	NA	NA	NR
Acenaphthene	81-32-8	100	100	1000	0.9 U
Acenaphthylene	208-24-3	NA	NA	NA	0.9 U
Acridene	120-117-1	100	1000	1000	0.9 U
Benzenes	82-87-5	NA	NA	NA	NR
Benzo(a)anthracene	54-55-3	500	0.8	1	0.42 J
Benzo(a)pyrene	50-32-8	100	0.86	0.86	0.47 J
Benzo(b)fluoranthene	203-94-2	50	0.8	1	0.84 J
Benzo(k)fluoranthene	111-84-2	NA	NA	NA	1.2 J
Benzo(a)anthracene	207-26-1	500	0.8	1	0.44 J
Benzoic Acid	65-85-0	NA	NA	NA	NR
Benzo(a)fluoranthene	100-51-4	50	1000	1000	NR
Benzo(b)fluoranthene	111-84-2	NA	NA	NA	NR
Benzo(k)fluoranthene	111-84-2	10	0.86	1	NR
Benzo(a)anthracene	106-28-3	10	100	1000	NR
Benzo(a)anthracene	110-81-7	100	1	110	NR
Benzo(a)anthracene	85-44-7	100	100	1000	NR
Benzo(a)anthracene	85-74-8	NA	NA	NA	NR
Chrysene	218-01-9	500	1	10	0.5 J
Chlorobenzene	85-77-2	100	100	1000	NR
Chlorobenzene	111-40-0	100	100	1000	NR
Chlorobenzene	110-81-7	100	1	110	NR
Chlorobenzene	85-44-7	100	100	1000	NR
Carbazole	85-74-8	NA	NA	NA	NR
Chrysene	218-01-9	500	1	10	0.5 J
Chlorobenzene	85-77-2	100	100	1000	NR
Chlorobenzene	111-40-0	100	100	1000	NR
Chlorobenzene	110-81-7	100	0.86	0.86	0.9 U
Chlorobenzene	121-84-8	NA	NA	NA	NR
Chlorobenzene	81-84-1	50	1000	1000	NR
Chlorobenzene	131-11-3	50	1000	1000	NR
Chlorobenzene	208-24-3	100	100	1000	0.9 U
Chlorobenzene	85-77-2	100	100	1000	0.9 U
Chlorobenzene	110-81-7	100	0.86	0.86	NR
Chlorobenzene	87-84-3	100	1	21	NR
Chlorobenzene	77-47-4	100	100	700	NR
Chlorobenzene	81-77-2	100	1	100	NR
Chlorobenzene	103-29-5	500	0.8	1	0.21 J
Chlorobenzene	74-82-1	50	100	1000	NR
Chlorobenzene	85-77-2	100	0.86	0.86	NR
Chlorobenzene	81-77-2	NA	NA	NA	NR
Chlorobenzene	84-30-2	100	100	800	NR
Chlorobenzene	91-20-1	100	200	4200	0.9 U
Chlorobenzene	86-95-3	10	21	870	NR
Chlorobenzene	81-77-2	100	1	21	NR
Chlorobenzene	81-77-2	NA	NA	NA	0.51 J
Chlorobenzene	100-51-4	50	1000	1000	NR
Chlorobenzene	120-83-3	100	100	1000	1.1
Chlorobenzene	110-81-7	NA	NA	NA	NR

Note:  
 RIJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per kilogram, equivalent to parts per million  
 U - Not detected at the PCL  
 J - Analyte detected below PCL and/or estimated concentration  
 NR - Analyte not reported  
 Values exceeded the RIJDEP residential soil cleanup criteria.  
 Values exceeded the RIJDEP non-residential soil cleanup criteria.

Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano New Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.5-5.0 AA94325 8/27/1999 mg/kg	BH-N2F 0.5-2.0 AA94855 8/2/1999 mg/kg	BH-N2F 6.0-8.0 AA94856 8/2/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/23/1999 mg/kg	BH-N1 1.0-4.0 AA94130 8/23/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 8/23/1999 mg/kg	MW-C1 S-1 3-3.5 AA90434 8/23/1999 mg/kg	MW-C1 S-1 1-2 AA90327 8/23/1999 mg/kg	MW-C1 S-4 5-7 AA90328 8/23/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90435 8/23/1999 mg/kg	MW-C1 S-4 6-7 AA90436 8/23/1999 mg/kg
Aroclor-1018	12674-11-2	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1221	11104-28-2	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1232	11141-18-5	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1242	33469-21-9	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1248	12672-29-8	50	0.49	2		0.4	0.017 U	0.087 U		0.29				0.01 U		0.018 U
Aroclor-1254	11097-89-1	50	0.49	2		0.44	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U		0.018 U
Aroclor-1260	11096-82-3	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.092	0.21	0.21	0.064		0.01 U	0.18 U	0.018 U

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup standard.

Value exceeded the NJDEP residential and non-residential soil cleanup standards.

Value exceeded the NJDEP impact to groundwater cleanup standard.

Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano New Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID:		NJDEP Impact to Groundwater	NJDEP Residential	NJDEP Non-Residential	MW-C4 S-1	MW-C4 S-3	MW-C5 S-1	MW-C5 S-3	PA-C6 S-1	PA-C6 S-3	PA-C7 S-1	PA-C7 S-3	SB1 2-2.5	SB1 0.5-1	SB2 1-1.5	SB2 3-3.5
Sampling Depth (ft)		Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	1.5-2.0	3-5.5	1-2	3-8.5	0-1	3-8.5	0-1	3-8.5	2-2.5	0.5-1	1-1.5	3-3.5
Vertechn Sample ID:	CAS				AA90437	AA90438	AA90531	AA90532	AA90533	AA90534	AA90535	AA90536	AA90503	AA90504	AA90505	AA90506
Sampling Date:	Number	mg/kg	mg/kg	mg/kg	6/23/1999	6/23/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arcolor-1016	12674-11-2	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Arcolor-1221	11104-28-2	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Arcolor-1232	11141-15-5	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Arcolor-1242	53469-21-9	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Arcolor-1248	12872-29-6	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.12	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Arcolor-1254	11097-69-1	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Arcolor-1260	11096-62-5	50	0.49	2		0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analysis detected below PQL and/or estimated concentration  
 NR - Analysis Not Requested  
 Value exceeded the NJDEP residential soil cleanup standard.  
 Value exceeded the NJDEP residential and non-residential soil cleanup standards.  
 Bolded value exceeded the NJDEP impact to groundwater cleanup standard.



Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Vertech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB1 1-1.6 1-1.6 AA90507 6/23/1999 mg/kg	SB1 3-3.6 2-3.5 AA90508 6/23/1999 mg/kg	SB-6A 0-0.6 0-0.6 AA90509 6/23/1999 mg/kg	SB-6A 1.6-2 1.6-2 AA90510 6/23/1999 mg/kg	SB-6A 2.6-3 2.5-3 AA90511 6/23/1999 mg/kg	SB-6A 6.6-7 6.5-7 AA90512 6/23/1999 mg/kg	SB-6B 0-0.6 0-0.6 AA90513 6/23/1999 mg/kg	SB-6B 2.6-3 2.5-3 AA90514 6/23/1999 mg/kg	SB-6B 7-7.5 7-7.5 AA90516 6/23/1999 mg/kg
Aroclor-1016	12674-11-2	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1221	11104-26-2	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1232	11141-16-5	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1242	53469-21-9	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1246	12672-29-6	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1254	11087-69-1	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1260	11096-82-5	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup standard.
- Value exceeded the NJDEP residential and non-residential soil cleanup standards.
- Bolded value exceeded the NJDEP impact to groundwater cleanup standard.

Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-6C 2-2.5 2-2.5 AA80516 6/23/1999	SB-6C 3.5-4 3.5-4 AA90517 6/23/1999	SB-5D 0-0.5 0-0.5 AA90528 6/23/1999	SB-5D 3.5-4 3.5-4 AA90529 6/23/1999	SB-6E 0.5-1 0.5-1 AA90518 6/23/1999	SB-5E 2.5-3 2.5-3 AA90519 6/23/1999	SB-6E 6-6.9 6-6.9 AA90520 6/23/1999	SB-5E 9.5-10 9.5-10 AA90521 6/23/1999
Arcelor-1016	12874-11-2	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Arcelor-1221	11104-28-2	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Arcelor-1232	11141-18-5	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Arcelor-1242	53469-21-9	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Arcelor-1248	12872-28-6	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Arcelor-1254	11087-69-1	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Arcelor-1260	11096-82-3	50	0.49	2	0.38 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup standard.
- Value exceeded the NJDEP residential and non-residential soil cleanup standards.
- Bolded value exceeded the NJDEP impact to groundwater cleanup standard.

Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano New Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Vertechn Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 1-1.5 AA90524 6/24/1999 mg/kg	SB-4A 6.5-8 5.5-8 AA90525 6/24/1999 mg/kg	SB-4B 0.6-1 0.5-1 AA90526 6/24/1999 mg/kg	SB-4B 5.3-8 5.3-8 AA90527 6/24/1999 mg/kg	BH-N6 00.0-0.5 AB16065 10/27/2000 mg/kg	BH-N7 0.0-0.5 AB16066 10/27/2000 mg/kg
Arcebor-1015	12674-11-2	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	0.035 U	0.18 U
Arcebor-1221	11104-26-2	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Arcebor-1232	11121-16-5	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Arcebor-1242	53469-21-8	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Arcebor-1248	12674-26-6	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	0.035 U	0.18 U
Arcebor-1254	11087-68-1	50	0.49	2	0.48	0.034 U	0.37 U	0.035 U	0.035 U	0.18 U
Arcebor-1250	11026-87-5	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	0.035 U	0.18 U

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analyte Not Requested

Value exceeded the NJDEP residential soil cleanup standard.

Value exceeded the NJDEP residential and non-residential soil cleanup standards.

Bolded value exceeded the NJDEP impact to groundwater cleanup standard.

Table 5  
 Summary of Pesticides Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) VerteCh Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 02/21/1999 mg/kg	MW-N2 4.5-5.0 AA94326 02/21/1999 mg/kg	BH-N5F 0.5-2.0 AA94856 02/21/1999 mg/kg	BH-N5F 6.0-4.0 AA94856 02/21/1999 mg/kg	BH-N1 0.5-1.5 AA94149 02/21/1999 mg/kg	BH-N1 4.0-4.5 AA94150 02/21/1999 mg/kg	MW-C1 3-1 1.5-2.0 AA90433 02/21/1999 mg/kg	MW-C1 3-2 3-3.5 AA90434 02/21/1999 mg/kg	MW-C2 5-1 1-2 AA90327 02/21/1999 mg/kg
Aldrin	309-00-2	50	0.04	0.17	0.018 U	0.015 U	0.035 U	0.035 U	0.035 U	0.035 U	0.034 U	0.034 U	0.01 U
Alpha-BHC	319-84-6	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.035 U	0.072 U	0.035 U	0.0034 U	0.0035 U	0.01 U
Beta-BHC	319-83-7	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.035 U	0.072 U	0.035 U	0.0034 U	0.0035 U	0.01 U
Chlordane	57-74-9	NA	NA	NA	0.038 U	0.0069 U	0.069 U	0.069 U	0.14 U	0.0069 U	0.0067 U	0.0071 U	0.03 U
Delta-BHC	319-86-8	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Dieldrin	60-57-1	50	0.042	0.16	0.018 U	0.0035 U	0.035 U	0.036	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan I	959-98-8	50	340	6200	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan II	33213-85-8	50	340	6200	0.073	0.0081	0.035 U	0.016	0.3	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan Sulfate	10311-07-8	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endrin	72-20-8	50	17	310	0.16	0.013	0.056	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endrin Aldehyde	7421-83-4	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0041	0.0035 U	0.01 U
Endrin Ketone	53494-70-5	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0062	0.0035 U	0.01 U
Gamma-BHC	58-89-8	NA	0.52	2.2	0.018 U	0.0035 U	0.035 U	0.021	0.072 U	0.0035 U	0.007	0.0035 U	0.01 U
Heptachlor	76-44-8	50	0.15	0.55	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.023	0.0086	0.1
Heptachlor Epoxide	1024-57-3	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Methoxychlor	72-43-5	50	280	5200	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.29
P, P'-DDD	72-54-8	50	3	12	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
P, P'-DDE	72-55-9	50	2	9	0.097	0.0035 U	0.035 U	0.0035 U	0.34	0.0035 U	0.0074	0.0035 U	0.01 U
P, P'-DDT	50-29-3	500	2	9	0.018 U	0.0035 U	0.035 U	0.0035 U	0.44	0.0035 U	0.0088	0.0035 U	0.01 U
Toxaphene	8001-35-2	50	0.1	0.2	0.18 U	0.0035 U	0.35 U	0.035 U	0.72 U	0.035 U	0.034 U	0.035 U	0.19 U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PDL  
 J - Analyte detected below PDL and/or estimated concentration  
 NR - Analysis Not Requested  
 Value exceeded the NJDEP residential soil cleanup criteria  
 Value exceeded the NJDEP non-residential soil cleanup criteria  
 Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria

Table 5  
 Summary of Pesticides Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C2 S-4 6-7 AA90328 6/24/1999 mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90438 6/23/1999 mg/kg	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 6-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C5 S-6 6-4.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 6-1 AA90533 6/24/1999 mg/kg	PA-C6 S-5 6-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 6-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 6-8.5 AA90536 6/24/1999 mg/kg	BH-N6 00.9-0.5 AB16065 10/2/2000 mg/kg	BH-N7 6.0-0.5 AB16066 10/2/2000 mg/kg
Aldrin	309-00-2	50	0.04	0.17	0.0035 U	0.0035 U	0.0037 U	0.078 U	0.0078 U	0.0035 U	0.0035 U	0.017 U	0.0078 U	0.0035 U	0.0035 U	0.071 U	0.16 U
Alpha-BHC	319-84-6	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Beta-BHC	319-85-7	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.07	0.0034 U	NR	NR
Chlordane	97-74-9	NA	NA	NA	0.0071 U	0.037 U	0.0073 U	0.16 U	0.016 U	0.036 U	0.0071 U	0.035 U	0.0071 U	0.035 U	0.0069 U	NR	NR
Delta-BHC	319-86-8	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Dieldrin	60-57-1	50	0.042	0.18	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.02	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	0.071 U	0.16 U
Endosulfan I	959-98-9	50	340	6200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endosulfan II	33213-85-9	50	340	6200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endosulfan Sulfate	1631-07-8	NA	NA	NA	0.0035 U	0.25	0.0037 U	0.078 U	0.0078 U	0.1	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endrin	72-20-8	50	17	310	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endrin Alderhyde	7421-83-4	NA	NA	NA	0.0035 U	0.031	0.0037 U	0.41	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.016 U	0.0034 U	NR	NR
Endrin Ketone	53594-70-5	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Gamma-BHC	98-89-9	NA	0.52	2.2	0.0035 U	0.075	0.0037 U	0.078 U	0.0078 U	0.041	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Heptachlor	78-44-8	50	0.15	0.65	0.0035 U	0.0037 U	0.0037 U	0.017	0.14	0.0035 U	0.017 U	0.0035 U	0.035	0.0034 U	0.071 U	0.16 U	
Heptachlor Epoxide	1624-57-3	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Methoxychlor	72-43-5	50	280	5200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
P,P'-DDD	72-54-8	50	3	12	0.0035 U	0.018 U	0.0037 U	0.078 U	0.011	0.016 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
P,P'-DDE	72-55-9	50	2	9	0.0035 U	0.067	0.0037 U	1.8	0.036	0.046	0.0035 U	0.017 U	0.0035 U	0.027	0.0034 U	NR	NR
P,P'-DDT	50-29-2	500	2	9	0.0035 U	0.063	0.0037 U	1.4	0.034	0.033	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Toxaphene	8001-35-2	50	0.1	0.2	0.03 U	0.18 U	0.037 U	0.78 U	0.078 U	0.18 U	0.035 U	0.17 U	0.035 U	0.18 U	0.034 U	NR	NR

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PCL  
 J - Analyte detected below PQL and/or estimated concentration  
 NR - Analyte Not Requested  
 Value exceeded the NJDEP residential soil cleanup criteria  
 Value exceeded the NJDEP non-residential soil cleanup criteria  
 Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria

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**Table 6**  
**Summary of Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Vertical Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.5-3.0 AA94325 8/27/1999 mg/kg	BH-N5F 0.5-2.0 AA94655 8/25/1999 mg/kg	BH-N5F 6.0-8.0 AA94656 8/25/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/25/1999 mg/kg	BH-N1 4.0-4.5 AA94150 8/25/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 6/23/1999 mg/kg	MW-C1 S-2 3-3.5 AA90434 6/23/1999 mg/kg	MW-C2 S-1 1-2 AA90327 6/23/1999 mg/kg	MW-C2 S-4 6-7 AA90328 6/23/1999 mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90436 6/23/1999 mg/kg
Antimony	7440-36-0	NA	34	340	9.2	1.4 U	1.4 U	1.4 U	22	1.4 U	1.3 U	1.4 U	5.2	1.4 U	1.4 U	1.4 U
Arsenic	7440-38-2	NA	20	20	2 U	2 U	3.1	2 U	14	2 U	1.9	2 U	14	2 U	10	2.5
Barium	7440-39-3	NA	700	47000	180	6.5	100	20	420	9.7	12	8	240	9.3	340	6.2 U
Beryllium	7440-41-7	NA	2	2	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U
Cadmium	7440-43-8	NA	39	100	21	0.31 U	1.2	0.31 U	22	0.31 U	0.3 U	0.32 U	6.4	0.32 U	12	0.33 U
Chromium	7440-47-3	NA	500	500	220	3.9	37	13	150	7	7.4	4.6	130	9.9	190	5.5
Copper	7440-50-8	NA	600	600	5.9	100	29	60	8.5	24	8.3	430	6.1	490	7.9	3.1
Lead	7439-92-1	NA	400	600	15	15	60	60	22	30	11	7.9	7.9	7.9	7.9	3.1
Mercury	7439-97-6	NA	14	270	3.7	0.11	1.4	0.17	10	0.034 U	0.055	0.084	0.47	0.03 U	3.7	0.033 U
Nickel	7440-02-0	NA	250	2400	120	4.3	33	30	6	10	6.5	110	11	180	6.4	6.4
Selenium	7782-49-2	NA	65	3100	2.9 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.7 U	2.9 U	3 U	2.9 U	3 U	3 U
Silver	7440-22-4	NA	110	4100	1.3 U	1.2 U	1.2 U	1.2 U	1.9	1.2 U	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Thallium	7440-28-0	NA	2	2	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Zinc	7440-66-6	NA	1500	1500	1100	35	410	110	26	94	53	1300	19	20 U	20 U	20 U
Cyanide	57-12-5	NA	1100	21000	0.27 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.25 U	0.7	0.28 U	0.27 U	7.7	9.7
Phenol	103-95-2	50	10000	10000	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.4 U	1.4 U
K Solids		NA	NA	NA	93	96	96	96	93	96	94	94	94	94	91	91

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration  
 NA - Not Available  
 NR - Analysis Not Requested  
 Value exceeded the NJDEP residential soil cleanup criteria  
 Value exceeded the NJDEP non-residential soil cleanup criteria

PA000003572

Table 6  
 Summary of Inorganic Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C4 B-1 1-B-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 S-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C6 S-5 8-8.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 0-1 AA90533 6/24/1999 mg/kg	PA-C6 S-6 8-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 0-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 8-8.5 AA90536 6/24/1999 mg/kg
Antimony	7440-36-0	NA	14	340	NR	1.5 U	NR	1.4 U	1.4 U	1.5	2	1.3 U
Arsenic	7440-38-2	NA	20	20	3.9	2.4	2.5	2.3	2.6	3.3	5.8	3
Barium	7440-39-3	NA	700	47000	250	20	90	12	22	48	80	7.8
Beryllium	7440-41-7	NA	2	2	0.21 U	0.21 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Cadmium	7440-43-0	NA	39	100	NR	0.35 U	4.6	0.32 U	0.31 U	0.87	1.8	0.31 U
Chromium	7440-47-3	NA	500	500	NR	13	NR	14	12	120	54	12
Copper	7440-50-9	NA	800	800	NR	32	190	10	18	75	190	8.8
Lead	7439-92-1	NA	400	800	NR	63	390	10	8.2	200	210	4.8
Mercury	7439-97-5	NA	14	270	8.5	0.18	0.96	0.032 U	0.031 U	0.13	0.79	0.031 U
Nickel	7440-02-0	NA	250	2400	NR	15	NR	34	9.9	89	58	17
Selenium	7782-49-2	NA	63	3100	3.1 U	3.1 U	2.9 U	2.9 U	2.8 U	2.9 U	2.8 U	2.8 U
Silver	7440-22-4	NA	110	4100	1.4 U	1.4 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.2 U
Thallium	7440-28-0	NA	2	2	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Zinc	7440-66-6	NA	1500	1500	NR	140	980	31	27	310	380	25
Cyanide	57-12-5	NA	1100	21000	9.7	1.2	0.83	0.27 U	0.26 U	0.57	0.89	0.8
Phenol	103-95-2	50	10000	10000	1.4 U	1.4 U	1.3 U	1.3 U	2.8	1.3 U	3.7	1.3 U
% Solids		NA	NA	NA	88	86	93	94	98	94	95	97

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Table 6  
 Summary of Inorganic Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB1 2-2.5 2-2.5 AA90503 6/23/1999 mg/kg	SB1 0.5-1 0.5-1 AA90504 6/23/1999 mg/kg	SB2 1-1.5 1-1.5 AA90505 6/23/1999 mg/kg	SB2 3-3.5 3-3.5 AA90506 6/23/1999 mg/kg	SB3 1-1.5 1-1.5 AA90507 6/23/1999 mg/kg	SB3 3-3.5 3-3.5 AA90508 6/23/1999 mg/kg	SB-5A 0-0.5 0-0.5 AA90509 6/23/1999 mg/kg	SB-5A 1.5-2 1.5-2 AA90510 6/23/1999 mg/kg	SB-5A 2.5-3 2.5-3 AA90511 6/23/1999 mg/kg	SB-5A 6.5-7 6.5-7 AA90512 6/23/1999 mg/kg	SB-5B 0-0.5 0-0.5 AA90513 6/23/1999 mg/kg
Antimony	7440-38-0	NA	14	340	1.4 U	3	1.4 U	1.4 U	1.3 U	1.4 U	3.9	5.5	1.3 U	1.4 U	10
Arsenic	7440-38-2	NA	20	20	2 U	5.5	2 U	2 U	1.9 U	2 U	6.6	7.2	1.9 U	2 U	10
Barium	7440-39-3	NA	700	47000	15	100	48	18	41	6.4	170	180	10	8.2	410
Beryllium	7440-41-7	NA	2	2	0.18 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.2 U
Cadmium	7440-43-9	NA	39	100	0.31 U	3	0.31 U	0.31 U	0.31 U	0.31 U	4.1	5.4	0.31 U	0.32 U	20
Chromium	7440-47-3	NA	500	500	8	85	25	7.7	20	3.1	53	80	5.5	4.5	170
Copper	7440-50-8	NA	600	600	11	250	39	7.8	44	3.1 U	200	210	6.2	5.1	100
Lead	7439-92-1	NA	400	600	8.8	340	3.1	5.8	7.2	2.2 U	2.8	2.8	2.8	3.3	100
Mercury	7439-97-6	NA	14	270	0.12	1.2	0.031 U	0.041	0.042	0.031 U	3.2	2.2	0.03 U	0.091	5.1
Nickel	7440-02-0	NA	250	2400	17	58	19	12	18	6.3	48	56	19	17	170
Selenium	7782-49-2	NA	63	3100	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.9 U	2.9 U	2.8 U	2.9 U	2.9 U
Silver	7440-22-4	NA	119	4100	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U
Thallium	7440-28-0	NA	2	2	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U
Zinc	7440-68-8	NA	1500	1500	39	590	47	24	34	19 U	730	650	18 U	19 U	100
Cyanide	57-12-5	NA	1100	21000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	103-95-2	50	10000	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Solids		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

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Table 6  
 Summary of Inorganic Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Vertech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-SB 2.5-3 2.5-3 AA90514 6/23/1999 mg/kg	SB-SB 7-7.5 7-7.5 AA90515 6/23/1999 mg/kg	SB-3C 2-2.5 2-2.5 AA90516 6/23/1999 mg/kg	SB-3C 3.5-4 3.5-4 AA90517 6/23/1999 mg/kg	SB-5D 0-0.5 0-0.5 AA90528 6/25/1999 mg/kg	SB-5D 3.5-4 3.5-4 AA90529 6/25/1999 mg/kg	SB-5E 0.5-1 0.5-1 AA90518 6/23/1999 mg/kg	SB-5E 2.5-3 2.5-3 AA90519 6/23/1999 mg/kg	SB-5E 6-6.5 6-6.5 AA90520 6/23/1999 mg/kg	SB-5E 9.5-10 9.5-10 AA90521 6/23/1999 mg/kg
Antimony	7440-38-0	NA	14	340		1.4 U		1.4 U	8.6	2.8		12	5.1	1.4 U
Arsenic	7440-38-2	NA	20	20		2 U		2 U	11	3.4	8.9	13	2.8	2 U
Barium	7440-39-3	NA	700	47000	320	6 U	400	6 U	210	48	250	330	34	5.8 U
Beryllium	7440-41-7	NA	2	2	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U
Cadmium	7440-43-9	NA	39	100	28	0.32 U		0.32 U	9.5	0.67	12	12	1	0.31 U
Chromium	7440-47-3	NA	500	500	250	3.3	290	2.5	230	67		110	16	2.9
Copper	7440-50-8	NA	600	600		3.4		6.7	440	120	530		130	3.1 U
Lead	7439-92-1	NA	400	600		3.8		10		130				2.2 U
Mercury	7439-97-6	NA	14	270	3.3	0.032 U	2.5	0.044	2.2	0.49	2.5	4.4	0.049	0.031 U
Nickel	7440-02-0	NA	250	2400	220	3.6		3.4	150	65		150	29	3.6
Selenium	7782-49-2	NA	83	3100	3.1 U	2.9 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	3 U	2.8 U	2.8 U
Silver	7440-22-4	NA	110	4100	1.4 U	1.3 U	1.3 U	1.3 U	1.2 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U
Thorium	7440-28-0	NA	2	2	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U
Zinc	7440-66-8	NA	1500	1500		56		77		340			310	19 U
Cyanide	57-12-5	NA	1100	21000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	103-95-2	50	10000	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Solids		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 6  
 Summary of Inorganic Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date:	CAS	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 1-1.5 AA90524 6/24/1999	SB-4A 5.5-6 5.5-6 AA90525 6/24/1999	SB-4B 0.5-1 0.5-1 AA90526 6/24/1999	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999
Units:	Number	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	7440-36-0	NA	14	340	1.7	1.3 U	1.4 U	NR	NR	NR
Arsenic	7440-38-2	NA	20	20	3	1.9 U	14	2 U	NR	NR
Barium	7440-39-3	NA	700	47000	46	8	520	5.8 U	NR	NR
Beryllium	7440-41-7	NA	2	2	0.18 U	0.18 U	0.2 U	0.78 U	NR	NR
Cadmium	7440-43-9	NA	39	100	0.93	0.31 U	14	0.31 U	NR	NR
Chromium	7440-47-3	NA	500	500	25	4.8	3.3	NR	NR	NR
Copper	7440-50-8	NA	600	600	230	4.8	3.1 U	NR	NR	NR
Lead	7439-92-1	NA	400	600	120	18	3.1	110	NR	NR
Mercury	7439-97-6	NA	14	270	0.53	0.03 U	5.8	0.031 U	NR	NR
Nickel	7440-02-0	NA	250	2400	22	5.8	4	NR	NR	NR
Selenium	7782-49-2	NA	63	3100	2.9 U	2.8 U	3 U	2.8 U	NR	NR
Silver	7440-22-4	NA	110	4100	1.3 U	1.2 U	1.3 U	1.2 U	NR	NR
Thallium	7440-28-0	NA	2	2	1.1 U	1 U	1.1 U	1 U	NR	NR
Zinc	7440-68-6	NA	1500	1500	170	47	18 U	NR	NR	NR
Cyanide	57-12-5	NA	1100	21000	NA	NA	NA	NA	NR	NR
Phenol	103-95-2	50	10000	10000	NA	NA	NA	NA	NR	NR
% Solids		NA	NA	NA	NA	NA	NA	NA	NR	NR

Notes:

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Table 7  
 Summary of Total Petroleum Hydrocarbons Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID:		NJDEP Impact to Groundwater	NJDEP Residential Direct Contact Soil	NJDEP Non-Residential Direct Contact Soil	MW-N2	MW-N2	BH-N5F	BH-N5F	BH-N1	BH-N1	MW-C1 S-1	MW-C1 S-2	MW-C2 S-1	MW-C2 S-4	MW-C3 S-1	MW-C3 S-4
Sampling Depth (ft)		Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	0.5-1.5	4.5-8.0	0.5-2.0	0.5-8.0	0.5-1.5	4.5-8.0	1.5-2.0	3-3.5	1-2	0-7	1.5-2.0	0-7
VerTech Sample ID:	CAS Number	mg/kg	mg/kg	mg/kg	AA94324	AA94325	AA94615	AA94606	AA94149	AA94150	AA94433	AA94434	AA90327	AA90328	AA90435	AA90436
Sampling Date:					02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	5700	1300	570	570	55	180	40	66	66	66	50	50

Client Sample ID:		NJDEP Impact to Groundwater	NJDEP Residential Direct Contact Soil	NJDEP Non-Residential Direct Contact Soil	MW-C4 S-1	MW-C4 S-3	MW-C5 S-1	MW-C6 S-5	PA-C6 S-1	PA-C6 S-5	PA-C7 S-1	PA-C7 S-5	BH-N6	BH-N7	BH-N5A	BH-N5B
Sampling Depth (ft)		Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	1.5-2.0	0.5-5	1-1.5	0.5-5	0-1	0-5	0-1	0-5	0-0.5	0-0.5	0.5-2.5	0.5-2.5
VerTech Sample ID:	CAS Number	mg/kg	mg/kg	mg/kg	AA90437	AA90438	AA90631	AA90632	AA10533	AA90524	AA90525	AA90526	AD10055	AD10056	AB10135	AB10136
Sampling Date:					02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	02/21/1999	10/22/2000	10/22/2000	7/23/2001	7/23/2001
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	1300	99	77	180	180	60	60	60	1700	1700	4300	430

Client Sample ID:		NJDEP Impact to Groundwater	NJDEP Residential Direct Contact Soil	NJDEP Non-Residential Direct Contact Soil	BH-N5C	BH-N5D
Sampling Depth (ft)		Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	0.5-2.0	0.5-2.5
VerTech Sample ID:	CAS Number	mg/kg	mg/kg	mg/kg	AB10137	AB10138
Sampling Date:					7/23/2001	7/23/2001
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	5700	6000

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - milligrams per kilogram, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL under estimated concentration  
 Shaded value exceeded the corresponding soil cleanup criteria

Table 7  
 Summary of Total Petroleum Hydrocarbons Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Vertechn Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C1-N1-01 2.0-2.5 AB47874 12/5/2001 mg/kg	MW-C1-N1-02 2.5-3.0 AB47875 12/5/2001 mg/kg	MW-C1-N1-03 3.0-3.5 AB47876 12/5/2001 mg/kg	MW-C1-N1-04 3.5-4.0 AB47877 12/5/2001 mg/kg	MW-C1-S1-01 2.0-2.5 AB47878 12/5/2001 mg/kg	MW-C1-S1-02 2.5-3.0 AB47879 12/5/2001 mg/kg	MW-C1-S1-03 3.0-3.5 AB47880 12/5/2001 mg/kg	MW-C1-S1-04 3.5-4.0 AB47881 12/5/2001 mg/kg	MW-C1-E1-01 2.0-2.5 AB47882 12/5/2001 mg/kg	MW-C1-E1-02 2.5-3.0 AB47883 12/5/2001 mg/kg	MW-C1-E1-03 3.0-3.5 AB47884 12/5/2001 mg/kg	MW-C1-E1-04 3.5-4.0 AB47885 12/5/2001 mg/kg			
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	9000	85	33	U	38	1300	1200	25	35	U	8000	900	25	U	45

Client Sample ID: Sampling Depth (ft) Vertechn Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C1-N1-01 2.0-2.5 AB47886 12/5/2001 mg/kg	MW-C1-N1-02 2.5-3.0 AB47887 12/5/2001 mg/kg	MW-C1-N1-03 3.0-3.5 AB47888 12/5/2001 mg/kg	MW-C1-N1-04 3.5-4.0 AB47889 12/5/2001 mg/kg	PA-C1-S1-01 2.0-2.5 AB47891 12/5/2001 mg/kg	PA-C1-S1-02 2.5-3.0 AB47892 12/5/2001 mg/kg	PA-C1-S1-03 3.0-3.5 AB47893 12/5/2001 mg/kg	PA-C1-S1-04 3.5-4.0 AB47894 12/5/2001 mg/kg	PA-C1-W1-01 2.0-2.5 AB47895 12/5/2001 mg/kg	PA-C1-W1-02 2.5-3.0 AB47896 12/5/2001 mg/kg	PA-C1-W1-03 3.0-3.5 AB47897 12/5/2001 mg/kg	PA-C1-W1-04 3.5-4.0 AB47898 12/5/2001 mg/kg	
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	9100	130	35	U	21	U	U	U	U	U	U	U	U

Client Sample ID: Sampling Depth (ft) Vertechn Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C1-E1-01 2.0-2.5 AB47899 12/5/2001 mg/kg	PA-C1-E1-02 2.5-3.0 AB47900 12/5/2001 mg/kg	PA-C1-E1-03 3.0-3.5 AB47901 12/5/2001 mg/kg	PA-C1-E1-04 3.5-4.0 AB47902 12/5/2001 mg/kg	PA-C1-N1-01 2.0-2.5 AB47903 12/5/2001 mg/kg	PA-C1-N1-02 2.5-3.0 AB47904 12/5/2001 mg/kg	PA-C1-N1-03 3.0-3.5 AB47905 12/5/2001 mg/kg	PA-C1-N1-04 3.5-4.0 AB47906 12/5/2001 mg/kg	PA-C1-S1-01 2.0-2.5 AB47907 12/5/2001 mg/kg	PA-C1-S1-02 2.5-3.0 AB47908 12/5/2001 mg/kg	PA-C1-S1-03 3.0-3.5 AB47909 12/5/2001 mg/kg	PA-C1-S1-04 3.5-4.0 AB47910 12/5/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	U	U	U	U	U	U	U	U	U	U	U	U

Client Sample ID: Sampling Depth (ft) Vertechn Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C1-E2-01 2.0-2.5 AB47911 12/5/2001 mg/kg	PA-C1-E2-02 2.5-3.0 AB47912 12/5/2001 mg/kg	PA-C1-E2-03 3.0-3.5 AB47913 12/5/2001 mg/kg	PA-C1-E2-04 3.5-4.0 AB47914 12/5/2001 mg/kg	PA-C1-W2-01 2.0-2.5 AB47915 12/5/2001 mg/kg	PA-C1-W2-02 2.5-3.0 AB47916 12/5/2001 mg/kg	PA-C1-W2-03 3.0-3.5 AB47917 12/5/2001 mg/kg	PA-C1-W2-04 3.5-4.0 AB47918 12/5/2001 mg/kg	PA-C1-E1-01 2.0-2.5 AB47919 12/5/2001 mg/kg	PA-C1-E1-02 2.5-3.0 AB47920 12/5/2001 mg/kg	PA-C1-E1-03 3.0-3.5 AB47921 12/5/2001 mg/kg	PA-C1-E1-04 3.5-4.0 AB47922 12/5/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	U	U	U	U	U	U	U	U	U	U	U	U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per kilogram, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration  
 Shaded values exceeded the corresponding soil cleanup criteria

**Table 7**  
**Summary of Total Petroleum Hydrocarbons Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (R) Vertical Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E3-01 2.5-3.0 AB48117 12/7/2001 mg/kg	PA-C6-E3-01 3.0-3.5 AB48118 12/7/2001 mg/kg	PA-C6-E3-04 3.5-4.0 AB48119 12/7/2001 mg/kg	PA-C6-W3-01 2.0-2.5 AB48112 12/7/2001 mg/kg	PA-C6-W3-02 2.5-3.0 AB48113 12/7/2001 mg/kg	PA-C6-W3-03 3.0-3.5 AB48114 12/7/2001 mg/kg	PA-C6-W3-04 3.5-4.0 AB48115 12/7/2001 mg/kg	PA-C6-E1-01 2.0-2.5 AB48120 12/7/2001 mg/kg	PA-C6-S3-02 2.5-3.0 AB48121 12/7/2001 mg/kg	PA-C6-S1-03 3.0-3.5 AB48122 12/7/2001 mg/kg	PA-C6-S1-04 3.5-4.0 AB48123 12/7/2001 mg/kg	PA-C6-W3-01 2.0-2.5 AB48124 12/7/2001 mg/kg			
Total Petroleum Hydrocarbons	22125-22-0	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		
Client Sample ID: Sampling Depth (R) Vertical Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-S4-01 2.5-3.0 AB48323 12/11/2001 mg/kg	PA-C6-S4-02 3.0-3.5 AB48324 12/11/2001 mg/kg	PA-C6-S4-03 3.5-4.0 AB48325 12/11/2001 mg/kg	PA-C6-S4-04 4.0-4.5 AB48326 12/11/2001 mg/kg	PA-C6-E4-01 2.0-2.5 AB48327 12/11/2001 mg/kg	PA-C6-E4-02 2.5-3.0 AB48328 12/11/2001 mg/kg	PA-C6-E4-03 3.0-3.5 AB48329 12/11/2001 mg/kg	PA-C6-E4-04 3.5-4.0 AB48330 12/11/2001 mg/kg	PA-C6-S5-01 2.0-2.5 AB48331 4/29/2002 mg/kg	PA-C6-S5A-02 2.5-3.0 AB48332 4/29/2002 mg/kg	PA-C6-S5A-03 3.0-3.5 AB48333 4/29/2002 mg/kg	PA-C6-S5A-04 3.5-4.0 AB48334 4/29/2002 mg/kg	PA-C6-S5-01 2.0-2.5 AB48335 4/29/2002 mg/kg		
Total Petroleum Hydrocarbons	22125-22-3	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	
Client Sample ID: Sampling Depth (R) Vertical Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E6-01 2.0-2.5 AB54342 4/29/2002 mg/kg	PA-C6-E6-02 2.5-3.0 AB54343 4/29/2002 mg/kg	PA-C6-E6-03 3.0-3.5 AB54344 4/29/2002 mg/kg	PA-C6-E6-04 3.5-4.0 AB54345 4/29/2002 mg/kg	PA-C6-E6-05 4.0-4.5 AB54346 4/29/2002 mg/kg	PA-C6-E6-06 4.5-5.0 AB54347 4/29/2002 mg/kg	PA-C6-E6-07 5.0-5.5 AB54348 4/29/2002 mg/kg	PA-C6-E6-08 5.5-6.0 AB54349 4/29/2002 mg/kg	PA-C6-E6-09 6.0-6.5 AB54350 4/29/2002 mg/kg	PA-C6-E6-10 6.5-7.0 AB54351 4/29/2002 mg/kg	PA-C6-E6-11 7.0-7.5 AB54352 4/29/2002 mg/kg	PA-C6-E6-12 7.5-8.0 AB54353 4/29/2002 mg/kg	PA-C6-E6-13 8.0-8.5 AB54354 4/29/2002 mg/kg	PA-C6-E6-14 8.5-9.0 AB54355 4/29/2002 mg/kg	
Total Petroleum Hydrocarbons	22125-22-0	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Client Sample ID: Sampling Depth (R) Vertical Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E7-01 2.0-2.5 AB54356 4/29/2002 mg/kg	PA-C6-E7-02 2.5-3.0 AB54357 4/29/2002 mg/kg	PA-C6-E7-03 3.0-3.5 AB54358 4/29/2002 mg/kg	PA-C6-E7-04 3.5-4.0 AB54359 4/29/2002 mg/kg	PA-C6-E7-05 4.0-4.5 AB54360 4/29/2002 mg/kg	PA-C6-E7-06 4.5-5.0 AB54361 4/29/2002 mg/kg	PA-C6-E7-07 5.0-5.5 AB54362 4/29/2002 mg/kg	PA-C6-E7-08 5.5-6.0 AB54363 4/29/2002 mg/kg	PA-C6-E7-09 6.0-6.5 AB54364 4/29/2002 mg/kg	PA-C6-E7-10 6.5-7.0 AB54365 4/29/2002 mg/kg	PA-C6-E7-11 7.0-7.5 AB54366 4/29/2002 mg/kg	PA-C6-E7-12 7.5-8.0 AB54367 4/29/2002 mg/kg	PA-C6-E7-13 8.0-8.5 AB54368 4/29/2002 mg/kg	PA-C6-E7-14 8.5-9.0 AB54369 4/29/2002 mg/kg	PA-C6-E7-15 9.0-9.5 AB54370 4/29/2002 mg/kg
Total Petroleum Hydrocarbons	22125-22-0	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not collected at this PCL  
 J - Analyte detected below PCL and/or estimated concentration  
 Shaded values exceeded the corresponding soil cleanup criteria

Table 7  
 Summary of Total Petroleum Hydrocarbons Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) VeriTech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E11-02 2.0-2.0 AB57521 5/18/2002 mg/kg	PA-C6-E11-05 2.0-2.5 AB57522 5/18/2002 mg/kg	PA-C7-E1-01 2.0-2.5 AB47749 12/4/2001 mg/kg	PA-C7-E1-02 2.0-2.5 AB47749 12/4/2001 mg/kg	PA-C7-E1-03 2.0-2.5 AB47750 12/4/2001 mg/kg	PA-C7-E1-04 2.0-2.5 AB47751 12/4/2001 mg/kg	PA-C7-N1-01 2.0-2.5 AB47752 12/4/2001 mg/kg	PA-C7-N1-02 2.0-2.5 AB47753 12/4/2001 mg/kg	PA-C7-N1-03 2.0-2.5 AB47754 12/4/2001 mg/kg	PA-C7-N1-04 2.0-2.5 AB47755 12/4/2001 mg/kg	PA-C7-N1-05 2.0-2.5 AB47756 12/4/2001 mg/kg	PA-C7-N1-06 2.0-2.5 AB47757 12/4/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	6000	10000	10000	110	33	4300	4600	240	74	5500	3200	200	110	8100	2700

Client Sample ID: Sampling Depth (ft) VeriTech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C7-N1-03 2.0-2.5 AB47758 12/4/2001 mg/kg	PA-C7-N1-04 2.0-2.5 AB47759 12/4/2001 mg/kg	PA-C7-E1-01 2.0-2.5 AB47760 12/4/2001 mg/kg	PA-C7-E1-02 2.0-2.5 AB47761 12/4/2001 mg/kg	PA-C7-E1-03 2.0-2.5 AB47762 12/4/2001 mg/kg	PA-C7-E1-04 2.0-2.5 AB47763 12/4/2001 mg/kg	BH-N1-N1-01 2.0-2.5 AB47764 12/4/2001 mg/kg	BH-N1-N1-02 2.0-2.5 AB47765 12/4/2001 mg/kg	BH-N1-N1-03 2.0-2.5 AB47766 12/4/2001 mg/kg	BH-N1-N1-04 2.0-2.5 AB47767 12/4/2001 mg/kg	BH-N1-N1-05 2.0-2.5 AB47768 12/4/2001 mg/kg	BH-N1-N1-06 2.0-2.5 AB47769 12/4/2001 mg/kg			
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	260	48	10000	8400	100	110	74	37	U	33	U	42	74	33	U

Client Sample ID: Sampling Depth (ft) VeriTech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	BH-N1-N1-03 2.0-2.5 AB47770 12/4/2001 mg/kg	BH-N1-N1-04 2.0-2.5 AB47771 12/4/2001 mg/kg	BH-N1-N1-05 2.0-2.5 AB47772 12/4/2001 mg/kg	BH-N1-E1-02 2.0-2.5 AB47773 12/4/2001 mg/kg	BH-N1-E1-03 2.0-2.5 AB47774 12/4/2001 mg/kg	BH-N1-E1-04 2.0-2.5 AB47775 12/4/2001 mg/kg	BH-N1-N1-01 2.0-2.5 AB47776 12/4/2001 mg/kg	BH-N1-N1-02 2.0-2.5 AB47777 12/4/2001 mg/kg	BH-N1-N1-03 2.0-2.5 AB47778 12/4/2001 mg/kg	BH-N1-N1-04 2.0-2.5 AB47779 12/4/2001 mg/kg					
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	31	38	U	50	47	41	48	40	U	36	U	36	U	36	U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration  
 Shaded values exceeded the corresponding soil cleanup criteria

**Table 8  
Summary of Excel's Volatile Organic Compounds Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B .5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg
Trichlorofluoromethane	NA	NA	NA	0.67	ND	1.8	ND
Tetrachloroethene	1	4	6	ND	ND	0.41	ND
Toluene	500	1000	1000	0.98 J	ND	0.31	ND
Ethylbenzene	100	1000	1000	ND	ND	0.15	ND
Xylene	67	410	1000	ND	ND	0.74	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection  
mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 9**  
**Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-1 0.0-0.5 139896 6/23/1999 mg/kg	SB-1 2.0-2.5 139897 6/23/1999 mg/kg	SB-2 1.0-1.5 139892 6/23/1999 mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B* 0.5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg
Naphthalene	100	230	4200	0.080 J	ND	ND	0.210 J	ND	0.490 J	ND
Acenaphthylene	NA	NA	NA	0.160 J	ND	ND	0.290 J	ND	0.540 J	ND
Acenaphthene	100	3400	10000	0.030 J	ND	ND	0.220 J	ND	0.580 J	ND
Fluorene	100	2300	10000	0.041 J	ND	ND	0.260 J	ND	0.610 J	ND
Phenanthrene	NA	NA	NA	0.810 J	ND	ND	1.60 J	0.014 J	4.9	0.0081 J
Anthracene	100	10000	10000	0.220 J	ND	ND	0.520 J	ND	1.40 J	ND
Fluoranthene	100	2300	10000	1.7	0.012 J	ND	3.30 J	ND	10.0	0.0074 J
Pyrene	100	1700	10000	1.6	0.012 J	ND	4.0 J	ND	8.7	0.012 J
Benzo[a]anthracene	500	0.9	4		0.017 J	ND		ND		ND
Chrysene	500	9	40	1.2	0.0098 J	ND	1.50 J	ND	5.3	ND
Benzo[b]fluoranthene	50	0.9	4		0.012 J	ND		ND		ND
Benzo[k]fluoranthene	500	0.9	4		ND	ND		ND		ND
Benzo[a]pyrene	100	0.66	0.66		0.011 J	ND		ND		ND
Indeno[1,2,3-cd]pyrene	500	0.9	4	0.350 J	0.0079 J	ND	0.85	ND		ND
Dibenzo[a,h]anthracene	100	0.66	0.66	ND	ND	ND	ND	ND	0.390	ND
Benzo[g,h,i]perylene	NA	NA	NA	0.320 J	0.0076 J	ND	0.650 J	ND	1.40 J	ND

## Notes:

NJDEP - New Jersey Department of Environmental Protection  
mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria



**Table 9  
Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5A 0.0-0.5 139898 6/23/1999 mg/kg	SB-5A 6.5-7.0 139901 6/23/1999 mg/kg	SB-5B 0.0-0.5 139907 6/23/1999 mg/kg	SB-5B 7.0-7.5 109909 6/23/1999 mg/kg	SB-5C 2.0-2.5 139905 6/23/1999 mg/kg	SB-5C 3.5-4.0 139906 6/23/1999 mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg
Naphthalene	100	230	4200	1.0 J	ND	0.220 J	ND	5.3	0.240 J	0.610 J
Acenaphthylene	NA	NA	NA	1.60 J	ND	0.480 J	ND	0.240 J	0.070 J	0.360 J
Acenaphthene	100	3400	10000	0.170 J	ND	0.170 J	ND	1.20 J	0.360 J	1.5 J
Fluorene	100	2300	10000	0.370 J	ND	0.180 J	ND	0.920 J	0.52	1.8 J
Phenanthrene	NA	NA	NA	2.4	ND	1.70 J	ND	4.8	1.3	18.0
Anthracene	100	10000	10000	1.50 J	ND	0.710 J	ND	1.4 J	0.290 J	4.8
Fluoranthene	100	2300	10000	4.4	ND	4.70 J	ND	7.5	0.670 J	21.0
Pyrene	100	1700	10000	11.0	ND	4.50 J	ND	5.0	0.47	15.0
Benzo[a]anthracene	500	0.9	4	NR	ND	NR	ND	NR	0.14	NR
Chrysene	500	9	40	2.7	ND	2.60 J	ND	2.6	0.120 J	8.3
Benzo[b]fluoranthene	50	0.9	4	NR	ND	NR	ND	NR	0.1	NR
Benzo[k]fluoranthene	500	0.9	4	ND	ND	NR	ND	NR	0.036 J	NR
Benzo[a]pyrene	100	0.66	0.66	NR	ND	NR	ND	NR	0.059	NR
Indeno[1,2,3-cd]pyrene	500	0.9	4	NR	ND	NR	ND	NR	0.028 J	NR
Dibenzo[a,h]anthracene	100	0.66	0.66	0.3	ND	0.40 J	ND	0.150 J	0.012 J	0.58
Benzo[g,h,i]perylene	NA	NA	NA	1.01	ND	1.20 J	ND	0.420 J	0.029 J	1.20 J

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- NR Value exceeded the NJDEP residential soil cleanup criteria
- NR Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 9  
Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/25/1999 mg/kg	SB-5F 5.5-6.0 140193 6/25/1999 mg/kg
Naphthalene	100	230	4200	ND	0.960 J	ND
Acenaphthylene	NA	NA	NA	ND	0.280 J	ND
Acenaphthene	100	3400	10000	ND	2.70 J	ND
Fluorene	100	2300	10000	ND	2.70 J	ND
Phenanthrene	NA	NA	NA	ND	21.0	ND
Anthracene	100	10000	10000	ND	6.3	ND
Fluoranthene	100	2300	10000	ND	37.0	ND
Pyrene	100	1700	10000	ND	32.0	ND
Benzo[a]anthracene	500	0.9	4	ND	1.70	ND
Chrysene	500	9	40	ND	1.70	ND
Benzo[b]fluoranthene	50	0.9	4	ND	1.70	ND
Benzo[k]fluoranthene	500	0.9	4	ND	1.70	ND
Benzo[a]pyrene	100	0.66	0.66	ND	1.70	ND
Indeno[1,2,3-cd]pyrene	500	0.9	4	0.0084 J	1.70	ND
Dibenz[a,h]anthracene	100	0.66	0.66	ND	1.70	ND
Benzo[g,h,i]perylene	NA	NA	NA	0.0098 J	3.8	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

 Value exceeded the NJDEP residential soil cleanup criteria

 Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 10  
Summary of Excel's PCB Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B 0.5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg	SB-5A 0.0-0.5 139898 6/23/1999 mg/kg	SB-5A 2.5-3.0 139899 6/23/1999 mg/kg
Aroclor 1242	50	0.49	2	ND	ND	ND	ND	ND	ND
Aroclor 1248	50	0.49	2	ND	ND	ND	ND	ND	ND
Aroclor 1254	50	0.49	2	ND	ND	ND	ND	ND	ND
Aroclor 1260	50	0.49	2	ND	ND	ND	ND	ND	ND

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 10  
Summary of Excel's PCB Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5B 0.0-0.5 139907 6/23/1999 mg/kg	SB-5B 2.5-3.0 139908 6/23/1999 mg/kg	SB-5B 7.0-7.5 139909 6/23/1999 mg/kg	SB-5C 2.0-2.5 139905 6/23/1999 mg/kg	SB-5C 3.5-4.0 139906 6/23/1999 mg/kg	SB-5D 0.0-0.5 140189 6/25/1999 mg/kg	SB-5D 1.5-2.0 140190 6/25/1999 mg/kg
Aroclor 1242	50	0.49	2	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	50	0.49	2	ND	ND	ND	ND	ND	ND	0.4
Aroclor 1254	50	0.49	2	ND	ND	ND	ND	ND	ND	0.34
Aroclor 1260	50	0.49	2	ND	ND	ND	ND	ND	ND	0.19

Notes:

NJDEP - New Jersey Department of Environmental Protection  
mg/Kg - Milligrams per Kilograms, equivalent to parts per million

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J - Analyte detected below PQL and/or estimated concentration

NA - Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria  
Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 10  
Summary of Excel's PCB Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5D 3.5-4.0 140196 6/25/1999 mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg	SB-5E 2.5-3.0 139903 6/23/1999 mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/25/1999 mg/kg	SB-5F 2.5-3.0 140192 6/25/1999 mg/kg
Aroclor 1242	50	0.49	2	0.56	ND	0.56	ND	0.56	ND
Aroclor 1248	50	0.49	2	ND	ND	ND	ND	ND	ND
Aroclor 1254	50	0.49	2	0.44	ND	ND	0.15	0.15	ND
Aroclor 1260	50	0.49	2	0.26	ND	ND	ND	ND	ND

Notes:

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- NA - Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

Table 11  
 Summary of Excel's Inorganic Soil Sampling Results  
 Naporano and Hugo Neu  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B 0.5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg	SB-5A 0.0-0.5 139898 6/23/1999 mg/kg	SB-5A 2.5-3.0 139899 6/23/1999 mg/kg	SB-5A 6.5-7.0 139901 6/23/1999 mg/kg	SB-5B 0.0-0.5 139907 6/23/1999 mg/kg	SB-5B 7.0-7.5 139909 6/23/1999 mg/kg
Antimony	NA	14	340	NA	NA	NA	NA	6.9	ND	ND	9.0 B	NA
Arsenic	NA	20	20	NA	NA	NA	NA	7.5	NA	NA	8.4	NA
Beryllium	NA	2	2	NA	NA	NA	NA	0.23 B	NA	NA	0.28 B	NA
Cadmium	NA	39	100	NA	NA	NA	NA	6.2	NA	NA	28.4	NA
Chromium	NA	500	500	NA	NA	NA	NA	135	NA	NA	321	NA
Copper	NA	600	600	NA	NA	NA	NA	6.2	6.9	5.3	15.0	0.93 B
Lead	NA	400	600	189	ND	24.0	ND	6.2	4.8	4.2	15.0	1.2
Mercury	NA	14	270	NA	NA	NA	NA	1.3	NA	NA	6.3	NA
Nickel	NA	250	2400	NA	NA	NA	NA	98.8	NA	NA	15.0	2.8 B
Selenium	NA	63	3100	NA	NA	NA	NA	3.7	NA	NA	ND	NA
Thallium	NA	2	2	NA	NA	NA	NA	ND	NA	NA	ND	NA
Silver	NA	110	4100	NA	NA	NA	NA	38.1	NA	NA	1.5 B	NA
Zinc	NA	1500	1500	NA	NA	NA	NA	1,440	NA	NA	15.0	5.3 B

Notes:

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- Value exceeded the NJDEP residential soil cleanup criteria
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Table 11  
 Summary of Excel's Inorganic Soil Sampling Results  
 Naporano and Hugo Neu  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5C 2.0-2.5 139905 6/23/1999 mg/kg	SB-5C 3.5-4.0 139908 6/23/1999 mg/kg	SB-5D 0.0-0.5 140189 6/23/1999 mg/kg	SB-5D 3.5-4.0 140196 6/23/1999 mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/23/1999 mg/kg	SB-5F 2.5-3.0 140192 6/23/1999 mg/kg	SB-5F 5.5-6.0 140193 6/23/1999 mg/kg
Antimony	NA	14	340	23.0	ND	ND	NA	ND	NA	ND	NA	NA
Arsenic	NA	20	20	18.4	NA	11.9	NA	13.1	NA	16.1	NA	NA
Beryllium	NA	2	2	ND	NA	ND	NA	ND	NA	0.19 B	NA	NA
Cadmium	NA	39	100	11.4	NA	15.8	NA	19.2	NA	10.0	NA	NA
Chromium	NA	500	500	20.0	NA	20.0	NA	20.0	NA	182	NA	NA
Copper	NA	800	800	20.0	2.5 B	579	NA	1600	6.1	5000	7.1	4.2 B
Lead	NA	400	600	20.0	3.4	38.1	NA	1600	6.0	5000	7.1	3.2
Mercury	NA	14	270	4.1	NA	3.8	NA	0.27	NA	5.0	NA	NA
Nickel	NA	250	2400	27.4	6.1 B	57.5	18.3	2000	21.9	176	NA	NA
Selenium	NA	63	3100	ND	NA	ND	NA	ND	NA	ND	NA	NA
Thallium	NA	2	2	ND	NA	ND	NA	ND	NA	ND	NA	NA
Silver	NA	110	4100	3.7 B	NA	ND	NA	2.9 B	NA	2.5 B	NA	NA
Zinc	NA	1500	1500	2200	55.1	2500	99.3	2000	19.6	2000	25.4	13.3

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
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- Value exceeded the NJDEP non-residential soil cleanup criteria

Table 12  
 Summary of Excel's Total Petroleum Hydrocarbons Soil Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID:	NJDEP Impact to Groundwater	NJDEP Residential	NJDEP Non-Residential	SB-1	SB-1	SB-2	SB-3	SB-4A	SB-4A	SB-4B	SB-4B	SB-5A	SB-5A	SB-5B	SB-5B	SB-5C	SB-5C	SB-5D	SB-5D
Sampling Depth (ft)	Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	0.0-0.5	2.0-2.5	1.0-1.5	1.0-1.5	1.0-1.5	5.5-6.0	0.5-1.0	5.5-6.0	0.0-0.5	2.5-3.0	0.0-0.5	7.5-3.0	2.0-2.5	0.0-0.5	1.5-2.0	1.5-4.0
Lab Sample ID:	Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	139456	139457	139452	139454	140185	140186	140167	140168	139910	139909	139907	139908	139903	140189	140190	149196
Sampling Date:	Criteria	Criteria	Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Total Petroleum Hydrocarbons	10000	10000	10000	139456	25.5	144	94.8	140185	33.9	140167	21.2	139910	ND	139907	6260	3640	5200	ND	ND

Client Sample ID:	NJDEP Impact to Groundwater	NJDEP Residential	NJDEP Non-Residential	SB-5E	SB-5E	SB-5E	SB-5F	SB-5F	SB-5F	FB-1	FB-2
Sampling Depth (ft)	Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	0.5-1.0	2.5-3.0	0.0-4.5	1.0-1.5	2.5-3.0	5.5-6.0	-	-
Lab Sample ID:	Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	139902	139903	139904	140191	140192	140193	139910	140194
Sampling Date:	Criteria	Criteria	Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/24/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Total Petroleum Hydrocarbons	10000	10000	10000	139902	139903	139904	140191	140192	140193	ND	ND

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PCL  
 J - Analyte detected below PCL and/or estimated concentration  
 NA - Not Available  
 NR - Analyte Not Requested  
 Value exceeded the NJDEP residential soil cleanup criteria  
 Value exceeded the NJDEP non-residential soil cleanup criteria



Table 13  
 Summary of Volatile Organic Compounds Groundwater Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID Veritech Sample # Sampling Date Units	Class # Groundwater Depth (feet) Units	MW-42	MW-2	MW-3	MW-4	MW-5	MW-6	F-BLANK	F-BLANK	F-BLANK	F-BLANK	F-1-022198	F-1-022199	
		AA81132 7/17/1999 UG/L	AA81133 7/17/1999 UG/L	AA81134 7/17/1999 UG/L	AA81135 7/17/1999 UG/L	AA81136 7/17/1999 UG/L	AA81137 7/17/1999 UG/L	AA81138 7/17/1999 UG/L	AA81139 7/17/1999 UG/L	AA81140 7/17/1999 UG/L	AA81141 7/17/1999 UG/L	AA81142 7/17/1999 UG/L	AA81143 7/17/1999 UG/L	AA81144 7/17/1999 UG/L
1,1,1-Trichloroethane	71-55-6	30	0.51 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.51 U	0.51 U
1,1,2,2-Tetrachloroethane	79-34-5	2	0.55 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.55 U	0.55 U
1,1,2-Trichloroethane	79-00-5	3	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.58 U
1,1-Dichloroethane	75-34-3	50	0.52 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.52 U	0.52 U
1,1-Dichloroethene	75-35-4	2	0.66 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.66 U	0.66 U
1,2-Dichlorobenzene	95-50-1	600	0.25 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.25 U	0.25 U
1,2-Dichloroethane	107-06-2	2	0.43 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.43 U	0.43 U
1,2-Dichloropropane	78-87-5	1	0.39 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.39 U	0.39 U
1,2-Dichlorobenzene	541-73-1	600	0.78 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.78 U	0.78 U
1,4-Dichlorobenzene	106-46-7	75	0.4 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.4 U	0.4 U
2-Butanone	78-93-3	300	1.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.4 U	1.4 U
2-Chloroethanol	110-75-8	NA	1 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	1 U	1 U
2-Hexanone	581-79-8	NA	0.78 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.78 U	0.78 U
4-Methyl-2-Pentanone	109-10-1	400	0.78 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.78 U	0.78 U
Acetone	67-64-1	700	4.8 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.8 U	4.8 U
Acetone	107-02-6	NA	0.4 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	0.4 U	0.4 U
Acrylonitrile	107-13-1	50	6.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	6.9 U	6.9 U
Benzene	71-42-2	1	0.47 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.47 U	0.47 U
Bromodichloromethane	75-27-4	1	0.85 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.85 U	0.85 U
Bromofors	75-29-2	4	1.3 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.3 U	1.3 U
Bromomethane	74-83-8	10	1.2 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	1.2 U	1.2 U
Carbon Disulfide	75-15-0	NA	0.4 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.4 U	0.4 U
Carbon Tetrachloride	56-23-5	2	0.61 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.61 U	0.61 U
Chlorobenzene	106-90-7	4	0.64 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.64 U	0.64 U
Chloroethane	75-00-3	NA	2.5 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	2.5 U	2.5 U
Chloroform	67-66-3	8	0.47 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.47 U	0.47 U
Chloroform	74-87-3	30	0.69 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.69 U	0.69 U
Cis-1,2-Dichloroethane	156-59-2	10	0.61 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.61 U	0.61 U
Cis-1,3-Dichloropropene	10061-01-5	NA	0.45 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.45 U	0.45 U
Diisopropyl ether	109-29-3	NA	0.33 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.33 U	0.33 U
Dibromochloromethane	124-48-1	10	0.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.7 U	0.7 U
Dichlorodifluoromethane	75-71-9	NA	0.67 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.67 U	0.67 U
Ethylbenzene	100-41-4	700	0.74 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.74 U	0.74 U
Methyl Tertiary ether	1624-04-4	NA	3.4	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Methylene Chloride	75-09-2	2	1.5 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	1.5 U	1.5 U
Styrene	100-42-5	100	0.59 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.59 U	0.59 U
n-Butyl Alcohol	75-85-0	NA	0.7 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.7 U	0.7 U
Tetrachloroethane	127-18-4	1	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	1 U	1 U
Toluene	108-88-3	1000	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.45 U
Trans-1,2-Dichloroethane	158-60-5	100	1.2 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	1.2 U	1.2 U
Trans-1,3-Dichloropropene	10061-02-6	NA	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.42 U
Trichloroethane	79-01-6	1	0.78 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.78 U	0.78 U
Trichlorobromomethane	75-89-4	NA	0.61 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.61 U	0.61 U
Vinyl Acetate	108-05-4	NA	0.32 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.32 U	0.32 U
Vinyl Chloride	75-01-4	5	1.1 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.1 U	1.1 U
MMP-Xylenes	1330-20-7	NA	1.1 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	1.1 U	1.1 U
O-Xylene	95-47-8	NA	0.69 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.69 U	0.69 U

NOTES:  
 ug/l - Micrograms per Liter, equivalent to parts per billion  
 U - Not detected at the MDL  
 J - Analyte detected below MDL and/or estimated concentration  
 Shaded Values Exceeded Corresponding Cleanup Criteria  
 NA - Not Available

Table 14  
 Summary of Semivolatile Organic Compounds Groundwater Results  
 Naporano and Hugo Neu  
 Port Newark  
 Newark, New Jersey

Client Sample ID Well/Screen Sample ID Sampling Date	CAS Number	Class No Organic Quality Standards	MW-C1	MW-C2	MW-C3	MW-C4	MW-C5	F-BLANK	F-BLANK	F-BLANK	F-BLANK
			AA891232 02/01/99 UGA	AA81155 7/13/1999 UGA	AA81297 7/13/1999 UGA	AA81254 7/13/1999 UGA	AA81355 7/13/1999 UGA	AA81296 7/13/1999 UGA	AA81355 7/13/1999 UGA	AA81356 02/01/99 UGA	
1,2,4-Trichlorobenzene	127-18-1	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichlorobenzene	95-50-1	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene	641-72-1	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	106-46-7	75	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
1,2,4-Trichloroethane	23-12-6	100	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
1,1,1-Trichloroethane	69-59-3	3	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,4-Dichloroethane	107-06-2	75	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
1,2-Dichloroethane	107-06-9	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethene	31-26-3	48	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,3-Dichloroethene	124-18-2	18	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
1,1-Dichloroethene	89-53-2	18	6.72 U	6.72 U	6.72 U	6.72 U	6.72 U	6.72 U	6.72 U	6.72 U	6.72 U
1,1-Dichloroethane	91-58-7	NA	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1-Chlorobenzene	99-47-8	60	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
1,1,1-Trichloroethene	31-37-4	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	91-58-7	NA	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
1,1-Dichloroethene	89-53-2	NA	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
1,1-Dichloroethane	91-58-7	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,1-Dichloroethene	89-53-2	NA	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
1,1,1-Trichloroethane	106-44-3	NA	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
1,1,2-Trichloroethane	91-88-1	85	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,1,1,2-Tetrachloroethane	79-09-9	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,1,1,2-Tetrachloroethane	121-16-1	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,1,1,2-Tetrachloroethane	101-55-2	NA	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
1,1,2,2-Tetrachloroethane	64-67-7	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
1,1,2,2-Tetrachloroethane	106-47-8	NA	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
1,1,2,2-Tetrachloroethane	100-72-3	NA	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
1,1,1,2-Tetrachloroethane	100-01-4	NA	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1,1,2-Tetrachloroethane	100-02-7	NA	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
1,1,1,2-Tetrachloroethane	82-12-9	600	6.30 U	6.30 U	6.30 U	6.30 U	6.30 U	6.30 U	6.30 U	6.30 U	6.30 U
1,1,1,2-Tetrachloroethane	208-98-9	NA	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
1,1,1,2-Tetrachloroethane	100-12-7	6000	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
1,1,1,2-Tetrachloroethane	32-81-6	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	36-51-3	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1,2-Tetrachloroethane	80-12-6	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,1,2-Tetrachloroethane	202-89-2	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1,2-Tetrachloroethane	111-24-1	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1,2-Tetrachloroethane	82-53-8	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1,2-Tetrachloroethane	102-11-4	2000	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,1,1,2-Tetrachloroethane	111-82-1	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,1,1,2-Tetrachloroethane	100-02-1	300	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
1,1,1,2-Tetrachloroethane	117-84-7	30	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1,1,1,2-Tetrachloroethane	15-88-7	100	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1,1,2-Tetrachloroethane	26-15-8	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,1,2-Tetrachloroethane	218-01-3	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1,2-Tetrachloroethane	64-74-9	300	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U
1,1,1,2-Tetrachloroethane	117-84-7	100	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1,1,2-Tetrachloroethane	22-70-3	NA	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,1,2-Tetrachloroethane	134-44-9	NA	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
1,1,1,2-Tetrachloroethane	84-99-2	6000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,1,2-Tetrachloroethane	111-15-3	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,1,1,2-Tetrachloroethane	208-11-6	300	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,1,2-Tetrachloroethane	86-72-7	300	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,1,2-Tetrachloroethane	118-74-1	10	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,1,1,2-Tetrachloroethane	87-89-3	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,1,2-Tetrachloroethane	71-41-6	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	87-72-1	10	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1,1,2-Tetrachloroethane	132-78-2	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,1,2-Tetrachloroethane	71-59-1	100	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1,1,2-Tetrachloroethane	64-74-9	300	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,1,2-Tetrachloroethane	82-72-2	30	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1,2-Tetrachloroethane	28-26-2	75	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,1,2-Tetrachloroethane	87-20-2	100	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1,1,2-Tetrachloroethane	30-92-3	10	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1,2-Tetrachloroethane	87-89-3	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,1,2-Tetrachloroethane	15-81-3	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1,1,2-Tetrachloroethane	108-78-2	1000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,1,2-Tetrachloroethane	118-96-1	NA	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

NOTES:  
 UGA: Micrograms per Liter, equivalent to parts per billion  
 U: Not Detected at the PQL  
 J: Analyte detected below PQL, and/or estimated concentration  
 NA: Not Available  
 Shaded values exceeded the corresponding MCL.

Table 15  
 Summary of Pesticides and PCB Groundwater Sampling Results  
 Naporano and Hugo Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class # Ground Water Quality Standards UGL	MW-N2 AA91332 8/21/1998 UGL	MW-C2 AA91333 7/13/1999 UGL	MW-C3 AA91297 7/13/1999 UGL	MW-C7 AA91334 7/13/1999 UGL	MW-C6 AA91336 7/13/1999 UGL	F-BLANK AA91298 7/13/1999 UGL	F-BLANK AA91335 7/13/1999 UGL	FB-1-892199 AA91336 8/21/1998 UGL
Atrazine	304-00-1	0.04	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Alpha-BHC	319-84-8	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Beta-BHC	319-85-7	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorfens	57-74-9	0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Delta-BHC	319-88-8	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dieldrin	80-57-1	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Endosulfan I	959-98-8	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	23213-85-9	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan Sulfate	1031-07-8	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	72-20-8	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin Aldehyde	7421-93-1	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin Ketone	53484-70-3	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Gamma-BHC	56-89-9	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	75-44-4	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor Epoxide	1024-67-3	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	72-43-3	40	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
p,p'-DDE	72-84-8	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
p,p'-DDE	72-83-8	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
p,p'-DDT	50-29-3	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Terphenyls	8001-35-2	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1018	12874-11-2	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1221	11104-28-2	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1237	11141-18-8	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1242	53489-21-9	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1248	12872-29-8	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1254	11097-89-1	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1260	11096-82-3	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

NOTES:  
 J - Analyte detected below MDL and/or estimated concentration  
 UGL: Micrograms per Liter, equivalent to parts per billion  
 U Not detected at the PGL  
 NA Not Available  
 Shaded Values Exceeded Corresponding Cleanup Criteria

**Table 16**  
**Summary of the Inorganic Analysis For Groundwater Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class IIA Ground Water Quality Standards (ppm)	MW-N1 AA95332 9/21/1999 UG/L	MW-C1 AA91333 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L
Antimony	7440-36-0	20	2.1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Arsenic	7440-38-2	8	3.7 U	3.7 U	3.7 U	3.8	6.2	3.7 U	3.7 U	3.7 U
Barium	7440-39-3	2000	24	67	120	28	56	4.5 U	4.5 U	4.5 U
Beryllium	7440-41-7	20	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Cadmium	7440-43-9	4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chromium	7440-47-3	100	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U
Copper	7440-50-8	1000	6.1	4.4	3.1	4.1	3.2	2.7 U	2.7 U	5.7
Lead	7439-92-1	10	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Mercury	7439-97-6	2	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U
Nickel	7440-02-0	100	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Selenium	7782-49-2	50	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
Silver	7440-22-4	NA	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Thallium	7440-28-0	10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Zinc	7440-66-8	5000	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U
Cyanide	57-12-5	200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	103-95-2	4000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Chloride	18887-00-6	250000	180000	180000	180000	180000	180000	1800 U	1800 U	1000 U
Total Suspended Solids		NA	140000	27999	20000	5200	24000	4000 U	3999 U	4000 U

NOTES:  
 ug/L - Micrograms per Liter, equivalent to parts per billion  
 U - Not detected at the MDL  
 J - Analyte detected below MDL and/or estimated concentration  
 NA - Not Available  
 Shaded Values Exceeded Corresponding Cleanup Criteria

**Table 17**  
**Summary of Total Petroleum Hydrocarbons Groundwater Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	Number	Class I/II Ground Water Quality (ppm)	MW-N2 AA95332 8/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 8/21/1999 UG/L
Total Petroleum Hydrocarbons	23135-22-0	NA	1000 U	1100 U	5100	1100 U	1100 U	1000 U	1100 U	1000 U

**NOTES:**

ug/L - Micrograms per Liter, equivalent to parts per billion  
 U - Not detected at the MDL  
 J - Analyte detected below MDL and/or estimated concentration  
 NA - Not Available

APPENDIX A

11

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT <b>PA METRO METALS</b>	NAME OF CONTRACTOR <b>E.P.I.</b>	BORING NO. <b>SB-1</b>	SURFACE ELEV.
LOCATION <b>Laid out by Consultant (EXCEL)</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>6-23-99</b>	

DIA O.D. I.D.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
HAMMER <b>60 POUND FALL</b>						
LEADER <b>B. KOKOT</b>						
DIRECTOR <b>Midudeh / R. HARDWOOD</b>						

CASING DEPTH (FEET)	DEPTH	SPOON BLOWS/6"	RE-COND	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	MACRO			
	1				Use fill
	2		48"	1	
	3				
	4				
	5				
					Bottom of Boring
					0.5'-1.0' bottle #C067
					2'-2.5' bottle #C068

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, and head in casing, etc.

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THE POR. AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: PN METRO METALS

RWG No. SP-1 DATE: 6/23/99

ELD READINGS BY: N. DUBEH PID Model: Mini RAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
Am	0 - 0.5	-	0	0	
	0.5 - 1.0	-	0	0	
	1.0 - 1.5	-	0	0	
	1.5 - 2.0	-	0	0	
	2.0 - 2.5	-	0	0	
	2.5 - 3.0	-	0	0	
	3.0 - 3.5	-	0	0	
	3.5 - 4.0	-	0	0	



THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN metro Metals

LOCATION: laid out by Consultant DATE: 6/23/99

RING No: SB-1 TOTAL No. OF SAMPLES: 2

NATURE OF ALL PRESENT AT SAMPLING

*W. J. O'Neil*

RELINQUISHED DATE 6/23/99 RECEIVED

(SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED

(SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED

(SIGN) TIME BY LAB

REMARKS: 2 samples taken in 2 one pt. JARS  
and bottle # C067 0.5' - 1.0'  
# C068 2' - 2.5'

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <b>PJ METRO METALS</b>		NAME OF CONTRACTOR <b>EPI</b>		BORING NO. <b>SB-2</b>	SHEET <b>1</b> OF <b>3</b>
LOCATION <b>ad utility consultant</b>		CONTRACT NO. <b>426-99-006</b>		SURFACE ELEV.  DATE <b>6-23-99</b>	
DRILLER <b>B. KOKOT</b>	CASING SIZE <b>48" PS</b>	HOLE TYPE <b>HP</b>	GROUND WATER LEVEL		
OPERATOR <b>MILODICH</b>	WASHER <b>EXCEL</b>	RE-COVERED	Date	Time	Depth
DEPTH (FT.)	SPOON BLOWERS	SAMP. NO.	REMARKS		
0	<b>MACRO</b>		<b>A Asphalt PAVEMENT 0.5'</b>		
1			<b>B CRushed rock, little br. m.F sand SUBGRADE 1.0'</b>		
		<b>48"</b>	<b>C Fill grey-br. m.F Sand, some gravel, tr. silt (Sample saved Bottle # 072) 1.5'</b>		
2			<b>D Fill red-br. m.F Sand, tr. silt, tr. gravel 3.0'</b>		
3			<b>E Fill red-br. m.F Sand, tr. silt, tr. gravel (Sample saved Bottle # 073) 3.5'</b>		
4			<b>F Fill red-br. m.F Sand, tr. silt, tr. gravel 4.0'</b>		
5			<b>Bottom of Boring</b>		
			<b>#072 1'-1.5'</b>		
			<b>#073 3'-3.5'</b>		

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used



THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN Metro Metals

LOCATION: Laid out by Consultant DATE: 6-23-99

DRILLING No: SB-2 TOTAL No. OF SAMPLES: 2

DESCRIPTION OF SAMPLES

1 NATURE OF ALL *Why Odd*

PRESENT AT SAMPLING

UNOBTAINED	<i>Why Odd</i>	DATE	<i>6/23/99</i>	RECEIVED
(SIGN)		TIME		BY (SIGN)

UNOBTAINED		DATE		RECEIVED
(SIGN)		TIME		BY (SIGN)

UNOBTAINED		DATE		RECEIVED
(SIGN)		TIME		BY LAB

REMARKS: 2 samples taken in 2 conc pt. TARS  
and bottle #C072 1.0' - 1.5'  
#C073 3.0' - 3.5'

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT <b>PJ METRO METALS</b>		NAME OF CONTRACTOR <b>EPI</b>		BORING NO. <b>SB-3</b>		SHEET <b>1</b> OF <b>3</b>	
LOCATION <b>Laid out by Consultant</b>				CONTRACT NO. <b>426-99-006</b>		DATE <b>6-23-99</b>	
C.A.S.I.N.G. SIZE "O.D." "I.D."		HOLE TYPE		GROUND WATER LEVEL			
"O.D." "I.D."		HAMMER # FALL		Date	Time	Depth	Remarks
METHOD <b>GW Probe</b>		# FALL					
OPERATOR <b>B. KOTOT</b>		EXCEL					
SUPERVISOR <b>M. Duda / R. Harwood</b>		# FALL					
DEPTH FT.	DEPTH	SPOON BLOWS/FT	RE- COVER	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
	0	MACRO					
	1				Misc. fill		
	2		48"	1			
	3						
	4						
	5				Bottom of Boring $\uparrow$ 4.0'		
					1'-1.5' #1071		
					3'-3.5' #1074		

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U - undisturbed; A - auger; OER - open end rod; V - vane

**THE PORT AUTHORITY OF N.Y & N.J.**  
**ENGINEERING DEPARTMENT**  
**MATERIALS ENGINEERING DIVISION**  
**PID READINGS**

PROJECT: PN metro metals  
 DRING No. SB-3 DATE: 6/23/99  
 FIELD READINGS BY: M. OUDEK PID Model: MINI PAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>Am</u>	<u>0-25</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>25-1.0</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>1.0-1.5</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>1.5-2.0</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>2.0-2.5</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>2.5-3.0</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>3.0-3.5</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>3.5-4.0</u>	<u>-</u>	<u>0</u>	<u>0</u>	

THE PORT AUTHORITY OF N.Y & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN metro Metals  
LOCATION: Laid out by Consultant DATE: 6/23/99  
DRILLING No: SB-3 TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PERSONS PRESENT AT SAMPLING

*[Handwritten signature]*

1. QUISHED *[Handwritten signature]* DATE 6/23/99 RECEIVED  
(SIGN) TIME BY (SIGN)

2. QUISHED DATE RECEIVED  
(SIGN) TIME BY (SIGN)

3. QUISHED DATE RECEIVED  
(SIGN) TIME BY LAB

REMARKS: 2 samples taken in 2 one pt. TARS  
and bottle # C071 1'-1.5'  
# C074 3'-3.5'

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <b>PN METRO METALS</b>		NAME OF CONTRACTOR <b>EPI</b>	BORING NO. <b>SB 4-A</b>	SHEET <b>1</b> OF <b>3</b>
LOCATION <b>Site out by Consultant</b>		CONTRACT NO. <b>426-99-004</b>	DATE <b>6.24.99</b>	

CASHING SIZE		HOLE TYPE		GROUND WATER LEVEL			
•O.D.	•I.D.	•HAMMER	•FALL	Date	Time	Depth	Remarks
<b>Geo. P. 1062</b>		<b>BRIAN KOKOT</b>					
DIRECTOR <b>OUDEH</b>		EXCEL <b>P. HARRWOOD</b>					

CASING DEPTH (FEET)	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		MACRO			
2			4 1/2"	1	Misc. Fill
4		MACRO			FO'
6			32"	2	Misc. Fill
8					50'
10					Fill br. on F sand, to gravel, to silt
					Bottom of boring
					10' - 1.5' Bottle # C204
					5.5' - 6' Bottle # C205

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = after RCB = run and out U = ...





THE PORT AUTHORITY OF N.Y & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PD METRO METALS

LOCATION: laid out by Consultant Excel DATE: 6-24-99

IRING No: SB4-A TOTAL No. OF SAMPLES: 2

NATURE OF ALL PRESENT AT SAMPLING

*W. J. Oehl*

UNQUISHED *W. J. Oehl* DATE 6-24-99 RECEIVED  
SIGN TIME BY (SIGN)

UNQUISHED DATE RECEIVED  
SIGN TIME BY (SIGN)

UNQUISHED DATE RECEIVED  
SIGN TIME BY LAB

REMARKS: 2 samples taken in 2 one pt. JARS

bottle # C204 1.0' - 1.5'

# C205 5.5' - 6'

**THE PORT AUTHORITY OF NY & NJ**  
 Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

PROJECT <b>PA METRO METALS SITE</b>		NAME OF CONTRACTOR <b>EPI</b>		BORING NO. <b>SB 4-B</b>	SHEET <b>1</b> OF <b>3</b>																
LOCATION <b>Laid out by Consultant</b>				CONTRACT NO. <b>926-99-006</b>	SURFACE ELEV. <b></b>																
DATE <b>6-24-99</b>	CASING SIZE		HOLE TYPE		GROUND WATER LEVEL																
OPERATOR <b>Geo</b>	HARDWARE <b>PIPE</b>		FALL																		
OPERATOR <b>B. KOKOT</b>	EXCEL		R. HARDWOOD		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td><b>6/24</b></td> <td><b>Am</b></td> <td><b>6'</b></td> <td><b>Found in S#2</b></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Date	Time	Depth	Remarks	<b>6/24</b>	<b>Am</b>	<b>6'</b>	<b>Found in S#2</b>								
Date	Time	Depth	Remarks																		
<b>6/24</b>	<b>Am</b>	<b>6'</b>	<b>Found in S#2</b>																		
OPERATOR <b>M. OUDEH</b>	EXCEL		R. HARDWOOD		*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE																
DEPTH (FOOT)	DEPTH	SPOON BLOWN	RE. COY'D	SAMP. NO.																	
0	0	MACRO			4.5' fill (typical)																
2	2		48'	1																	
4	4	MACRO			Fill br. m.f. Sand, fr. gravel, fr. silt																
6	6		48'	2																	
8	8				Bottom of Boring																
10	10																				
					0.5'-1.0' # C210																
					5.5'-6' # C211																

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = after RCB - near and mid V -

# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: <b>PJ METRO METALS</b>
TRNG No. <b>SB4-B</b> DATE: <b>6-24-99</b>
PID READINGS BY: <b>M. OUDEH</b> PID Model: <b>Mini RAE</b>

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<b>Am</b>	<b>0-0.5</b>	<b>—</b>	<b>3.4</b>	<b>0</b>	
	<b>0.5-1.0</b>	<b>—</b>	<b>8.6</b>	<b> </b>	
	<b>1.0-1.5</b>	<b>—</b>	<b>3.0</b>	<b> </b>	
	<b>1.5-2.0</b>	<b>—</b>	<b>3.4</b>	<b> </b>	
	<b>2.0-2.5</b>	<b>—</b>	<b>4.2</b>	<b> </b>	
	<b>2.5-3.0</b>	<b>—</b>	<b>30.5</b>	<b> </b>	
	<b>3.0-3.5</b>	<b>—</b>	<b>18.9</b>	<b> </b>	
	<b>3.5-4.0</b>	<b>—</b>	<b>9.5</b>	<b> </b>	
	<b>4.0-4.5</b>	<b>—</b>	<b>2.8</b>	<b> </b>	
	<b>4.5-5.0</b>	<b>—</b>	<b>2.8</b>	<b> </b>	
	<b>5.0-5.5</b>	<b>—</b>	<b>3.8</b>	<b> </b>	
	<b>5.5-6.0</b>	<b>—</b>	<b>3.3</b>	<b> </b>	
	<b>6.0-6.5</b>	<b>—</b>	<b>2.6</b>	<b> </b>	
	<b>6.5-7.0</b>	<b>—</b>	<b>2.7</b>	<b> </b>	
	<b>7.0-7.5</b>	<b>—</b>	<b>3.5</b>	<b> </b>	
	<b>7.5-8.0</b>	<b>—</b>	<b>2.2</b>	<b>∨</b>	

THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PA METRO METALS

LOCATION: Laid out by Consultant DATE: 6-24-99

LABORING No: SB4-B TOTAL No. OF SAMPLES: 2

NATURE OF ALL

PRESENT AT SAMPLING

*[Signature]*

RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
<i>[Signature]</i>	<u>6-24-99</u>	
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)

REMARKS: 2 samples taken in 2 one pt. JARS

0.5' - 1.0' # C210  
5.5' - 6' # C211

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**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <b>IN METRO METALS SITE</b>	NAME OF CONTRACTOR <b>EPI</b>	BORING NO. <b>SB5-A</b>	SURFACE ELEV.
LOCATION <b>112 out by the consultant as per drawing</b>	CONTRACT NO. <b>426-49-006</b>	DATE <b>6-23-99</b>	

JOB NO.	CASING SIZE	SOLE TYPE	GROUND WATER LEVEL			
"O.D."	"I.D."		Date	Time	Depth	Remarks
DRILLER <b>Brian Kokot</b>	HAMMER <b>Probe</b>	SOLE TYPE <b>E</b>	<b>6/23</b>	<b>Am</b>	<b>7'</b>	<b>Found in s#2</b>
ENGINEER <b>ADBH / Consultant Excel</b>	<b>R. Harwood</b>					

DEPTH (FEET)	SPOON BLOWS	RE-CO'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	MACRO			
2		48"	1	Misc. Fill
4	MACRO			
6		48"	2	fill red-br m-f Sand, tr. gravel, tr. shell
8				
10				

Bottom of Boring →

#C070 0'-0.5'    #C077 2.5'-3.0'  
#C165 1.5'-2.0'    #C166 6.5'-7'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PJ Metro Metals Site

LOCATION: Laid out in the field by consultant DATE: 6-23-99

TESTING No: SBS-A TOTAL No. OF SAMPLES: 4

NATURE OF ALL PRESENT AT SAMPLING [Signature]

ACQUISISHED [Signature] DATE 6-23-99 RECEIVED  
BY (SIGN)

ACQUISISHED DATE RECEIVED  
BY (SIGN)

ACQUISISHED DATE RECEIVED  
BY LAB

REMARKS: 4 samples taken in 1 one pt. Joes  
and the following bottles

- # C070 0' - 0.5'
- # C165 1.5' - 2.0'
- # C077 2.5' - 3.0'
- # C166 6.5' - 7.0'



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**THE PORT AUTHORITY OF NY & NJ**  
 Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

PROJECT <b>PN METRO METALS SITE</b>		NAME OF CONTRACTOR <b>CRAIG</b>		BORING NO. <b>SB 5-B</b>	SHEET / OF <b>1 / 3</b>
LOCATION <b>Laid out by Consultant as per dwg.</b>		CONTRACT NO. <b>426-99-006</b>		DATE <b>6-23-99</b>	
DRILLER <b>B. Kokot</b>		CASHING SIZE <b>4" O.D. 2" I.D.</b>		GROUND WATER LEVEL	
METHOD <b>Wash Probe 3 FALL</b>		HAMMER <b>3 FALL</b>		Date	Time
SUPERVISOR <b>m. Duda / E. H. Wood</b>		HOLE TYPE		Depth	Remarks
DEPTH (FOOT)	SP. BLOWS	RE. COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0	MACRO			disc fill bc of sand, wood, crushed rock, gravel, silt	
3	MACRO	46"	1	disc fill dk br. c.t. sand, wood, concrete fragments, tile, gravel, silt	
6	MACRO	36"	2	No Recovery (breaks off)	
9				Full grey to br. of sand, fr. gravel, fr. silt	
12				Bottom of boring	
15				#C131 0'-0.5' #C135 2'-2.8' #C133 7'-7.5'	

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN METRO METALS

LOCATION: Laid out by Consultant as per Dig DATE: 6-23-99

DRILLING No: SBS-B TOTAL No. OF SAMPLES: 3

NATURE OF ALL PRESENT AT SAMPLING mtg Oil

UNSIGNATURED	<u>mtg Oil</u>	DATE	<u>6/23/99</u>	RECEIVED
(SIGN)		TIME		BY (SIGN)

UNSIGNATURED		DATE		RECEIVED
(SIGN)		TIME		BY (SIGN)

UNSIGNATURED		DATE		RECEIVED
(SIGN)		TIME		BY LAB

REMARKS: 3 samples taken in 3 one pt. JARS  
and bottle # C171 0'-0.5'  
# C135 2'-2.5'  
# C133 7'-7.5'

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THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT <b>PAJ METRO METALS SITE</b>	NAME OF CONTRACTOR <b>EPI</b>	BORING NO. <b>SBS-C</b>	SURFACE ELEV.
---	----------------------------------	----------------------------	---------------

LOCATION <b>2 out in the field as per drawing by the consultant</b>	CONTRACT NO. <b>42699-006</b>	DATE <b>6-23-99</b>
--	----------------------------------	------------------------

CASHING SIZE HOLE TYPE	GROUND WATER LEVEL			
	Date	Time	Depth	Remarks
"O.D." "I.D."	"O.D." "I.D."	"O.D." "I.D."	"O.D." "I.D."	"O.D." "I.D."
6 SER	6/23	2:19 PM		found in S#2
OPERATOR <b>Brian Kokot</b>				
CONSULTANT <b>R. HARDWOOD</b>				

DEPTH (FEET)	SPOON BLOWN*	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATED CHANGE OF PROFILE
0	MACRO			
3		22"	1	Misc. fill br. Sand, wood, crushed Rock, gravel, silt.
3.7'				fill grey br. ft Sand, fr. gravel, fr. silt
4.0'				
6	MACRO	24"	2	fill grey m.f. sand fr. gravel, fr. silt
7.7'				clay and silt
8.0'				Bottom of Boring
9				#c 140 2'-2.5' #c 164 3'-4'
12				NOTE: S#2 had br. Sand, gravel on top this is from S#1. The Danner did not clean out hole 0' to 4' (this is common practice with Geoprobe).
15				

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used

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THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: PN METRO METALS SITE

RING No. SP5-C DATE: 6-23-99

FIELD READINGS BY: H. OUDEH PID Model: MINI RAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>An</u>	<u>0-1</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>1'-2</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>2'-3</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>3'-4</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>4'-5</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>5'-6</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>6'-7</u>	<u>-</u>	<u>0</u>	<u>0</u>	
	<u>7'-8</u>	<u>-</u>	<u>0</u>	<u>0</u>	

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

OBJECT: *PN METAL METALS SITE*

LOCATION: *hand out by consultant* DATE: *6-23-99*

RING No: *SB 5-e* TOTAL No. OF SAMPLES: *2*



NATURE OF ALL PRESENT AT SAMPLING *inty Odl*

UNOBTAINED SIGNI DATE *6-23-99* RECEIVED TIME BY (SIGNI)

UNOBTAINED SIGNI DATE RECEIVED TIME BY (SIGNI)

UNOBTAINED SIGNI DATE RECEIVED TIME BY LAB

LABS: *2 samples taken in 2 one pt. JACS*

*and bottle #140 2'-2.5'*  
*# 164 3.5'-4'*

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Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT 20 METRO METALS SITE C and out by Consultant		NAME OF CONTRACTOR EPI		BORING NO. SB5-D		SHEET 1 OF 3 SURFACE ELEV.	
CONTRACT NO. 426-99-006		DATE 6-25-99					
CASING SIZE HOLE TYPE		GROUND WATER LEVEL					
O.D. I.D. HAMMER # FALL		Date Time Depth Remarks					
CLIENT Paul BARKALOW		Date Time Depth Remarks					
OPERATOR R. HARDWOOD (EXERCISE CONSULTANT)		Date Time Depth Remarks					
DEPTH (FT.) SPOON BLOWS/FT. RE-COVD SAMP. NO.		*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE					
0 MACRO		misc. fill (typical)					
2 MACRO		refusal 2.5' 2.0'					
4 MACRO		grey med sand					
6 MACRO		clay & silt					
8 MACRO		Bottom of Boring 7.0'					
10 MACRO		0'-0.5' bottle # C213 1.5'-2.0' # C214 3.5'-4.0' # C215					

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used

# THE PORT AUTHORITY OF N.Y. & N.J.

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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of

PROJECT: <u>PN Metro Metals Site C</u>	
WING No. <u>SB5-D</u>	DATE: <u>6/25/99</u>
FIELD READINGS BY: <u>R. HARDWOOD</u>	PID Model: <u>Mini PAF</u>

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
7:00	0-0.5	—	0.1	0	
	0.5-1.0	—	0		
	1.0-1.5	—	0		
	1.5-2.0	—	0.1		
	2.0-2.5	—	0		
	2.5-3.0	—	0		
	3.0-3.5	—	0.2		
	3.5-4.0	—	0.9		
	4.0-4.5	—	0.5		
	4.5-5.0	—	0.0		
	5.0-5.5	—	0.0		
	5.5-6.0	—	0.0		
	6.0-6.5	—	0.0		
7:00	6.5-7'	—	0.0	↓	



THE PORT AUTHORITY OF N.Y & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet } of 3

OBJECT: PN Metro Metals Site C

LOCATION: Laid out by Consultant DATE: 6-25-99

RING No: SB5D TOTAL No. OF SAMPLES: 3

NATURE OF ALL SAMPLES SENT AT SAMPLING  
Wagon Drill

ACQUIRED Wagon Drill DATE 6/25/99 RECEIVED  
SIGN TIME BY (SIGN)

ACQUIRED DATE RECEIVED  
SIGN TIME BY (SIGN)

ACQUIRED DATE RECEIVED  
SIGN TIME BY LAB

REMARKS: 3 samples taken in 3 JARS  
and bottle # C217 0'-0.5'  
# C214 1.5'-2'  
# C215 3.5'-4'

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**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

CERT <b>PN Netto Metals Site</b>	NAME OF CONTRACTOR	BORING NO. <b>SB 5-E</b>	SHEET 1 of 3
CATION <b>cut out in the field as per drawing</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>6-23-99</b>	SURFACE ELEV.

EN <b>P. O. Parobiz</b>	CASING SIZE	HOLE TYPE
CER <b>0 FALL</b>	HAMMER	0 FALL
OPER <b>BRIAN KOKUT</b>	CONSULTANT <b>WADEH / Don HARDWOOD</b>	

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
<b>6/23</b>	<b>12:20 PM</b>	<b>9'</b>	<b>found in S#3</b>

DEPTH (FOOT)	SPOON BLOWS/6"	RE-COY'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	MACRO			Misc. Fill Asphalt fragments, Sand, Crushed Rock 0.5'
				Misc. fill dk-brown soft sand, crushed rock, metal gravel 1.0'
		42"	1	Misc. fill dk-brown to black fine sand, silt, crushed rock fragments, metal fragments, glass, asphalt fragments
3				fill grey mt sand, fr. gravel, fr. silt 3.5'
	MACRO			Misc. fill dk-grey-black mt sand, silt, crushed fragments, some gravel
		48"	2	fill red br mt sand, fr. gravel, fr. silt 6.0'
6				Same 6.5'
				Same 8.0'
	MACRO			Same 9.5'
		48"	3	fill red br mt sand, fr. gravel, fr. silt 10.0'
				Same 11.5'
				fill grey mt sand, fr. gravel, fr. silt 12.0'
12				Bottom of boring
				Sample 0.5' to 1.0' # C167 6'-6.5' # C168
				" 2.5' to 3.0' # C169 9.5'-10' # C170
15				

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = air; OCB = over-coring; ...



THE PORT AUTHORITY OF N.Y. & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN Metro Metals Site

LOCATION: Laid out by the Consultant as per drawing DATE: 6-23-99

RING No: SB 5-E TOTAL No. OF SAMPLES: 4

NATURE OF ALL PRESENT AT SAMPLING Stage 1

UNWITNESSED	DATE	RECEIVED
<u>Stage 1</u>	<u>6/23/99</u>	
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS: Took 4 Samples in 4 out pt. JARS and

the following Jars bottles

Bottle # C167 0.5' - 1.0'

# C169 2.5' - 3.0'

# C168 6' - 6.5'

# C170 9.5' - 10'

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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

BPT METRO METALS		NAME OF CONTRACTOR EPI		BORING NO. SB 5F		SHEET / OF	
						SURFACE ELEV.	
Laid out by Consultant				CONTRACT NO. 426-99-006		DATE 6-25-99	
CASING SIZE HOLE TYPE		GROUND WATER LEVEL					
*O.D.      *I.D.		HAMMER		Date		Time	
*FALL      *FALL		*FALL      *FALL		Depth		Remarks	
OPER Paul BARKALOW		OPER Paul BARKALOW		OPER Paul BARKALOW		OPER Paul BARKALOW	
SUPERVISOR R. HARDWOOD (EXCEL Consultant)		SUPERVISOR R. HARDWOOD (EXCEL Consultant)		SUPERVISOR R. HARDWOOD (EXCEL Consultant)		SUPERVISOR R. HARDWOOD (EXCEL Consultant)	
BORE LOG DEPTH		SPOON BLOWS/6"		RE- COV'D		SAMPLING NO.	
0		0		0		0	
5		0		0		0	
10		0		0		0	
15		0		0		0	
20		0		0		0	
25		0		0		0	
*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE							
DID NOT OBTAIN SAMPLES. THE CONSULTANT, EXCEL, DID NOT CALL P.A. MATERIALS ENGINEERING TO NOTIFY OF THE TIME AND DATE SB 5-F WILL BE SAMPLED.							

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane

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Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

LOCATION M - Metro Metals Site and cut in field as per Drawing		NAME OF CONTRACTOR Craig Drilling		BORING NO. MW-C1	SHEET 1 OF 4
		CONTRACT NO. 47699-006		DATE 6/29/99	SURFACE ELEV.
CASSING SIZE 4" O.D. 3 3/8" I.D. SAFETY 0 FALL 30"	HOLE TYPE 3" Meter HAMMER 0 FALL	GROUND WATER LEVEL			
		Date	Time	Depth	Remarks
D 0 inch 0 None		6/29/99	9:25	3.5	White Hard Aquifer
DEPTH 0 5 10 15 20 25	SPOON BLOWS* Hand Blow 2-3 3-2 3.5' SCREEN 8' 5' 6' 10'	RE-COVD Full Full 72"	SAMP. NO. 1 2 3 4	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
				MISC. - Sand, SILT, Metal, wood, etc Fill-M-F Gray Sand, Tr Silt, Tr Gravel Same Same Same Black Gray organic silty clay Bottom of Boring	
SEAM INTEREST 4'-5.5' 4'-12" 4'-9" 3'-9"		All Samples checked with PID Meter S#1 5-2' & S#2 3-3.5' saved for Testing Remaining Samples Discarded Methanol Sol Bottle S#1 C075 " " " S#2 C076			

NOTES: 1 - Length recovered; 0\* - Loss of Sample; T - Trap used

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 3 of 4

PROJECT: PN- Metro Metals Site

WELL No. MW-C1 DATE: 6/23/99

FIELD READINGS BY: D. Howe PID Model: MIM RAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>AM</u>	<u>1</u>		<u>0.6</u>		
<u> </u>	<u>2</u>		<u>0.4</u>		
<u> </u>	<u>3</u>		<u>0.1</u>		
<u> </u>	<u>4A</u>		<u>0.0</u>		
<u>↓</u>	<u>4B</u>		<u>0.2</u>		

THE PORT AUTHORITY OF N.Y. & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

OBJECT: PN- Metro Metals Site

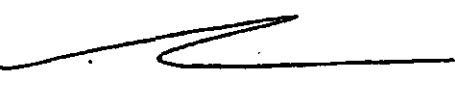

LOCATION: As laid out in Field 95 Per Drawing DATE: 6/23/55

DRIVING No: MU-C1 TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL

PRESENT AT SAMPLING

1 UNWITNESSED

DATE 6/23/55

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

2 UNWITNESSED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

3 UNWITNESSED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

2 - Soil Samples Test 1 - 16oz. just 1 - Method used Sol. Bottle Each



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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SCT VN- Metro Mats Site	NAME OF CONTRACTOR Craig Pilling	BORING NO. MW-C2	SHEET 1 OF 4
FROM Laid out in field as per Drawing	CONTRACT NO. 426 99-006	DATE 6/22/99	SURFACE ELEV.

COIN 2	CASING SIZE ALGERS	SOLE TYPE D' MON JAY	GROUND WATER LEVEL			
ER 1/2" FALL 30	HAMMER	FALL	Date 6/22/99	Time 1:15 PM	Depth 70	Remarks S#4
BLER D Osack						
STON D Howe						

NO. OF FT.	DEPTH	SPOON BLOWNS*	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	OO
	0				Handall Clashed Stage	1.0
				1	Misc Fill - Gravel, Sand, SILT, Shales, ETC	
				2	FILL - M-F Brown Sand, Ir SILT, Ir Gravel	
	5			3	Same	
		8-13		4	Same	8.0
		17-24	19"			
		8-7		5	FILL - M-F Gray Sand, Ir SILT, Ir Gravel	
	10	7-9	18"			
		15-5		6	FILL - MF Gray Sand Little Red Brown clayey SILT, Ir SILT Red	
		5-6	16"			
		8-7		7A	FILL - Red Brown Silty Clay, Ir PSand	13.5
		6-6	18"	B	Blue-gray organic SILTY clay	14.0
	15				Bottom of Boring	
					All Samples checked with PID Meter S# 1 1-2' & S# 4 6-7' Saved for Testing Remaining Samples Discarded	
	20					
					Method used Soil Bottle	
					C076 S#1	1-2'
					C079 S#4	6-7'
	25					

NOTES: 1 - Length recovered: 0' - (nos of Annals, T - Trip used

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ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 PID READINGS

Sheet 3 of 4

PROJECT: PN - Metro Metals Site

TRING No. MU - C2 DATE: 6/22/99

FIELD READINGS BY: O'Hare PID Model: Meter RAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1		1.4		
	2		0.0		
	3		0.0		
	4		0.6		
	5		0.0		
	6		0.0		
	7A		0.0		
	7B		0.0		

THE POLICE AUTHORITY OF N.Y. & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

SUBJECT: PN - Metro Metals

LOCATION: Placed within field as per Drawing DATE: 6/22/99

LABORATORY No: MW-C2 TOTAL No. OF SAMPLES: 2

NATURE OF ALL

PRESENT AT SAMPLING

UNWITNESSED	DATE 6/22/99	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

MARKS:

2 Soil Samples each in 1-lb bag put in 1 Metal Sol Bottle

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <b>PN - Metro Metals Site</b>		NAME OF CONTRACTOR <b>Craig Drilling</b>		BORING NO. <b>MAU-C3</b>	SHEET <b>1</b> OF <b>4</b>
LOCATION <b>Laid out in fields per Drawing</b>		CONTRACT NO. <b>476-99-006</b>		SURFACE ELEV. <b>6/23/55</b>	
DIAMETER <b>2" O.D. 2 3/8" I.D.</b>	CASING SIZE <b>Open</b>	HOLE TYPE <b>Hand Drilled</b>		GROUND WATER LEVEL	
DEPTH <b>30' FALL</b>	NUMBER <b>30</b>	Date <b>6/23/55</b>	Time <b>12:45 P</b>	Depth <b>7.0</b>	Remarks <b>5" 4"</b>
CORRECTION <b>0.0 such</b>					
REMARKS <b>0 None</b>					
DEPTH (FT.)	SPOON BLOWS/B'	RE-COY'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0	Hand Drilled	Full	1	Misc Fill Silt, Sand, Metal, Gravel, Curdles, ETC	
			2	Same 4.0	
5			3	Fill M-F Gray Sand, Ir Silt, Tr Gravel	
6	17-19		4	Same	
7	17-17	21"		same	
8	9-7		5	same 9.0	
10	5-4	19"	5 B	Black Gray Organic Silty Clay 100	
				Bottom of Poring	
15				All Samples checked with PID Meter, s# 1, 5-20 & s# 4 6-7' saved for Testing. Remaining Samples Observed	
20					
25					
30				Methanol Sol Bottle s# 1 C-069 " " " s# 4 C-067	

NOTES: 1 - Length recovered; 0\* - Loss of Sample; T - Trap used



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

OBJECT: *PN - Metro Metal Site*

LOCATION: *Byland out in Fuldosta Drain* DATE: *6/23/99*

DRILLING No: *MW-C3* TOTAL No. OF SAMPLES: *2*

SIGNATURE OF ALL

PERSONS PRESENT AT SAMPLING 

UNWITNESSED	DATE <i>6/23/99</i>	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS:

*2 Soil Samples for 1-log run of 1 Methanol Sol Btln each*

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**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT PN- Metro Metals Site		NAME OF CONTRACTOR Crazy Drilling		BORING NO. MW-C4	SHEET OF 4
LOCATION Laid out in field as per drawing		CONTRACT NO. 476-99-006		SURFACE ELEV. DATE 6/23/99	
DIAMETER 3" O.D. 2 3/8" I.D.	CASING SIZE	HOLE TYPE		GROUND WATER LEVEL	
DEPTH 40' FALL 30'	HAMMER	FALL		Date	Time
REMARKS 0 0 such D Hole		Date		Depth	Remarks
REMARKS D Hole		6/23/99		2:15 PM	5.5' White Hand Digging
		6/24/99		7:15 AM	5.6' Checked well

DEPTH (FEET)	SPOON BLOWS	RE-CO'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hand Dig	Fill	1	Misc Fill, Sand, Silt, Gravel, Metal, wire, etc.
			2	Same
5	4-4	22	3	Fill - M.F. Gray Sand Tr Silt, Tr Gravel
10	4-4	22	4	Same
			5	Same
			6	Black & Gray organic silty clay
				Bottom of Boring
15				
20				
25				

Notes: 1 - Length recovered; 0 - Loss of Sample, T - Trap used

Methodical Sed Bottle  
S# 1 5-2' & S# 3 5-5.5' Saved for Toxicity  
Remaining Samples Discarded  
S# 4 C172  
S# 3 C173

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**ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS**

Sheet 3 of 4

PROJECT: PN - Metro Mats Site  
 LOG No. MU-CY DATE: 6/23/99  
 PID READINGS BY: DDowe PID Model: Mini RDE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PN	1		2.1		
	2		1.0		
	3		0.1		
	4		0.0		
	SB		0.0		
	SB		0.0		



THE PORT AUTHORITY OF N.Y & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

SUBJECT: PN- Metro Metals Site	
LOCATION: Aslaid out in Field as per Drawing	DATE: 6/23/95
LABORING No: MU-C4	TOTAL No. OF SAMPLES: 2

CHARACTER OF ALL

PRESENT AT SAMPLING

UNASSIGNED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

UNASSIGNED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

UNASSIGNED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

2 - Soil Samples for 1-16oz jar & 1 Method Sel. Bottle Each

PA 647  
6-80

THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 4

PROJECT PN - Metro Metals Site			NAME OF CONTRACTOR Crag			BORING NO. MW-C5			SURFACE ELEV.				
LOCATION 20' laid out ± 180' South of C-6 (as per drawings)						CONTRACT NO. 426-99-006			DATE 6-24-99				
SPOON 3 O.D. 2 3/8 I.D.		CASING SIZE Auger		HOLE TYPE Annular		GROUND WATER LEVEL							
LEADER 140' FALL 30'		HAMMER		O FALL		Date 6-24-99		Time Am		Depth 8.5'		Remarks In S-5	
DRILLER D. Douch						SUPERVISOR T. Khan							
LOGGERS	DEPTH	SPOON BLOWERS	RE-COY'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LOG LOCATES CHANGE OF PROFILE								
	0	Hand Auger	Fill	1	Ann. Fill - Metals, Sand with								
			Rec										
				2	Fill - Red B <sub>2</sub> C-F Sand, lit Gr, lit Silt								
				3	Same								
	5			4	Fill - Red C-F Sand, some Gr, to Silt.								
		13-18											
		31-33	20"										
		23-17		5	Same								
	10	24-28	19"										
		5-6		6	Sand								
		7-9	14"										
		7-7		7	Same								
		8-7	15"										
	15	4-5		8	Same								
		3-4	16"										
					Bottom of Boring ↑								
					+ Meth. Bottle # C-143 used for S-1 (1'-2')								
					+ Meth. " # C-144 used for S-5 (8'-8.5')								
					Note: Samples # 1; & 5 were saved for testing. All other samples were screened w/ #10 & then discarded.								

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 3 of 4

PROJECT: *PN- Metro Metals Site*  
BORING No. *MW-C5* DATE: *6-24-99*  
FIELD READINGS BY: *T. Ryan* PID Model: *M. Rae*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>Am</i>	<i>1</i>		<i>0.0</i>		
	<i>2</i>		<i>0.0</i>		
	<i>3</i>		<i>0.0</i>		
	<i>4</i>		<i>0.0</i>		
	<i>5</i>		<i>0.0</i>		
	<i>6</i>		<i>0.0</i>		
	<i>7</i>		<i>0.0</i>		
	<i>8</i>		<i>0.0</i>		

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ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: *PN-Metro Metals Site*

LOCATION: *As laid out ± 180' So. of C-6* DATE: *6-24-99*

BORING No: *MW-C5* TOTAL No. OF SAMPLES: *2*

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Ryan*

RELINQUISHED

DATE *6-24-99*

RECEIVED

BY (SIGN)

*T. Ryan*

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS: *2 samples in 2-16 oz jars & 2 meth jars*

5B

PA 547  
600

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Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

PROJECT TN - Metro Metals Site		NAME OF CONTRACTOR Craig		BORING NO. PA-CL		SHEET 1 OF 3	
LOCATION As laid out per drawing				CONTRACT NO. 426-99-006		SURFACE ELEV. DATE 6-24-99	
SPOON 3 - O.D. 2 3/8 in.		CASING SIZE Augers		WOLE TYPE I		GROUND WATER LEVEL	
HAMMER 140 lb FALL 30"		HAMMER				Date Time Depth Remarks	
						6-24-99 AM 8.5' In S-S	
DRILLER D O'neil		SUPERVISOR T. Ryan					
CASING LOG/CRAFT	DEPTH	SPOON BLOWERS*	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
	0	Hand Auger	Fell Rec	1	FILL - Bl C-F Sand, little cinders, lit G		
				2	More Fell - Metals, Sand, Wood.		
	5			3	Same		
				4	FILL - 10 lb C-F Sand, lit shells, lit Gr. t		
				5	Same		
	10				Bottom of Boring		
					Note: Meth Bottle # C-138 was used for S-1 " " # C-136 was used for S-5		
					Note: Samples # 1 & 5 were saved for testing, all other samples were screened w/ AP & then discarded.		

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

PROJECT: *PN - Metro Metals Site*  
LOCATION: *As laid out per drawing* DATE: *6-24-99*  
BORING No: *PA-06* TOTAL No. OF SAMPLES: *2*

SIGNATURE OF ALL PRESENT AT SAMPLING  
*T. Ryan*

RELINQUISHED DATE *6-24-99* RECEIVED  
BY (SIGN) *T. Ryan* TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY LAB

MARKS: *2 samples in 2-16oz jars & 2-metl jars*

PA 547  
6-60

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Construction Division  
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT PN - Metro Metal Site		NAME OF CONTRACTOR Craig		BORING NO. PA-C7		SURFACE ELEV.	
LOCATION As laid out per drawings				CONTRACT NO. 426-99-006		DATE 6-24-99	
SPOON 3 O.D. 2 7/8 I.D.		CASING SIZE Auger		NO. TYPE 1		GROUND WATER LEVEL	
HATCHER 140 # FALL 30'		HATCHER		Date 6-24-99		Time PM	
DRILLER D. Osuch		DRILLER		Depth 8.5'		Remarks In S-5	
INSPECTOR T. Khan		INSPECTOR					
CASING BLOWS/FT.	DEPTH	SPOON BLOWS/8"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
	0	Hard Auger	Full Rec	1	Fill - Rd M-F Sand, bit Gr, to Surf		
				2	Fill - Br C-F Sand, to Shells, to Gr.		
	5			3	Same		
	Auger ↓	7-12		4	Fill - Rd Br Sand & Gr, to Shells		
		15-20	18"				
		15-17					
	16	20-20	20"	5	Same		
					Bottom of Boring		
					Meth Bottle = C-132 was used for S-1		
					" " # C-141 was used for S-5		
					Note: Samples # 1 & 5 were saved for testing. All other samples were screened by PA & then discarded.		

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
S - II - insufficient & - super; OER - open end rod; V - vane

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: <i>PN-Metro Metals Site</i>	
BORING No. <i>PA-C7</i>	DATE: <i>6-24-99</i>
FIELD READINGS BY: <i>T. Ryan</i>	PID Model: <i>Mini Ras</i>

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1</i>		<i>0</i>		
<i> </i>	<i>2</i>		<i>0</i>		
<i> </i>	<i>3</i>		<i>0</i>		
<i> </i>	<i>4</i>		<i>0</i>		
<i> </i>	<i>5</i>		<i>0</i>		

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PA - Metro Metals Site</i>	
LOCATION: <i>As laid out as per drawing</i>	DATE: <i>6-24-99</i>
DRIVING No: <i>PA - C7</i>	TOTAL No. OF SAMPLES: <i>2</i>

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Ryan*

RELINQUISHED

DATE *6-24-99* RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS: *2 samples in 2-16oz jars & 2-meth jars*

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**BORING REPORT**

PT P.O. Port's Fac		NAME OF CONTRACTOR Crag Drilling		BORING NO. BM-N6	SHEET 1 OF 3
LOAD BY Load by PT Survey		CONTRACT NO. 476-99-006		DATE 10/2/00	SURFACE ELEV.
O.D. Bore "I.O. HAMMER		CASING SIZE	HOLE TYPE ↓	GROUND WATER LEVEL	
# FALL				Date	Time
				10/2	8:10
				Depth	Remarks
					Dry
P. Parcel D. House					
DEPTH FEET	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0	Hand Bore ↓	FU ↓	1	Misc fill - Sand, Gravel, Great wood sill, etc.	
				Bottom of Boring	
5				All Soil checked with PID Meter 5th L Saved for Testing Remaining Soil Discarded	
10					
15					
20					
21					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- 010 Parts Fec

LOCATION: Island outby Pt Surry DATE: 10/2/00

DRILLING No: BH-146 TOTAL No. OF SAMPLES: 1 Soil

3. NATURE OF ALL

4. PRESENT AT SAMPLING

UNQUOTE	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)
	10/2/00	

5. REKS:

Soil <sup>sample</sup> ~~test~~ to 1-lb bag per

Cel

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Materials Engineering Section

**BORING REPORT**

PROJECT NAPOLANO SITE - BERTH 63	NAME OF CONTRACTOR CRAIG	BORING NO. BH-N5D	SHEET / OF 1 / 1
LOCATION 5' South from BH-N5C	CONTRACT NO. 426-99-007	DATE 8/27/99	SURFACE ELEV.

DRILLER S. BUANS	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
OPERATOR M. JUDCH	HAMMER		Date	Time	Depth	Remarks

DEPTH	SPoon BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hand Auger	Full	-	Misc. FILL
5				Obstruction found AT ± 2.6' Relocated Boring
10				
15				
20				
25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; Y = yane

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602

PA 547  
6-90

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Materials Engineering Section

BORING REPORT

PROJECT 7N - NAPORANO SITE - BERTH 63		NAME OF CONTRACTOR CRAIO		BORING NO. 3H NSF	SHEET 1 OF 3
LOCATION ± 24' NORTH-WEST OF THE ORIGINAL LOCATION				CONTRACT NO. 426-99-007	DATE 9-2-99
SPOON 3	O.D. 2 1/8	I.D.	CASING SIZE AUGER	GROUND WATER LEVEL	
HAMMER (SAFETY) 140	FALL 90	HAMMER	FALL	Date 9-2-99	Time PM
DRILLER D. OUSCH				Depth 7.0'	Remarks Sample # 4
INSPECTOR CARLOS L. PEREZ					

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/FT.	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
AUGER	0	Roller Bit HAND AUGER	18"	1	ASPHALT MISC. FILL (TOOK ENVIRONMENTAL SAMPLE) CRUSHED ROCK, SAND, SILT
			24"	2	MISC. FILL - CRUSHED ROCK, SAND, METALS
	5		24"	3 <sup>A</sup> 3 <sup>B</sup>	SAME AS ABOVE Fill - brown c-f SAND, little gravel, tr. silt
		8-10	20"	4	USED 3" SPOON (TOOK ENVIRONMENTAL SAMPLE) SAME AS ABOVE
	10				BOTTOM OF BORING
	15				
	20				
	24				

NOTE: ALL SAMPLES WERE SCREENED USING THE MINI RAE. SAMPLES 1 & 4 WERE SAVED THE REMAINING SAMPLES WERE DISCARDED.

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - If there is a change in color of wash water, leaks of water, artesian water, sand heave in casing, etc

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: PH-NAPORANO SITE - BERTH 63  
BORING No. BH NSF DATE: 9-2-99  
FIELD READINGS BY: CARLOS L. PEREZ PID Model: HINI RAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1	-	0	-	
	2	-	0	-	
	3A	-	4.3	-	
	3B	-	1.0	-	
↓	4	-	0	-	



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - NAPOLANO SITE - BERTH 63

LOCATION: ± 24' NORTH - WEST OF THE ORIGINAL LOCATION DATE: 9-2-99

BORING No: BH NSF TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING

*Capt. J. Perez*

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:

2 - 16oz JAR OF SOIL SAMPLE.

METH. BOTTLE:

SAMPLE # 1 → E271

SAMPLE # 4 → E267

1.647  
0-00

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**BORING REPORT**

SHEET 1 OF 3

PROJECT: **PN - NAPOLEANO SITE - BERTH 63** NAME OF CONTRACTOR: **CRAIG DRILLING** BORING NO.: **BH-N1** SURFACE ELEV.:  
 LOCATION: **laid out in the field as per drawing** CONTRACT NO.: **426-99-007** DATE: **8/25/99**

ROPE 3" O.D. 2 3/8" I.D.	CASING SIZE 1 1/2" Auger	HOLE TYPE HAMMER	GROUND WATER LEVEL		
NUMBER (SAFETY) 140	DEPTH 30'	REMARKS FOUND IN S#3	Date 8/25	Time AM	Depth 5.0'
DRILLER S. Burns	INSPECTOR M. Oudeh				

CASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				ASPHALT Pavement
Hand Auger		Hand Auger	Full	1 A	Misc Fill Sand, Metal, Gravel, Wood, Rubber, ETC.
				2	Fill gray m-f Sand, fr. gravel fr. silt
	5			3 A	Same
1 1/2" Auger		1-0	22"	3 B	gray br silty clay, fr. fine sand
		1-1		4	Same
		1-1	24"	5 A	Same
	10	3-3		5 B	PEAT
					Bottom of Boring
					All samples were screened for VOC's with a PID the following samples were saved
					0.5' - 1.5' saved
					4' - 4.5' saved
					and the remaining were discarded.
	15				
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used

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MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: PJ NAPORAND SITE - BERTH 03

JOBING No. BH-N1 DATE: 8/25/99

FIELD READINGS BY: M. OUDEH PID Model: Mini PAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1A	—	1.5	0	
	1B	—	0	0	
	2	—	0	0	
	3A	—	0	0	
	3B	—	0	0	
	4	—	0	0	
	5A	—	0	0	
↓	5B	—	0	0	

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CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: P.N. LAPORANO SITE - BERTH 63

LOCATION: Laid out in the field as per drawing DATE: 8/25/99

BORING No: BH-N 1 TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL		
<i>[Signature]</i>		
PRESENT AT SAMPLING		
RELINQUISHED	DATE <u>8/25/99</u>	RECEIVED
BY (SIGN) <i>[Signature]</i>	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS: 2 Samples taken in 2 one pt. JAW, ~~2~~ 2 UAS, AND  
0.5'-1.5' Bottle # E146  
4.0'-4.5' Bottle # E147

647  
6-00

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BORING REPORT

SHEET 1 OF 4  
SURFACE ELEV.

PROJECT: PN - NAPOLANO SITE - BERTH 63  
NAME OF CONTRACTOR: CRAIG  
BORING NO.: MW-N2

LOCATION: Laid out in the field as per drawing  
CONTRACT NO.: 426-99-007  
DATE: 8/27/99

SPOON: 3 o.o. 2 1/8 i.d.  
CASING SIZE: 1 1/2 Aug.  
HOLE TYPE: Type A #1  
HAMMER (Safety): 30.  
HAMMER: 140# FALL  
FALL: 1 FALL

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
8/27	12:45 pm	5.5'	Found in S#3

DRILLER: S. BURNS  
INSPECTOR: N. Oudett

CASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0	Hand	full	1	Asphalt pavement 0.3'
0	0	Auger	1	2 A	Misc. fill sand, wood, nails, etc
0	0	1	1	2 B	Same
0	5	1	1	3	fill grey br. sand & gravel, tr. silt 3.5'
0	5	11-16	20"	3	Same
0	5	14-16	+	4	fill grey-br. of sand, little gravel, tr. silt
0	10	6-8	20"	5 A	fill br. grey br. sand, little gravel, little silt 9.8'
0	10	8-8	1	5 B	red-br. clayey silt, little fine sand
0	10	2-2	18"	6 A	Same 11.2'
0	10	2-2	18"	6 B	PERT 12.0'
					Bottom of Boring

NOTE: All samples were screened for VOC'S WITH A PID. S#1 (0.5'-1.5') AND #3 (4.5' - 5.0') WERE SAVED AND THE REMAINING WERE DISCARDED.

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: <i>PN - NAPORTLAND SITE - Berth 63</i>	
LOCATION: <i>laid out in the field as per drawing</i>	DATE: <i>8/27/99</i>
BORING No: <i>HW-22</i>	TOTAL No. OF SAMPLES: <i>2</i>

SIGNATURE OF ALL PRESENT AT SAMPLING *[Signature]*

RELINQUISHED <i>[Signature]</i>	DATE <i>8/27/99</i>	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS: *2 Samples taken in 2 one pt. Jars*  
*and 2 VOA's Also:*  
*Bottle # E205 0.5' - 1.5'*  
*Bottle # E203 4.5' - 5.0'*

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Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT N- Former Metro Metals	NAME OF CONTRACTOR Crags	BORING NO. PA-CL-E-1	SURFACE ELEV.
LOCATION 1' east of PA-CL	CONTRACT NO. 416-91-006	DATE 12/3/01	

Casing Size	Hole Type Hand Auger	GROUND WATER LEVEL			
		Date 12/3/01	Time 1:30 P	Depth	Remarks No water
OPERATOR Alan Kidas		SUPERVISOR T Ryan			

RING NO./FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
1	0				Asphalt
					2.0'
	2.5	Hand Auger	Fall	1	Mix Fill - Sand, Cinders, Wood Gravel
			Rec.	2	Same
				3	Same
				4	Same
					4.0'
	5				Bottom of Boring

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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 PID READINGS

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Sheet 2 of 3

PROJECT: PN - Former Metro Metals  
 RING No. PA-CL-E1      DATE: 12/3/01  
 FIELD READINGS BY: T. Ryan      PID Model: 7

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>PM</u>	<u>1</u>		<u>0.3</u>	<u>0.0</u>	
	<u>2</u>		<u>0.4</u>	<u>0.0</u>	
	<u>3</u>		<u>0.4</u>	<u>0.0</u>	
	<u>4</u>		<u>0.7</u>	<u>0.0</u>	

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**CHAIN OF CUSTODY RECORD**

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Sheet 3 of 3

**SUBJECT:** *PN - Former Metro Metals*

**LOCATION:** *± 1' east of PA-C6*      **DATE:** *12/3/01*

**DRILLING No:** *PA-C6-E1*      **TOTAL No. OF SAMPLES:** *4 + 1 Dup*

**NATURE OF ALL**

**1. ELEMENT AT SAMPLING**

*T. Ryan*

**2. UNOBTAINED**

**DATE** *12/3/01*

**RECEIVED**

**BY (SIGN)**

*T. Ryan*

**TIME**

**BY (SIGN)**

**3. UNOBTAINED**

**DATE**

**RECEIVED**

**BY (SIGN)**

**TIME**

**BY (SIGN)**

**4. UNOBTAINED**

**DATE**

**RECEIVED**

**BY (SIGN)**

**TIME**

**BY LAB**

**REMARKS:** *4 samples in 4-16oz jars & 1-# Duplciate in 1 10oz jar  
 (S-2 Dup)*

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**BORING REPORT**

SHEET 1 OF 3

PROJECT <b>PN - Former Metro Metros</b>		NAME OF CONTRACTOR <b>Craig</b>		BORING NO. <b>PAC6-E2</b>	SURFACE ELEV.
LOCATION <b>± S. East of PAC6</b>				CONTRACT NO. <b>426-99-006</b>	DATE <b>12/5/01</b>
POOH	CASING SIZE	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL		
"O.D.	"I.D.	HAMMER	Date	Time	Depth
		# FALL	<b>12/5/01</b>		
DRILLER <b>A. Kidas</b>			Remarks <b>No water</b>		
DIRECTOR <b>T. Ryan</b>					

LOG WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0				Asphalt
		Hand Auger	Full		Misc fill - Cinders, br, wood, sand, metal
	2.5			1	Same
				2	Same
				3	Same
				4	Same
	5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 MATERIALS ENGINEERING DIVISION  
 PID READINGS

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Sheet 2 of 3

OBJECT: PN - Former Metro Metals  
 BORING No. PAC6-E2 DATE: 12/5/01  
 PID READINGS BY: T. Ryan PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
Am	1.		3.1	0.0	
↓	2		5.0	0.0	
↓	3		4.6	0.0	
↓	4		10.1	0.0	

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MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

**SUBJECT:** PN - Former Metro Metals  
**LOCATION:** ± 5' East of PAC 6  
**DATE:** 12/5/01  
**DRILLING No:** PAC 6-EZ  
**TOTAL No. OF SAMPLES:** 4

**SIGNATURE OF ALL**

**PRESENT AT SAMPLING**

T. Ryan

**ACQUISHED**

**DATE**

**RECEIVED**

**(SIGN)**

**TIME**

**BY (SIGN)**

T. Ryan

**ACQUISHED**

**DATE**

**RECEIVED**

**(SIGN)**

**TIME**

**BY (SIGN)**

**ACQUISHED**

**DATE**

**RECEIVED**

**(SIGN)**

**TIME**

**BY LAB**

**REMARKS:**

4 samples in 4 16oz jars

THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

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SHEET 1 OF 3

PROJECT PN - Former Metro Metal	NAME OF CONTRACTOR Crag	BORING NO. PAC6-E3	SURFACE ELEV.
LOCATION + 10' East of PAC6		CONTRACT NO. 426-99-006	DATE 12/7/01

DRILLER Al. Dolar	RECTOR T. Lynn	GROUND WATER LEVEL			
DATE 12/7/01	TIME	DEPTH	REMARKS No water		

CASING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0					min fill - Curbs, etc. metal etc
					ASPHALT
	2.5	Hard layer full		1	Miss fill Curbs, Gravel, Metal, Wood
				2	Sand
				3	Sand
				4	Sand
	5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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MATERIALS ENGINEERING DIVISION  
PID READINGS

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Sheet 2 of 3

PROJECT: PA - Former Metro Metals  
WELLING No. PA06-E3 DATE: 12/7/01  
PID READINGS BY: T. Ryan PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>AM</u>	<u>1.</u>		<u>3.7</u>	<u>0.0</u>	
<u>↓</u>	<u>2</u>		<u>4.1</u>	<u>0.0</u>	
<u>↓</u>	<u>3</u>		<u>2.9</u>	<u>0.0</u>	
<u>↓</u>	<u>4</u>		<u>6.5</u>	<u>0.0</u>	

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**MATERIALS ENGINEERING DIVISION**  
**CHAIN OF CUSTODY RECORD**

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Sheet 3 of 3

<b>SUBJECT:</b>	PN - Former Metro Metals		
<b>LOCATION:</b>	± 10' east of PA-C6	<b>DATE:</b>	12/7/01
<b>TESTING No:</b>	PA-C6-E3	<b>TOTAL No. OF SAMPLES:</b>	4

**SIGNATURE OF ALL**

**PERSONS PRESENT AT SAMPLING**

*T. Ryan*

RECEIVED	DATE	TIME	BY (SIGN)
RECEIVED	12/7/01		<i>T. Ryan</i>
RECEIVED			
RECEIVED			
RECEIVED			

**REMARKS:** 4 samples in 4-16oz jars



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Engineering Department  
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Materials Engineering Section  
**BORING REPORT**

PROJECT <b>PN - Former Metco Metals</b>		NAME OF CONTRACTOR <b>Craig</b>		BORING NO. <b>PACG-E3A</b>	SHEET 1 OF 3
LOCATION <b>10' East of PACG (Same location as PACG-E3)</b>		CONTRACT NO. <b>426-99-006</b>		DATE <b>12/11/01</b>	
DEPTH <b>3</b>	CASING SIZE <b>2 3/8" I.D.</b>	HOLE TYPE <b>Auger</b>	GROUND WATER LEVEL		
MEASUREMENT <b>40' FALL 30'</b>	HAMMER <b>1 FALL</b>		Date	Time	Depth
OPERATOR <b>M. McErlain</b>			<b>12/11/01</b>		<b>No water encountered</b>
DIRECTOR <b>T. Ryan</b>					

DEPTH (WS/FT.)	DEPTH	SPHON BLOWS/6"	RE-COY'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0				
2.5	2.5				For Soil Strata from 0'-4' See B.H. PACG-E3
5.0	5.0	Hand Auger	Full Rn.		
8-10	8-10	6'		1	Misc Fill - Sand, Gravel, Metal, Wood. (Sheen's odor)
7.5	7.5	32-19	5"	2	Fill - Brk - F Sand. (fuel odor)
					Bottom of Boring

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: *PN - Former Metro Metals*  
LOCATION: *10' east of PAC6 / same location as PAC6-E3* DATE: *12/11/01*  
SAMPLING No: *PAC6-E3A* TOTAL No. OF SAMPLES: *2*

SIGNATURE OF ALL

PERSONNEL AT SAMPLING

*T. Ryan*

PREPARED BY

DATE *12/11/01*

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

PREPARED BY

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

PREPARED BY

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

*2 samples in 2-16oz jars*

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**BORING REPORT**

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SHEET 1 OF 3

PROJECT PA - Former Metro Metals		NAME OF CONTRACTOR Craig		BORING NO. PAC6-5.4	SURFACE ELEV.
LOCATION 20' East of PAC6		CONTRACT NO. 426-99-606		DATE 12/11/01	
BOON	CASING SIZE	HOLE TYPE H. Auger		GROUND WATER LEVEL	
"O.D."	"I.D."	HAMMER	Date	Time	Depth
# FALL	# FALL		12/11/01		No water
OPERATOR M. McElean		REMARKS			
DIRECTOR T. Ryan					
DEPTH FEET	SPOON BLOWS/FT	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
				REMARKS	DEPTH
0				Asphalt	1.0'
2.5	Hand Auger	Full Rec	1 2 3 4	Sand Sand Sand Sand	
5.0				Bottom of Boring	4.0'

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: *PN - Former Metro Metals*

LOCATION: *± 20' east of PAC6*

DATE: *12/11/01*

WELLING No: *PAC6-E.4*

TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

# QUISHED

DATE *12/11/01*

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

1 QUISHED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

1 QUISHED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

MARKS: *4 samples in 4 16oz jars*

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Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 2

PROJECT <b>PN - Metro Mats</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-PA-C6 65</b>	SURFACE ELEV.
LOCATION <b>40 E. of PA-C6</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>4/29/02</b>	

ROOD <b>3" O.D. 2 3/4" I.D.</b>	CASING SIZE <b>AUGERS</b>	HOLE TYPE <b>1</b>
DRILLER <b>14-UTD</b>	HAMMER <b>1 FALL</b>	
INSPECTOR <b>A K. To</b>		

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
4/29/02	2 <sup>PM</sup>	0.5	1st Depth Milling
4/29/02	2 <sup>55</sup>	9.5	Groundwater 5' 5"

USING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Head	0	Hard Area	Fy		Asphalt Millings
1 per b		↓	↓		
Hollow		Tap and Spoon	10'	1	Mix Fill - Coarse Sand, Gravel, Asphalt, Etc
2 Top		↓	↓	2	Mix Fill - Sand, Gravel, Gravel, Mats, Etc
3 Auger	5	↓	↓	3 <sup>A</sup>	Same
		↓	↓	3 <sup>B</sup>	Fill - M-F Gray Brown Sand, F.C. Gravel, 2 S. U
		10-14			
		21-30	16"	4	Same
		8-9			
	10	14-14	16"	5	Same
					Bottom of Boring
	15				All Samples checked with PID Meter S <sup>1</sup> , 2 & 3 (R.O. - S.F.) Sand Testing + checked for SP HC in field Remaining Samples Discarded
	20				
	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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**BORING REPORT**

PROJECT 17N- Metro Metals			NAME OF CONTRACTOR Craig Drillers			BORING NO. BH-PAC6 E1		SHEET OF 7	
LOCATION ± 30' East of BH PAC6			CONTRACT NO. Y26-99-006			SURFACE ELEV.		DATE 4/30/02	
POOH 3		CASING SIZE "O.D. 2 3/4" "O.D. 2 1/2"		HOLE TYPE DUALS		GROUND WATER LEVEL			
HAMMER 146		FALL 30		FALL					
OPERATOR D Cooke		INSPECTOR D Howe		Date		Time		Depth	
				4/30		8		18'	
				4/30		9 <sup>15</sup>		9.5'	
								Remarks in Asphalt Millage Groundwater 3'5"	

DEPTH FWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
					Remarks	
	0	Hand Auger	Fyt		Asphalt Millage	0.0
		↓	↓			2.0
		Typical Spoon	12"	1	Misc Fill - Sand, Asphalt, Brick, wood, etc.	
			10'	2	Misc Fill - Gravel, Sand, Gravel, Metal, etc.	
				3	Same	
	5	↓	12"	4	Fill M-F Gray Medium Sand, Tr Gravel, Tr Silt	5.5 6.2
		18-51		4		
		69-64	13'		Misc Fill - Sand, Gravel, Metal, Silt, BR	
		24-29				
	10	32-40	14'	5	Same	10.0
					Bottom of Boring	↑
	15					
					All Samples checked with PID Meter 5 <sup>#</sup> 1, 2 & 5 (9-95) sand for Test & checked for TP HC in field by Chem Lab Primary Samp Discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

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PROJECT: PN- Metro Masab	DATE: 4/10/02
BORING No. PH PA CG EB	PID Model: MINI RAISE
ELD READINGS BY: D. Howe	

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1		0.1		
	2		0.3		
	3.D		2.1		
	3P		0.9		
	4		0.7		
	5		1.0		

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**BORING REPORT**

SHEET 1 OF 2  
SURFACE ELEV.

PROJECT <b>PN - Matrix Metals</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BM PAC 67</b>	DATE <b>4/30/02</b>
LOCATION <b>10 East of BM PAC 65 South PAC 6</b>		CONTRACT NO. <b>426-99-006</b>	

SPOON <b>3</b>	O.D. <b>2 3/8</b>	C.A.S.I.N.G. S.I.Z.E. <b>Auger</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
NUMBER <b>40</b>	FALL <b>30</b>	HAMMER	FALL	Date	Time	Depth	Remarks
DRILLER <b>D Cooke</b>				<b>4/30</b>	<b>9:45</b>	<b>1.0</b>	<b>in Asphalt Milling</b>
DIRECTOR <b>D Howe</b>				<b>7/30</b>	<b>10:30</b>	<b>9.0</b>	<b>Groundwater 5'±</b>

CASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Head	0	Head Auger	Full		Asphalt Milling, Little M-E Brown Sand
↓		↓	↓		20
↓		Tapped Spica	10'	1	Misc. Fill - Sand, Gravel, Cinders, etc., MATRY, ETC
↓			12'	2	Same
↓			18'	3	Same
↓	5			3	Fill - M-E Gray Brown Sand, TP Gravel, TP SILK
↓		16-19			
↓		25-23	17'	4	Same
↓		14-16			
↓		16-18	21'	5	Same
↓	10				Low
					Bottom of Boring
↓	15				
↓	20				
↓	25				

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 MATERIALS ENGINEERING DIVISION  
 PID READINGS

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Sheet 2 of 2

PROJECT: PN - M. Tro Metals

ORING No. BH-BA C6 E7 DATE: 4/30/02

FIELD READINGS BY: D Howe PID Model: Mini RAB

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1		0.7		
	2		0.1		
	3A		0.7		
	3B		0.2		
	4		0.9		
	5		0.1		

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Materials Engineering Section

BORING REPORT

- Pdc Parts Fac		NAME OF CONTRACTOR Crank Drilling		BORING NO. BK-N7		SHEET 1 OF 7	
aid out by PA Survey				CONTRACT NO. 426-99-006		SURFACE ELEV.	
W.O.D. Ducer - I.D.		CASING SIZE		HOLE TYPE 1		DATE 10/2/00	
HAMMER		GROUND WATER LEVEL					
# FALL		# FALL		Date	Time	Depth	Remarks
				10/2	9:15 AM	Dry	
P Parcel							
D Howe							
BORING DEPTH (FT.)	DEPTH	SPOON BLOWS/6"	RE. COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
	0	Hand Ducer	Full	1	Miss Fall - Gravel, Sand, Wood, Cement, Si, Gr, etc. 1/2"		
					Bottom of Boring		
	5				All Soil checked with PID Meter		
					5' 1" Sample for Test use		
					Remaining Soil - Discarded		
	10						
	15						
	20						
	25						

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - I on depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

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ECT: PN - Pdo - Ports Fee

ENG No. BX-N7

DATE: 10/200

READINGS BY: D.Kan

PID Model: Mini PDE

ME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
4			1.0		

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MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: PN- Pdc Ports Fee  
LOCATION: Aslaid out by PA Survey DATE: 10/2/00  
TAG No: BM-N7 TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL  
AGENTS AT SAMPLING

ACQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)
	10/1/00	

REMARKS:  
1 Soil Sample in 16oz jar

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Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT JAPORANO SITE - BERTH 63		NAME OF CONTRACTOR CEAIG	BORING NO. BH NSB	SHEET 1 OF 1
LOCATION Fill East from BH NSA		CONTRACT NO. 126-99-067	DATE 8/27/99	SURFACE ELEV.
"O.D.	"I.D.	CASING SIZE	GROUND WATER LEVEL	
HAMMER		HOLE TYPE	Date	Time
# FALL		# FALL	Depth	Remarks
SUPERVISOR S. Burns				
DIRECTOR M. Oudeh				

DEPTH IN FEET	DEPTH	SPOON BLOWS	RE. COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		Hand Auger ↓	Full ↓		Misc. Fill grey sand, crushed rock, metal, etc
					Bottom of Boring → 3.0'
5					Note: Obstruction found at ± 3.0', Relocated Boring Hole.
10					
15					
20					
25					

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used



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Construction Division  
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**BORING REPORT**

PROJECT NAPORAND SITE-BERTH 63	NAME OF CONTRACTOR CRAIG	BORING NO. BH NSC	SHEET 1 OF 1
LOCATION 15' south FROM BH-NSB	CONTRACT NO. 426-99-007	DATE 8/27/99	SURFACE ELEV.

CASING SIZE		SOLE TYPE	GROUND WATER LEVEL			
*O.D.	*I.D.		Date	Time	Depth	Remarks
HAMMER		HAMMER				
# FALL		# FALL				
OPERATOR S. BURZ'S						
INSPECTOR M. OUDEH						

DEPTH FOOT	DEPTH FEET	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hand Auger	Well		1/2" Full grey br Sand, crossed Rock, metal, etc.
	5				Bottom of BORING
					Note: Obstruction found at 13.5' Relocated boring hole.
	10				
	15				
	20				
	25				

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Materials Engineering Section

**BORING REPORT**

PROJECT <b>N - NAPORANO SITE - Berth 63</b>		NAME OF CONTRACTOR <b>CRAIG</b>		BORING NO. <b>BH USA</b>	SHEET <b>1</b> OF <b>1</b>
LOCATION <b>Laid out in TIE FIELD AS PER DWG.</b>		CONTRACT NO. <b>426-99-007</b>		DATE <b>8/25/99</b>	
CASING SIZE		HOLE TYPE		GROUND WATER LEVEL	
HAMMER		# FALL		Date	Time
SUPERVISOR <b>S. Burns</b>		INSPECTOR <b>M. Oudeh</b>		Depth	Remarks
DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0	Hand Auger	Full		<del>Asphalt pavement</del> <b>As</b>	
	↓	↓		<b>Misc. fill Sand, Metal, glass, brick, wood</b>	
				<b>3'</b>	
5				<b>Bottom of boring</b>	
				<b>NOTE: Obstruction found at ± 3.1' relocated boring hole.</b>	
10					
15					
20					
25					

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Materials Engineering Section  
**BORING REPORT**

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PROJECT <b>PN - Metro Hotel</b>		NAME OF CONTRACTOR <b>Crazy Drilling</b>		BORING NO. <b>57PDC6E6</b>	SHEET <b>1</b> OF <b>2</b>
LOCATION <b>25' West of B4PA6L-56</b>		CONTRACT NO. <b>47699-006</b>		DATE <b>4/30/02</b>	
SPRONG <b>3</b>	O.D. <b>2 3/4</b>	I.D. <b>1.0</b>	CASING SIZE <b>Auger</b>	HOLE TYPE <b>1</b>	
DRILLER <b>140</b>		HAMMER <b>Auto</b>		GROUND WATER LEVEL	
SUPERVISOR <b>D Cooke</b>		DISPATCHER <b>D Hone</b>		Date	Time
				4/30/02	11 <sup>40</sup>
				4/30	12 <sup>05</sup>
				1.0	10 Asphalt Millings
				9.0	groundwater 5' 15"

USING B.W.S/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand	0	Hand Auger	F(1)		Asphalt Millings
1' soil ↓		↓	↓		2.0
Moist		Tapel Spoon	11'	1	Misc Fill Asphalt, Gravel, Sand, wood, etc
Tom		↓	10'	2	Same
Auger	5	↓	14'	3	Same
↓		16-31			oil odor
↓		31-36	18'	4	Fill M-F Gray Brown Sand, IV Gravel, IV Silt
↓		8-10			
↓	10	14-16	18'	5	Same
					Bottom of Boring ↗
	15				All Samples checked with PID Meter
					S# 1, 2, 4 & 5 (BS-9) Sand for testing
					& checked for TPH w/ soil by chem lab
					Remainder Samp Discarded
	20				
	25				

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

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Sheet 2 of 2

PROJECT: *PN - M. Are. N. 21b*

BORING No. *BX PH CE-15Y*

DATE: *4/30/02*

FIELD READINGS BY: *D. Howe*

PID Model: *Miny PPE*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>AM</i>	<i>1.</i>		<i>4.4</i>		
<i>↓</i>	<i>2</i>		<i>1.0</i>		
<i>PM</i>	<i>3</i>		<i>2.1</i>		
<i>↓</i>	<i>4</i>		<i>55.5</i>	<i>2.0</i>	<i>odor</i>
<i>↓</i>	<i>5</i>		<i>1.2</i>		

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Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT <i>Former Metro Metals</i>		NAME OF CONTRACTOR <i>Craig</i>		BORING NO. <i>PA-C7-S-1</i>	SURFACE ELEV.
LOCATION <i>S. of PA-C7</i>		CONTRACT NO. <i>424-99-006</i>		DATE <i>12/4/01</i>	
IN	CASING SIZE	HOLE TYPE <i>H. Auger</i>		GROUND WATER LEVEL	
PER	HAMMER	Date	Time	Depth	Remarks
BLER	# FALL	<i>12/4/01</i>	<i>11:45A</i>		<i>No water</i>
ECTOR	OPERATOR <i>T. Ryan</i>				
CASING DEPTH (FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<i>11.5</i>	0				<i>Misc. Curbs, Sods, Metal, etc.</i> 0.1'
					<i>asphalt</i> 1.0'
		<i>Hand Auger</i>	<i>Full Rec.</i>		<i>Misc Fill - Sand, Curbs, Gravel, Metal, Wood.</i>
	2.5			1	<i>Some</i>
				2	<i>Some</i> 3.0'
				3	<i>Fill - B1 M. Sand, to silt, to G.</i>
				4	<i>Some</i> 4.0'
	5.0				<i>Bottom of Boring</i> ↑

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

METRO-NORTH RAILROAD AUTHORITY OF N.Y. & N.J.  
 ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 PID READINGS

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Sheet 2 of 3

PROJECT: PN - Former Metro Metals	
BORING No. PA-C7-S.1	DATE: 12/4/01
FIELD READINGS BY: T. Ryan	PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
Am	1.		33.0	0.0	
↓	2		64.9	0.0	
↓	3		7.2	0.0	
↓	4		3.8	0.0	

THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: *PAU - Former Metro Metals*  
LOCATION: *± 1'S of PA-C7* DATE: *12/4/01*  
URING No: *PA-C7* TOTAL No. OF SAMPLES: *4*

SIGNATURE OF ALL

SENT AT SAMPLING

*T. Ryan*

UNQUISHED	DATE	RECEIVED
(SIGN) <i>T. Ryan</i>	TIME	BY (SIGN)
UNQUISHED	DATE	RECEIVED
Y (SIGN)	TIME	BY (SIGN)
UNQUISHED	DATE	RECEIVED
Y (SIGN)	TIME	BY LAB

REMARKS: *4 samples in 4 16oz jars*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT A1 - Former Metro Metals		NAME OF CONTRACTOR Cragg		BORING NO. PA-C7-E-1		SURFACE ELEV.	
LOCATION - 1' W. of PA-C7				CONTRACT NO. 426-99-006		DATE 12/4/01	
OPERATOR Alan Kider		SUPERVISOR T. Ryan		GROUND WATER LEVEL			
Casing Size		Hole Type H Auger		Date	Time	Depth	Remarks
HAMMER		HAMMER		12/4/01	8:05 A		No water encountered
SPOON BLOWS/6"		RE-COVD		SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE			
0				MISC. FILL - Br M, S, G, WOOD, METAL, WIRE			
1.0				ASPHALT			
2.0		H Auger Fall Rec.		Misc. Fill - Sand, Gravel, Wood, Metal, Cinders			
2.5				1. Some			
3.0				2. Some			
4.0				3. Fill - Br M - FSand to Silt, to Gr.			
5.0				4. Sand			
				Bottom of Boring			

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U - undisturbed; A - auger; OER - open end rod; V - vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

SUBJECT: PN - Former Metro Metals  
 POND No. PA-C7-E-1      DATE 12/4/01  
 READINGS BY: T. Ro      PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
1m	1		59.7	0.0	
↓	2		98.3	0.0	
↓	3		6.1	0.0	
↓	4		4.4	0.0	

THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN - Metro Metals (Former)

LOCATION: ± 1' ~~W~~ of AA-C7 DATE: 12/4/01

WING No: PA-C7-~~10~~ E1 TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUIRED DATE 12/4/01 RECEIVED

SIGN *T. Ryan* TIME BY (SIGN)

ACQUIRED DATE RECEIVED

SIGN TIME BY (SIGN)

ACQUIRED DATE RECEIVED

SIGN TIME BY LAB

REMARKS: 4 samples in 4 16 oz jars

THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT U - Former Metro Metals		NAME OF CONTRACTOR Crang		BORING NO. PA-C7-W-1	SHEET 1 OF 3	
LOCATION 1' W. of PA-C7				CONTRACT NO. 426-99-006	DATE 12/4/01	
INCH		CASING SIZE	HOLE TYPE	GROUND WATER LEVEL		
"O.D.		"L.O.		Date	Time	
SERIES		HAMMER		Depth	Remarks	
# FALL		# FALL		12/4/01	9:15A	
OPERATOR A. Kidea				No water encountered		
SUPERVISOR T. Ryan						
DEPTH DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0					Misc Fill - Silt, Gr, Mtl, Wood, Stone, Curbs	0.5'
					Asphalt	1.0'
		Hard Auger			Misc Fill - Silt, Sand, Gr, Curbs, Core	
	2.5	Hard Auger	Full Rec.	1 2	Sample	
				3	Fill - Br M - F Sand, to Silt, to Gr.	3.0'
		↓	↓	4	Sample	
	5.0					
						4.0'
					Bottom of Boring	

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

SUBJECT: PN - Former Metro Metals  
 DRING No. PA-C7-W-1 DATE 12/4/01  
 LD READINGS BY: T. Ryan PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>AM</u>	<u>1</u>		<u>32.1</u>	<u>0.0</u>	
	<u>2</u>		<u>25.6</u>	<u>0.0</u>	
<u>↓</u>	<u>3</u>		<u>4.2</u>	<u>0.0</u>	
	<u>4</u>		<u>5.1</u>	<u>0.0</u>	

THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: *PN - Former Metro Metals*

LOCATION: *± 1W of PA-C7* DATE: *12/4/01*

RING No: *PA-C7 W-1* TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUISISHED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

*T. Ryan*

ACQUISISHED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUISISHED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4-16oz jars*

127  
80

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**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.  
DATE 12/4/01

PROJECT: *Former Metros Metals*  
NAME OF CONTRACTOR: *Craig*  
BORING NO.: *BH-MW-N1-N1*  
CONTRACT NO.: *426-99-006*  
LOCATION: *± 1' No. of MW-N1*

C.O.D.	L.D.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
				Date	Time	Depth	Remarks
			<i>H. Auger</i>	<i>12/4/01</i>	<i>1:55p</i>	<i>1.0'</i>	<i>Perched, seeping under pavement</i>

BORG NO./FT.	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<i>0</i>					<i>ASPHALT</i>
		<i>Hand Auger</i>	<i>Full Rec</i>		<i>Fill - Br M - F Sand, lit Grnd.</i>
					<i>Same</i>
	<i>2.5</i>			<i>1</i>	<i>Fill - Br M - F Sand, to Silt</i>
				<i>2</i>	<i>Same</i>
				<i>3</i>	<i>Same</i>
				<i>4</i>	<i>Same</i>
	<i>5.0</i>				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

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Sheet 2 of 3

PROJECT: *PN - Former Metro Metals*

BORING No. *BH-MW-N1-N1*

DATE: *12/4/01*

FIELD READINGS BY: *T. Ryan*

PID Model: *14*

TIME	SAMPLE No.	IN-SITU Sp/ft Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1.</i>		<i>0.0</i>		
	<i>2</i>		<i>0.0</i>		
<i>↓</i>	<i>3</i>		<i>0.0</i>		
	<i>4</i>		<i>0.0</i>		

THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN - Former Metro Metals

LOCATION: ± 1' North of MW-N1

DATE: 12/4/01

WELLING No: BH-MW-N1-N1

TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUIRED

DATE 12/4/01 RECEIVED

SIGNATURE

*T. Ryan*

TIME BY (SIGNATURE)

ACQUIRED

DATE RECEIVED

SIGNATURE

TIME BY (SIGNATURE)

ACQUIRED

DATE RECEIVED

SIGNATURE

TIME BY LAB

REMARKS:

4 samples in 4-16 oz jars



**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT A1 - Former Metro Metals	NAME OF CONTRACTOR Craw	BORING NO. BH - MW-N1-W1	SHEET 1 OF 3 SURFACE ELEV.
LOCATION 1' W of MW-N1	CONTRACT NO. 426-99-006	DATE 12/4/01	

WELL NO. # FALL	CASING SIZE # FALL	HOLE TYPE H Auger	GROUND WATER LEVEL			
DATE 12/4/01	TIME 12:15 P.	DEPTH 1.0'	REMARKS Perched water seeping in under pavement.			
OPERATOR A. Kidas			SUPERVISOR T. Ryan			

DEPTH (FT.)	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				Asphalt 0.9'
	Hard Auger	Full Rec		Fill - Br m - FSnd, lit G.
				Fill - Br m - FSnd, to Silt
2.5			1	Same
			2	Same
			3	Same
			4	Same
5.0				Bottom of Boring 4.0'

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

OBJECT: *PN - Former Metals Metals*

DRING No. *BH-MW-NI-W1*

DATE: *12/4/01*

LD READINGS BY: *T. Ryan*

PID Model: *14*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1</i>		<i>0.0</i>		
<i>↓</i>	<i>2</i>		<i>0.0</i>		
<i>↓</i>	<i>3</i>		<i>0.0</i>		
<i>↓</i>	<i>4</i>		<i>0.0</i>		

THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: PN - Former Metro Metals

LOCATION: ± 1' West of MW-N1

DATE: 12/4/01

RING No. BH MW-N1-W1

TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

T. Ryan

ACQUIRED

DATE 12/4/01

RECEIVED

(SIGN)

T. Ryan

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4-16oz jars

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

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PROJECT A1 - Former Metro Metals		NAME OF CONTRACTOR Crang		BORING NO. BH-MW-N1-S-1	SHEET 1 OF 3
LOCATION ± 1' South of MW-N1		CONTRACT NO. 426-99-006		DATE 12/4/01	
DATE 12/4/01	CASING SIZE	HOLE TYPE H. Auger	GROUND WATER LEVEL		
"O.D."	"I.D."	HAMMER	Date	Time	Depth
		# FALL	12/4/01	2:35 P	1.0'
OPERATOR A. Kides			REMARKS Perched, seeping under pavement		
SUPERVISOR T. Ryan					
DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0				ASPHALT - 0.9'	
	Hand Auger	Full Rec		Fill - Br M-F Sand, lit Gravel	
2.5			1	Same	
			2	Same	
			3	Same	
			4	Same	
5.0				Bottom of Boring - 4.0'	

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



THE PORT AUTHORITY OF N.Y. & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

OBJECT: *PN - Former Metro Metals*

LOCATION: *± 1' South of MW-N1* DATE: *12/4/01*

RING No: *BH-MW N1-S1* TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACCOMPLISHED DATE *12/4/01* RECEIVED

(SIGN) *T. Ryan* TIME BY (SIGN)

ACCOMPLISHED DATE RECEIVED

(SIGN) TIME BY (SIGN)

ACCOMPLISHED DATE RECEIVED

(SIGN) TIME BY LAB

REMARKS: *4 samples in 4-16oz jars*

Empty lined area for additional remarks.

THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT Former Metro Mats	NAME OF CONTRACTOR Craw	BORING NO. & H. MWNI-E1	DATE 12/4/01
LOCATION IE of MWNI	CONTRACT NO. 426-99-006	DATE 12/4/01	

WELL NO. # FALL	CASING SIZE "O.D." "I.D."	HOLE TYPE H Auger	GROUND WATER LEVEL			
DRILLER A. Kider	HAMMER # FALL		Date	Time	Depth	Remarks
OPERATOR T. Ryan			12/4/01	1:25P	1.0'	Purified water under pressure

DEPTH	SPoon BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0.0'	Hand Auger	Full Rec.		Fill - Br M-F Sand, lit Gr. <span style="float: right;">0.9'</span>
1.5'			1	Same
			2	Same
			3	Same
			4	Same
5.0'				Bottom of Boring <span style="float: right;">4.0'</span>

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

# THE PORT AUTHORITY OF N.Y. & N.J.

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: *PN - Former Metro Metals*

LOGGING No. *MW-NI-E1*

DATE: *12/4/01*

FIELD READINGS BY: *T. Ryan*

PID Model: *14*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1</i>		<i>0.0</i>		
	<i>2</i>		<i>0.0</i>		
	<i>3</i>		<i>0.0</i>		
	<i>4</i>		<i>0.0</i>		



THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: *PAU - Former Metro Metals*

LOCATION: *± 1' E. of MWNI -* DATE: *12/4/01*

RING No: *BH-MWNI-E1* TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING *T. Ryan*

ACQUIRED DATE *12/4/01* RECEIVED

SIGN *T. Ryan* TIME BY (SIGN)

ACQUIRED DATE RECEIVED

SIGN TIME BY (SIGN)

ACQUIRED DATE RECEIVED

SIGN TIME BY LAB

REMARKS: *4 samples in 4 16 oz jars*

THE CITY AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

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SHEET 1 OF 3

PROJECT <i>N - former Metro Metals</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>BH-MWCS-N 1</i>	SURFACE ELEV.
LOCATION <i>± 1' North of MWCS</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>12/5/01</i>	

C.O.D.	I.D.	CASING SIZE	HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL					
				Date	Time	Depth	Remarks		
# FALL		HAMMER		# FALL		<i>12/5/01</i>		<i>No water</i>	
OPERATOR <i>A. Kidas</i>									
SUPERVISOR <i>T. Ryan</i>									

DEPTH (FT.)	SPoon BLOWS/6"	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				<i>Misc fill - concrete, sand</i>
				<i>Asphalt</i>
	<i>Hard Auger</i>	<i>Full Rec.</i>		<i>Misc fill - concrete, sand, gravel, glass, wood</i>
2.5			1	<i>Same</i>
			2	<i>Same</i>
			3	<i>Fill - Br M-F Sand, bit Gravel, to silt</i>
			4	<i>Same</i>
5.0				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

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Sheet 2 of 3

PROJECT: PN - Former Metro Metrol  
RING No. BH-MUCS-N1 DATE: 12/5/01  
PID READINGS BY: T. Gan PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1		4.3		
	2		5.1		
	3		0.0		
✓	4		0.0		

REPORT AUTHORITY OF N.E. & N.S.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: PN-Former Metro Metals  
LOCATION: ± 1/2 mi. north of MWCS DATE: 12/5/01  
WELLING No: BH-MWCS-N1 TOTAL No. OF SAMPLES: 4

SIGNATURE OF ALL PARTICIPANTS			
AGENT AT SAMPLING			
ACQUIRED	DATE 12/5/01	RECEIVED	
SIGN T. Ryan	TIME	BY (SIGN)	
ACQUIRED	DATE	RECEIVED	
SIGN	TIME	BY (SIGN)	
ACQUIRED	DATE	RECEIVED	
SIGN	TIME	BY LAB	

REMARKS: 4 samples in 4 16 oz jars

**T. PORT AUTHORITY OF NY & N.J.**  
 Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

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SHEET 1 OF 3

PROJECT <i>PA - Former Metro Metals</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>BH-mwes-W1</i>	SURFACE ELEV.
LOCATION <i>± 1' West of MW-C5</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>12/5/01</i>	

BOON	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
"O.D."	"I.D."	<i>H. Auger</i>	Date	Time	Depth	Remarks
HAMMER	HAMMER		<i>12/5/01</i>			<i>No water</i>
# FALL	# FALL					
SPECTOR <i>A. Kulas</i> <i>T. Ryan</i>						

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<i>Misc fill - Sand, Gravel, Cinders, Wood, etc.</i> <span style="float:right">0.4'</span>
					<i>ASPECT</i> <span style="float:right">1.1'</span>
		<i>H. Auger</i>	<i>Full</i>		<i>Misc fill - Cinders, Sand, Gravel, Wood etc.</i>
		↓	↓		
	2.5	<i>Hard Auger</i>	<i>Full</i>	1	<i>Same</i>
		↓	↓	2	<i>Fill - Rd Br M-F Sand, lid Gravel, to Silt.</i>
		↓	↓	3	<i>Fill - Rd Br M-F Sand, to Silt, to Gr</i>
		↓	↓	4	<i>Same</i>
					<span style="float:right">4.0'</span>
	5.0				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

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Sheet 2 of 3

PROJECT: *PN - Former Metro Metals*  
DRING No. *BH-MWCS-W1* DATE: *12/5/01*  
FIELD READINGS BY: *T. Ryan* PID Model: *14*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1</i>		<i>0.6</i>	<i>0.0</i>	
<i> </i>	<i>2</i>		<i>0.3</i>	<i>0.0</i>	
<i> </i>	<i>3</i>		<i>0.0</i>		
<i>✓</i>	<i>4</i>		<i>0.0</i>		

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ENGINEERING DEPARTMENT  
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PROJECT: *PN - Former Micro Metals*  
LOCATION: *± 1' West of MWCS - ~~W1~~* DATE: *12/5/01*  
SAMPLING No: *BH-MWCS-W1* TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

ACT AT SAMPLING

*T. Ryan*

ACCOMPLISHED

DATE *12/5/01*

RECEIVED

BY (SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACCOMPLISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

ACCOMPLISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4 16oz jars*

THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

PROJECT PA - Former Metro Metals		NAME OF CONTRACTOR Craig		BORING NO. BH-MWCS-51	SHEET 1 OF 3
LOCATION ± 1' South of MWCS		CONTRACT NO. 426-99-006		DATE 12/5/01	
WELL NO.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL		
"O.D."	"I.D."	H Auger	Date	Time	Depth
HAMMER		Date		Time	Depth
# FALL		12/5/01			7' No water
SUPERVISOR A. Kulas					
DIRECTOR T. Ryan					
CASING DEPTH (FT.)	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0				Asphalt 1.2'
		Hand Auger	Full Rec	1	Sample
	2.5			2	Sample
				3	Fill - Br M - F Sand & Silt
				4	
	5.0				Bottom of Boring 4.0

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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PROJECT: <i>PN - Former Metro Mills</i>	DATE: <i>12/5/01</i>
WELLING No. <i>BH-MWCS-51</i>	PID Model: <i>14</i>
PID READINGS BY: <i>T. Luo</i>	

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1.</i>		<i>6.2</i>		
	<i>2</i>		<i>4.1</i>		
	<i>3</i>		<i>0.0</i>		
	<i>4</i>		<i>0.0</i>		

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CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: *PN - Finnes Metro Metals*  
LOCATION: *± 1' South of MWCS* DATE: *12/5/01*  
SAMPLING No: *BH-MWCS-51* TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUISISHED	DATE	RECEIVED
<i>T. Ryan</i>	<i>12/5/01</i>	
SIGN	TIME	BY (SIGN)
ACQUISISHED	DATE	RECEIVED
SIGN	TIME	BY (SIGN)
ACQUISISHED	DATE	RECEIVED
SIGN	TIME	BY LAB

REMARKS:

*4 samples in 4-16oz jars*

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Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3

EST <b>PA - Former Metro Metals</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>BH-MWCS-E1</b>	SURFACE ELEV.
CATION <b>± 1 East of MW-C5</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>12/5/01</b>

NO	CASING SIZE	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL			
"O.D.	"I.D.		Date	Time	Depth	Remarks
NO	HAMMER		<b>12/5/01</b>			<b>No water</b>
NO	# FALL	# FALL				
OPERATOR <b>A. Kidas</b>						
RECTOR <b>T. Ryan</b>						

DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				<b>max fill - sand, cinders, wood, metal</b> 0.3'
				<b>Asphalt</b> 1.0'
	<b>Hand Auger</b>	<b>Full Rec</b>		<b>Misc Fill - Sand, Cinders, Metal, Wood</b>
2.5			1	<b>Same</b>
			2	<b>Same</b>
			3	<b>Fill - Rd Br M-F Sand, G. Silt</b>
			4	<b>Same</b>
5.0				
				<b>Bottom of Boring</b> 4.0'

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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PROJECT: PN - Inner Metro Metals  
 RING No. BH-MWCS-E1      DATE: 12/5/01  
 READINGS BY: T. Ryan      PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1		4.2	0.0	
↓	2		5.1	0.0	
	3		0.0		
↓	4		0.0		

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Sheet 3 of 3

SUBJECT: PA - Former Metro Meter  
LOCATION: ± 1' East of MWCS | DATE: 12/5/01  
RING No: BH-MWCS-E1 | TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING		
ACQUISHED	DATE	RECEIVED
SIGN	TIME	BY (SIGN)
ACQUISHED	DATE	RECEIVED
SIGN	TIME	BY (SIGN)
ACQUISHED	DATE	RECEIVED
SIGN	TIME	BY LAB

REMARKS: 4 samples in 4-16oz jars

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 Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

PROJECT <i>Newark Metro Metals Site</i>		NAME OF CONTRACTOR <i>Craig</i>		BORING NO. <i>BH-PAC6 E-89</i>	SHEET <i>1</i> OF <i>3</i>
LOCATION <i>± 600' E of BHPAGE 7</i>		CONTRACT NO. <i>426-99-006</i>		SURFACE ELEV. <i>511.62</i>	
DATE <i>5/14/02</i>		TIME <i>AM</i>		DEPTH <i>± 9.0'</i>	
REMARKS <i>In S-4</i>					

NO. / DEPTH	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
					REMARKS	DEPTH
	0				FILL: Crushed Asphalt	
		Hand Auger	Full			3.0
				1	Crushed Gravel, various metal scrap	FILL
	5			2	Brown c-f SAND, little of Gravel, tr. Silt	4.0
		24.20	24	3	SAME tr. shell frags	
		22.22				
		7.10	22	4	Brown c-f SAND, little Silt, little c-f Gravel	
	10	12.12			(± 8.5' - 9.0' Saved)	10.0'
						Bottom of boring
All Samples Checked w/ PID Meter Samples 2 & 3 NOT Saved In S-4, ± 8.5' - 9.0' Saved						

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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PID READINGS

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PROJECT: Port Newark Metro Metals Site  
WELLING No. BH PAC6 E-89 DATE: 5/16/02  
READINGS BY: A. Koss PID Model: M.M. Pac

ME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
Am	1	0.0		0.0	
	2	↓		↓	
	3	↓		↓	
	4	↓		↓	

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PROJECT: Port Newark Metro Metro Site

LOCATION: ± 60.0' E of BH-PA-C-6 E-7      DATE: 5/16/02

DRILLING No: BH-PA-C-6 E-09      TOTAL NO. OF SAMPLES: 2 gal

SIGNATURE OF ALL

PRESENT AT SAMPLING *[Signature]*

ACQUISHED	DATE 5/16/02	RECEIVED
(SIGN) <i>[Signature]</i>	TIME 3pm	BY (SIGN)
ACQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)
ACQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS:

2 Gal samples in 1 bag for each



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**BORING REPORT**

PROJECT Newark Metro Metals Site		NAME OF CONTRACTOR Cruz		BORING NO. BHPAC6 E-810	SHEET 1 OF 3
LOCATION 140.0' E. of BHPA-6 E-8		CONTRACT NO. 426-99-006		DATE 5/16/02	SURFACE ELEV.
DRILLER D. Cooke	CASING SIZE 2 7/8" I.D.	AUGER HAMMER	HOLE TYPE I	GROUND WATER LEVEL	
				Date 5/16/02	Time AM
OPERATOR H. Koss					

DEPTH (ft)	SPOON BLOWS/6"	RE-COVD.	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hand Auger	Full		FILL - Cracked Asphalt
1			1	Cracked Asphalt, metal pieces & frags FILL
2			2	SAME FILL 4.0'
3			3	Light Brown, c.f. SAND, little c.f. Gravel & silt
4	34.36	24	4	SAME
5	26.29			
6	8.10	24	5	SAME
7	11.11			
10				10.0' Bottom of boring

All Samples Checked w/ PID Meter  
Samples 3 & 4 NOT Saved  
Ground Water in S-5 @ ± 9.0'  
(± 8.5' - 9.0' Saved in S-5)

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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PROJECT: Port Newark Metro Metals Site

RING No. BHPA C-6 E-10 DATE: 5/11/02

READINGS BY: H. Kass PID Model: Mum Pac

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
4:30	1	0.0		0.0	
	2	0.0		↓	
	3	0.0			
	4	0.0			
	5	0.0			

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Sheet 3 of 3

PROJECT: Port Newark Metro Metals Site

LOCATION: ± 400' E of BH-PA-C-6 E-8

DATE: 5/16/02

BORING No: BH-PA-C-6 E-10

TOTAL No. OF SAMPLES: 3 soil

SIGNATURE OF ALL

SENT AT SAMPLING

*Handwritten signature*

INQUIRED

DATE 5/16/02

RECEIVED

BY (SIGN)

*Handwritten signature*

TIME 3 pm

BY (SIGN)

INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS: 3 soil samples, each in one 16oz. jar

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**BORING REPORT**

SGT f Newark Metro Metals Site NAME OF CONTRACTOR Craig	BORING NO. BH-PA-C-6 E-10	SHEET 7 OF 3 SURFACE ELEV. DATE 5/16/02
LOCATION ± 40.0' E of BH-PA-C-6 E-9	CONTRACT NO. 426-99-006	

CASING SIZE 2 7/8" I.D.	HOLE TYPE Augers I	GROUND WATER LEVEL			
DRIVER AUTO 40 FALL 30	HAMMER 1 FALL	Date 5/16/02	Time PM	Depth ± 9.5'	Remarks In S-S
OPERATOR D Cooke					
SUPERVISOR H. Kocs					

REQ FAS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hand Auger	Full		FILL - Crushed Asphalt & Metal frags
				1	SAME
				2	Light Brown, c-f SAND, little Silt, tr. f Gravel
	5			3	Brown, c-f SAND, little c-f Gravel, tr Silt
		21.15	24	4	SAME, tr. c-f Gravel
		15.12			
		22.11	24	5	SAME
	10	12.12			
					Bottom of boring
					10.0'
					All Samples Checked w/ PID Meter
					Samples 3 & 4 NOT Saved
					Groundwater in S-S @ ± 9.5'
					(± 9.0' - 9.5' Saved)

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

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Sheet 2 of 3

PROJECT: Port Newark Midway Metals Site

ENGINEERING No. BH-PA-C-6 E-10

DATE: 5/16/02

READINGS BY: H. Koss

PID Model: Mini Racer

ME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
^	1	2.7		0.0	
	2	0.0		↓	
	3	0.0		↓	
	4	0.0		↓	
↓	5	0.0		↓	

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PROJECT: Port Newark Metro Metals Site

LOCATION: ± 40.0' E of BH-PA C-6 E-9

DATE: 5/16/02

BORING No: BH-PA C-6 E-10

TOTAL No. OF SAMPLES: 3 soil

SIGNATURE OF ALL

SENT AT SAMPLING

*Thomas J. K...*

INQUIRED

DATE 5/16/02

RECEIVED

BY (SIGN)

*Thomas J. K...*

TIME 3 PM

BY (SIGN)

INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

3 Soil samples for 1 kg for each

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BORING REPORT

SHEET 1 OF 3

PROJECT PA - Jones Metro		NAME OF CONTRACTOR Crax		BORING NO. PA-C6-N-1	SURFACE ELEV.
LOCATION 1' North of PA-C6		CONTRACT NO. 426-99-006		DATE 12/3/01	
Casing Size		Hole Type H. Auger		GROUND WATER LEVEL	
*O.D.		*I.D.		Date	Time
HAMMER				Depth	Remarks
# FALL		# FALL		12/3/01	2:10 P
				No water encountered	
OPERATOR Alan Kidas					
DIRECTOR T Ryan					

*SING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				Asphalt
	1.5	Hand Auger	Full Rec	1	Min. Fill - Sand, Gravel, Corral
				2	Same
				3	Same
				4	Same
	5				Bottom of Boring

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

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PROJECT: *PA - Former Metro Metals*  
 DRING No. *PA-06-N1* DATE: *12/3/01*  
 FIELD READINGS BY: *T. Ryan* PID Model: *7*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>PM</i>	<i>1</i>		<i>0.5</i>	<i>0.0</i>	
<i>↓</i>	<i>2</i>		<i>0.4</i>	<i>0.0</i>	
<i>↓</i>	<i>3</i>		<i>0.4</i>	<i>0.0</i>	
<i>↓</i>	<i>4</i>		<i>0.3</i>	<i>0.0</i>	



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SUBJECT: *PN - Joiner Metro Metals*

LOCATION: *± 1' North of PA-C60*

DATE: *12/3/01*

DRILLING No: *PA-C6-N-1*

TOTAL No. OF SAMPLES: *4 + 1 Dup*

SIGNATURE OF ALL

PERSONS PRESENT AT SAMPLING

*T. Ryan*

UNOBTAINED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

UNOBTAINED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

UNOBTAINED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4-16oz jars + 1 Dup in 1 10oz jar (S-1)*

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**BORING REPORT**

SHEET 1 OF 3

Former Metro Metals 5' No. of PA-C6		NAME OF CONTRACTOR Craig	BORING NO. PA-C6-N-2	SURFACE ELEV.
			CONTRACT NO. 426-99-006	DATE 12/5/01
O.D. I.D. # FALL	CASING SIZE HAMMER # FALL	HOLE TYPE H. Auger	GROUND WATER LEVEL	
			Date 12/5/01	Time 8:00 A
			Depth No water	Remarks
Q. Kulas T. Ryan				
DEPTH	SP. BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				Asphalt
1.0	Hand Auger Full	↓		Misc Fill - Bl. Cinders, Sand, Gravel, etc.
2.5	↓	↓	1	Some
5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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SUBJECT: PN - Forimer Metro Metals

LOCATION: ± 5' North of PA-C6

DATE: 12/5/01

WING No: PA-C6-N2

TOTAL No. OF SAMPLES: ~~3~~ 1

NATURE OF ALL

EVENT AT SAMPLING

T. Ryan

DISPATCHED

DATE 12/5/01

RECEIVED

(SIGN)

T. Ryan

TIME

BY (SIGN)

DISPATCHED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

DISPATCHED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

1 sample in 1-16oz jar

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Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

Former Metro Metals		NAME OF CONTRACTOR Crag		BORING NO. PAC6-N3		SURFACE ELEV.	
± 10' North of PAC6				CONTRACT NO. 426-99-006		DATE 12/7/01	
CASHING SIZE		HOLE TYPE		GROUND WATER LEVEL			
°O.D.	°I.D.	HAMMER		Date	Time	Depth	Remarks
		H. Auger		12/7/01			No water
# FALL		# FALL					
Alan Kidas							
T. Ryan							
LOG FT.	DEPTH	SPOON BLOWS/5'	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
0					ASPHALT		
2.05		H. Auger	Full	1	Muc. Felt - Under, Gr., Glass, Wood		
					Bottom of Boring ↗		
5.0							

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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PROJECT: PP - Former Metro Metals

LOCATION: ± 10' North of PAC6      DATE: 12/7/01

TESTING No: PAC6-N3      TOTAL No. OF SAMPLES: 1

SIGNATURE OF ALL

PERSONS PRESENT AT SAMPLING

*T. Ryan*

PREPARED BY:	DATE	RECEIVED
<i>T. Ryan</i>	<u>12/7/01</u>	
TIME	BY (SIGN)	

PREPARED BY:	DATE	RECEIVED
TIME	BY (SIGN)	

PREPARED BY:	DATE	RECEIVED
TIME	BY LAB	

REMARKS: 1 sample in 1-16 bag jar





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OBJECT: PN - James Metro Metals

WORKING No. PA-C6-W1                                      DATE: 12/3/01

FIELD READINGS BY: T. Khan                                      PID Model: 7

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1		0.4	0.0	
↓	2		0.5	0.0	
PM	3		0.8	0.0	
↓	4		0.5	0.0	

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Sheet 3 of 3

SUBJECT: PN - Former Metro Metals

LOCATION: ± 1' West of PA-C6

DATE: 12/3/01

RING No: PA-C6-W-1

TOTAL No. OF SAMPLES: 4 + 1 Dup

NATURE OF ALL

EVENT AT SAMPLING

T.R.

INQUIRED

DATE 12/3/01

RECEIVED

SIGN

T.R.

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4-16oz jars + 1 duplicate sample of  
S-3 in 10oz jar

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BORING REPORT

SHEET 1 OF 3

PROJECT <i>N - Turner Metro Metals</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>PA-C6-W-2</i>	SURFACE ELEV.
LOCATION <i>5' West of PA-C6</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>12/5/01</i>	

CASING SIZE HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL		
	Date <i>12/5/01</i>	Time <i>9:05 A</i>	Depth <i>No water</i>
REMARKS <i>Alan Kidas</i>			
INSPECTOR <i>T. Ryan</i>			

SING WS/FT. Pen Head	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<i>Asphalt</i>
		<i>Hand Auger</i>	<i>Full Rec</i>		<i>Misc fill - Cinders, Sand, Gravel, Metal</i>
	2.5			1	<i>Same</i>
				2	<i>Same</i>
				3	<i>Same</i>
				4	<i>Same</i>
	5.0				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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ENGINEERING DEPARTMENT

MATERIALS ENGINEERING DIVISION

PID READINGS

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Sheet 2 of 3

PROJECT: PN - Former Metro Metals

BORING No. PA-C6-W2

DATE: 12/5/01

FIELD READINGS BY: T. Ga

PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>AM</u>	<u>1</u>		<u>1.1</u>	<u>0.0</u>	
↓	<u>2</u>		<u>0.9</u>	<u>0.0</u>	
↓	<u>3</u>		<u>3.0</u>	<u>0.0</u>	
↓	<u>4</u>		<u>9.1</u>	<u>0.0</u>	

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ENGINEERING DEPARTMENT  
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CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: <i>PN - Former Metro Metals</i>	
LOCATION: <i>± 5' West of PA-C6</i>	DATE: <i>12/5/01</i>
DRILLING No: <i>PAC6-W2</i>	TOTAL No. OF SAMPLES: <i>4</i>

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Ryan*

UNWITNESSED

DATE *12/5/01*

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

UNWITNESSED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

UNWITNESSED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4 16oz jars*

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BORING REPORT

SHEET 1 OF 3

L.F. U - Former Metro Metals #1 + 10' West of PA-C6	NAME OF CONTRACTOR Craig	BORING NO. PA-C6-W3	SURFACE ELEV.
		CONTRACT NO. 426-99-006	DATE 12/7/01

O.D. I.D. # FALL	CASING SIZE # FALL	HOLE TYPE H. Auger	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
			12/7/01			No water
LOGS Rob Deller						
LOGS T. Ryan						

DEPTH FT.	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				ASPHALT
2.5	Hand Auger	Full Rec	1	Misc Fill - Cinders, Sand, Gravel
			2	Same
			3	Same
			4	Same
5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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**ENGINEERING DEPARTMENT**  
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**PID READINGS**

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Sheet 2 of 3

ECT: <u>TN - Former Metro Metals</u>	DATE: <u>12/7/01</u>
ENG No. <u>PA06-W3</u>	PID Model: <u>14</u>
READINGS BY: <u>T. Ryan</u>	

ME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1		4.9	0.0	
	2		6.3	0.0	
	3		5.5	0.0	
↓	4		5.3	0.0	

ENGINEERING DEPARTMENT  
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CHAIN OF CUSTODY RECORD

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Sheet 2 of 3

PROJECT: Pp- Former Metro Metals  
LOCATION: ± 10' West of PAC6 DATE: 12/7/01  
TAG No: PAC6-W3 TOTAL No. OF SAMPLES: 4

DESCRIPTION OF ALL

LOCATION AT SAMPLING

*T. Gen*

ACCOMPLISHED	DATE	RECEIVED
<i>T. Gen</i>	12/7/01	
	TIME	BY (SIGN)
ACCOMPLISHED	DATE	RECEIVED
	TIME	BY (SIGN)
ACCOMPLISHED	DATE	RECEIVED
	TIME	BY LAB

REMARKS:

4 samples in 4 16oz jars



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**BORING REPORT**

SHEET 1 OF 3

PROJECT <i>PA - Former Metro Metals</i>		NAME OF CONTRACTOR <i>Craig</i>		BORING NO. <i>PA-C6-S-1</i>	SURFACE ELEV.	
LOCATION <i>1' South of PA-C6</i>		CONTRACT NO. <i>426-99-006</i>		DATE <i>12/3/01</i>		
BOON	CASING SIZE	HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL			
"O.O.	"I.D.	HAMMER	Date	Time	Depth	Remarks
# FALL	# FALL		<i>12/3/01</i>	<i>2:50 PM</i>		<i>No water</i>
OPERATOR <i>A. Kedes</i>						
SUPERVISOR <i>T. Ryan</i>						
CASING U/S/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				<i>Asphalt</i>	
					<i>2.0'</i>	
	2.5'	<i>Hand Auger</i>	<i>Full Rec</i>	1	<i>Misc Fill - Sand, Cinders, Gravel, Wood</i>	
				2	<i>Same as above</i>	
				3	<i>Same</i>	
				4	<i>Same</i>	
					<i>4.0'</i>	
	5.0'				<i>Bottom of Boring</i>	

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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Sheet 3 of 3

OBJECT: <i>PN - former Metro Metals</i>		
LOCATION: <i>± 1' South of PA-C6</i>	DATE: <i>12/3/01</i>	
DRAWING No: <i>PA-C6-S1</i>	TOTAL No. OF SAMPLES: <i>4</i>	

SIGNATURE OF ALL

1. PRESENT AT SAMPLING

*T. Ryan*

2. ACQUIRED

DATE *12/3/01*

RECEIVED

BY (SIGN)

*T. Ryan*

TIME

BY (SIGN)

3. ACQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

4. ACQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4-loggers.*

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**BORING REPORT**

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SHEET 1 OF 3

PROJECT <b>PN - Former Metro Metrol</b>		NAME OF CONTRACTOR <b>Craig</b>		BORING NO. <b>PA-C6-S12</b>	SURFACE ELEV.
LOCATION <b>± 5' South of PAC6</b>				CONTRACT NO. <b>426-99-006</b>	DATE <b>12/5/01</b>
DRILLER <b>A. Kidas</b>	OPERATOR <b>T. Lya</b>	CASING SIZE <b>H. Auger</b>	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL	
TIME	NUMBER OF FALLS	HAMMER	NUMBER OF FALLS	Date	Time
				<b>12/5/01</b>	
				Depth	Remarks
					<b>No water</b>
CASING NOS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<b>0</b>					<b>Asphalt</b>
		<b>Hand Auger</b>	<b>Full R.C.</b>		<b>Misc Fill - Cinders, Sand, Gravel, Wood, Metal</b>
	<b>2.5</b>			<b>1</b>	<b>Same</b>
				<b>2</b>	<b>Same</b>
				<b>3</b>	<b>Same</b>
				<b>4</b>	<b>Same</b>
	<b>5.0</b>				<b>Bottom of Boring</b>

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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Sheet 3 of 3

PROJECT: *PN - Former Metro Metals*

LOCATION: *± 5' South of PAC6* DATE: *12/5/01*

DWELLING No: *PA-C6-S20* TOTAL No. OF SAMPLES: *4*

SIGNATURE OF ALL

SENT AT SAMPLING

*T. Ryan*

INQUIRED	DATE	RECEIVED
<i>T. Ryan</i>	<i>12/5/01</i>	
(SIGN)	TIME	BY (SIGN)
INQUIRED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)
INQUIRED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS:

*4 samples in 4 16oz jars*

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**BORING REPORT**

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SHEET 1 OF 3

PROJECT <i>PA - Former Metro Metal</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>PAC6-S-3</i>	SURFACE ELEV.
LOCATION <i>± 10' South of PAC6</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>12/7/01</i>	

HOLE NO.	Casing Size	HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
DRILLER <i>Rob Dallas</i>	DRILLER	DRILLER	<i>12/7/01</i>			<i>No water</i>
SECTOR <i>T. Ryan</i>						

CASING NO./FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0				<i>Asphalt - 12" dia, sand, gravel, metal etc.</i>
					<b>ASPHALT</b>
					<i>Misc fill - concrete, sand, gravel, metal etc.</i>
	2.5	<i>Hand auger</i>	<i>Full rec</i>	1	<i>Same</i>
				2	<i>Same</i>
				3	<i>Same</i>
				4	<i>Same</i>
	5.0				<i>Bottom of Boring</i> <span style="position: absolute; left: 800px; top: -40px;">↗ 4.0'</span>

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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 CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: *PN-Former Metro Metals*  
 LOCATION: *± 10' South of PA-CG* DATE: *12/7/01*  
 TAGGING No: *PACG-S3* TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING *T. Ryan*

ACQUIRED	DATE <i>12/7/01</i>	RECEIVED
(SIGN) <i>T. Ryan</i>	TIME	BY (SIGN)

ACQUIRED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

ACQUIRED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

MARKS: *4 samples in 4 1/16 oz jars.*

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**BORING REPORT**

PROJECT DN - Former Metro Metals	NAME OF CONTRACTOR Craig	BORING NO. PAC6-5.4	SHEET 1 OF 3
LOCATION + 20' South of PAC6		CONTRACT NO. 426-99-006	SURFACE ELEV. DATE 12/11/01

POON	"O.D."	"I.D."	CASING SIZE	HOLE TYPE H. Auger	GROUND WATER LEVEL			
DRILLER M. McElean			HAMMER		Date	Time	Depth	Remarks
SUPERVISOR T. Ryan					12/11/01			No water

DEPTH	SPONGE BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				Asphalt
	Hand Auger	Full Rec		Misc. Fill - Coarse Sand, Gravel, Metal
2.5'			1	Same
			2	Same
			3	Same
			4	Same
5.0'				Bottom of Boring

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

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PROJECT: PN - Former Metro Metals

DRING No. PACG-54 DATE: 12/11/01

FIELD READINGS BY: T. Kyan PID Model: 14

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>Pm</u>	<u>1</u>		<u>1.0</u>	<u>0.0</u>	
<u> </u>	<u>2</u>		<u>0.9</u>	<u>0.0</u>	
<u> </u>	<u>3</u>		<u>1.3</u>	<u>0.0</u>	
<u>∨</u>	<u>4</u>		<u>1.7</u>	<u>0.0</u>	

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CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: PN - Former Metro Metals  
LOCATION: ± 20' South of PA-C6 DATE: 12/11/01  
SAMPLING No: PAC6-S4 TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

T. Ryan

ACQUIRED	DATE	RECEIVED
(SIGN) <u>T. Ryan</u>	TIME	BY (SIGN)
ACQUIRED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)
ACQUIRED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS: 4 samples in 4 16oz jars

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Engineering Department  
Construction Division  
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**BORING REPORT**

PROJECT N - Metro Metals		NAME OF CONTRACTOR Crazy Drilling		BORING NO. BH-PB-6655		SHEET 1 OF 2	
LOCATION 40' South of PA-C6				CONTRACT NO. 476-99-006		SURFACE ELEV. DATE 4/29/02	
BORER D.W.J.		CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
NO. OF FALLS		HAMMER	# FALLS	Date	Time	Depth	Remarks
SUPERVISOR A. K. J.				4/29	7 <sup>30</sup>	.5'	Water w/ Asphalt Millings
DIRECTOR D. Howe							
DEPTH FEET	DEPTH FEET	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
0	0	Hand Auger	Full		Asphalt Millings		
1	1	Tapped Spoon	12'	1	Misc Fill - Gravel, Crushed Asphalt, Sand, Bricks, etc.		
5	5				Bottom of Accidental Obstruction Possible Concrete Slab Moved 4' NW to PA-C6-55B Resumed Sampling at 3'		
10	10				All Samples checked w/ PA Metals 5# 1 2-3' Test for TPH in Field Sample sent by check lab for Lab Testing		
15	15						
20	20						
25	25						

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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PID READINGS

Sheet 2 of 2

PROJECT: *PN - Metro Metab*

DRING No. *BH-PA-CG-55*

DATE: *4/29/02*

FIELD READINGS BY: *J. How*

PID Model: *Mini PAF*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>8:24</i>	<i>1</i>		<i>0.2</i>		

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**BORING REPORT**

ECT Y - Metro Metals		NAME OF CONTRACTOR Craig Drilling		BORING NO. BH-PA-C6-55A		SHEET 1 OF 2	
TON 4' NW of PA-C6-55				CONTRACT NO. 476.99.006		SURFACE ELEV. DATE 4/29/02	
C.O.D. 2 3/4		CASING SIZE 4" O.D.	HOLE TYPE 1	GROUND WATER LEVEL			
HAMMER # FALL 30				Date	Time	Depth	Remarks
D.K.J.s				4/29	9 <sup>30</sup>	1.5	1" Asphalt Milling
D.Hove				4/29	10 <sup>00</sup>	9.5	Ground water s <sup>#</sup> 4
REQ NO./FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE		
	0	Hand Dug	Full		Asphalt Milling		
	1	↓	↓		Misc Fill - Cinders, Sand, Gravel, Asphalt, ETC		
	5	Epped Spoon	6"	1	Same		
	5	↓	14"	2	MISC.F.I., METAL, CRUSTED STONY SAND, ETC		
		14-29		3	Fill M-F Brown Sand, Tr Gravel, Tr S.I.T		
		38-52	20"	3			
		4-8		4			
	10	13-19	16"	4	Same		
					Bottom of Boring		
					All samples checked with PID Meter		
					S <sup>#</sup> 1/2 & S <sup>#</sup> 4 (q <sub>v</sub> = 9.5) saved for testing		
					checked for TPH in field by chem lab		
					Remaining samples discarded		
	15						
	20						
	25						

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

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OBJECT: PN-Metro Mats	
ORING No. BN-PA 66 SB	DATE: 4/29/02
PID READINGS BY: J Hanc	PID Model: Mini RA5

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1	0.1			
↓	2	5.6	0.0		
↓	3	0.5			
↓	1	0.3			

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# THE PORT AUTHORITY OF NY & NJ

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**BORING REPORT**

PROJECT <b>N. Metro Mats</b>		NAME OF CONTRACTOR <b>Craig Drilling</b>		BORING NO. <b>PH-PA-CL-56</b>	SHEET 1 OF 2
LOCATION <b>30' South of PH-PA-CL-56</b>		CONTRACT NO. <b>42699-006</b>		DATE <b>4/29/02</b>	SURFACE ELEV.
OD. <b>2 3/8</b>	I.D.	CASING SIZE <b>Auger</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL	
ER <b>4.75</b>		HAMMER		Date	Time
FALL <b>3.0</b>		FALL		<b>4/29</b>	<b>11:5</b>
REMARKS <b>A Kites</b>				Depth	Remarks
<b>D Howe</b>				<b>15</b>	<b>w Asphalt Millings</b>
				<b>4:29</b>	<b>groundwater 8'5</b>

SHO. B/FT.	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0	Hard Auger	Full		Asphalt Millings	0.0
	1.2				Fill - M-F Brown Sand, Tr Silt, Tr Gravel	1.0
	1.5	Topped Spoon	12'	1	Misc Fill - Asphalt, Curbing Gravel, Silt, ETC	2.0
	2.0		7"	2	Misc Fill - Sand, Gravel, Brick, Metal, ETC	3.0
	2.5		15"	3	Misc Fill - Sand, Metal Silt, Gravel, ETC	6.0
	3.0	11-14		4		
	3.5	17-27	16'		Fill - M-F Gray Brown Sand, Tr Gravel, Tr Silt	
	4.0	8-11		5		
	10	15-19	18'		Same	10.1
					Bottom of Boring	
	15				All Samples checked with P.D. Meter 2" 1, 2 & 5 (9-10) Saved for Testing & checked w/ field for JPHK Remaining Sample discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

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Sheet 2 of 2

OBJECT: PH-METRO METAK  
 RING No. PH-PA C-6 S-6 DATE: 4/29/02  
 PID READINGS BY: D Howe PID Model: Mini PAB

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1		0.2		
PM	2		0.4		
↓	3		0.2		
↓	4		0.2		

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Construction Division  
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**BORING REPORT**

PROJECT <b>PN-Metro Mats</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BM PAC 6-57</b>	SHEET <b>1</b> OF <b>2</b>
LOCATION <b>E 5' South of BM PAC 654</b>	CONTRACT NO. <b>Y2699-06</b>	DATE <b>4/30/02</b>	SURFACE ELEV.

POOH <b>3</b> O.D. <b>2 3/4</b> I.D. <b>Auger</b>	CASING SIZE	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
HAMMER <b>140</b> FALL <b>30</b>	HAMMER	FALL	Date	Time	Depth	Remarks
DRILLER <b>D Costa</b>			<b>4/30</b>	<b>1 PM</b>	<b>1.0</b>	<b>in Asphalt Milling</b>
SPECTOR <b>D Hane</b>			<b>4/30</b>	<b>1:45</b>	<b>9.5</b>	<b>ground water 5' 5"</b>

CASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	O.D.
land	0	Hand Auger	F-4		Asphalt Milling	0.0
Bugs ↓		↓	↓			2.0
Yellow		Tapel Spare	12'	1	Misc Fill Asphalt, Sand, Bricks, ETC	
STEM		↓	10'	2	Misc Fill Cinders, Bricks, Sand, Asphalt, ETC	
Bugs →	5	↓	18'	3	Same	6.0
↓		15-16		4		
↓		19-22	19'		Fill M-P Gray Brown Sand, Gravel, In Situ	
		11-15				
→	10	16-18	19'	5	Same	10.0
					Bottom of Boring	↗
→	15				All Samples checked with PID Meter 5' / 2 & 5 (9-95) Sand for Testing & checked for TPH in field by Chem Lab Remaining Sample Discarded	
→	20					
→	25					

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

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Sheet 2 of 2

PROJECT: PM Meth Metals  
BORING No. PM PB-C6 57 DATE: 4/30/02  
FIELD READINGS BY: D Howe PID Model: M1 v. R013

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>PM</u>	<u>1</u>		<u>0.3</u>		
<u> </u>	<u>2</u>		<u>1.2</u>		
<u> </u>	<u>3</u>		<u>1.7</u>		
<u> </u>	<u>4</u>		<u>0.7</u>		
<u>✓</u>	<u>5</u>		<u>0.0</u>		

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT PA - Former Metro Metrol	NAME OF CONTRACTOR Crescent	BORING NO. PA-C7-N-1	SURFACE ELEV.
LOCATION 1' N. of PA-C7		CONTRACT NO. 426-99-006	DATE 12/4/01

CASING SIZE "O.D." "I.D."	HOLE TYPE H. Auger	GROUND WATER LEVEL			
		Date	Time	Depth	Remarks
HAMMER		12/4/01	10:30 A		No water encountered
# FALL	# FALL				
OPERATOR A. Kidas					
SUPERVISOR T. Ryan					

DEPTH (FEET)	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				Asphalt
	Hand Auger			Misc Fill - Silt, Sand, Gr, Wood, Metal
2.5		Full Rec.	1	Same
			2	Same
			3	Fill - Bym-F Sand, to Silt, to Gr
			4	Same
5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

# THE PORT AUTHORITY OF N.Y. & N.J.

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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of 3

<b>PROJECT:</b> <i>PN - Former Metric Metals</i>	
<b>TESTING No.:</b> <i>PA-C7.N.1</i>	<b>DATE:</b> <i>12/4/01</i>
<b>PID READINGS BY:</b> <i>T. Ryan</i>	<b>PID Model:</b> <i>14</i>

TIME.	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>AM</i>	<i>1</i>		<i>41.2</i>	<i>6.0</i>	
<i> </i>	<i>2</i>		<i>29.6</i>	<i>6.0</i>	
<i> </i>	<i>3</i>		<i>6.2</i>	<i>0.0</i>	
<i>✓</i>	<i>4</i>		<i>3.1</i>	<i>0.0</i>	

THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

JECT: <i>PN - Former Metro Metals</i>	
ATION: <i>± 1' N of PA-C7</i>	DATE: <i>12/4/01</i>
ING No: <i>PA-C7-N1</i>	TOTAL No. OF SAMPLES: <i>4</i>

NATURE OF ALL

SIGNATURE AT SAMPLING

*T. Ryan*

ACCOMPLISHED

DATE *12/4/01* RECEIVED

(SIGN)

*T. Ryan*

TIME BY (SIGN)

ACCOMPLISHED

DATE RECEIVED

(SIGN)

TIME BY (SIGN)

ACCOMPLISHED

DATE RECEIVED

(SIGN)

TIME BY LAB

REMARKS:

*4 samples in 4 16 oz jars*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 1  
SURFACE ELEV. \_\_\_\_\_

PROJECT <b>2nd NAPOLitano SITE - BERTH 63</b>	NAME OF CONTRACTOR <b>CRAIG</b>	BORING NO. <b>BH-NSD</b>	
LOCATION <b>5' South from BH-NSC</b>	CONTRACT NO. <b>426-99-007</b>	DATE <b>8/27/99</b>	

CASON "O.D." "I.D."	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
INSTRUMENT # FALL	HAMMER	# FALL				
OPERATOR <b>S. Buens</b>						
DIRECTOR <b>M. Dudek</b>						

BORING DEPTH (FEET)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		Hand Auger	Full	-	Misc. FILL
5					Obstruction found AT ±2.6' Relocated Boring
10					
15					
20					
25					

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane

CONFIDENTIAL

PA000003780



**APPENDIX B**

**Table B-1  
Survey Data  
Boring and Monitoring Well Location and Elevations  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
PA-C6-S1	673493.03368	590899.38016		
PA-C6-S2	673489.03368	590899.38016		
PA-C6-S3	673484.03368	590899.38016		
PA-C6-S4	673474.03368	590899.38016		
PA-C6-S5	673454.03368	590899.38016		
PA-C6-S5A	673454.03368	590899.38016		
PA-C6-S6	673464.03368	590899.38016		
PA-C6-S7	673469.03368	590899.38016		
PA-C7	673132.08006	590627.12031	307.70	
PA-C7-W1	673132.08006	590626.12031		
PA-C7-E1	673132.08006	590628.12031		
PA-C7-N1	673133.08006	590627.12031		
PA-C7-S1	673131.08006	590627.12031		

Note: Horizontal survey data of borehole/well locations drilled by Port Authority personnel are presented in NAD 83 datum.  
Vertical survey data of borehole/well locations drilled by Port Authority personnel are presented in Port Authority datum which is 297.65 above mean sea level based on NGVD 29 datum.

**Table B-1**  
**Survey Data**  
**Boring and Monitoring Well Location and Elevations**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
BH-N1	673883.79667	590073.72762	306.68	-
BH-N1-W1	673883.79667	590072.72762		
BH-N1-E1	673883.79667	590074.72762		
BH-N1-N1	673884.79667	590073.72762		
BH-N1-S1	673882.79667	590073.72762		
MW-N2	674086.01241	590257.21356	307.69 307.39 307.69	RIM P.V.C. ASPHALT
MW-N5	673099.41927	590592.00169	307.21 306.94 307.10	RIM P.V.C. G.L.
BH-N5	673214.02411	590546.88200	307.10	-
BH-N6	673456.70000	590392.00000	307.80	-
BH-N7	673354.90000	590519.30000	308.30	-
MW-C1	673963.24423	590537.61748	305.53 305.37 305.50	RIM P.V.C. G.L.
MW-C2	673676.53592	590910.69377	307.17 306.80 307.20	RIM P.V.C. G.L.
MW-C3	673652.64794	590635.23255	308.35 308.12 308.30	RIM P.V.C. G.L.
MW-C4	673695.72387	590380.99591	307.11 306.72 307.10	RIM P.V.C. G.L.
MW-C5	673310.77792	590927.06172	307.51 307.42 307.5	RIM P.V.C. G.L.
MW-C5-W1	673310.77792	590926.06172		
MW-C5-E1	673310.77792	590928.06172		
MW-C5-N1	673311.77792	590927.06172		
MW-C5-S1'	673309.77792	590927.06172		
PA-C6	673494.03368	590899.38016	307.30	
PA-C6-W1	673494.03368	590898.38016		
PA-C6-W2	673494.03368	590894.38016		
PA-C6-W3	673494.03368	590889.38016		
PA-C6-E1	673494.03368	590900.38016		
PA-C6-E2	673494.03368	590904.38016		
PA-C6-E3	673494.03368	590909.38016		
PA-C6-E4	673494.03368	590919.38016		
PA-C6-E5	673494.03368	590939.38016		
PA-C6-E6	673494.03368	590929.38016		
PA-C6-E7	673494.03368	590949.38016		
PA-C6-E8	673494.03368	590924.38016		
PA-C6-E9	673494.03368	591009.38016		
PA-C6-E10	673494.03368	591049.38016		
PA-C6-E11	673494.03368	591089.38016		
PA-C6-N1	673495.03368	590899.38016		
PA-C6-N2	673495.03368	590899.38016		
PA-C6-N3	673495.03368	590899.38016		

(2)

**Table B-2**  
**Coordinate Data - Soil Boring Locations**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
SB-1	673301.28	589787.87	NA	*
SB-2	673314.09	589864.68	NA	*
SB-3	673241.51	589824.85	NA	*
SB-4	673400.89	589886.01	NA	*
SB-5A	673208.79	589893.13	NA	*
SB-5B	673548.46	589935.80	NA	*
SB-5C	673864.8	590026.84	NA	*
SB-5D	673847.72	590220.29	NA	*
SB-5E	673346.82	590117.87	NA	*
SB-5F	673184.6	590318.44	NA	*

Notes: \* Survey data of borehole locations drilled by Excel Environmental Resources, Inc. are presented in NAD 83 datum and are of proposed and not as built boring locations.

NA - Not Available

(3)

**ADDITIONAL SAMPLING REPORT**

**ADDENDUM NO. 3**

**to**

**EXHIBIT**

**to Lease No. L-PN-264**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

*[Signature]*  
\_\_\_\_\_  
For the Port Authority

Initialed:

*[Signature]*  
\_\_\_\_\_  
For the Lessee

**ADDITIONAL SAMPLING REPORT**

**ADDENDUM NO. 3**

**to**

**EXHIBIT I**

**to**

**Lease No. L-PN-264**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**June 2002**

**PORT NEWARK CONTAINER TERMINAL, LLC  
ADDITIONAL SAMPLING REPORT**

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## 1.0 INTRODUCTION

In September and October 2000 and April and May 2002, the Port Authority of New York and New Jersey (the "Port Authority") conducted supplemental soil and groundwater sampling at the premises under Port Authority Lease No. L-PN-264 between the Port Authority and Port Newark Container Terminal LLC ("PNCT"). The soil sampling was performed to further delineate soil exceedances detected during a baseline investigation conducted by PNCT and the supplemental groundwater sampling was performed to respond to comments received from the New Jersey Department of Environmental Protection ("NJDEP").

## 2.0 FIELD ACTIVITIES

The purpose of the supplemental soil investigation was to provide additional soil delineation to further establish current environmental conditions of subsurface soils. The purpose of the supplemental groundwater investigation was to provide additional water quality data for the area located upland of Berths 51 to 61 at Port Newark. Sampling locations were designated by the Port Authority. The area encompassing the terminal is approximately 154 acres. Figure 1 presents the Site Plan as provided by GEOD Corporation, a NJ licensed land surveyor.

The supplemental investigation activities included the drilling of 20 soil borings and the collection of 5 groundwater samples at locations shown in Figure 1. Table 2-1 provides a summary of the analytical methods performed. All investigative work conducted for the supplemental investigation program was performed in accordance with the NJDEP Field Sampling Procedures Manual, May 1992. Information collected during the investigation was recorded in a bound fieldbook and in conformance with the Port Authority's "Environmental Baseline Field Program, Port Newark, June 1999".

## 2.1 SOIL SAMPLING PROGRAM

The supplemental soil sampling program was conducted at the site on September 7 and 8, and October 2 and 3, 2000. Soil borings were advanced using a combination of hand auger and hollow stem auger ("HSA") drilling techniques. Hand augering was performed to advance the first 6 feet of each boring advanced deeper than 2 feet below ground surface ("bgs"). The HSA techniques were used to advance the remainder of the soil borings that were drilled to a final depth of 11.5 feet bgs. The soil borings that were completed at depths less than 11.5 bgs were completed exclusively by hand augering. Continuous samples were collected from borings advanced via HSA techniques by using 2 3/8-inch inside diameter carbon steel split-spoons with all samples collected from beneath the asphalt cover and subbase. A total of 20 soil samples were collected for laboratory analysis. Soil boring logs are included in Appendix A.



The following summarizes the soil samples collected from the borings:

<u>Sample ID</u>	<u>Boring</u>	<u>Sampling Depth</u>	<u>Sampling Date</u>
PO-BH02A-090800	BH-MW-2A <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02B-090800	BH-MW-2B <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02C-090800	BH-MW-2C <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02D-090800	BH-MW-2D <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02E-090800	BH-MW-2E <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH13A-090700	BH-MW-13A <sup>(2)</sup>	6.5-7 feet	09/07/00
PO-BH13B-090700	BH-MW-13B <sup>(2)</sup>	6.5-7 feet	09/07/00
PO-BH13C-090700	BH-MW-13C <sup>(2)</sup>	6.5-7 feet	09/07/00
PO-BH13D-100300	BH-MW-13D <sup>(2)</sup>	6.5-7 feet	10/03/00
PO-BH13E-100300	BH-MW-13E <sup>(2)</sup>	6.5-7 feet	10/03/00
PO-BH14A-090700	BH-MW-14A <sup>(2)</sup>	1.5-2 feet	09/07/00
PO-BH14B-090800	BH-MW-14B <sup>(2)</sup>	1.5-2 feet	09/08/00
PO-BH14C-090800	BH-MW-14C <sup>(2)</sup>	1.5-2 feet	09/08/00
PO-BH14D-090800	BH-MW-14D <sup>(2)</sup>	1.5-2 feet	09/08/00
PO-BH14E-100300	BH-MW-14E <sup>(2)</sup>	1.5-2 feet	10/03/00
PO-BH14F-100300	BH-MW-14F <sup>(2)</sup>	1.5-2 feet	10/03/00
PO-BH14G-100300	BH-MW-14G <sup>(2)</sup>	1.5-2 feet	10/03/00
PO-BH14H-100300	BH-MW-14H <sup>(2)</sup>	1.5-2 feet	10/03/00

<sup>(1)</sup> Indicates that the boring was advanced using a hand auger to 6 feet bgs and completed using HSA drilling techniques to final depth.

<sup>(2)</sup> Indicates that the boring was advanced using a hand auger to final depth.

Sample intervals for laboratory analysis in each boring were selected based on the delineation information needed at each area (i.e., horizontal or vertical). Actual sample depth intervals varied depending on several factors, as follows:

- The soil recovered for each sample needed to be sufficient to fill the required sample jars. At times, it was necessary to collect soil from more than a six-inch interval to fulfill this requirement.
- In instances where a confining layer was encountered before reaching the water table, a sample was collected directly above the confining layer thereby not compromising the layer by drilling through it.
- When elevated photoionization detector ("PID") readings or an odor not associated with natural organic material was detected while field screening split-spoon samples, these samples were also sent for analysis.

Soil sampling was conducted in accordance with the following procedure:

1. Extract the split-spoon from the borehole, open it and lay it on plastic. In the case of borings completed using a hand auger, extract the auger and transfer the auger contents to a decontaminated stainless-steel bowl.
2. Log the sample and perform headspace screening analysis using a PID.
3. Transfer the soil to a decontaminated stainless-steel bowl, if necessary, and homogenize using a decontaminated stainless-steel spoon.

4. Transfer homogenized soil to the laboratory supplied sample containers.
5. Label the sample and record sample information in the field book.
6. Place labeled sample in a cooler with ice.
7. Complete the chain of custody form and ship samples to the laboratory for analysis.

Sampling equipment was decontaminated according to the following procedure before use at each discrete sample location:

1. Wash the equipment with non-phosphate detergent and potable water.
2. Rinse with potable water.
3. Rinse with deionized water.
4. Allow equipment to air dry.
5. Wrap equipment in aluminum foil.

Soil samples were analyzed for the following parameters:

- Polynuclear Aromatic Hydrocarbons (PAHs);
- Polychlorinated Biphenyls (PCBs);
- Select Target Analyte List (TAL) Metals, specifically chromium, copper, lead, mercury, thallium and zinc; and,
- Percent Solids.

## 2.2 GROUNDWATER SAMPLING PROGRAM

The groundwater investigation program involved the collection of 5 groundwater samples from select existing monitoring wells at the terminal as follows:

<u>Sample ID</u>	<u>Monitoring Well</u>	<u>Sampling Date</u>
PNO-MW-14A-091900WG1	MW-14	09/19/00
PNO-MW-12SB13-091900WG1	MW-12	09/19/00
PO-MW05-042002WG01	MW-05	04/20/02
PO-MW11-042002WG01	MW-11	04/20/02
PO-MW14-042302WG01	MW-14	04/23/02
PNCT-MW11-053102	MW-11	05/31/02

Groundwater samples were collected via low-flow sampling techniques according to the following procedure:

1. Wearing the appropriate PPE, open the monitoring well and screen the headspace of the well using a PID to determine if VOCs are present.
2. Measure the static water level in the monitoring well from top of inner casing using an electronic water level meter. Minimize the disturbance to the water column.
3. Check for free product or sheen floating on water surface in the well.

4. Carefully lower the low-flow pump into the water column until the intake of the pump is in the middle of the saturated section of the screen. Minimize disturbance to the water column.
5. Purge the well using a low flow rate (<0.5 l/min) until indicator parameters (i.e., pH, conductivity, dissolved oxygen, etc.) have stabilized. Drawdown in the well should not exceed 0.3 foot.
6. Without stopping the pump, collect groundwater samples using same flow rates as established during purging.
7. Fill sample bottles directly from the pump discharge tubing. VOC sample vials will be filled first, then remaining sample bottles.
8. Label the samples and record sampling information in the field book.
9. Place labeled samples in a cooler with ice. A trip blank will be maintained in the cooler during each sampling day.
10. Complete the chain of custody form and ship samples to the laboratory for analysis.

The submersible pump used for groundwater sampling was decontaminated prior to use on each well according to the following procedure:

1. Manually wash the outside of the pump using non-phosphate detergent and potable water.
2. Rinse the outside of the pump using potable water.
3. Flush the pump with 20 gallons of potable water by pumping the water through the housing and tubing.
4. Rinse the exterior housing with distilled/deionized water.
5. Repeat this procedure between each use of the pump.
6. Collect the rinsate from the pump decontamination in drums for disposal.

Dedicated teflon-lined tubing was used for sampling each well.

MW-14 was purged and sampled using a polypropylene bailer since the pump control box malfunctioned. MW-14 was purged by carefully lowering the bailer into the well, and removing groundwater from the well. Water quality parameters including pH, turbidity, conductivity, temperature, dissolved oxygen and oxidation-reduction potential were measured during this process. Groundwater samples were collected for MW-14 after parameter stabilization by transferring water directly from the bailer into the sample bottles. This sampling technique is considered to yield accurate analytical results, similar to what might be obtained by sampling directly from a pump discharge. Groundwater samples were analyzed for metals, including antimony, arsenic, lead and thallium, by EPA Method 200.7.

### 3.0 RESULTS

#### 3.1 SOIL SAMPLING RESULTS

The analytical results for soil samples were compared to NJDEP's "Soil Cleanup Criteria (mg/kg)", dated 5/12/99 and available through the NJDEP's website (<http://www.state.nj.us/dep/srp/regs/guidance.htm>). The criteria on the list include the following:

- Residential Direct Contact;
- Non-Residential Direct Contact; and,
- Impact to Groundwater.

Twenty soil samples, plus appropriate QA/QC samples, were collected from twenty soil borings. Samples were submitted to Hampton-Clarke, Inc., Veritech Laboratories of Fairfield, New Jersey for analysis. The soil samples were analyzed for the following parameters:

- Polynuclear Aromatic Hydrocarbons (PAHs);
- Polychlorinated Biphenyls (PCBs);
- Select Target Analyte List (TAL) Metals, specifically chromium, copper, lead, mercury, thallium and zinc; and,
- Percent Solids.

A posting map depicting sample locations where sample concentrations exceed criteria is provided as Figure 1.

##### 3.1.1 Polynuclear Aromatic Hydrocarbons (PAHs)

The following soil samples were analyzed for selected polynuclear aromatic hydrocarbons (PAHs) by EPA SW-846 Method 8270:

PO-BH14A (1.5-2)  
PO-BH14B (1.5-2)  
PO-BH14C (1.5-2)  
PO-BH14D (1.5-2)  
PO-BH14E (1.5-2)  
PO-BH14F (1.5-2)  
PO-BH14G (1.5-2)  
PO-BH14H (1.5-2)

A summary of the PAHs detected in the soil samples is presented in Table 3-1.

The concentration of benzo(a)anthracene detected in the following samples exceeded the residential direct contact soil cleanup criterion (RDCSCC) of 0.9 mg/kg, the most stringent criterion for benzo(a)anthracene:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2
PO-BH14B (1.5-2)	3.7
PO-BH14C (1.5-2)	14
PO-BH14D (1.5-2)	4.4
PO-BH14E (1.5-2)	2
PO-BH14G (1.5-2)	0.91
PO-BH14H (1.5-2)	2.4

The concentration of benzo(b)fluoranthene detected in the following samples exceeded the RDCSCC of 0.9 mg/kg, the most stringent criterion for benzo(b)fluoranthene :

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2.9
PO-BH14B (1.5-2)	4
PO-BH14D (1.5-2)	5.7
PO-BH14E (1.5-2)	1.8
PO-BH14G (1.5-2)	1.1
PO-BH14H (1.5-2)	3

The concentration of benzo(k)fluoranthene detected in the following samples exceeded the RDCSCC of 0.9 mg/kg, the most stringent criterion for benzo(k)fluoranthene:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	1.5
PO-BH14B (1.5-2)	3.1
PO-BH14C (1.5-2)	30
PO-BH14D (1.5-2)	3.6
PO-BH14E (1.5-2)	1.1
PO-BH14H (1.5-2)	1.4

The concentration of benzo(a)pyrene detected in the following samples exceeded the RDCSCC and non-residential direct contact soil cleanup criterion (NRDCSCC), both 0.66 mg/kg and the most stringent criteria for benzo(a)pyrene:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	1.9
PO-BH14B (1.5-2)	3
PO-BH14C (1.5-2)	11

PO-BH14D (1.5-2)	3.8
PO-BH14E (1.5-2)	1.3
PO-BH14G (1.5-2)	0.81 J
PO-BH14H (1.5-2)	1.7

J indicates the concentration of the compound is estimated

### 3.1.2 Polychlorinated Biphenyls

The following soil samples were analyzed for polychlorinated biphenyls (PCBs) by EPA SW-846 Method 8082:

PO-BH14A (1.5-2)  
 PO-BH14B (1.5-2)  
 PO-BH14C (1.5-2)  
 PO-BH14D (1.5-2)  
 PO-BH14E (1.5-2)  
 PO-BH14F (1.5-2)  
 PO-BH14G (1.5-2)  
 PO-BH14H (1.5-2)

PCB Aroclors, including Aroclor 1242 and 1260, were detected in soil samples above the Soil Cleanup Criteria. Each of the individual aroclors was compared to the criteria for total PCBs.

The concentration of Aroclor 1242 detected in the following samples exceeded the RDCSCC of 0.49 mg/kg, the most stringent criterion for total PCBs:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2.3
PO-BH14B (1.5-2)	8.2
PO-BH14C (1.5-2)	4
PO-BH14D (1.5-2)	6.1
PO-BH14E (1.5-2)	2.2
PO-BH14F (1.5-2)	1.7
PO-BH14G (1.5-2)	0.96
PO-BH14H (1.5-2)	5.9

The concentration of Aroclor 1260 detected in the following samples exceeded the RDCSCC of 0.49 mg/kg, the most stringent criterion for total PCBs:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2
PO-BH14B (1.5-2)	6.2
PO-BH14C (1.5-2)	3.3

PO-BH14D (1.5-2)	4.9
PO-BH14E (1.5-2)	11
PO-BH14F (1.5-2)	4.4
PO-BH14G (1.5-2)	6.4
PO-BH14H (1.5-2)	6.5

### 3.1.3 TAL Metals

The following soil samples were analyzed for select metals including chromium, copper, lead, thallium and zinc by EPA SW-846 Method 6010 and Mercury by EPA SW-846 Method 7471A, as indicated:

<u>Sample ID</u>	<u>Analytes</u>
PO-BH02A-090800	Chromium, Thallium, Zinc
PO-BH02B-090800	Chromium, Thallium, Zinc
PO-BH02C-090800	Chromium, Thallium, Zinc
PO-BH02D-090800	Chromium, Thallium, Zinc
PO-BH02E-090800	Chromium, Thallium, Zinc
PO-BH13A-090700	Chromium
PO-BH13B-090700	Chromium
PO-BH13C-090700	Chromium
PO-BH13D-100300	Chromium
PO-BH13E-100300	Chromium
PO-BH14A (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14B (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14C (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14D (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14E (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14F (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14G (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14H (1.5-2)	Copper, Lead, Mercury, Zinc

The concentrations of chromium detected in soil were compared to the soil cleanup criteria for the trivalent form of chromium. The only criterion for trivalent chromium is the RDCSCC of 120,000 mg/kg. No soil samples exceeded the RDCSCC for chromium.

The concentration of copper detected in the following samples exceeded the residential RDCSCC and NRDCSCC, both 600 mg/kg and the most stringent criteria for copper:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14B (1.5-2)	3,500
PO-BH14D (1.5-2)	1,200
PO-BH14E (1.5-2)	720

The concentration of lead detected in the following samples exceeded the RDCSCC of 400 mg/kg, the most stringent criterion for lead:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	8,000
PO-BH14B (1.5-2)	2,800
PO-BH14C (1.5-2)	1,700
PO-BH14D (1.5-2)	2,500
PO-BH14E (1.5-2)	35,000
PO-BH14F (1.5-2)	2,900
PO-BH14G (1.5-2)	810
PO-BH14H (1.5-2)	2,500

The concentration of mercury detected in the following samples exceeded the RDCSCC of 14 mg/kg, the most stringent criterion for mercury:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14B (1.5-2)	38
PO-BH14C (1.5-2)	18
PO-BH14E (1.5-2)	19

The concentration of zinc detected in the following samples exceeded the RDCSCC and NRDCSCC, both 1,500 mg/kg and the most stringent criteria for zinc:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14B (1.5-2)	3,300
PO-BH14D (1.5-2)	2,100
PO-BH14F (1.5-2)	1,800
PO-BH14H (1.5-2)	10,000

### 3.2 GROUNDWATER SAMPLING RESULTS

The analytical results for groundwater samples were compared to NJDEP's "Groundwater Quality Standards N.J.A.C 7:9-6, Table 1 – Specific Ground Water Quality Criteria – IIA and Practical Quantitation Levels" (GWQS), available through the NJDEP website (<http://www.state.nj.us/dep/srp/regs/guidance.htm>). Detected concentrations of analytes in the groundwater were compared to the criteria provided in the GWQS Table 1 column entitled "Higher of PQLs and Ground Water Quality Criteria"

Six groundwater samples, including one duplicate, were collected from four monitoring wells including MW-05, MW-11, MW-12 and MW-14. MW-12 and MW-14 were sampled on September 19, 2000. MW-5 and MW-11 were sampled on April 20, 2002 and MW-14 was resampled on April 23, 2002. MW-11 was also sampled again on May



31, 2002. The groundwater samples were analyzed for metals, including antimony, arsenic, lead and thallium, by EPA Method 200.7.

Table 3-2 presents the analytical results for groundwater samples collected during September 2000, April 2002 and May 2002. At the completion of the groundwater sampling, no parameter exceeded the applicable NJDEP GWQS.

**FIGURES**

**TABLES**

TABLE 2-1  
 PORT NEWARK CONTAINER TERMINAL, LLC  
 SOIL AND GROUNDWATER ANALYTICAL PROTOCOLS

Parameter Name	Matrix	Container	Analytical Method	Preservatives	Maximum Holding Time
Metals	Water	(1) 500 ml Polyethylene bottle	USEPA 200.7	HNO <sub>3</sub> to pH<2; Cool to 4°C	6 months (Hg - 28 days)
Polynuclear Aromatic Hydrocarbons	Soil	(1) 16 oz. Glass jar	SW846 8270C	Cool to 4°C	7 days extract 40 days analyze
PCBs	Soil		SW846 8082		7 days extract 40 days analyze
Metals	Soil		SW846 6010B/7000		6 months (Hg - 28 days)
Total Solids	Soil		SM 2540G		28 days

Note:

All holding times listed are from time of sample collection.

TABLE 3-1  
 FORMER MAERSK-UNIVERSAL TERMINAL SITE  
 SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES  
 PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000

Contaminant	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	Sample ID: Lab ID:	Sampling Depth (ft bgs):	Analysis Method	Sample Date:	PO-BH02A		PO-BH02B		PO-BH02C		PO-BH02D		PO-BH02E		PO-BH13A		PO-BH13B		PO-BH13C		PO-BH13D		
								Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt
Metals																										
Chromium <sup>1</sup>	120,000	NC	NC	EPA 8010	MG/KG			46		500		390		380		570		600		380		610		240		
Copper	600	600	NC	EPA 8010	MG/KG																					
Lead	400	600	NC	EPA 8010	MG/KG																					
Mercury	14	270	NC	EPA 7471A	MG/KG																					
Thallium	2	2	NC	EPA 8010	MG/KG																					
Zinc	1,500	1,500	NC	EPA 8010	MG/KG			120		1,500		150		740		420										
Polychlorinated Biphenyls (PCB)																										
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG																					
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG																					
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG																					
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG																					
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG																					
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG																					
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG																					
Polynuclear Aromatic Hydrocarbons (PAHs)																										
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG																					
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG																					
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG																					
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG																					
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG																					
% Solids				SM 2540G	%			75		61		64		64		55		66		66		65		73		

Note:

- <sup>1</sup> Chromium -trivalent (III) Concentrations and Values
- Exceedance of Most Stringent Criteria
- NC or "-" No Criteria Exists
- U Not Detected above Method Detection Limit Shown in Result Column
- J Estimated Concentrations
- B Below Sample Quantitation Limit
- BLANK Indicate Not Analyzed
- ft bgs feet below ground surface
- \* - Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.
- Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."
- Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1, identified as BH-MW-02A, BH-MW-02B, etc...
- Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with Borings in Figure 1 identified as BH-MW-13 and BH-MW- 14

TABLE 3-1  
FORMER MAERSK-UNIVERSAL TERMINAL SITE  
SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES  
PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000

Contaminant	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	Sample ID: Lab ID: Sampling Depth (ft bgs): Analysis Method	Unit	PO-BH13E		PO-BH14A-		PO-BH14B-		PO-BH14C-		PO-BH14D-		PO-BH14E-		PO-BH14F-		PO-BH14G-	
						Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual
<b>Metals</b>																					
Chromium <sup>1</sup>	120,000	NC	NC	EPA 6010	MG/KG	270															
Copper	600	600	NC	EPA 6010	MG/KG		480			510									580		230
Lead	400	600	NC	EPA 6010	MG/KG		9.2												4.3		8.1
Mercury	14	270	NC	EPA 7471A	MG/KG									12							
Thallium	2	2	NC	EPA 6010	MG/KG																
Zinc	1,500	1,500	NC	EPA 6010	MG/KG		1,100			1,200					1,300						860
<b>Polychlorinated Biphenyls (PCB)</b>																					
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG																
<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b>																					
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG														0.69	J	
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG														0.43	J	J
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG					0.92	U								0.68	J	
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG																
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG														0.37	J	0.58 J
% Solids				SM 2540G	%	71	88	90	91	90	94	88	95								

Note:

- <sup>1</sup> Chromium -trivalent (III) Concentrations and Values
- Exceedance of Most Stringent Criteria
- NC or "-" No Criteria Exists
- U Not Detected above Method Detection Limit Shown in Result Column
- J Estimated Concentrations
- B Below Sample Quantitation Limit
- BLANK Indicate Not Analyzed
- ft bgs feet below ground surface
- \* - Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants. Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."
- Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1. Identified as BH-MW-02A, BH-MW-02B, etc...
- Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with Borings in Figure 1 identified as BH-MW-13 and BH-MW-14

TABLE 3-1  
 FORMER MAERSK-UNIVERSAL TERMINAL SITE  
 SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES  
 PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000

Contaminant	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	Sample ID: Lab ID: Sampling Depth (ft bgs): Analysis Method	Sample Date: Unit	PO-BH14H	
						Rslt	Qual
Metals							
Chromium <sup>1</sup>	120,000	NC	NC	EPA 6010	MG/KG		
Copper	600	600	NC	EPA 6010	MG/KG	520	
Lead	400	600	NC	EPA 6010	MG/KG	22,500	
Mercury	14	270	NC	EPA 7471A	MG/KG	13	
Thallium	2	2	NC	EPA 6010	MG/KG		
Zinc	1,500	1,500	NC	EPA 6010	MG/KG	2,000	
Polychlorinated Biphenyls (PCB)							
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG	2,500	
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG	2,500	
Polynuclear Aromatic Hydrocarbons (PAHs)							
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG	2,500	
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG	2,500	
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG	2,500	
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG		
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG	2,500	
% Solids				SM 2540G	%		88

Note:

<sup>1</sup> Chromium -trivalent (III) Concentrations and Values

Exceedance of Most Stringent Criteria

NC or "U" No Criteria Exists

U Not Detected above Method Detection Limit Shown in Result Column

J Estimated Concentrations

B Below Sample Quantitation Limit

BLANK Indicate Not Analyzed

ft bgs feet below ground surface

\* - Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1.

Identified as BH-MW-02A, BH-MW-02B, etc...


Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with

Borings in Figure 1 Identified as BH-MW-13 and BH-MW- 14

**TABLE 3-2  
FORMER MAERSK-UNIVERSAL TERMINAL SITE  
SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN GROUNDWATER SAMPLES  
PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER 2000 and APRIL AND MAY 2002**

Contaminant	New Jersey Groundwater Quality Standards	Sample ID: Lab ID: Sample Date: Unit	PNO-MW-14A- 091900WG1 AB15185 09/19/2000		PNO-MW-12SB13 091900WG1 AB15186 09/19/2000		PO-MW05- 042002WG01 AB56164 04/20/2002		PO-MW11- 042002WG01 AB56165 04/20/2002		PO-MW14- 042302WG01 AB56228 04/23/2002		PNCT-MW11- 053102 P2836-01 S 05/31/2002	
			Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual
<b>Metals</b>														
Antimony	20	UG/L			3.3	U								
Arsenic	8	UG/L	3.6	U	3.6	U	4	U				5.0	U	3.4 B
Lead	10	UG/L	5.1											
Thallium	10	UG/L			3.1	U								

**Note:**

-  Exceedance of Most Stringent Criteria
  - B Below contract required detection limit/above instrument detection limit
  - U Not Detected above Method Detection Limit Shown in Result Column
  - BLANK Indicate Not Analyzed
- Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."



**APPENDIX A**

**THE PORT AUTHORITY OF NY & NJ**  
Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT <b>PN - Pda Pairs Fsc</b>			NAME OF CONTRACTOR <b>Craig Drilling</b>			BORING NO. <b>BH-MU-2A</b>			SHEET <b>1</b> OF <b>3</b>		
LOCATION <b>5' NW of MU-2</b>			CONTRACT NO. <b>476-99-00</b>			DATE <b>9/8/00</b>			SURFACE ELEV.		
SPOON <b>3</b>		CASING SIZE <b>3" O.D. 2 3/8" I.D.</b>		HOLE TYPE <b>Bucks</b>		HOLE TYPE <b>1</b>		GROUND WATER LEVEL			
MMER <b>140</b>		HAMMER <b>S. Fall 30</b>		# FALL		Date <b>9/8/00</b>		Time <b>12:30</b>		Depth <b>6-11'</b>	
DRILLER <b>P. Pennell</b>		INSPECTOR <b>D. Howe</b>								Remarks <b>Water encountered between 6-11'</b>	

CASING DEPTH (O.W.S./FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
					<del>Hand Auger</del> <del>Clayed stone</del>	<del>0.0</del> <del>0.15</del> <del>1.0</del>
				1	Fill - M-F reddish brown sand, Tr Silty, Tr Gravel	
				2	Same	2.0
				3	Fill - Dk Gray organic silty clay, Little M-F sand, Tr Gravel	
	5				Same	
					No Sampling 6-11'	
	10	2	18"	4	2 Attempts to Recover Sample Fill - RB Brown silty clay & Dk Gray organic silty clay	10.0
					Bottom of Boring	
	15				All Samples checked with PID Meter Sample #4 11-11.5' saved for Toxicology Remaining Samples discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**THE PORT AUTHORITY OF N.Y. & N.J.**  
**ENGINEERING DEPARTMENT**  
**MATERIALS ENGINEERING DIVISION**  
**PID READINGS**

Sheet 2 of 3

PROJECT: PN- PJO Peris Fac	DATE: 9/8/00
DRING No. BM- MW-2A	PID Model: P114 PDE
FIELD READINGS BY: D. H. ...	

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1		0.0		
↓	2A		0.0		
	2B		0.0		
↓	3		0.0		
↓	4		0.0		

**THE PORT AUTHORITY OF N.Y. & N.J.**  
 ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PN - Pto Ports Fr</i>	
LOCATION: <i>75' Nw of MW-2</i>	DATE: <i>9/8/00</i>
BORING No: <i>BJ1-MW-2A</i>	TOTAL No. OF SAMPLES: <i>1 Soil</i>

SIGNATURE OF ALL PRESENT AT SAMPLING

RELINQUISHED	DATE	RECEIVED
	<i>9/8/00</i>	
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:

*1 Soil Sample in 1-1/2 oz jar*

THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT PN - Pto Ports Fac	NAME OF CONTRACTOR Crazy Drilling	BORING NO. BH-MW-2B	SURFACE ELEV.
LOCATION 15' NE of MW-2	CONTRACT NO. 426-99-006	DATE 9/8/00	

SPOON 3 HAMMER 140 # FALL 30	CASING SIZE 4 HAMMER # FALL	HOLE TYPE 4	GROUND WATER LEVEL	
			Date 9/8/00	Time
			Depth	Remarks No water encountered
DRILLER P Pennell				
INSPECTOR D Howe				

CASING FOWS/FT.	DEPTH	SPOON BLOWS/5'	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	O.C. G.T. L.O.
	0				Hand dug Gibson 9' Drive	
land Auger		Hand Auger	Full	1	Fill - M-F. Reddish Brown Sand, Tr Silt, Tr Gravel	
				2	Fill - M-F Brown Sand, Tr Silt, Tr Gravel	
	5			3	Same	
Yellow Silty Auger					No Sample 6'-11'	
	10					
		1	6'	4	Black & Grey organic silty clay, Tr Black Peat	11.0 11.5
					Re James' Bore's	
	15				All Samples checked with PIP Meter 5 <sup>th</sup> 4 11'-11.5' saved for testing Remainder Samples Discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**THE PORT AUTHORITY OF N.Y. & N.J.**  
**ENGINEERING DEPARTMENT**  
**MATERIALS ENGINEERING DIVISION**  
**PID READINGS**

Sheet 2 of 3

PROJECT: PN-PHO Parts Fac  
 DRING No. B1-MW-2B DATE: 9/8/00  
 FIELD READINGS BY: D. Moore PID Model: MINI RAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
ATM	1		0.0		
↓	2		0.0		
↓	3		0.0		
↓	4		0.0		

THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- PJO PRTS Fac  
LOCATION: 25' NE of MW-2 DATE: 9/8/00  
BORING No: BX-MW-2B TOTAL No. OF SAMPLES: 1 Seal

SIGNATURE OF ALL PRESENT AT SAMPLING

RELINQUISHED: [Signature] DATE 9/8/00 RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY LAB

REMARKS:  
1 Seal Sample for 1-16oz fac

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Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

PROJECT PN - P&O Ports Fac		NAME OF CONTRACTOR Craig Drilling		BORING NO. BN-MU-2C	SHEET 1 OF 3
LOCATION 25' South of MU-2		CONTRACT NO. 476-99-006		DATE 9/8/00	
SPHOON 3	CASING SIZE 3" O.D. 2 3/4" I.D.	HOLE TYPE Augers	GROUND WATER LEVEL		
HAMMER 1 1/2 FALL 30	HAMMER 1 FALL		Date 9/8/00	Time 1:40	Depth Dry
DRILLER P Pennell		Remarks No. water encountered			
SPECTOR D Moore					

CASING DEPTH (OWS/FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	CG
	0				Hand dug crushed stone	0.0
		Hand Dug	Full	1	Fill - M-P Brown Sand, Tr Silt, Tr Gravel	1.5
				2	Fill - M-F Dk Brown Sand, Little Gray argill. silty clay	
	5			3	Same	
					2 BT samples for recovery sample	10.0
	10	1-1	7"	4	Black & Gray argill. silty clay, Tr West	11.5
					Bottom of boring	
	15					
					All samples checked with PID Meter, # 4 11-11.5 saved for testing Remainder samples discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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**PID READINGS**

Sheet 2 of 3

PROJECT: PN- PJO Ports, Fac  
 DRING No. BH- MW-2C DATE: 9/8/00  
 FIELD READINGS BY: D. Hove PID Model: Mini RBG

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1.		0.0		
↓	2		0.0		
↓	3		0.0		
↓	4		0.0		

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - Pdc Ports Fac	
LOCATION: #5' South of MW-2	DATE: 9/1/00
BORING No: B01-MW-2C	TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED	DATE 9/1/00	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:

1 Soil Sample in 1-16oz jar

**THE PORT AUTHORITY OF NY & NJ**

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Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <b>PN- P+O Paris Fec</b>		NAME OF CONTRACTOR <b>Craig Drilling</b>		BORING NO. <b>BH-MU-2D</b>	SHEET <b>1</b> OF <b>3</b>
LOCATION <b>225' South of MU-2C</b>		CONTRACT NO. <b>426-99-006</b>		SURFACE ELEV. <b>10/2/00</b>	
SPOON <b>3</b>	CASING SIZE <b>3 1/2"</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL		
HAMMER <b>140 # FALL 30</b>	HAMMER <b>1 FALL</b>		Date	Time	Depth
DRILLER <b>P. Powell</b>			<b>10/2</b>	<b>12<sup>30</sup> p</b>	<b>4.5'</b>
SPECTOR <b>D. Howe</b>			Remarks <b>while Hand Augering</b>		
CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<b>Asphalt checked stone</b>
<b>land DUGER</b>		<b>Hand Duger</b>	<b>Fur</b>		<b>Fill - M-F Brown Sand Tr. Silt Tr. Gravel</b>
	5				<b>Fill - PE Gray clay silt &amp; F Sand Tr. Concrete Tr. Gravel</b>
<b>Willow Stem Dugers</b>					
	10	<b>2-2</b>	<b>18"</b>	<b>1</b>	<b>Black &amp; Brown clay silt, Little Gray organic silt Tr. Black Part</b>
	15				<b>Bo Tom A. Berling</b>
	20				<b>All Soil checked with Pic Meter, 5' - 11' - 11.5' saved for testing, Remaining Soil discarded</b>
	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

Sheet 2 of 3

PROJECT: PN- PDC Ports Fac

BORING No. BH- MW- 2D DATE: 10/2/00

FIELD READINGS BY: D. Mena PID Model: Mini PBE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1-2.5		0.0		
↓	2.5-4		0.0		
PM	4-6		0.0		
↓	1		0.0		


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ENGINEERING DEPARTMENT  
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CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN-070 Potts Fec  
LOCATION: ~~1075'~~ South of BX-MW-2C DATE: 10/2/00  
BORING No: BX-MW-2D TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED  DATE 10/2/00 RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY LAB

REMARKS:  
1 Soil Sample to 1-16oz jar

THE PORT AUTHORITY OF NY & NJ

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Materials Engineering Section

BORING REPORT

PROJECT PN- PJC Port's Fic	NAME OF CONTRACTOR Craig Drilling	BORING NO. BH-MW-2E	SHEET 1
LOCATION E 25' NE of BH-MW-2B	CONTRACT NO. 426-99-006	DATE 10/2	SURFACE EL

SPHOON 3	O.D. 2 3/8	I.D.	CASING SIZE Bugs	HOLE TYPE 1	GROUND WATER LEVEL			
HAMMER 14C	FALL		HAMMER	FALL	Date	Time	Depth	Remarks
DRILLER P Pannofy					10/26	2:30	6.5	open hole of Dr Fluorot
SPECTOR D Howe								

CASING FOWS/FT.	DEPTH	SPHOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				Start Crushed Stone
Hand Auger			FV		
	5				Fill - M-F Brown Sand, Jv Silt, Jv Gravel
Yellow SAND Auger					
	10	1-2-2	18'	1	Blue & Gray organic silt/clay, F F Sand
					Bottom of Boring
	15				BH Seal checked with PID Meter S <sup>1</sup> 11-11.5' saved for Testing Permanency Soil Ascertained
	20				
	25				

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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PID READINGS

Sheet 2 of 3

PROJECT: PN - Jdc Ports Fac	DATE: 10/2/00
ORING No. B11-MW-2E	PID Model: MINI PAE
FIELD READINGS BY: D Howe	


TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1-2.5'		0.0		
↓	2.5-4'		0.0		
	4-6'		0.0		
↓	1		0.2		

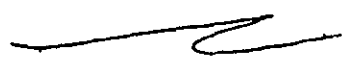
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CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- Pdo Pits Fe  
LOCATION: #25 1 NE of BX-MW-2B DATE: 10/2/00  
BORING No: BX-MW-2E TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED  DATE 10/2/00 RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY LAB

REMARKS:  
1 Soil Sample In 1-Hour Jan



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BORING REPORT

PROJECT PN- Pto Ports Fr	NAME OF CONTRACTOR Craig Drilling	BORING NO. BH-MU-13A	SHEET 1 OF 3
LOCATION 5' NW of MU-13	CONTRACT NO. 426-99-00	DATE 9/7/00	SURFACE ELEV.

SPHOON Hand Auger	CASING SIZE	HOLE TYPE 1	GROUND WATER LEVEL			
HAMMER	HAMMER		Date	Time	Depth	Remarks
# FALL	# FALL		9/7/00	11:30	Dry	
DRILLER P. Pennock						
SPECTOR D. Howe						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Baseline Crushed Stone	0.0 0.5 1.0
Hand Auger		Hand Auger	Full	1	Fill-M-F Sand, Tr. Silty, Tr. Gravel	3.0
	5			2	Fill-M-F DK Gray Sand, Little Organic Silty clay	5.0
	7			3	Fill-DK Gray organic silty clay & some F Sand	7.0
					Bottom of Boring	
	10					
	15					
	20					
	25					

All Samples checked with P10 Meter  
 SH-3 6.5'-7' Sued for Testing  
 Remaining Samples Discarded

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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PID READINGS

Sheet 2 of 3

PROJECT: PN - Pto Ports Fee  
BORING No. BH-MW-13A DATE: 9/7/00  
FIELD READINGS BY: D'Hon PID Model: Mini PDE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>PM</u>	<u>1</u>		<u>0.0</u>		
	<u>2</u>		<u>0.0</u>		
	<u>3</u>		<u>0.0</u>		

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CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PH-PJO PORTS FAC*

LOCATION: *#5 NW of MW-B* DATE: *9/7/00*

BORING No: *BH-MW-13A* TOTAL No. OF SAMPLES: *1 Soil*

SIGNATURE OF ALL

PRESENT AT SAMPLING 

RELINQUISHED 

DATE *9/7/00*

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*1 Soil Sample for 1-kg for*

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**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT PN- P&O Ports Fac	NAME OF CONTRACTOR Craig Drilling	BORING NO. MU-13B	SHEET 1 OF 3
LOCATION 5' NE of MU-13	CONTRACT NO. 426-99-006	DATE 9/7/00	

SPOON Hand Auger I.D.	CASING SIZE	HOLE TYPE 4	GROUND WATER LEVEL			
DRUMMER # FALL	HAMMER # FALL		Date 9/7	Time 1:15 P	Depth Dry	Remarks
OPERATOR P. Parnell						
INSPECTOR D. House						

ASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Asphalt crushed stone	0.0 0.5 1.0
and Auger		Hand Auger	Full	1	Fill- M-F Brown Sand, T.S.U., T. Gravel	3.0
	5			2	Misc Fill- Sand, organic silty clay, Gravel, wood, Metal, etc	
				3	Fill- DK Gray organic silty clay, Little F Sand	7.0
					Bottom of Boring	
	10					
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 PID READINGS

Sheet 2 of 3

PROJECT: PN- Pto Parts Fac

BORING No. BM-XW-13B

DATE: 9/7/00

FIELD READINGS BY: D. Horro

PID Model: Mini PPA

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1.		0.0		
PM	2		0.0		
↓	3		0.0		

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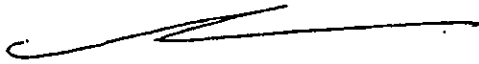
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CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - Pdo Potts Fc	
LOCATION: ±5' NE of MW-13	DATE: 9/7/00
BORING No: BH-MW-13B	TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING



RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:

1 Soil Sample for 1-1003 Jan

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Materials Engineering Section

**BORING REPORT**

PROJECT <i>PN- Pto Ports Fac</i>		NAME OF CONTRACTOR <i>Craig Drilling</i>		BORING NO. <i>BM-MU-13C</i>	SHEET   OF   <i>3</i>
LOCATION <i>± 5' South of MU-13</i>		CONTRACT NO. <i>426-99-006</i>		DATE <i>9/7/00</i>	
SPOON <i>Mand. Auger</i>	CASING SIZE	HOLE TYPE <i>4</i>	GROUND WATER LEVEL		
HAMMER	HAMMER		Date	Time	Depth
# FALL	# FALL		<i>9/7</i>	<i>2:50</i>	<i>Dry</i>
DRILLER <i>P. Pennell</i>			REMARKS		
INSPECTOR <i>D. Moore</i>					
CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<i>Robert Cashed Stone</i>
<i>land Auger</i>		<i>Mand Auger</i>	<i>FULL</i>	<i>1</i>	<i>Fill - M-F Brown Sand Tr Silty, Tr Gravel</i>
	5			<i>2</i>	<i>Misc Fill - Sand, organic silty clay, Gravel, Wood, ETC</i>
				<i>3</i>	<i>Fill - DE Gray organic silty clay, Tr RR clay, Silty Tr Fines Sand</i>
	10				<i>BOTTOM of BORING</i>
	15				<i>All Samples checked with PID Meter S# 3 at 7' Spaced for Disting' All Remaining Samples Discarded</i>
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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**ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS**

Sheet 2 of 3

PROJECT: <u>PN- pto Ports Fac</u>	
BORING No. <u>BY MW-13C</u>	DATE: <u>9/7/00</u>
FIELD READINGS BY: <u>D Howe</u>	PID Model: <u>Mini RAE</u>

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1		0.0		
↓	2		0.0		
↓	3		0.0		



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- Pto Ports Fee

LOCATION: ± 5' South of MW-13

DATE: 9/7/00

BORING No: BH-MW-13C

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/7/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample In 1-16 oz jar

**THE PORT AUTHORITY OF NY & NJ**

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**BORING REPORT**

SHEET 1 OF 3

PROJECT <b>PN- P&amp;O Port's Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-MU-13D</b>	SURFACE ELEV.
LOCATION <b>25' South of BH-MU-13C</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>10/3/00</b>	

SP. NO. <b>3</b>	CASING SIZE <b>3" O.D. 2 3/8" I.D.</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
HAMMER <b>140 # FALL 30</b>	HAMMER	# FALL	Date	Time	Depth	Remarks
<b>P. Pennell</b>			<b>10/3/00</b>	<b>8:35 AM</b>	<b>6.5</b>	<b>S#1</b>
INSPECTOR <b>D. Howe</b>						

CASING DEPTH (FEET)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0					Result of Clashed Stem
Hand Auger		Hand Auger	Full		Fill - M-E Brown Sand, Dr. Silt, Tr. Gravel Misc Fill - Pip Rapp, Silt, Sand, Gravel, ETC
5					Tr. F. Black Sand 6.0
11-13		11-13	Lo <sup>4</sup>	1	Fill - Red Brown clayey Silt, Some black & gray organic silt/clay (C)
					Bottom of Boring
15					All Soil checked with P.D. Meter, Sample #1 6.5-7' Saved For Testing Remaining Soil Discarded
20					
25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U - undisturbed; A - auger; OER - open end rod; V - vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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MATERIALS ENGINEERING DIVISION  
PID READINGS

PROJECT: *PN- Pto Ports Fac*  
DRING No. *BH-MU-13D* DATE: *10/3/02*  
FIELD READINGS BY: *D. Hous* PID Model: *Mini PDS*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>BM</i>	<i>1-2.5'</i>		<i>0.0</i>		
<i> </i>	<i>2.5'-4'</i>		<i>0.0</i>		
<i> </i>	<i>4-6'</i>		<i>0.0</i>		
<i>√</i>	<i>1</i>		<i>0.0</i>		

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MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN Pto Ports Fac*

LOCATION: *#25 South of Bx-MW-13C*

DATE: *10/3/00*

BORING No: *BX-MW-13D*

TOTAL No. OF SAMPLES: *1 Soil*

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE *10/3/00*

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*1 Soil Sample In A 1-16g pic*

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Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <b>PN- P&amp;O Ports Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BX-MU-13E</b>	SURFACE ELEV.
LOCATION <b>E 25' NW of BX-MU-13A</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>10/1/00</b>	

SPOON <b>3</b>	CASING SIZE <b>3" O.D. 2 3/8" I.D.</b>	HOLE TYPE <b>4</b>	GROUND WATER LEVEL			
NUMBER <b>140</b>	HAMMER <b>Safety</b>	FALL <b>FALL</b>	Date <b>10/1/00</b>	Time	Depth <b>DM</b>	Remarks
OPERATOR <b>P Powell</b>						
INSPECTOR <b>D Howe</b>						

CASING DEVS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	C.O
					<b>Asphalt Crisolite Stone</b>	<b>0.0 0.3 1.0</b>
		<b>Hand Auger</b>	<b>Full</b>		<b>Fill - M-F Brown Sand, Tr SILT, Tr Gravel</b>	
	<b>5</b>				<b>Misc Fill Pip, Red Brown Clay, SILT, Blakst Gray organic SILT, Clay, F Ok Gray Sand</b>	<b>6.0</b>
		<b>10-10</b>	<b>11"</b>	<b>1</b>	<b>Fill - Black &amp; Gray organic SILT, Clay, Some PB clay SILT</b>	<b>7.0</b>
					<b>Bottom of Boring</b>	
	<b>10</b>					
					<b>All Soil checked with PID Meter</b>	
					<b>Sample # 1 6.5-20' Sand for Testing, Remaining Soil discarded</b>	
	<b>15</b>					
	<b>20</b>					
	<b>25</b>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF N.Y. & N.J.  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: PIV P&U Ponds Fac  
BORING No. BH-MW-13E DATE: 10/3/00  
FIELD READINGS BY: DHowe PID Model: MWR-PA5

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>AM</u>	<u>1.0'-2.5'</u>		<u>0.0</u>		
<u>↓</u>	<u>2.5'-4'</u>		<u>0.0</u>		
<u>↓</u>	<u>4'-6'</u>		<u>1.2</u>		
<u>↓</u>	<u>1</u>		<u>0.9</u>		

THE PORT AUTHORITY OF N.Y. & N.J.

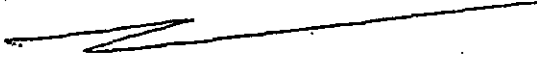
ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 CHAIN OF CUSTODY RECORD


Sheet 3 of 3

PROJECT: PN- Pda Ports Fac

LOCATION: #25 N W BAY BH-MW-130 DATE: 10/3/00

BORING No: BH-MW-13E TOTAL No. OF SAMPLES: 1 Soils

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED BY (SIGN)  DATE 10/3/00 TIME RECEIVED BY (SIGN)

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY (SIGN)

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY LAB

REMARKS:  
1 Soil sample in 1-bag on fac

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT <i>PN- PJO Potts Fac</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BH-MW-14A</i>	
LOCATION <i>23' S of MW-14</i>		CONTRACT NO. <i>426-99-006</i>	DATE <i>9/7/00</i>

SP. NO. <i>12nd</i>	CASING SIZE <i>10.0" Auger</i>	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
METHOD <i>1 FALL</i>	HAMMER <i>1 FALL</i>		Date	Time	Depth	Remarks
			<i>9/7/00</i>	<i>3:00</i>	<i>Dry</i>	
OPERATOR <i>P. Pennell</i>						
INSPECTOR <i>D. Howe</i>						

CASING DEPTH (FT.)	DEPTH	SPOON BLOWS/6"	RE: COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<i>Asphalt Choked Stone</i>
			<i>Full</i>	<i>1</i>	<i>Misc Fill - Choking, Sand, Gravel, Silt, Brick, Wood Etc</i>
					<i>Bottom of Boring</i>
	5				
	10				<i>All samples checked with PID Meter Silt 1.5-2' Squid for Testing Remaining Sample Discarded.</i>
	15				
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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 ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 PID READINGS

Sheet 2 of 3

PROJECT: PN-P&O Port B Fae	
WORKING No. BH-MW-14A	DATE: 9/7/00
FIELD READINGS BY: D. Now	PID Model: Mini PDB

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
PM	1		O.C		

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - Pdo Ports Fgc

LOCATION: # 2 3' South of MW-17 DATE: 9/7/00

BORING No: BX-MW-17A TOTAL No. OF SAMPLES: 1

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/7/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in H1603 jar

THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

PROJECT <b>PN- Pto Parts Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-MW-14B</b>	SHEET <b>1</b> OF <b>3</b>
LOCATION <b>E 3 west of MW-14</b>	CONTRACT NO. <b>486-99-006</b>	DATE <b>9/8/00</b>	SURFACE ELEV.

SPOON <b>Hand O.D. Auger</b>	CASING SIZE	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
HAMMER <b>HAMMER</b>	# FALL	# FALL	Date <b>9/8/00</b>	Time	Depth <b>Dry</b>	Remarks
DRILLER <b>P Ponnell</b>						
SPECTOR <b>D Howe</b>						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Asphalt Gravel Stone	0.0 0.5 1.0
		Hand Auger	Full	1	Misc Fill - Gravel, Sand, concrete, Silt, mts, etc	2.0
					Bottom of Boring	
	5					
	10				Sample checked with PID Meter 5' 1.5-2' saved for testing Remaining Sample Discarded	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc:

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 ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 PID READINGS

Sheet 2 of 3

PROJECT: PN P&O Ports Fac	
DRIVING No. BH-MW-14B	DATE: 9/8/00
FIELD READINGS BY: D/Lowe	PID Model: Mini RDE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
AM	1		0.0		

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - Pdo Ports Fac

LOCATION: ± 3' west of NU-14 DATE: 7/8/00

BORING No: BN-NU-14B TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL  
PRESENT AT SAMPLING 

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:  
1 Soil Sample in 1-bag fac

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <i>PN- PJO Ports Fac</i>		NAME OF CONTRACTOR <i>Craig Drilling</i>		BORING NO. <i>BN-MW-14C</i>	SHEET OF <i>3</i>
LOCATION <i>A 3. East of MW-14</i>		CONTRACT NO. <i>426-99-006</i>		DATE <i>9/8/00</i>	SURFACE ELEV.
SPHOON <i>Hand - O.D. Auger - I.D.</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL		
HAMMER <i># FALL</i>	HAMMER	<i># FALL</i>	Date <i>9/8/00</i>	Time	Depth <i>Dry</i>
DRILLER <i>P. Pennell</i>		REMARKS			
INSPECTOR <i>D. Howe</i>					
CASING DEPTHS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<i>Asphalt crushed stone</i>
		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Misc Fill - Sand, Gravel, Organic, Concrete, ETC</i>
					<i>Bottom of Boring</i>
	5				
	10				<i>Sample checked with PID Meter Sample #1 1.5-2' saved for testing Remaining sample discarded</i>
	15				
	20				
	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

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 ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 PID READINGS

Sheet 2 of 3

PROJECT: PN- 020 Ports, Fee

DRIING No. BH MW-14C

DATE: 9/8/00

FIELD READINGS BY: O'Howe

PID Model: MINI RBE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
0-IX	1		0.0		

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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- Pto Parts Enc

LOCATION: #3' East of MW-14

DATE: 9/8/00

BORING No: BH-MW-14 C

TOTAL No. OF SAMPLES: 1 Seal

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Seal Sample In 1-16oz jar



547  
70

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 Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
 SURFACE ELEV.   
 CONTRACT NO. 406-99-006  
 DATE 9/8/00

PROJECT: PN - Ptd Ports Fac  
 LOCATION: 3' North of MW-14

NAME OF CONTRACTOR: Craig Drilling

BORING NO.: BHT-MW-14D

SPERM: Hand D. Auger I.D.  
 CASING SIZE:   
 HOLE TYPE:   
 DRILLER: P. Powell  
 SUPERVISOR: D. Moore

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
9/8		Dry	

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6'	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	C. or O. or T. or V. or
					Asph. D Crushed Glass	
		Hand Auger	Full	1	Misc Fill - Sand, Silt, Gravel, Wood, Metal, etc	2.0
					Bottom of Boring	
	5					
	10				Sample checked with PLD Meter, Sample #1 1.5-2' Sand for Testing, Remaining Sample Discarded	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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**MATERIALS ENGINEERING DIVISION**  
**CHAIN OF CUSTODY RECORD**

Sheet 3 of 7

PROJECT: <u>PN-Port Posts Fac</u>	
LOCATION: <u>± 3' North of MW-14</u>	DATE: <u>9/8/00</u>
BORING No: <u>BH-MW-14D</u>	TOTAL No. OF SAMPLES: <u>1 Seal</u>

SIGNATURE OF ALL PRESENT AT SAMPLING

RELINQUISHED	DATE <u>9/8/00</u>	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:

1 Seal Sample in 1-lb bag for

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT <i>PN - Pto Ports Fac</i>		NAME OF CONTRACTOR <i>Craig Drilling</i>		BORING NO. <i>BH-MW-14E</i>	SHEET <i>1</i> OF <i>3</i>
LOCATION <i>25' West of BH-MW-14B</i>		CONTRACT NO. <i>426 99-006</i>		DATE <i>10/3/00</i>	
SPOON <i>and O.D. Auger I.D.</i>	CASING SIZE	HOLE TYPE <i>↓</i>	GROUND WATER LEVEL		
MMER	HAMMER		Date	Time	Depth
<i># FALL</i>	<i># FALL</i>		<i>10/3</i>	<i>10<sup>00</sup></i>	<i>Dry</i>
DRILLER <i>P Penwell</i>			REMARKS		
INSPECTOR <i>D'Anna</i>					

CASING DEPTH FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	<i>0</i>				<i>Depth to Crushed Stone</i>
		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Misc Fill - Gravel, Crystals, Sand, Silt, Mud, ETC</i>
					<i>Bi-Dermat Borings</i>
	<i>5</i>				<i>SP checked with 110 MATV</i>
					<i>1.5' - 2.0' Sawed for Test</i>
					<i>Remaining Sample Discarded</i>
	<i>10</i>				
	<i>15</i>				
	<i>20</i>				
	<i>25</i>				

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE UNIVERSITY OF MICHIGAN  
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

PROJECT: PN- PJO Port, Fac  
CORING No. BH-MU-14E DATE: 12/3/00  
FIELD READINGS BY: D. Moore PID Model: MU-PDG

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<u>AM</u>	<u>1</u>		<u>O.C</u>		

THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PN-020 Potts Fec</i>	
LOCATION: <i>#25' west of BA-MW-14B</i>	DATE: <i>10/7/00</i>
BORING No: <i>BA-MW-13E</i>	TOTAL No. OF SAMPLES: <i>1 Soil</i>

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED	<i>[Signature]</i>	DATE <i>10/7/00</i>	RECEIVED
BY (SIGN)		TIME	BY (SIGN)
RELINQUISHED		DATE	RECEIVED
BY (SIGN)		TIME	BY (SIGN)
RELINQUISHED		DATE	RECEIVED
BY (SIGN)		TIME	BY LAB

REMARKS:

*1 Soil sample in 1-lb bag for*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <i>PN Pdo Ports Fac</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BH-MW-14F</i>	SURFACE ELEV.
LOCATION <i>E 25' South of BH-MW-14A</i>	CONTRACT NO. <i>726-99-006</i>	DATE <i>10/3/00</i>	

SPOON <i>Hand - O.D. Auger - I.D.</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
HAMMER <i>1 FALL</i>	HAMMER	<i>1 FALL</i>	Date	Time	Depth	Remarks
DRILLER <i>P. Pennelli</i>			<i>10/3</i>	<i>11~</i>	<i>Dry</i>	
SPECTOR <i>Offshore</i>						

CASING DEPT. (O.W.S./FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
					<i>Asphalt</i>	<i>0.0</i>
					<i>Crushed Stone</i>	<i>0.3</i>
		<i>Hand Auger</i>	<i>Fully</i>	<i>1</i>	<i>Misc Fill - Crushed Sand Gravel, Brick, Concrete, ETC</i>	<i>1.0</i>
					<i>Bottom of Boring</i>	<i>2.0</i>
	<i>5</i>				<i>SB-1 checked with PID Meter</i>	
					<i>1.5-2.0' Sounded for Test Log</i>	
	<i>10</i>				<i>Remainder Sample Discarded</i>	
	<i>15</i>					
	<i>20</i>					
	<i>25</i>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
 MATERIALS ENGINEERING DIVISION  
 CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- PDC Ponds Fac  
 LOCATION: ±25' South of B7 NW-14A DATE: 10/3/00  
 BORING No: B7-NW-14F TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED	DATE 10/3/00	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:

1 Soil Sample in 1-bag fac

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <i>PN - Pto Parts Fac</i>		NAME OF CONTRACTOR <i>Craig Drilling</i>		BORING NO. <i>BH-MW-14G</i>	SHEET ( OF )	
LOCATION <i>= 75' North of BH-MW-14 D</i>		CONTRACT NO. <i>426-98-066</i>		SURFACE ELEV.		
SPOON <i>Hand o.d. Auger L.D.</i>		CASING SIZE	HOLE TYPE <i>L</i>	GROUND WATER LEVEL		
HAMMER # FALL		HAMMER # FALL		Date	Time	Depth
				<i>10/2/00</i>	<i>11:23</i>	<i>Dry</i>
DRILLER <i>P. Parnol</i>		REMARKS				
INSPECTOR <i>D. Howe</i>						

DEPTH FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	<i>0</i>				<i>Depth of crushed stone</i>	<i>0.0</i>
		<i>Hand Auger</i>	<i>Full</i>		<i>Fill - 1X-1-1T Brown Sand To 5' 11" Ground, 5' 6" to 6' 2"</i>	<i>1.0</i>
					<i>Bottom of boring</i>	
	<i>5</i>				<i>Sample #1 checked with PID Meter, 1.5-2.0' Search for Leaking Components Sample Discarded</i>	
	<i>10</i>					
	<i>15</i>					
	<i>20</i>					
	<i>25</i>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = sугer; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

Sheet 2 of 3

PROJECT: *PN - PJO Parts Fin*

ORING No. *BX-MU-146*

DATE: *10/3/02*

FIELD READINGS BY: *DHow*

PID Model: *M111 MB5*

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
<i>AM</i>	<i>1.</i>		<i>0.0</i>		


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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN Pto Port J Pac*  
LOCATION: *#25' North of BJ-MW-14D* DATE: *10/3/00*  
BORING No: *BJ-MW-14 G* TOTAL No. OF SAMPLES: *1 Soil*

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED BY (SIGN)  DATE *10/3/00* TIME RECEIVED BY (SIGN)

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY (SIGN)

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY LAB

REMARKS:  
*1 Soil Sample For 1-kg for*

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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <i>DN - Pdc Parts Fac</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BH-MW-144</i>	SHEET <i>1</i> OF <i>3</i>
LOCATION <i>= 25' E of BH-MW-14C</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>10/13/00</i>	SURFACE ELEV.

SPOON <i>Lead .0.D. Auger .I.D.</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
HAMMER <i>1 FALL</i>	HAMMER <i>1 FALL</i>		Date <i>10/13</i>	Time <i>12<sup>15</sup> P</i>	Depth <i>Dry</i>	Remarks
DRILLER <i>P. Pannal</i>						
INSPECTOR <i>D. Howe</i>						

CASING DEPT. (FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				<i>Asphalt</i>	0.0
					<i>closed stone</i>	0.5
		<i>Hand Auger</i>	<i>R/I</i>	<i>1</i>	<i>Misc Fill - Cinders, MatN, Sand Gravel, ETC</i>	2.0
					<i>Bottom of Boring</i> →	
	5					
	10				<i>Sample #1 checked with PID Meter 1.5-2.0' Spaul for Test Remainder Sample Discarded</i>	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
PID READINGS

PROJECT: PN- pto Ports: Fac  
BORING No. BM- 124-14 H DATE: 10/3/00  
FIELD READINGS BY: DM PID Model: Mini RA5

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
DM	1.		0.9		


THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PN Pdc Ports Fac</i>	
LOCATION: <i>#25' West of B21-MW-14C</i>	DATE: <i>10/3/00</i>
BORING No: <i>B21-MW-14A</i>	TOTAL No. OF SAMPLES: <i>1 Soil</i>

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED	DATE <i>10/3/00</i>	RECEIVED
BY (SIGN) 	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:  
*1 Soil sample in 1-16oz jar*

ACKNOWLEDGEMENTS

FOR THE PORT AUTHORITY

STATE OF NEW YORK )  
 )ss.  
COUNTY OF NEW YORK )

On the 5<sup>th</sup> day of October in the year 2004, before me, the undersigned, a Notary Public in and for said state, personally appeared RICHARD M. LARRABEE, DIRECTOR, PORT COMMERCE DEPT. personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

*Marie M. Edwards*  
\_\_\_\_\_  
(notarial seal and stamp)

FOR THE LESSEE Marie M. Edwards  
Notary Public, State of New York  
No. 01ED4959693  
Qualified in Kings County  
Commission Expires Jan-6, 2006

STATE NEW JERSEY )  
 )ss.  
COUNTY OF ESSEX )

On the 5<sup>th</sup> day of October in the year 2004, before me, the undersigned, a Notary Public in and for said state, personally appeared DONALD P. HAMM personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

*Andrea Goc*  
\_\_\_\_\_  
(notarial seal and stamp)

ANDREA GOC  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 2/27/07



**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 5 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a 15-acre area to the Lease (the "Area A1A"), as such Area A1A is more fully depicted on Exhibit A-1a attached to the Lease Supplement.

NOW, THEREFORE, it is

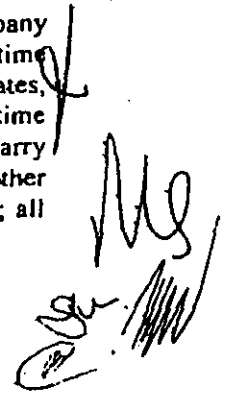
RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all

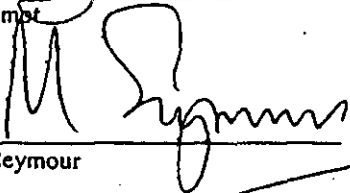


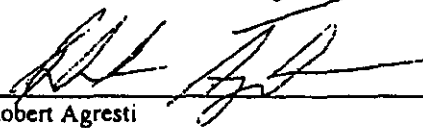
such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.


The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

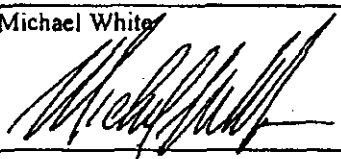
IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this 21 day of September, 2004.

  
\_\_\_\_\_  
Gary Willmet

  
\_\_\_\_\_  
Michael Seymour

  
\_\_\_\_\_  
Robert Agresti

  
\_\_\_\_\_  
Peter Duijnhuizen

\_\_\_\_\_  
Michael White  
  
\_\_\_\_\_

**Schedule A**

**Annual Per Acre Base Rental Rates**

<b>Beginning</b>	<b>Ending</b>	<b>Per Acre Rate (\$)</b>
3/1/2011	11/30/2011	48,455.03
12/1/2011	11/30/2012	49,424.13
12/1/2012	11/30/2013	50,412.61
12/1/2013	11/30/2014	51,420.87
12/1/2014	11/30/2015	52,449.28
12/1/2015	11/30/2016	53,498.27
12/1/2016	11/30/2017	54,568.23
12/1/2017	11/30/2018	55,659.60
12/1/2018	11/30/2019	56,772.79
12/1/2019	11/30/2020	57,908.25
12/1/2020	11/30/2021	59,066.41
12/1/2021	11/30/2022	60,247.74
12/1/2022	11/30/2023	61,452.69
12/1/2023	11/30/2024	62,681.75
12/1/2024	11/30/2025	63,935.38
12/1/2025	11/30/2026	65,214.09
12/1/2026	11/30/2027	66,518.37
12/1/2027	11/30/2028	67,848.74
12/1/2028	11/30/2029	69,205.71
12/1/2029	11/30/2030	70,589.83

**With Respect to Any Portion of the Premises That is Not Contiguous With the Existing Terminal or Development Parcels, only:**

12/1/2030	11/30/2031	72,001.63
12/1/2031	11/30/2032	73,441.66
12/1/2032	11/30/2033	74,910.49
12/1/2033	11/30/2034	76,910.49
12/1/2034	11/30/2035	77,936.88
12/1/2035	11/30/2036	79,495.61
12/1/2036	11/30/2037	81,085.52
12/1/2037	11/30/2038	82,707.24
12/1/2038	11/30/2039	84,361.38
12/1/2039	11/30/2040	86,048.61
12/1/2040	11/30/2041	87,769.58
12/1/2041	11/30/2042	89,524.97
12/1/2042	11/30/2043	91,315.47
12/1/2043	11/30/2044	93,141.78

<b>Beginning</b>	<b>Ending</b>	<b>Per Acre Rate (\$)</b>
12/1/2044	11/30/2045	<b>95,004.62</b>
12/1/2045	11/30/2046	<b>96,904.71</b>
12/1/2046	11/30/2047	<b>98,842.80</b>
12/1/2047	11/30/2048	<b>100,819.66</b>
12/1/2048	11/30/2049	<b>102,836.05</b>
12/1/2049	11/30/2050	<b>104,892.77</b>

**Schedule B**

**Tier 1 Rental Rates**

<b>Date</b>	<b>Tier 1 Rate</b>
12/1/10	19.00
12/1/11	19.00
12/1/12	21.00
12/1/13	21.00
12/1/14	21.00
12/1/15	23.00
12/1/16	23.00
12/1/17	23.00
12/1/18	25.00
12/1/19	25.00
12/1/20	25.00
12/1/21	27.00
12/1/22	27.00
12/1/23	27.00
12/1/24	29.00
12/1/25	29.00
12/1/26	29.00
12/1/27	31.00
12/1/28	31.00
12/1/29	31.00

## SCHEDULE C

### PART I

#### Affirmative Action Guidelines - Equal Employment Opportunity

I. Lessee agrees to comply with and Lessee shall require the Contractor, as hereinafter defined, to comply with the provisions set forth hereinafter and in paragraphs (r) and (s) of Section 10 of the Agreement to which this schedule is attached. The provisions set forth in this Part I are similar to the conditions for bidding on federal government contracts adopted by the Office of Federal contract Compliance and effective May 8, 1978.

Lessee agrees fully to comply with and shall require each bidder, contractor and subcontractor of Lessee and each subcontractor of a contractor at any tier of construction (herein collectively referred to as the "Contractor") fully to comply with the following conditions set forth in this Schedule as to each construction trade to be used on the construction work or any portion thereof (said conditions being herein called "Bid Conditions"). Lessee hereby agrees to commit itself to the goals for minority and female utilization set forth below and all other requirements, terms and conditions of the Bid Conditions. Lessee agrees to require the Contractor to commit itself to the said goals for minority and female utilization set forth below and all other requirements, terms and conditions of the Bid Conditions by submitting a properly signed bid.

II. Lessee agrees to and shall require the Contractor to appoint an executive of its respective company to assume the responsibility for the implementation of the requirements, terms and conditions of the following Bid Conditions:

(a) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work are as follows:

- (1) Minority participation: 32%
- (2) Female participation: 6.9%

These goals are applicable to all the Contractor's construction work performed in and for the Premises.

The Contractor's specific affirmative action obligations set forth herein of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make good faith efforts to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract. Compliance with the goals will be measured against the total work hours performed.

(b) The Contractor shall provide written notification to Lessee and Lessee agrees to provide written notification to the Equal Opportunity Programs Unit of the Port Authority within 14 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

(c) As used in these specifications:

- (1) "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- (2) "Minority" includes:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(d) Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the construction work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 those provisions which include the applicable goals for minority and female participation.

(e) The contractor shall implement the specific affirmative action standards provided in subparagraphs (1) through (16) of paragraph (h) hereof. The goals set forth above are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the Premises. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

(f) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations hereunder.

(g) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period, and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

(h) The Contractor shall take specific affirmative actions to ensure equal employment opportunity ("EEO").

The evaluation of the Contractor's compliance with these provisions shall be based upon its good faith efforts to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

(1) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each phase of the construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other supervisory personnel at the Premises are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at the Premises.

(2) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

(4) Provide immediate written notification to Lessee when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and training programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (2) above.



(6) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the Contractor's newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the Contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

(7) Review, at least every six months the Contractor's EEO policy and affirmative action obligations hereunder with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on Premises supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at the Premises. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the contractor does or anticipates doing business.

(9) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations and to State-certified minority referral agencies serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the Premises and in other areas of a Contractor's workforce.

(11) Tests and other selection requirements shall comply with 41 CFR Part 60-3.

(12) Conduct, at least every six months, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(13) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations hereunder are being carried out.

(14) Ensure, that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and supplies, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least every six months, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

(i) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (subparagraphs (1)-(16) of Paragraph (h) above). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraph (h) hereof provided that the Contractor actively participates in the group, makes good faith efforts to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes good faith efforts to meet its individual goals and timetables, and can provide-access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.

(j) A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation hereof if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the contractor may be in violation hereof if a specific minority group of women is underutilized).

(k) The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

(l) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive order 11246.

(m) The contractor shall carry out such sanctions and penalties for violation of this clause including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered by Lessee. Any Contractor who fails to carry out such sanctions and penalties shall be in violation hereof.

(n) The Contractor, in fulfilling its obligations hereunder shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (h) hereof so as to achieve maximum results from its efforts to ensure equal employment

opportunity. If the Contractor fails to comply with the requirements of these provisions, Lessee shall proceed accordingly.

(o) The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

(p) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(q) Without limiting any other obligation, term or provision under the Agreement, the Contractor shall cooperate with all federal, state or local agencies established for the purpose of implementing affirmative action compliance programs and shall comply with all procedures and guidelines established or which may be established by the Port Authority.

## PART II

### Minority Business Enterprises/Women-Owned Business Enterprises

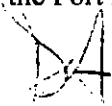
Lessee agrees to and shall require the general contractor or other construction supervisor and each of Lessee's contractors to use every good faith effort to provide for meaningful participation by Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBEs) in the construction work, pursuant to the provisions hereof and in accordance with the Agreement. For purposes hereof, Minority Business Enterprise (MBE) shall mean any business enterprise which is at least fifty-one percentum owned by or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by citizens or permanent resident aliens who are minorities and such ownership is real, substantial and continuing. For the purposes hereof, Women-owned Business Enterprise (WBE) shall mean any business enterprise which is at least fifty-one percentum owned by, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by women and such ownership is real, substantial and continuing. A minority shall be as defined in paragraph II (c) of Part I of this Schedule C. "Meaningful participation" shall mean that at least ten percent (10%) of the total dollar value of the construction contracts (including subcontracts) covering the construction work are for the participation of Minority Business Enterprises and Women-owned Business Enterprises, of which at least one percent (1%) are for the participation of Minority Business Enterprises. Good faith efforts to include meaningful participation by MBEs and WBEs shall include at least the following:

- (a) Dividing the work to be subcontracted into smaller portions where feasible.
- (b) Actively and affirmatively soliciting bids for subcontracts from MBEs and WBEs, including circulation of solicitations to minority and female contractor associations. The Contractor shall maintain records detailing the efforts made to provide for meaningful MBE and WBE participation in the Work, including the names and addresses of all MBEs and WBEs contacted and, if any such MBE or WBE is not selected as a joint venturer or subcontractor, the reason for such decision.
- (c) Making plans and specifications for prospective construction work available to MBEs and WBEs in sufficient time for review.
- (d) Utilizing the list of eligible MBEs and WBEs maintained by the Port Authority or seeking minorities and women from other sources for the purpose of soliciting bids for subcontractors.
- (e) Encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors, where appropriate, to insure that Lessee and Contractor will meet their obligations hereunder.
- (f) Insuring that provision is made to provide progress payments to MBEs and WBEs on a timely basis.

(g) Not requiring bonds from and/or providing bonds and insurance for MBEs and WBEs, where appropriate.

Initialed:

  
\_\_\_\_\_  
For the Port Authority

  
\_\_\_\_\_  
For Lessee

**Schedule D**

**Compact Disc Containing Existing Port Leases**

[See Attached Disc]

## **THROUGHPUT GUARANTY AGREEMENT**

by

**MSC Mediterranean Shipping Company S.A.**

for the benefit of

**The Port Authority of New York and New Jersey**

This THROUGHPUT GUARANTY AGREEMENT, made as of the 14th day of June, 2011 by MSC MEDITERRANEAN SHIPPING COMPANY S.A. ("Carrier"), a Swiss registered company having its place of business at 40 Avenue Eugene Pittard, 1206 Geneva, Switzerland, for the benefit of THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (the "Port Authority"), a body corporate and politic created by compact between the States of New Jersey and New York, with the consent of the United States Congress, and having an office and place of business at 225 Park Avenue South, 15th Floor, New York, New York 10003-1604, United States of America.

WHEREAS, as of the date hereof, the Port Authority and Port Newark Container Terminal LLC will enter into a certain Amended and Restated Agreement of Lease known as L-PN-264 ("PNCT Lease");

WHEREAS; in consideration of Carrier's execution of this Agreement, the Port Authority has agreed to the economics, terms and conditions of the PNCT Lease and without Carrier's execution hereof, the Port Authority could not justify entering into the PNCT lease;

WHEREAS, in consideration of the Port Authority's execution of the PNCT Lease, which will enable the Carrier's Containers to be handled by PNCT in volume (by the Port Authority increasing the land available to PNCT) pursuant to the terms of the PNCT Lease and at economic rates (by reducing the lease payments payable by PNCT to the Port Authority) pursuant to the terms of the PNCT Lease, Carrier has agreed to the economics, terms and conditions of this Agreement and without the Port Authority's execution of the PNCT Lease, Carrier could not justify entering into this Agreement; and

WHEREAS; Terminal Investment Limited, which, contemporaneously with the execution hereof, will become the owner of a 50% ownership interest in Port Newark Container Terminal, LLC's, and with whom Carrier has an agreement concerning the exclusivity of Port Newark Container Terminal LLC for Carrier's

containers in the Port of New York and New Jersey, will derive substantial benefit from the Port Authority's agreement to enter into the PNCT Lease.

NOW THEREFORE; Carrier, for and in consideration of the covenants and agreements described above and hereinafter contained, hereby agrees as follows:

Section 1. Definitions

"Agreement" shall mean this Throughput Guaranty Agreement;

"Carrier" shall have the meaning given in the Preamble;

"Carrier's Containers" shall mean Qualified Containers carrying cargo for which Carrier is acting as common carrier or any empty Qualified Containers owned or leased by Carrier;

"Guaranty" shall have the meaning given to it in Section 3(a);

"Force Majeure" shall mean any circumstances occurring at the Port for which Carrier is not responsible and which are not within its control that preclude Carrier from conducting operations within the Port for a significant period of time including, acts of God, acts of the public enemy, acts of superior governmental authority, unusually severe weather conditions, riots, rebellion, sabotage, labor disputes or a physical impediment, not existing on the date hereof, to use of the Port by Carrier's vessels;

"PNCT" shall mean Port Newark Container Terminal, LLC;

"PNCT Lease" shall mean the Amended and Restated Agreement of Lease known as Lease L-PN-264;

"Port" shall mean the Port of New York District, as defined in the Port Compact of 1921 authorized by C. 154 Laws of N. Y. 1921 and C. 151 Laws of N.J. 1921, approved by Public Resolution No. 17 of the 67th Congress, First Session;

"Port Authority" shall have the meaning given in the Preamble;

"Port Throughput Fee" shall mean the Port Throughput Shortfall Number multiplied the amount indicated in Schedule A in effect on the last day of the applicable Port Throughput Guaranty Period;

"Port Throughput Guaranty Number" shall mean Carrier's Containers for each Throughput Year falling within the ranges set forth below:

- (i) from March 1, 2011 through November 30, 2012: 413,600 Carrier's Containers;



- (ii) from December 1, 2012 through November 30, 2014: 488,800 Carrier's Containers;
- (iii) from December 1, 2014 through November 30, 2019: 572,000 Carrier's Containers;
- (iv) from December 1, 2019 through November 30, 2024: 809,100 Carrier's Containers;
- (v) from December 1, 2024 through November 30, 2029: 939,600 Carrier's Containers;
- (vi) from December 1, 2029 and through November 30, 2030: 1,120,300 Carrier's Containers;

In the event that any Throughput Year shall contain less than 12 calendar months, the Port Throughput Guaranty Number for such Throughput Year will be prorated on a 360 day per year basis.

"Port Throughput Guaranty Period" shall mean each two successive Throughput Years, the first such period beginning on March 1, 2011 and ending on November 30, 2012, then each successive two Throughput Years thereafter.

"Qualified Containers" shall mean containers (or similar cargo conveyances, if any, which shall generally replace, succeed or are functionally equivalent to present containers) loaded onto or discharged from vessels berthing within the Port (whether or not stuffed or stripped at the Premises, whether or not so loaded or discharged by means of container cranes, and whether or not empty or containing cargo), including without limitation any specialized cargo containers such as flat-racks (flat-racks when empty and bundled together as one unit shall be counted as one container), but shall not mean containers arriving on shipboard and departing on the same ship and the same voyage if such containers are merely unloaded from the ship at the Premises and reloaded in the course of a restowing operation or are merely moved from one location to another location on the same ship in the course of a shifting operation. Containers discharged from a vessel berthing at the Premises and loaded onto another vessel berthing at the Premises in the course of a transshipment operation shall be deemed to have been discharged and loaded in one discrete operation and counted as one (1) Qualified Container for purposes of the computation of the total number of Carrier's Containers.

"Throughput Year" shall mean any twelve (12) month period commencing on December 1 and ending on the following November 30 throughout the Term of this Agreement, provided; however that the first Throughput Year shall be the nine (9) month period between March 1, 2011 and November 30, 2011.

"Term" shall have the meaning set forth in Section 4.

Section 2. Representations and Warranties

Carrier represents and warrants as of the date hereof, as follows:

(a) Carrier acknowledges that the Port Authority would not enter into the PNCT Lease but for the undertaking by the Carrier in this Agreement and Carrier has received, or will receive substantial, direct or indirect benefit from the making of this Agreement and from the execution of the PNCT Lease by Port Newark Container Terminal, LLC and the Port Authority;

(b) Carrier, and the individuals executing below on its behalf, are duly authorized to execute and deliver and to enter into this Agreement.

Port Authority represents and warrants with respect to itself as of the date hereof, as follows:

(a) Port Authority acknowledges that Carrier would not enter into this Agreement but for Port Authority providing to PNCT sufficient suitable land for PNCT to handle all of Carrier's Containers, and to provide that land at all times at a cost to PNCT which is competitive with the cost paid by other container terminals in the Port to the Port Authority;

(b) Port Authority, and the individuals executing below on its behalf, are duly authorized to execute and deliver and to enter into this Agreement.

Section 3. Guaranty

(a) Carrier guarantees to the Port Authority that, for each Throughput Year, Carrier will transport to or from the Port not less than the Port Throughput Guaranty Number of Carrier's Containers.

(b) Carrier's primary intention in delivering this Agreement is in support of its obligation of exclusivity as a customer of PNCT, however to the extent that PNCT cannot handle the Port Throughput Guaranty Number for any reason, Carrier's obligations described in this Section 3 shall in no way be limited and Carrier will obtain terminal services elsewhere within the Port in order to reach the Port Throughput Guaranty Number.

(c) In the event that during any Port Throughput Guaranty Period, the number of Carrier's Containers transported to or from the Port shall be less than the Port Throughput Guaranty Number calculated for each Throughput Year during a Port Throughput Guaranty Period, with the result of each of the two Throughput Years during the applicable Port Throughput Guaranty Period being aggregated (the "Port Throughput Shortfall Number"), Carrier shall pay to the Port Authority a sum (hereinafter called "the Port Throughput Fee") equal to the product obtained by multiplying the amount indicated on Schedule A in effect on the last day of the applicable Port Throughput Guaranty

Period by the Port Shortfall Number, with payment to be made as set forth in paragraph (e) of this Section.

(d) Carrier shall pay the Port Throughput Fee on the 20th day of the month following the last month of the previous Port Throughput Guaranty Period during the Term, Carrier shall render to the Port Authority a statement certified by a responsible officer of Carrier showing the total number of Carrier's Containers transported to or from the Port for each Throughput Year during the applicable Port Throughput Guaranty Period. If the statement rendered for the Port Throughput Guaranty Period shall show a Port Throughput Shortfall Number, the Carrier shall pay to the Port Authority the Port Throughput Fee at the time of rendering such statement. Each statement shall be accompanied by, and the determination of the number of the Carrier's Containers loaded onto or discharged from vessels berthing at any Port Authority terminal within the Port during any Throughput Year shall be as shown in, monthly vessel activity reports made by the Carrier to the New York Shipping Association, or successor organization, for the purpose of cargo assessment. Carrier, in addition to providing copies of monthly vessel activity reports at the time of rendering the bi-annual statement described herein, shall provide the Port Authority with a copy of any such report within five (5) days of the Carrier's making such report to the New York Shipping Association.

(e) By way of example, if the Port Throughput Guaranty Number applicable for both Throughput Years during a Port Throughput Guaranty Period is equal to 1000 Carrier Containers, and on the first Throughput Year the actual number of Carrier Containers transported to or from the Port is 700, and during the second Throughput Year the actual number of Carrier Containers transported to or from the Port is 1100, the Port Throughput Shortfall Number for that Port Throughput Guaranty Period will be equal to 200 (300 short in year 1 less 100 over in year 2), and the Port Throughput Fee for that Port Throughput Guaranty Period will be equal to 200 times the rate in effect on the last day of such Port Throughput Guaranty Period as specified on Schedule A.

(f) In the event that during any Port Throughput Guaranty Period from and after December 1, 2020, the number of Carriers Containers transported to or from the Port shall be in excess of the number of Carriers Containers required hereunder during such Port Throughput Guaranty Period (such excess number of containers, the "Port Throughput Surplus Number"), Carrier will be entitled to a credit equal to 50% of the Port Throughput Surplus Number to be applied against a Port Throughput Shortfall Number, if any, for any subsequent Port Throughput Guaranty Period.

(g) Carrier shall permit the Port Authority by its agents, employees and representatives at all reasonable times to examine and audit the records and other documentation of Carrier which pertain to and will substantiate such statements and reports.

Section 4. Events Beyond Carrier's Control.

(a) Carrier has undertaken the obligation to provide the throughput volumes described in this Agreement, or, failing which, to pay the Port Throughput Fee. In so doing, Carrier has assumed substantial business risk and the obligation to maintain and expand its operations within the Port, regardless of many factors that could impact Carrier's ability to do so. Notwithstanding the foregoing, Carrier and the Port Authority agree as follows:

(1) In the event of a Force Majeure that Carrier reasonably expects to have a material impact on its ability to meet the Port Throughput Guaranty Number, the Port Authority and Carrier agree to negotiate for a reasonable and appropriate adjustment in the Port Throughput Guaranty Number for the Throughput Year (or Throughput Years) materially affected by such Force Majeure event provided Carrier has promptly (but in no event later than 45 days from the commencement of Force Majeure event) notified the Port Authority in writing of the occurrence and nature of such Force Majeure.

(2) In the event that the Port Authority does not deliver any portion of the additional acreage to be leased to PNCT pursuant to the PNCT Lease and such failure to deliver such acreage is reasonably expected to have a material impact on Carrier's ability to meet the Port Throughput Guaranty Number, the Port Authority agrees to negotiate with Carrier for a reasonable and appropriate adjustment to the Port Throughput Guaranty Number.

(3) In the case of general economic conditions beyond Carrier's control causing a substantial decrease in overall shipping volumes that might otherwise have been expected to move through the Port, the Port Authority agrees to negotiate with Carrier for a reasonable and appropriate adjustment to the Port Throughput Guaranty Number for the Throughput Year (or Throughput Years) materially affected by such general economic conditions.

(b) The Port Authority agrees to act in its reasonable discretion in negotiating with Carrier to agree upon any appropriate adjustments to the Port Throughput Guaranty Number. In the exercise of such reasonable discretion, the Port Authority may and will consider various factors that may effect Carrier's ability to meet the Port Throughput Guaranty Number including, but not limited to, Carrier's throughput volumes at competing ports, Carrier's relative market share in comparison to other carriers, and Carrier's ability to maintain or expand throughput volumes through reasonable commercial means or reasonable adjustments to Carrier's operations over the course of any given Port Throughput Guaranty Period.

Section 5. Term. The term of this Agreement shall commence on the date hereof and shall end upon the expiration or earlier termination of, and be co-terminus with, the PNCT Lease excluding any extensions or renewals thereof.

Section 6. Costs and Expenses. If the Carrier should fail to pay, if and when due, the Port Throughput Fee, Carrier agrees to pay to the Port Authority all reasonable out-of-pocket costs and expenses (including court costs and reasonable attorneys' fees) incurred by the Port Authority in connection with the enforcement hereof.

Section 7. No Offset. Carrier shall not have any right to offset any amounts owed to the Port Authority hereunder against any claims or actions from time to time against the Port Authority or any debts or amounts owed by the Port Authority to Carrier:

Section 8. PNCT Lease Amendments: The Port Authority agrees that it will not, without the consent of Carrier, which consent will not be unreasonably withheld, conditioned or delayed, agree to (i) any amendment to the PNCT Lease that enables PNCT to surrender any material portion of the premises leased pursuant to the PNCT Lease or (ii) consent to PNCT not taking delivery of any material portion of the expansion parcels (except to the extent that such portion is replaced by substantially similar land) to be leased to PNCT pursuant to the PNCT Lease. Carrier's right to consent shall be limited solely to the foregoing matters and no other waivers, modifications, amendments or otherwise shall require any notice to, or consent by, Carrier.

Section 9. Miscellaneous:

(a) This Agreement shall inure to the benefit of, and shall be binding upon, the Port Authority and Carrier, and their respective successors and assigns.

(b) The obligations hereunder are personal to Carrier and may not be assigned. Any purported assignment, by merger, operation of law, or otherwise, shall not in any way relieve Carrier, and any successor to Carrier, of any obligations hereunder.

(c) This Agreement and any claim, dispute or controversy arising out of, under or related to this Agreement shall be governed by, interpreted and construed in accordance with, the laws of the State of New Jersey, without regard to choice of law principles.

(d) Carrier hereby irrevocably submits to the exclusive jurisdiction of any federal or state court located within the State of New Jersey over any dispute arising out of or relating to this Agreement or any of the transactions contemplated hereby and each party hereby irrevocably agrees that all claims in respect of such dispute or any suit, action proceeding related thereto may be heard and determined in such courts. The parties hereby irrevocably waive, to the fullest extent permitted by applicable law, any objection which they may now or hereafter have to the

laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute. Each of the parties hereto agrees that a judgment in any such dispute may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(e) Carrier hereby agrees to appoint an agent for service of process for any suit, action or proceeding in relation to this Guaranty and to notify the Port Authority of that appointment within 7 working days of receiving written notice from the Port Authority to do so. Failing the appointment of an agent as aforesaid the Port Authority shall be entitled to serve process for any suit, action or proceeding in relation to this Guaranty at the head office of Carrier's steamship agent in the United States and Carrier confirms that the said agent is so authorized to accept service.

(f) If any clause, provision or Section of this Agreement shall be ruled invalid by any court of competent jurisdiction, the invalidity of such clause, provision or Section shall not affect any of the remaining provisions hereof.

(g) The Port Authority and Carrier do hereby expressly waive all rights to trial by jury on any cause of action directly or indirectly involving the terms, covenants or conditions of this Agreement or any matters whatsoever arising out of or in any way connected with this Agreement. This provision shall survive the termination or expiration of this Agreement.

(h) This Agreement contains the entire agreement between the parties with respect to the matters contained herein and supersedes all prior understandings, if any, with respect hereto.

(i) This Agreement cannot be modified or amended unless such modification or amendment is in writing and executed by the parties hereto.

(j) The descriptive headings herein are inserted for convenience of reference only, do not constitute a part of this Agreement, and shall not affect in any manner the meaning or interpretation of this Agreement.

(k) No provision of this Agreement shall be deemed waived by a party unless expressly waived in a writing signed thereby. The waiver by a party of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any subsequent breach of same or any other term, covenant or condition herein contained.

(l) This Agreement may be executed in counterparts with the same effect as if all parties hereto had executed the same document. All counterparts shall be construed together and shall constitute a single agreement.

(m) Without limiting any term or condition hereof, the Port Authority, in the enforcement of this Agreement, shall have all rights and remedies available to it hereunder and under law and equity.

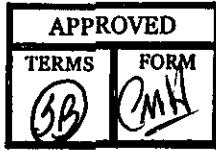
(n) Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof shall be held personally liable to the Carrier or to Carrier's Parent under any term provision of this Agreement or because of its execution or because of any breach or alleged or attempted breach thereof or otherwise.

(o) The parties agree that any rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be applicable to the interpretation of this Agreement.

[Signature Page to Follow]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**



By: *Richard Larrabee*  
Name: Richard Larrabee  
Its: Director Port Commerce Dept.  
(the Port Authority)

**MSC MEDITERRANEAN SHIPPING COMPANY SA**

By: \_\_\_\_\_  
Name:  
Its:



**IN WITNESS WHEREOF**, the parties have executed this Agreement as of the day and year first above written.

**THE PORT AUTHORITY OF NEW  
YORK AND NEW JERSEY**

By: \_\_\_\_\_  
Name: Richard Larrabee  
Its: Director Port Commerce Dept.  
(the Port Authority)

**MSC MEDITERRANEAN SHIPPING  
COMPANY SA**

By: \_\_\_\_\_  
Name: D. Aponic  
Its: Vice-President

**Schedule A**

**Throughput Rates**

Date	Per Container Amount
3/1/11	14.25
12/1/11	14.25
12/1/12	15.75
12/1/13	15.75
12/1/14	15.75
12/1/15	17.25
12/1/16	17.25
12/1/17	17.25
12/1/18	18.75
12/1/19	18.75
12/1/20	18.75
12/1/21	20.25
12/1/22	20.25
12/1/23	20.25
12/1/24	21.75
12/1/25	21.75
12/1/26	21.75
12/1/27	23.25
12/1/28	23.25
12/1/29	23.25

This Space for Port Authority Use Only:  
Number: MNS-338

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY  
225 Park Avenue South  
New York, New York 10003

**RAILROAD OPERATING AND SPACE PERMIT (the "Permit")**

The Port Authority of New York and New Jersey (hereinafter called the "**Port Authority**") hereby grants to the Permittee hereinafter named permission to use and occupy the following described space (hereinafter called the "**Space**"), in compliance with the operating procedures described herein, at the Port Authority Facility hereinafter named, for the purposes hereinafter specified and purposes incidental thereto, in accordance with the Terms and Conditions hereof and the endorsements annexed hereto; and the Permittee agrees to perform all the obligations imposed upon it in the Terms and Conditions and endorsements.


1. **FACILITY:** PORT NEWARK
2. **PERMITTEE:** PORT NEWARK CONTAINER TERMINAL, LLC, a Delaware limited liability company
3. **PERMITTEE'S ADDRESS:** 241 Calcutta Street  
Port Newark, New Jersey 07114
4. **PERMITTEE'S REPRESENTATIVE:** David F. Adam
5. **SPACE:** Approximately 7.16 acres of open area shown respectively in diagonal crosshatching on the sketch attached hereto, hereby made a part hereof and marked "Exhibit A". The Port Authority and the Permittee agree that the Space constitutes non-residential real property. The Port Authority in its sole discretion reserves the right to add additional acreage to the Space at any time during the term of this Permit.
6. **PURPOSES:** For: (i) the operation and management of the ExpressRail Port Newark intermodal rail terminal as a public, multi-user marine container rail interchange terminal; (ii) the ingress and egress of railroad cars and locomotives to and from areas adjacent to the Space; (iii) the receipt and delivery of containerized waterborne freight which has arrived or will be departing by vessel through the Port of New York and New Jersey, to and from such railroad cars; and (iv) such other purposes as may be approved by the Facility Manager in writing.

ExpressRail Port Newark

7. [INTENTIONALLY OMITTED]
8. **COMMENCEMENT DATE:** As set forth in Section 1 of the Terms and Conditions.
9. **EXPIRATION:** The term of this Permit shall be coterminous with the term of the Lease. The expiration date of this Permit shall be November 30, 2030 (unless terminated or revoked in accordance with the Terms and Conditions and Endorsements), subject to extension of such expiration date in accordance with the provisions of the Lease. In the event that the Lease is revoked or terminated, this Permit shall be revoked as of the date of termination or revocation, as applicable, of the Lease.
10. **ENDORSEMENTS:** 10.4, 11.1, 17.1, 18.1, 22.1, 28, Special Endorsements, Exhibits A and B, and Insurance Schedule.



Dated as of: June 14, 2011

**THE PORT AUTHORITY OF  
NEW YORK AND NEW JERSEY**

By   
Print Name Richard M. Larrabee  
(Title) Director, Port Commerce Dept.

**PORT NEWARK CONTAINER  
TERMINAL LLC**

By \_\_\_\_\_  
Print Name David F. Adam  
(Title) President

Port Authority Use Only:	
Approval as to Terms:	Approval as to Form:
	

SA

ExpressRail Port Newark

- 7. [INTENTIONALLY OMITTED]
- 8. **COMMENCEMENT DATE:** As set forth in Section 1 of the Terms and Conditions.
- 9. **EXPIRATION:** The term of this Permit shall be coterminous with the term of the Lease. The expiration date of this Permit shall be November 30, 2030 (unless terminated or revoked in accordance with the Terms and Conditions and Endorsements), subject to extension of such expiration date in accordance with the provisions of the Lease. In the event that the Lease is revoked or terminated, this Permit shall be revoked as of the date of termination or revocation, as applicable, of the Lease.
- 10. **ENDORSEMENTS:** 10.4, 11.1, 17.1, 18.1, 22.1, 28, Special Endorsements, Exhibits A and B, and Insurance Schedule.

Dated as of: JUNE 14, 2011

**THE PORT AUTHORITY OF  
NEW YORK AND NEW JERSEY**

By \_\_\_\_\_

Print Name \_\_\_\_\_

(Title) \_\_\_\_\_

**PORT NEWARK CONTAINER  
TERMINAL, INC.**

By  \_\_\_\_\_

Print Name: David F. Adam

(Title): President

Port Authority Use Only:	
Approval as to Terms:	Approval as to Form:

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**TERMS AND CONDITIONS**

**1. COMMENCEMENT DATE**

The permission hereby granted shall take effect on January 1, 2008 (hereinafter called the "**Commencement Date**").

**2. DEFAULTS**

If any one or more of the following events shall occur, that is to say:

(a) **Voluntary Insolvency or Bankruptcy.** The Permittee shall become insolvent, or shall take the benefit of any present or future insolvency statute, or shall make a general assignment for the benefit of creditors, or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement or its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any other law or statute of the United States or of any State thereof, or consent to the appointment of a receiver, trustee, or liquidator of all or substantially all of its property; or

(b) **Involuntary Bankruptcy.**

(i) By order or decree of a court the Permittee shall be adjudged bankrupt or an order shall be made approving a petition filed by any of its creditors or, if the Permittee is a corporation, by any of its stockholders, seeking its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any law or statute of the United States or of any State thereof; or

(ii) A petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute shall be filed against the Permittee and shall not be dismissed within thirty (30) days after the filing thereof; or

(c) **Assignment.** The interest of the Permittee under this Permit shall be transferred to, pass to or devolve upon, by operation of law or otherwise, any other person, firm or corporation; or

(d) **Consolidation.** The Permittee, if a corporation, shall, without the prior approval of the Port Authority, become a possessor or merged corporation in a merger, a constituent corporation in a consolidation, or a corporation in dissolution; or

(e) **Appointment of Trustee.** By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of the Permittee, and such possession or control shall continue in effect for a period of fifteen (15) days; or

(f) **Abandonment.** The Permittee shall voluntarily abandon, desert or vacate the Space or discontinue its operations at the Space or, after exhausting or abandoning any right of further appeal, the Permittee shall be prevented for a period of thirty (30) days by action of any

## ExpressRail Port Newark

governmental agency, from conducting its operations at the Space, regardless of the fault of the Permittee; or

(g) Liens. Any lien shall be filed against the Space because of any act or omission of the Permittee and shall not be discharged within twenty (20) days; or

(h) Failure to Make Payments. The Permittee shall fail duly and punctually to make any payment required hereunder when due to the Port Authority; or

(i) Non-Performance. The Permittee shall fail to keep, perform and observe each and every other promise, covenant and agreement set forth in this Permit, on its part to be kept, performed or observed, within seven (7) days after its receipt of notice of default thereunder from the Port Authority (except where fulfillment of its obligation requires activity over a period of time, and the Permittee shall have commenced to perform whatever may be required for fulfillment within seven (7) days after receipt of notice and continues such performance without interruption except for causes beyond its control);

then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Port Authority may by seven (7) days' notice revoke this Permit, such revocation to be effective upon the date specified in such notice. Such right of revocation and the exercise thereof shall be and operate as a conditional limitation.

Revocation or termination shall not relieve the Permittee of any liabilities or obligations hereunder which shall have accrued on or prior to the effective date of such revocation or termination.

### 3. DEFINITIONS

(a) "Annual Period" shall mean as the context requires the twelve-month period commencing with the Commencement Date and each of the twelve-month periods thereafter occurring during the period of the permission granted under this Permit commencing on each anniversary of the Commencement Date occurring during the period of the permission granted under this Permit, except that if the Commencement Date shall occur on a day other than the first day of a calendar month then the first Annual Period shall mean the portion of the calendar month in which the Commencement Date shall occur commencing with the Commencement Date and the eleven-month period following said month and each succeeding Annual Period shall mean the twelve-month period commencing on the anniversary of the first day of the calendar month in which the Commencement Date shall occur; provided, however, that the last Annual Period shall expire in any event on the expiration date of the period of the permission granted under this Permit.

(b) "Basic Lease" shall mean that agreement of lease respecting marine and air terminals entered into with the Port Authority by the City of Newark (New Jersey) under date of October 22, 1947, and recorded in the Office of the Register of the County of Essex on October 30, 1947, in Book E-110 of Deeds, on pages 242 et seq. as the said agreement of lease has heretofore been or from time to time hereafter may be supplemented and amended.

ExpressRail Port Newark

The rights of the Port Authority in the Facility are those acquired by it pursuant to the Basic Lease and no greater rights are granted or intended to be granted to the Permittee hereunder than the Port Authority has power thereunder to grant. The granting of permission shall in any event terminate simultaneously with the termination or expiration of the Basic Lease.

(c) “**Executive Director**” shall mean the person or persons from time to time designated by the Port Authority to exercise the powers and functions vested in the Executive Director by this Permit; but until further notice from the Port Authority to the Permittee, it shall mean the Executive Director of the Port Authority for the time being, or his duly designated representative or representatives.

(d) “**Existing Lease**” shall mean that certain Agreement dated as of December 1, 2000, between the Port Authority, as lessor and the Permittee, as lessee, as amended and supplemented by those certain Supplemental Agreements between the Port Authority and Lessee numbered 1 through 10, i.e. Supplement No. 1, dated as of August 31, 2001, Supplement No. 2, dated as of November 26, 2001, Supplement No. 3, dated as of March 25, 2002, Supplement No. 4, dated as of December 1, 2000, Supplement No. 5, dated as of October 1, 2002, Supplement No. 6, dated as of February 15, 2003, Supplement No. 7, dated as of May 31, 2005, Supplement No. 8, dated as of August 31, 2005, Supplement No. 9, dated as of March 13, 2007 and Supplement No. 10, dated as of December 31, 2006.

(e) “**Facility**” or “**Port Newark Facility**” shall mean the land and Space in the City of Newark, in the County of Essex and State of New Jersey, which are easterly of the right-of-way of the Central Railroad of New Jersey and are shown upon the exhibit attached to the Basic Lease and marked “**Exhibit A**” (thereto), as contained within the limits of a line of crosses appearing on the said **Exhibit A** and marked (by means of the legend) “Boundary of Terminal Area in City of Newark,” and lands contiguous thereto within the County of Essex which may have been heretofore or may hereafter be acquired by the Port Authority to use for marine terminal purposes.

(f) “**Facility Manager**” and “**Manager**” shall mean the person or persons from time to time designated by the Port Authority to exercise the powers and functions vested in the Facility Manager or his or her duly designated representative.

(g) “**Lease**” shall mean that certain Amended and Restated Agreement of Lease (L-PN-264) dated as of June 14, 2011, between the Port Authority, as lessor and Permittee, as lessee, as the same may be amended, supplemented or otherwise modified.

(h) “**Space**” shall mean the area shown on **Exhibit A** hereto together with the buildings, structures, fixtures, improvements, and other property, if any, of the Port Authority located or to be located therein or thereon, as such area may be expanded pursuant to the terms of this Permit.

(i) “**Terminal**” shall mean the ExpressRail Port Newark intermodal rail terminal located on the Space as such terminal shall exist on the Commencement Date and at any time thereafter during the period of the permission granted under this Permit.



**4. NO WAIVER**

No failure by the Port Authority to insist upon the strict performance of any agreement, term, covenant or condition of this Permit or to exercise any right or remedy consequent upon a breach or default thereof, and no extension, supplement or amendment of this Permit during or after a breach thereof, unless expressly stated to be a waiver, and no acceptance by the Port Authority of charges or other payments in whole or in part after or during the continuance of any such breach or default, shall constitute a waiver of any such breach or default of such agreement, term, covenant or condition. No agreement, term, covenant or condition of this Permit to be performed or complied with by the Permittee, and no breach or default thereof, shall be waived, altered or modified except by a written instrument executed by the Port Authority. No waiver by the Port Authority of any default or breach on the part of the Permittee in performance of any agreement, term, covenant or condition of this Permit shall affect or alter this Permit but each and every agreement, term, covenant and condition thereof shall continue in full force and effect with respect to any other existing or subsequent breach or default thereof.

**5. NO TRANSFER**

The rights granted hereby shall be exercised by the Permittee acting only through the medium of its officers and employees. The Permittee shall not assign, transfer, mortgage or otherwise encumber this Permit or any improvements of the Port Authority on the Space or any of the rights or privileges granted under this Permit or enter into any contract requiring or permitting the doing of anything under this Permit by an independent contractor, without the prior written approval of the Port Authority.

**6. NO AGENCY**

This Permit does not constitute the Permittee the agent or representative of the Port Authority for any purpose whatsoever.

**7. ORDERLY MANNER**

The operations of the Permittee, its employees, invitees and those doing business with it, shall be conducted in an orderly and proper manner. The Port Authority shall have the right to object to the Permittee regarding the demeanor, conduct and appearance of the employees and invitees of the Permittee and of those doing business with it, whereupon the Permittee will take all steps necessary to remove the cause of the objection.

**8. RULES AND REGULATIONS**

The Permittee shall observe and obey (and compel its officers, employees, guests, invitees, and those doing business with it, to observe and obey) the rules and regulations of the Port Authority now in effect, and such further reasonable rules and regulations which may from time to time during the effective period of this Permit, be promulgated by the Port Authority for reasons of safety, health, preservation of property or maintenance of a good and orderly appearance of the Facility, including the Space, or for the safe and efficient operation of the Facility, including the Space. The Port Authority agrees that, except in cases of emergency, it

## ExpressRail Port Newark

shall give notice to the Permittee of every rule and every regulation hereafter adopted by it at least five (5) days before the Permittee shall be required to comply therewith.

### 9. INDEMNIFICATION

(a) The Permittee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, representatives and contractors, from and against (and shall reimburse the Port Authority for the Port Authority's costs and expenses including legal expenses incurred in connection with the defense of) all claims and demands of third persons including but not limited to claims and demands for death or personal injuries, or for property damages, arising out of any default of the Permittee, its officers, employees, and persons who are doing business with it, in performing or observing any term or provision of this Permit, or out of any of the operations, acts or omissions of the Permittee, its officers, employees, and persons who are doing business with it, including claims and demands of the City of Newark, from which the Port Authority derives its rights in Port Newark, for indemnification arising by operation of law or through agreement of the Port Authority with the said City.

(b) If so directed, the Permittee shall at its own expense defend any suit based upon any such claim or demand (even if such claim or demand is groundless, false or fraudulent), and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.

(c) The Permittee represents that it is the owner of or fully authorized to use or sell any and all services, processes, machines, articles, marks, names or slogans used or sold by it in its operations under or in any way connected with this Permit. Without in any way limiting its obligations under the preceding paragraph (a) hereof, the Permittee agrees to indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, agents and representatives of and from any loss, liability, expense, suit or claim for damages in connection with any actual or alleged infringement of any patent, trademark or copyright, or arising from any alleged or actual unfair competition or other similar claim arising out of the operations of the Permittee under or in any way connected with this Permit.

### 10. CASUALTY

(a) Total Destruction. If the Space, including improvements and personal property furnished by the Port Authority, or any part thereof, shall be completely damaged by fire, the elements, the public enemy or other casualty, this Permit shall terminate and the Permittee shall promptly remove all debris resulting from such damage from the Space, and to the extent, if any, that the removal of debris under such circumstances is covered by insurance, the proceeds thereof shall be made available to and be used by the Permittee for such purpose.

(b) Partial Destruction.

(i) If the Space, including improvements and personal property furnished by the Port Authority, or any part thereof, shall be damaged by fire, the elements, the public enemy

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or other casualty but not rendered untenable or unusable for a period of ninety (90) days, the Space shall be repaired with due diligence in accordance with the plans and specifications for the same as they existed prior to such damage by and at the expense of the Permittee unless otherwise directed by the Port Authority in writing, and if such damage is covered by insurance, the proceeds thereof shall be made available to and be used by the Permittee for such repairs.

(ii) If the Space, including improvements and personal property furnished by the Port Authority, or any part thereof, shall be destroyed or so damaged by fire, the elements, the public enemy or other casualty as to be unusable for ninety (90) days, or if within ninety (90) days after such damage or destruction the Permittee notifies the Port Authority in writing that in its opinion the same will be unusable for ninety (90) days then: The Permittee, unless otherwise directed by the Port Authority in writing, shall proceed with due diligence to make the necessary repairs or replacements to restore the Space, including improvements and personal property furnished by the Port Authority in accordance with the plans and specifications therefor as the same existed prior to such damage or destruction; or with the approval in writing of the Port Authority make such other repairs, replacements or changes as may be desired by the Permittee. If such damage or destruction was covered by insurance, the proceeds thereof shall be made available to and used by the Permittee for such restoration.

(c) Costs Limited to Proceeds. The obligation of the Permittee to repair or replace shall be limited to the amount of the insurance proceeds provided the Permittee has carried insurance to the extent and in accordance with the Insurance Schedule attached hereto. Any excess of the proceeds of insurance over the costs of the restoration shall be retained by the Port Authority.

(d) Section 227 of the RPL. The parties hereby stipulate that neither the provisions of Section 227 of the Real Property Law of the State of New York nor those of any other similar statute shall extend or apply to this Permit.

### **11. PERSONAL PROPERTY**

(a) Permittee's Personal Property. All personal property (including trade fixtures) which is installed by the Permittee in or on the Space pursuant to this Permit, removable without material damage to the Space, shall be deemed to be and remain the property of the Permittee except as otherwise provided in this Permit. All such personal property, provided the Permittee shall install suitable replacements therefor if such personal property is necessary to operate the Space in accordance with the terms and provisions hereof and in accordance with the best practices of the stevedoring and railroad industries in the United States, may at the Permittee's option be removed by the Permittee from the Space at any time during the effective period of this Permit. Furthermore, all such property of the Permittee shall, unless otherwise agreed in writing by the parties hereto, be removed by the Permittee on or before the expiration or earlier revocation or termination of the effective period of this Permit. If the Permittee shall fail to remove its property on or before the expiration or earlier revocation or termination of the effective period of this Permit, the Port Authority may remove such property to a public warehouse for deposit or retain the same in its own possession and in either event may dispose of the same as waste material or sell the same as waste material or sell the same at public auction, the proceeds of which shall be applied first to the expenses of removal, storage and sale; second

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to any sums owed by the Permittee to the Port Authority, with any balance remaining to be paid to the Permittee; if the expenses of such removal, storage and sale shall exceed the proceeds of sale, the Permittee shall pay such excess to the Port Authority upon demand. Without limiting any other term or provision of this Permit, the Permittee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, agents, employees and contractors from all claims of third persons arising out of the Port Authority's removal and disposition of property pursuant to this Section, including claims for conversion, claims for loss of or damage to property, claims for injury to persons (including death), and claims for any other damages, consequential or otherwise, except for claims based on the sole negligence of the Port Authority.

(b) The Port Authority's Personal Property. Without limiting the obligations of the Permittee stated elsewhere in this Permit, the Permittee shall be solely responsible to the Port Authority for loss or theft of or damage to any and all personal property, equipment and fixtures belonging to the Port Authority or for which it is responsible, located or to be located in or on the Space, and shall promptly replace or repair, the same within twenty (20) days after such loss, theft or damage; and the Permittee shall yield and deliver the same or replacements thereof to the Port Authority at the expiration or earlier revocation of this Permit in the same condition as at the commencement of this Permit, reasonable wear not materially affecting the efficient use and functioning of the same, excepted.

### **12. INTELLECTUAL PROPERTY**

The Permittee represents that it is the owner of or fully authorized to use and sell any and all services, processes, machines, articles, marks, names or slogans used or sold by it in its operations under or in any way connected with this Permit. Without in any wise limiting its obligations under the Insurance Schedule, the Permittee agrees to indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, agents and representatives of and from any loss, liability, expense, suit or claim for damages in connection with any actual or alleged infringement of any patent, trademark or copyright, or arising from any alleged or actual unfair competition or other similar claim arising out of the operations of the Permittee under or in any wise connected with this Permit.

### **13. VENDING MACHINES**

(a) Permittee Prohibition. The Permittee shall not install, maintain or operate, or permit the installation, maintenance or operation on the Space of any vending-machine or device designed to dispense or sell food, beverages, tobacco, tobacco products or merchandise of any kind whether or not included in the above categories, or of any restaurant, cafeteria, kitchen, stand or other establishment of any type for the preparation, dispensing or sale of food, beverages, tobacco, tobacco products, or merchandise of any kind, whether or not included in the above categories, or of any equipment or device for the furnishing to the public of service of any kind including therein, without limitation thereto, telephone pay stations.

(b) Service by the Port Authority. The Port Authority, by itself or by contractors, lessees or permittees, shall have the exclusive right to install, maintain and receive the revenues from all coin-operated or other vending machines or devices installed by it and operated on the Space for the sale of merchandise of all types or for the rendering of services, provided,

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however, that no such machine or device shall be installed except upon the request of the Permittee. If the Port Authority does not install and maintain any such machine that the Permittee may reasonably request, the Permittee shall have the right to do so, provided, however, (i) that the Permittee shall pay or cause to be paid to the Port Authority each month for each machine upon the same basis for the preceding month as any concessionaire, permittee or licensee of the Port Authority then operating machines at the Port Authority facilities generally for the sale of similar merchandise or the rendering of similar services, and (ii) that in the event the Permittee exercises such right the Port Authority, at any time thereafter, may substitute for the Permittee's machines other machines selling similar merchandise or services operated by the Port Authority or by its licensee, permittee or concessionaire, and thereupon the Permittee shall remove its machines.

### **14. SIGNS**

No signs, posters or similar devices shall be erected, displayed or maintained by the Permittee in view of the general public in or on the Space or the Facility without the written approval of the Facility Manager; and any not approved by the Facility Manager may be removed by the Port Authority at the expense of the Permittee.

### **15. PERMITTEE REPRESENTATIVE**

The representative of the Permittee hereinbefore specified (or such substitute as the Permittee may hereafter designate in writing) shall have full authority to act for the Permittee in connection with this Permit, and to do any act or thing to be done hereunder, and to execute on behalf of the Permittee any amendments, or supplements to this Permit or any extension thereof and to give and receive notices hereunder. This Permit shall not constitute the Permittee the agent or representative of the Port Authority for any purpose whatsoever.

### **16. NOTICE**

(a) Requirements. All notices, permissions, requests, consents and approvals given or required to be given to or by either party shall be in writing, and all such notices and requests shall be (i) personally delivered to the party or to the duly designated officer or representative of such party, or (ii) delivered to an office or residence of such party, officer or representative during regular business hours, or (iii) delivered to the residence of such party, officer or representative, (iv) or, if directed to the Permittee, delivered to the Space, or (v) forwarded to such party, officer or representative at the office or residence address by registered mail or by a nationally recognized overnight courier service. The Permittee shall designate an office within the Port of New York District and an officer or representative whose regular place of business is at such office. Until further notice, the Port Authority hereby designates its Executive Director, and the Permittee designates the person whose name appears on the first page of this Permit as their respective officers or representatives upon whom notices and requests may be served, and the Port Authority designates its office at 225 Park Avenue South, New York, New York 10003, and the Permittee designates its office, the address of which is set forth on the first page of this Permit, as their respective offices where notices and requests may be served.

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(b) Receipt. If any notice is mailed or delivered, the giving of such notice shall be complete upon receipt or, in the event of a refusal by the addressee, upon the first tender of the notice to the addressee or at the permitted address.

### **17. NO BROKER**

The Permittee represents and warrants that no broker has been concerned in the negotiation of this Permit and that there is no broker who is or may be entitled to be paid a commission, in connection therewith. The Permittee shall indemnify and save harmless the Port Authority of and from any claim for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation and execution of this Permit.

### **18. ENTIRE AGREEMENT**

This Permit, including the attached endorsements, exhibits and schedules, if any, constitutes the entire agreement of the Port Authority and the Permittee on the subject matter. It may not be changed, modified, discharged, or extended, except by written instrument duly executed on behalf of the Port Authority and the Permittee. The Permittee agrees that no representatives or warranties shall be binding upon the Port Authority unless expressed in writing herein.

The Permittee shall daily remove from the Space by means of facilities provided by it all garbage, debris and other waste material (whether solid or liquid) arising out of or in connection with its operations hereunder, and any such garbage, debris and other waste material not immediately removed shall be temporarily stored in a clean and sanitary condition, in suitable garbage and waste receptacles, the same to be made of metal and equipped with tight-fitting covers, to be of a design safely and properly to contain whatever material may be placed therein, and to be provided and maintained by the Permittee. The receptacles shall be kept covered except when filling or emptying the same. The Permittee shall exercise extreme care in removing such garbage, debris and other waste materials from the Space. The manner of such storage and removal shall be subject in all respects to the continual approval of the Port Authority. No facilities of the Port Authority shall be used for such removal unless with its prior consent in writing. No such garbage, debris or other waste materials shall be or be permitted to be thrown, discharged or disposed into or upon the waters at or bounding the Facility.

**STANDARD ENDORSEMENT NO. 10.4**  
**GARBAGE REMOVAL**

Marine Terminals

10/6/75

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The Port Authority, by its officers, employees, representatives, contractors, licensees, and their employees, shall have the right for the benefit of the Port Authority, or the Permittee and/or for the benefit of others than the Permittee to maintain existing and future heating, water, gas, electricity, sewerage, drainage, fire protection sprinkler, ventilating, refrigerating, fuel and communication systems and other such service systems, including all tubes, pipes, lines, mains, wires, conduits and equipment on or about the Space and to enter upon the Space at all reasonable times and to make such repairs, replacements and alterations as may, in the opinion of the Port Authority, be deemed necessary or advisable, and, from time to time, to construct or install over, on, in or under the Space new tubes, pipes, lines, mains, wires, conduits and equipment, provided however, that the same shall be done so as to interfere as little as reasonably possible with the Permittee's operations.

Nothing contained in this Endorsement shall or shall be construed to impose upon the Port Authority any obligations so to maintain or to make repairs, replacements, alterations or additions or any liability for failure to do so.

**STANDARD ENDORSEMENT NO. 11.1**  
**MAINTENANCE OF SERVICE FACILITIES**

All Facilities

7/21/49

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The Permittee shall procure all licenses, certificates, permits or other authorization from all governmental authorities, if any, having jurisdiction over the Permittee's operations at the Facility which may be necessary for the Permittee's operations thereat.

The Permittee shall pay all taxes, license, certification, permit and examination fees and excises which may be assessed, levied, exacted or imposed on its property or operation hereunder or on the gross receipts or income therefrom, and shall make all applications, reports and returns required in connection therewith.

The Permittee shall promptly observe, comply with and execute the provisions of any and all present and future governmental laws, rules, regulations, requirements, orders and directions which may pertain or apply to the Permittee's operations at the Facility.

The Permittee's obligations to comply with governmental requirements are provided herein for the purpose of assuring proper safeguards for the protection of persons and property at the Facility and are not to be construed as a submission by the Port Authority to the application to itself of such requirements or any of them.

STANDARD ENDORSEMENT NO. 17.1

**LAW COMPLIANCE**

All Facilities

8/29/49

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No Commissioner, Director, officer, agent or employee of either party shall be charged personally by the other party with any liability, or held liable to the other party, under any term or provision of this Permit, or because of the party's execution or attempted execution, or because of any breach thereof.

STANDARD ENDORSEMENT NO. 18.1  
**NO PERSONAL LIABILITY**  
All Facilities  
06/01/50  
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The Permittee shall promptly observe, comply with and execute the provisions of any and all present and future rules and regulations, requirements, orders and directions of the National Fire Protection Association and The Fire Insurance Rating Organization of N.J., and any other body or organization exercising similar functions which may pertain or apply to the Permittee's operations hereunder. If by reason of the Permittee's failure to comply with the provisions of this Endorsement, any fire insurance, extended coverage or rental insurance rate on the Facility or any part thereof or upon the contents of any building thereon shall at any time be higher than it otherwise would be, then the Permittee shall on demand pay the Port Authority that part of all fire insurance premiums paid or payable by the Port Authority which shall have been charged because of such violation by the Permittee.

The Permittee shall not do or permit to be done any act which,

- (a) will invalidate or be in conflict with any fire insurance policies covering the marine terminal or any part thereof or upon the contents of any building thereon, or
- (b) will increase the rate of any fire insurance, extended coverage or rental insurance on the marine terminal or any part thereof or upon the contents of any building thereon, or
- (c) in the opinion of the Port Authority will constitute a hazardous condition, so as to increase the risks normally attendant upon the operations contemplated, by this Permit, or
- (d) may cause or produce upon the marine terminal any unusual, noxious or objectionable smokes, gases, vapors or odors, or
- (e) may interfere with the effectiveness or accessibility of the drainage and sewerage system, fire-protection system, sprinkler system, alarm system, fire hydrants and hoses, if any, installed or located or to be installed or located in or on the marine terminal, or
- (f) shall constitute a nuisance in or on the marine terminal or which may result in the creation, commission or maintenance of a nuisance in or on the marine terminal.

For the purpose of this Endorsement, "marine terminal" includes all structures located thereon.

If any type of strike or other labor activity is directed against the Permittee at the Facility or against any operations pursuant to this Permit resulting in picketing or boycott for a period of at least forty-eight (48) hours, which, in the opinion of the Port Authority, adversely affects or is likely adversely to affect the operation of the Facility or the operations of other permittees, lessees or licensees thereat, whether or not the same is due to the fault of the Permittee, and whether caused by the employees of the Permittee or by others, the Port Authority may at any time during the continuance thereof, by twenty-four (24) hours' notice, revoke this Permit, effective at the time specified in the notice. Revocation shall not relieve the Permittee of any liabilities or obligations hereunder which shall have accrued on or prior to the effective date of revocation.

**STANDARD ENDORSEMENT NO. 28**  
**DISTURBANCES**

All Facilities

6/20/51

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**SPECIAL ENDORSEMENTS**

1. **[INTENTIONALLY OMITTED]**
2. **[INTENTIONALLY OMITTED]**
3. **SCHEDULES**

The Permittee shall, prior to furnishing any additional services hereunder, state the same in a schedule submitted to the Port Authority for its prior written approval (except that such Port Authority approval shall not be required for additional services to be provided outside of normal operating hours). Such schedules shall be submitted to the Port Authority for its approval as to compliance by the Permittee with its obligations under this Permit. The Port Authority shall examine such schedules and make such modifications therein as may be necessary. Any changes thereafter in the schedules shall be similarly submitted to the Port Authority for its prior written approval, and, if necessary, modification. All such schedules shall be made available to the public by the Permittee at locations designated from time to time by the Port Authority. The Permittee agrees to adhere to the rates stated in the approved schedules. If the Permittee applies any rate in excess of the approved rates, the amount by which the charge based on such actual rate deviates from a charge based on the approved rates and/or discounts shall constitute an overcharge which will, upon demand of the Port Authority or the Permittee's customer, be promptly refunded to the customer. If the Permittee applies any rate which is less than the approved rates the amount by which the charge based on such actual rate or actual discount deviates for a charge based on the approved rates shall constitute an undercharge and shall be collected from its customer by the Permittee. Notwithstanding any repayment of overcharges to a customer by the Permittee, any such overcharge shall constitute a breach of the Permittee's obligations hereunder and the Port Authority shall have all remedies consequent upon breach which would otherwise be available to it at law, in equity or by reason of this Permit.

**4. TERMINAL MAINTENANCE**

(a) Improvements. The Port Authority shall furnish properly ballasted railroad tracks and switches, light stanchions and electrical wiring for such stanchions, and water pipes, sewer lines and fencing on the Space, which are expected to be completed by December 31, 2014.

(b) Labor and Equipment. The Permittee shall furnish all labor and equipment necessary for the efficient operation of the Terminal throughout the period of the permission granted hereunder.

(c) Care of Space. The Permittee shall at all times keep the Space clean, and in an orderly condition and appearance, together with all the fixtures, equipment and personal property of the Permittee located in or on the Space.

(d) Repair and Replacement.

(i) The Permittee shall repair, replace, rebuild and paint all or any part of the Space or of the Facility which may be damaged or destroyed by the acts or omissions of the

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Permittee or by those of its officers or employees, or of other persons on or at the Space with the consent of the Permittee.

(ii) Subject to the provisions of paragraph (d)(iii) of this Special Endorsement, throughout the period of permission under this Permit, the Permittee shall assume the entire responsibility for, and shall relieve the Port Authority from all responsibility from, all care, maintenance, repair and rebuilding whatsoever in the Space, whether such care, maintenance, repair, or rebuilding be ordinary or extraordinary, partial or entire, inside or outside, foreseen or unforeseen, structural or otherwise; and without limiting the generality of the foregoing the Permittee shall do all preventive maintenance, maintain and make repairs and replacements, structural or otherwise to all improvements located on the Space and all other fixtures, machinery, or equipment now or hereafter belonging to or connected with said Space or the Permittee's operations being conducted thereon, including without limitation thereto all maintenance, repair and replacement of the following items: (1) paving, which shall mean maintenance paving, crack sealing, weed removal, repair of damaged or overstressed surfaces, manholes, catch basins, underground storm water pipes, and grate support systems. In addition, the Permittee shall be responsible for maintenance repairs, and damages, that are required above the structural concrete chamber of catch basins and manholes. Such repairs shall include the concrete brick collar, concrete collar, brick collar, asphalt concrete pavement, Portland cement concrete pavement, the frame and grate or manhole cover and silt bucket when and where applicable. For the purpose of manhole and catch basin repair, the top of the structural chamber shall be the top of the concrete slab that covers the vertical walls of the underground manhole structure, and for the purpose of catch basin and manhole repair, the top of the structural chamber shall be the top of the (cast-in-place or pre-cast) vertical walls of the underground catch basin and manhole structure; (2) scales; (3) rail track system including, without limitation, rail, switches, turnouts, and rail foundations; (4) all loading and unloading equipment and the infrastructure on which they operate, including concrete runways, turning pads and crossings; (5) lights, light poles and light pole foundations; (6) sprinkler systems; (7) gas and electric from the meter (utility companies are responsible up to the meter); (8) the electrical system, equipment and fixtures, including, without limitation, lighting fixtures, switches, outlets, receptacles and other electrical devices and accessories, and all relamping and fuse replacement; (9) power switch mechanism; (10) compressed air system; (11) the plumbing system, fixtures and equipment, and all finished plumbing; (12) buildings and all parts thereof; (13) gate complexes; (14) special loading devices, whether mechanical, electrical, hydraulic or otherwise; (15) fencing; (16) signs; (17) fire extinguishers; (18) all painting; and (19) any rail crossing and its associated warning systems and devices, provided that Permittee's responsibility for any rail crossing shall exclude the Corbin Street runner track located in the Space until such time as a majority of the cargo containers handled by Permittee are moved through the Corbin Street runner track. The Permittee shall maintain all such improvements, fixtures, machinery and equipment at all times in good condition, and shall perform all necessary preventive maintenance thereto so that at the expiration or termination of the Permit and all times during the period of the permission, the same (or a reconstruction of all or any part thereof) will be in as good condition as at the commencement thereof (or, in the case of improvements made during the period of the permission hereunder, in as good condition as at the time of the installation or construction thereof), except for reasonable wear which does not adversely affect the watertight condition or structural integrity of structures on the Space or adversely affect the efficient or the proper

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utilization of any part of the Space or the environmental condition thereof. The Permittee shall make frequent periodic inspections of the Space and shall make all repairs and replacements, and do all rebuilding, inside and outside, ordinary and extraordinary, partial and entire, foreseen and unforeseen, structural or otherwise, regardless of the cause of the condition requiring such repairs, rebuilding or replacements, which repairs, rebuilding and replacements by the Permittee shall be in quality and class not inferior to the original in materials and workmanship. With respect to anything originally supplied or installed by the Port Authority, the Permittee shall have the benefit of the warranty, if any, running to the Port Authority, to the extent assignment thereof does not impair or void the same. Without limiting any other provision of this Permit, the obligations of the Permittee set forth above in this paragraph apply to the Space as the same shall exist on the Commencement Date and at any time thereafter during the period of the permission under this Permit.

(iii) Except under circumstances as to which paragraph (d)(i) of this Section of this Special Endorsement applies, upon receipt of notice that repair or replacement of such of the following as are located at the Space is required: (1) the water distribution system up to the closer of twenty (20) feet from the exterior building walls of the building being serviced or the valve connection thereto; or (2) the underground sanitary systems; the Port Authority will make such repairs and replacements to the extent necessary to keep such part of the Space in a reasonably good condition for the operations of the Permittee hereunder, but the Port Authority shall not be obligated to make any repairs or replacements to bring the Space to a better condition than that existing at the Commencement Date. The Port Authority's responsibilities under this paragraph shall be limited to bearing the expense of repair or replacement, and without limiting the foregoing the Port Authority shall have no responsibility with respect to any repairs or replacements which are the obligation of the Permittee under any other provision of this Permit. The Port Authority shall have no responsibility with respect to any repairs or replacements which are required because of any casualty whether or not insured or insurable. If the Port Authority shall fail, after a reasonable period of time to perform its repair and replacement obligations under this paragraph, the Permittee, as its sole remedy, shall perform the work, and the Port Authority shall on demand pay the Permittee its actual certified cash expenditures to third parties therefor, or, at the option of the Port Authority, shall extend to the Permittee a credit against its rental obligations under the Lease in an amount equal to such expenditures. Furthermore, prior to the commencement by the Port Authority of any work set forth in the Permittee's notice to the Port Authority, the Permittee shall take all precautions necessary to protect persons or property at the Space, including the immediate performance by the Permittee of any work required to correct conditions which involve danger to persons or property, and the Port Authority will reimburse the Permittee for such work as provided in this paragraph.

(iv) The Permittee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, agents, and representatives, from and against all claims and demands, including but not limited to claims and demands for death, claims and demands for personal injuries, and claims and demands for property damages, of any third persons whatsoever, including, but not limited to, the Permittee's officers, employees, agents, and representatives which may arise from the condition of the Space or any part thereof, or from the failure of the Permittee to notify the Port Authority of conditions requiring repair or replacement,

or from the failure of the Permittee to make timely corrections of dangerous or potentially dangerous conditions at the Space. Except as set forth above, the Permittee hereby releases and discharges the Port Authority, its Commissioners, officers, employees, agents, and representatives from any liability for damages to the Permittee, consequential, or otherwise, in connection with any of the provisions of paragraph (d)(iii) of this Section of this Special Endorsement concerning repairs or replacements to any portion of the Space, including without limitation thereto any failure on the part of the Port Authority for any reason whatsoever to make any repair or replacement, and including without limitation thereto any act or omission of the Port Authority, its officers, agents, employees, contractors or their employees, connected with the performance of such repairs or replacements.

(e) Personal Property. Without limiting the obligations of the Permittee stated elsewhere in this Permit, the Permittee shall be solely responsible to the Port Authority for loss or theft of or damage to any and all personal property, equipment and fixtures belonging to the Port Authority or for which it is responsible, located or to be located in or on the Space and shall promptly replace or repair the same within twenty (20) days after such loss, theft or damage (except that if any such repair requires activity over a period of time, then the Permittee shall commence to perform such repair within such twenty (20) day period and shall diligently proceed therewith without interruption); and the Permittee shall yield and deliver the same or replacements thereof to the Port Authority at the expiration or earlier termination of this Permit in the same condition as at the commencement of the Permit (or such later time at which the Permittee became responsible for same), reasonable wear not materially affecting the efficient use and functioning of the same excepted.

## 5. TERMINAL OPERATION

(a) Purpose. A principal purpose of the Port Authority in granting the permission under this Permit is to have available for maritime users of The Port of New York and New Jersey the services which the Permittee is permitted to render hereunder, all for the better accommodation and convenience of such entities and in fulfillment of the Port Authority's obligation to operate facilities for the use and benefit of the public.

(b) Non-Discrimination. The Terminal shall be open to all railroads and outside shippers.

(c) Operational Standards. The Permittee agrees that it will conduct a first class operation and (without limiting any provision of paragraph (c) of Special Endorsement No. 4 hereto) will furnish all fixtures, equipment (including, without limitation, computer systems and software), personnel (including, without limitation, licensed personnel as necessary), supplies, materials and other facilities necessary or proper therefor. The Permittee shall furnish all services hereunder on a fair, equal and non-discriminatory basis.

(d) Competition. The Permittee shall not enter into any agreement or understanding, express or implied, binding or nonbinding, with any other person who may furnish services in the Port of New York District (as such term is defined in Section 6403 of Title 17 of the Unconsolidated Laws of New York Annotated) similar to those furnished hereunder which will have the effect of (i) fixing rates and charges to be paid by users of the services; (ii) lessening or



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preventing competition between the Permittee and such other furnishers of services; or (iii) tending to create a monopoly in The Port of New York and New Jersey in connection with the furnishing of such services.

(e) Prohibited Acts.

(i) The Permittee shall not commit any nuisance or permit its employees or others on the Space with its consent to commit or create or continue or tend to create any nuisance on the Space or in or near the Facility.

(ii) The Permittee shall not do or permit to be done any act or thing at the Space or the Facility which shall or might subject the Port Authority to any liability or responsibility for injury to any person or persons or damage to any property.

(f) Safety. From time to time and as often as required by the Port Authority, the Permittee shall conduct pressure, water-flow, and other appropriate tests of the fire extinguishing system and fire-fighting equipment on the Space whether such system or equipment is furnished by the Port Authority or by the Permittee. The Permittee shall keep all fire-fighting and fire extinguishing equipment well supplied with a fresh stock of chemicals and with sand, water or other materials as the case may be for the use of which such equipment is designed, and shall train its employees in the use of all such equipment, including in such training periodic drills.

(g) Condition of Space. The Permittee shall accept the Space, the railroad track and switches and all other improvements and personal property of the Port Authority thereon in their present condition and shall repair any damages thereto or to any other Port Authority property caused by its operations. The Permittee shall be responsible for snow removal. The Permittee shall not install any fixtures or make any additions or improvements in or additions to the Space except with the prior written approval of the Port Authority.

(h) Application of Insurance Proceeds. The obligation of the Permittee as set forth in paragraph (i) of this Special Endorsement, in the event of damage or destruction covered by any contract of insurance under which the proceeds thereof are payable to the Port Authority, the Permittee is hereby released to the extent that the loss is recouped by actual payment to the Port Authority of the proceeds of such insurance; provided, however, that, if this release shall invalidate any such policy of insurance or reduce, limit or void the rights of the Port Authority thereunder, then the release shall be void and of no effect.

(i) Harmful Acts. Without in any wise limiting obligations of the Permittee as elsewhere stated in this Permit, the Permittee shall be liable to the Port Authority for any damage done to the Space or the Facility or to any part of either or to any property of the Port Authority thereon through any act or omission of those in charge of or operating any railroad locomotive cars or railroad equipment, any marine container equipment, any truck or other highway vehicle or any other vehicles or transportation equipment, while the same are at, coming to, or leaving the Space. Upon the payment by the Permittee to the Port Authority of all amounts due with respect to any such damage, the Port Authority shall transfer to the Permittee all rights of the Port Authority against any such third party with respect to such damages.

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(j) Security of the Space. The Port Authority shall have no responsibility to keep the Space guarded, attended or patrolled at any time. The Port Authority shall have no obligation to police the use of the Space, or to ensure that others do not use or occupy the Space, or to provide any other service whatsoever in connection therewith.

(k) Use of Space by Permittee.

(i) The Space shall be used, pursuant to the permission hereby granted,

(1) if the Permittee is a corporation, by the Permittee acting only through the medium of its officers and employees,

(2) if the Permittee is an unincorporated association, or a "Massachusetts" or business trust, by the Permittee acting only through the medium of its members, trustees, officers and employees,

(3) if the Permittee is a partnership, by the Permittee acting only through the medium of its general partners and employees, or

(4) if the Permittee is an individual, by the Permittee acting only personally or through the medium of his employees; or

(5) if the Permittee is a limited liability company, by the Permittee acting only through the medium of its members, managers and employees;

and the Permittee shall not, without the written approval of the Port Authority, use the Space through the medium of any other person, corporation or legal entity. The Permittee shall not assign or transfer this Permit or the permission granted hereby, or enter into any contract requiring or permitting the doing of anything hereunder by an independent contractor, without the written approval of the Port Authority. In the event of the issuance of this Permit to more than one individual or other legal entity (or to any combination thereof), then and in that event each and every obligation or undertaking herein stated to be fulfilled or performed by the Permittee shall be the joint and several obligation of each such individual or other legal entity.

(ii) The Permittee's Representative specified in Item 3 of the cover page of this Permit (or such substitute as the Permittee may hereafter designate in writing) shall have full authority to act for the Permittee in connection with this Permit and any act or things done or to be done hereunder, and to execute on the Permittee's behalf any amendments or supplements to this Permit or any extension hereof and to give and receive notices hereunder.

(c) The Permittee hereby agrees that it will not carry on any business or operation in the Space or at the Facility other than as specifically provided herein without receiving the prior written consent of the Port Authority, which consent, if given, will be in the form of a supplement hereto or a separate agreement with the Port Authority, which consent will specify whether any fees shall apply thereto.

## 6. INGRESS AND EGRESS

The Permittee shall have the right of ingress and egress between the Space and the city streets outside the Facility. Such right shall be exercised by means of such pedestrian or vehicular ways, to be used in common with others having rights of passage within the Facility, as may from time to time be designated by the Port Authority for the use of the public. The use of any such way shall be subject to the rules and regulations of the Port Authority which are now in effect or which may hereafter be promulgated for the safe and efficient operation of the Facility. The Port Authority may, at any time, temporarily or permanently close, or consent to or request the closing of, any such way or any other area at, in or near the Facility presently or hereafter used as such, so long as a means of ingress and egress as provided above remains available to the Permittee. The Permittee hereby releases and discharges the Port Authority, and all municipalities and other governmental authorities, and their respective successors and assigns, of and from any and all claims, demands, or causes of action which the Permittee may now or at any time hereafter have against any of the foregoing arising or alleged to arise out of the closing of any way or other area whether within or outside the Facility. The Permittee shall not do anything which will interfere with the free access and passage of others to space adjacent to the Space or in any streets, ways and walks near the Space.

## 7. AMOUNTS PAID BY PORT AUTHORITY FOR PERMITTEE OBLIGATIONS

(a) Non-Performance. If the Port Authority has paid any sum or sums or has incurred any obligations or expense which the Permittee has agreed to pay or reimburse the Port Authority for, or if the Port Authority is required or elects to pay any sum or sums or incurs any obligations or expense by reason of the failure, neglect or refusal of the Permittee to perform or fulfill any one or more of the conditions, covenants or agreements contained in this Permit as a result of an act or omission of the Permittee contrary to the said conditions, covenants and agreements, the Permittee shall pay to the Port Authority the sum or sums so paid or the expense so incurred, including all interest, costs, damages and penalties, and each and every part of the same shall be recoverable by the Port Authority in the same manner and with like remedies that the Port Authority would have at law or in equity consequent upon any breach of this Permit by Permittee.

(b) Evidence of Payment. For all purposes under this Special Endorsement and in any suit, action or proceeding of any kind between the parties hereto, any receipt showing any payment of sum or sums by the Port Authority for any work done or material furnished shall be prima facie evidence against the Permittee that the amount of such payment was necessary and reasonable. Should the Port Authority elect to use its operating and maintenance staff in performing any work and to charge the Permittee with cost of same, any time report of any employee of the Port Authority showing hours of labor or work allocated to such work, or any stock requisition of the Port Authority showing the issuance of materials for use in the performance thereof, shall likewise be prima facie evidence against the Permittee that the amount of such charge was necessary and reasonable.

(c) Definition of Costs. The term "costs" in this Special Endorsement shall mean and include; (i) payroll costs, including contributions to pension plans or systems, insurance costs, sick leave pay, holiday, vacation, and authorized absence pay; (ii) cost of materials and supplies

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used; (iii) payments to contractors; (iv) any other direct costs; and (v) thirty percent (30%) of the sum of the foregoing.

### **8. REVOCATION**

(a) Right of Entry. The Port Authority shall, as an additional remedy upon the giving of a notice of revocation as provided in paragraph 2 of the Terms and Conditions of this Permit, have the right to re-enter the Space and every part thereof upon the effective date of revocation without further notice of any kind, and may regain and resume possession either with or without the institution of summary or any other legal proceedings or otherwise. Such re-entry, or regaining or resumption of possession, however, shall not in any manner affect, alter or diminish any of the obligations of the Permittee under this Permit and shall in no event constitute an acceptance of the surrender of the Space.

(b) Dispossession. The Permittee hereby waives any and all rights to recover or regain possession of the Space and all rights of redemption, granted by or under any present or future law in the event it is evicted or dispossessed for any cause, or in the event the Port Authority obtains possession of the Space in any lawful manner.

(c) Mutual Termination. No agreement for the mutual termination of this Permit shall be valid unless and until the same shall have been reduced to writing and signed by the duly authorized representatives of the Port Authority and of the Permittee. Except as expressly provided in this Special Endorsement, neither the doing of, nor any omission to do, any act or thing, by any of the officers, agents or employees of the Port Authority, shall be deemed an acceptance of a mutual termination of this Permit.

### **9. ACCEPTS THE SPACE AS-IS**

(a) The Permittee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of the Space or the suitability thereof for the operations permitted on the Space by this Permit. The Permittee, prior to the execution of this Permit, has thoroughly examined the Space and has found it to be in good order and repair and determined them to be suitable for the Permittee's operations hereunder. Without limiting any obligation of the Permittee to commence operations hereunder at the time and in the manner stated elsewhere in this Permit, the Permittee agrees that no portion of the Space will be used initially or at any time during the effective period of this Permit which is in a condition unsafe or improper for the conduct of the Permittee's operations hereunder so that there is possibility of injury or damage to life or property and the Permittee further agrees that before any use it will immediately correct any such unsafe or improper condition.

(b) Except to the extent required for the performance of any of the obligations of the Permittee under this Permit, nothing contained in this Permit shall grant to the Permittee any rights whatsoever in the air space above the height of the structures located on the Space as of the Commencement Date hereof.

**10. NO LIABILITY**

The Port Authority shall not be liable to the Permittee, or to any person, for injury or death to any person or persons whomsoever or damage to any property whatsoever at any time in the Space or elsewhere at the Facility, including but not limited to any such injury, death or damage from falling material, water, rain, hail, snow, gas, steam or electricity, whether the same may leak into, or fall, issue, or flow from any part of the Facility, or from any other place or quarter.

**11. [INTENTIONALLY OMITTED]**

**12. HOLDOVER**

Without in any way limiting any provisions of this Permit, as herein amended, unless otherwise notified by the Port Authority in writing, in the event the Permittee continues its use and occupancy of the Space after the expiration, revocation or termination of the period of permission granted under this Permit, as herein amended, as such period of permission may be extended from time to time, in addition to any damages to which the Port Authority may be entitled under this Permit or other remedies the Port Authority may have by law or otherwise, the Permittee shall pay to the Port Authority a fee for the period commencing on the day immediately following the date of such expiration or the effective date of such revocation or termination and ending on the date that the Permittee shall surrender and completely vacate the Space, at a rate equal to the maximum amount that may be charged by the Port Authority in accordance with applicable law. Nothing herein contained shall give, or be deemed to give, the Permittee any right to continue its use and occupancy of the Space after the expiration, revocation or termination of the period of permission granted under this Permit, as herein amended. The Permittee acknowledges that the failure of the Permittee to surrender, vacate and yield up the Space to the Port Authority on the effective date of such expiration, revocation or termination will or may cause the Port Authority injury, damage or loss. The Permittee hereby assumes the risk of such injury, damage or loss and hereby agrees that it shall be responsible for the same and shall pay the Port Authority for the same whether such are foreseen or unforeseen, special, direct, consequential or otherwise and the Permittee hereby expressly agrees to indemnify and hold the Port Authority harmless against any such injury, damage or loss.

**13. GOVERNMENTAL AUTHORITY INTERFERENCE**

(a) Interference with Services. The Port Authority shall be under no obligation to supply any service or services if and to the extent and during any period that the supplying of any such service or services or the use of any component necessary therefor shall be prohibited or rationed by any federal, state or municipal law, rule, regulation, requirement, order or direction and if the Port Authority deems it in the public interest to comply therewith, even though such law, rule, regulation, requirement, order or direction may not be mandatory on the Port Authority as a public agency.

(b) Interference with Business Operations. No abatement, diminution or reduction of any charges payable by the Permittee, shall be claimed by or allowed to the Permittee for any inconvenience, interruption, cessation or loss of business or other loss caused, directly or

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indirectly, by any present or future laws, rules, requirements, orders, directions, ordinances or regulations of the United States of America, or of the state, county or city governments, or of any other municipal, governmental or lawful authority whatsoever, or by priorities, rationing or curtailment of labor or materials, or by war or any matter or thing resulting therefrom, or by any other cause or causes beyond the control of the Port Authority, nor shall this Permit be affected by any such causes. In the event any occurrence described in the foregoing sentence shall result in the inability of the Permittee to operate at the Space for a period in excess of thirty (30) days, any charges hereunder shall be abated from and after the thirtieth (30th) day after such occurrence for so long as the Permittee shall be unable to operate at the Space.

### **14. UTILITIES**

(a) Provision of Utilities. The Port Authority shall be under no obligation to supply the Permittee with any utilities, including but not limited to water, gas, electricity, sewer service, heat, steam, air-conditioning, telephone, telegraph, cable, or electrical guard or watch service.

(b) Water. The Permittee shall promptly pay all water-bills covering consumption on the Space. In the event that any such water-bill or bills shall remain unpaid for a period of six (6) months after the same becomes due and payable, or in the event that any such bill remains unpaid at the date of expiration or earlier revocation or termination of the effective period under this Permit, the Port Authority may pay the same and any interest or penalties thereon, and the total payment or payments shall be payable to the Port Authority on demand.

(c) Increase in Assessments. If any federal, state, municipal or other governmental body, authority or agency, or any public utility or other entity providing any service, assesses, levies, imposes, makes or increases any charge, fee, rent or assessment on the Port Authority, for any service, system or utility now or in the future supplied to or available at the Space, the Permittee shall, at the option of the Port Authority exercised at any time and from time to time by notice to the Permittee, pay, in accordance with any such notice, such charge, fee, rent or assessment or such increase thereof (or the portion thereof allocated by the Port Authority to the Space or to the operations of the Permittee under this Permit) either directly to the governmental body, authority or agency, or to the public utility or other entity, or directly to the Port Authority, as such notice may direct. All such payments shall constitute charges payable under this Permit.

(d) Interruption of Services. No failure, delay or interruption in any service or services, whether such service or services shall be supplied by the Port Authority or by others, shall relieve or be construed to relieve the Permittee of any of its obligations hereunder, or shall be or be construed to be a revocation or termination of this Permit, or shall constitute grounds for any diminution or abatement of any charges payable under this Permit, or grounds for any claim by the Permittee for damages, consequential or otherwise.

(e) Meters. Without in any wise affecting the obligations of the Permittee elsewhere stated in this Permit, the Permittee shall, subject to the provisions of Special Endorsement No. 4 of this Permit, provide, maintain and keep in good order, condition and repair any and all meters (to be located as designated by the Port Authority, other governmental authority or utility).

## **15. BOOKS AND RECORDS**

The Permittee shall maintain in accordance with accepted accounting practice during the period of the permission under this Permit and for three years thereafter records and books of account of its operations at the Space connected with or reflecting upon the payment of any charges hereunder, which records and books of account shall be kept at all times within the Port of New York District, as defined in the Port Compact of 1921 authorized by C. 154 Laws of N.Y. 1921 and C. 151 Laws of N.J. 1921, approved by Public Resolution No. 17 of the 67th Congress, First Session. The Permittee shall provide to the Port Authority on a monthly basis on or before the twentieth (20th) day of the following calendar month a report summarizing such activity and such payments in such form as may be directed from time to time by the Port Authority. The Port Authority shall have the right from time to time during ordinary business hours by its agents, employees and representatives to audit and inspect such books, records and other data of the Permittee relating to the Space and the operations of the Permittee thereat, as the Port Authority shall deem necessary to substantiate the Permittee's reports hereunder, it being understood that the Port Authority shall not be bound by any prior audit conducted by it.

## **16. RIGHT TO USE RAILROAD TRACKS**

The Permittee shall have the right (to be exercised in common with others now or in the future having rights of passage by rail) to use such of the existing railroad tracks located on lands owned or leased by the Port Authority (and as to which others shall not have been granted the exclusive use by lease, permit or other arrangement with the Port Authority) as may be necessary for ingress and egress of railroad cars to and from Space subject to the following limitations and conditions:

- (a) United States' Superior Rights. The foregoing right of use shall be subject to all times to the prior right of use by or on behalf of the United States;
- (b) No Interference. The foregoing right of use shall be exercised in a manner which will not hamper, interfere with or prevent the reasonable use of the tracks by others for the passage of railroad cars, locomotives and tenders and for the ingress and egress of such cars and locomotives to areas adjacent to the Space made available to others by the Port Authority;
- (c) Rules and Regulations. The Permittee shall not cause or permit the tracks to be obstructed, (except for the portion of track adjacent to the Space, and that portion for reasonable loading and unloading periods only), and shall comply with all rules and regulations of the Port Authority relating to the use of railroad tracks which are now in effect or which may hereafter be promulgated for the safe and efficient use of the Facility, and shall comply further with the directions of the Facility Manager relating to the use of railroad tracks;
- (d) Relocation of Tracks. The Port Authority shall have the right to remove or to relocate any track or tracks so long as means of ingress and egress for railroad cars as above described remains available;
- (e) Delays by the Port Authority. The Port Authority shall not be liable for any inconvenience, delay or loss to the Permittee by reason of interruption of use by the Permittee of

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any or all such railroad tracks, occasioned by causes or circumstances over which the Port Authority shall not have control;

(f) Railroad Company Agreements. The right of user granted hereby shall be subject to any existing or future agreements between the Port Authority and the railroads serving the Facility relating to the furnishing of service by such railroads, as the said agreements may from time to time be modified or amended.

### **17. PRIOR OBLIGATIONS**

(a) Continuous Possession and Occupancy. The parties acknowledge and agree that (i) the Permittee has had and currently has the rights to use, occupy and operate the Space since the effective date of Lease Supplement No. 1 to the Existing Lease, (ii) the Permittee shall continue to have such rights during the period of permission of this Permit and (iii) no gap in time and no reversion with respect to the Space has occurred between the effective date of Lease Supplement No. 1 to the Existing Lease and the commencement of the period of permission of this Permit. Further, it is hereby acknowledged that the Permittee remained in possession of the Space hereunder continuously from the effective date of Lease Supplement No. 1 to the Existing Lease through the Commencement Date, and at no time did the Permittee surrender the Space to the Port Authority.

(b) Survival of the Lease Obligations. The Permittee shall not, by virtue of this Permit, be released or discharged from any liabilities or obligations whatsoever that arose or accrued under the Existing Lease or any other prior Port Authority permits or agreements, all of which shall survive.

### **18. LABOR DISTURBANCES**

(a) The existing paragraph appearing in Standard Endorsement No. 28 shall be designated as paragraph (a) thereof and the following shall be deemed inserted as paragraphs (b), (c), (d) and (e) thereof:

“(b) The Permittee shall use its best efforts to ensure labor harmony in its operations at the Space, to the end of avoiding and preventing strikes, walkouts, work stoppage, slowdowns, boycotts and other labor trouble and discord. The Permittee particularly recognizes the essential necessity of the continued and full operations at the Space.

(c) The Permittee shall not employ any persons or use any labor, or use or have any equipment, or permit any condition to exist which shall or may cause or be conducive to any labor complaints, troubles, disputes or controversies at the Facility which interfere or are likely to interfere with the operations of the Permittee under this Permit.

(d) The Permittee shall immediately give notice to the Port Authority (to be followed by written notices and reports) to any and all impending or existing labor complaints, troubles, disputes or controversies and the progress thereof.



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The Permittee shall use its best efforts to resolve any such complaint, trouble, dispute or controversy.”

(e) The Port Authority shall not be liable for any failure, delay or interruption in performing its obligations hereunder due to causes or conditions beyond its control, including without limitation thereto, strikes, boycotts, picketing, slow-downs, work stoppages or labor troubles of any other type (whether affecting the Port Authority, its contractors, or subcontractors.)”

### **19. ACCEPTANCE OF CARGO**

The Permittee will accept and deliver cargo containers at the Space in accordance with current and prevailing regional marine terminal operating hours.

### **20. PERMITTEE COOPERATION DURING CONSTRUCTION**

The Permittee understands that construction of additional parts of the Facility will be ongoing during its operations and that relocation and movement in and out of operating areas will be required in order to provide for unimpeded construction at the Facility. The Permittee hereby agrees and commits to faithfully and promptly cooperate with such relocation and movement requirements. Upon 15-day prior notice from the Port Authority, the Permittee will move out of needed areas and the Permittee will move back into such areas upon 15-day prior notice from the Port Authority.

### **21. PERFORMANCE STANDARDS**

The Port Authority and the Permittee have established the Performance Standards for the operations of the Permittee at the Space annexed hereto and hereby made a part hereof and marked Exhibit B and the Port Authority will review the Permittee’s compliance therewith in connection with any determination by the Port Authority of the eligibility of the Permittee for participation in any procurement process for the operation of the Space for the period following the expiration of this Permit.

### **22. LATE CHARGE**

If the Permittee should fail to pay any amount required under this Permit when due to the Port Authority, or if any such amount is found to be due as the result of an audit, then, in such event, the Port Authority may impose (by statement, bill or otherwise) a late charge with respect to each such unpaid amount for each late charge period (hereinbelow described) during the entirety of which such amount remains unpaid, each such late charge not to exceed an amount equal to eight-tenths of one percent of such unpaid amount for each late charge period. There shall be twenty-four late charge periods on a calendar year basis; each late charge period shall be for a period of at least fifteen calendar days except one late charge period each calendar year may be for a period of less than fifteen (but not less than thirteen) calendar days. Without limiting the generality of the foregoing, late charge periods in the case of amounts found to have been owing to the Port Authority as the result of Port Authority audit findings shall consist of each late charge period following the date the unpaid amount should have been paid under this

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Permit. Each late charge shall be payable immediately upon demand made at any time therefor by the Port Authority. No acceptance by the Port Authority of payment of any unpaid amount or of any unpaid late charge amount shall be deemed a waiver of the right of the Port Authority to payment of any late charge or late charges payable under the provisions of this Special Endorsement with respect to such unpaid amount. Nothing in this Special Endorsement is intended to, or shall be deemed to, affect, alter, modify or diminish in any way (i) any rights of the Port Authority under this Permit, including without limitation the Port Authority's rights set forth in this Special Endorsement or (ii) any obligations of the Permittee under this Permit. In the event that any late charge imposed pursuant to this Special Endorsement shall exceed a legal maximum applicable to such late charge, then, in such event, each such late charge payable under this Permit shall be payable instead at such legal maximum.

### **23. TRAFFIC**

All traffic information at the Terminal shall be reported by the Permittee to the Port Authority at a minimum on a monthly basis.

### **24. INDEMNITY**

(a) Indemnification. Without limiting any of the provisions of the Insurance Schedule, the Permittee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees, representatives and contractors, from and against (and shall reimburse the Port Authority for the Port Authority's costs and expenses including legal expenses incurred in connection with the defense of) all claims and demands of third persons including but not limited to claims and demands for death or personal injuries, or for property damages, arising out of any default of the Permittee, its officers, employees, and persons who are doing business with it, in performing or observing any term or provision of this Special Endorsement, including claims and demands of the City of Newark, from which the Port Authority derives its rights in the Facility, for indemnification arising by operation of law or through agreement of the Port Authority with the said City of Newark.

(b) Claims. If so directed, the Permittee shall at its own expense defend any suit based upon any such claim or demand (even if such claim or demand is groundless, false or fraudulent), and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal, the immunity of the Port Authority, its Commissioners, officers, agents or employee, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.

### **25. TRANSFER OF OWNERSHIP INTERESTS**

The Permittee recognizes the fact that a transfer of all of the securities or interests in the Permittee or of a substantial part thereof, or any other act or transaction involving or resulting in a change in the ownership or distribution of such securities or interests or with respect to the identity of the parties in control of the Permittee, is for practical purposes a transfer or disposition of the rights obtained by the Permittee through this Permit. The Permittee further recognizes that because of the nature of the obligations of the Permittee hereunder, the

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qualifications and identity of the Permittee and its security or interest holders are of particular concern to the Port Authority. The Permittee also recognizes that it is because of such qualifications and identity that the Port Authority is entering into this Permit and, in doing so, is willing to accept and rely on the Permittee for the faithful performance of all obligations and covenants hereunder. Therefore, the Permittee agrees that Section 48 of the Lease shall be incorporated herein.

### **26. WAIVER OF TRIAL BY JURY**

The Permittee hereby waives its right to trial by jury in any summary proceeding or action that may hereafter be instituted by the Port Authority against the Permittee in respect of the Space and/or in any action that may be brought by the Port Authority to recover damages or other sums due and owing under this Permit. The Permittee specifically agrees that it shall not interpose any claims as counterclaims in any summary proceeding or action for non-payment of amounts due under this Permit which may be brought by the Port Authority unless such claims would be deemed waived if not so interposed. The foregoing reference to summary proceedings shall not be construed to mean that a landlord-tenant relationship exists between the Port Authority and the Permittee.

### **27. CONSTRUCTION AND APPLICATION OF TERMS**

(a) The use of headings in this Permit is for convenience of reference only and in no way intended to define, limit or describe the scope or intent of any provision hereof.

(b) Any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applicable to the interpretation of this Permit or any amendments, addendums or supplements hereto or any endorsements, exhibits, schedules or other attachments hereto.

(c) The provisions and obligations contained in any endorsements, exhibits, schedules or other attachments hereto shall have the same force and effect as if set forth in full herein.

(d) To the extent that any provisions of this Permit are in any instance to be construed in accordance with the laws of a state, the laws of the State of New Jersey shall apply.

### **28. OFAC COMPLIANCE**

(a) The Permittee hereby represents and warrants to the Port Authority that the Permittee (x) is not, and shall not become, a person or entity with whom the Port Authority is restricted from doing business under the regulations of the Office of Foreign Assets Control (“OFAC”) of the United States Department of the Treasury (including, without limitation, those named on OFAC’s Specially Designated and Blocked Persons list) or under any statute, executive order (including, without limitation, Executive Order 13224 of September 23, 2001, Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism), or other governmental action, and (y) is not engaging, and shall not engage, in any dealings or transactions with, and is not and shall not be otherwise associated

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with (as determined by the Secretary of the Treasury of the United States of America), such persons or entities. The Permittee acknowledges that the Port Authority is entering into this Permit in reliance on the foregoing representations and warranties and that such representations and warranties are a material element of the consideration inducing the Port Authority to enter into and execute this Permit. In the event of any breach of any of the foregoing representations and warranties by the Permittee, the Port Authority shall have the right, in addition to any and all other remedies provided under this Permit or at law or in equity, to immediately terminate this Permit upon written notice to the Permittee. The Permittee further acknowledges that there shall be no cure for such a breach. In the event of any such termination by the Port Authority, the Permittee shall, immediately on receipt of the Port Authority's termination notice, cease all use of and operations permitted under this Permit and surrender possession of the Space to the Port Authority without the Port Authority being required to resort to any other legal process. Termination on the afore-described basis shall be deemed a termination for cause.

(b) The Permittee shall indemnify and hold harmless the Port Authority and its Commissioners, officers, employees, agents and representatives from and against any and all claims, damages, losses, risks, liabilities and expenses (including, without limitation, attorney's fees and disbursements) arising out of, relating to, or in connection with the Permittee's breach of any of its representations and warranties made under this Section. Upon the request of the Port Authority, the Permittee shall at its own expense defend any suit based upon any such claim or demand (even if such suit, claim or demand is groundless, false or fraudulent) and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provision of any statutes respecting suits against the Port Authority.

### **29. GOVERNING LAW**

This Permit and any claim, dispute or controversy arising out of, under or related to this Permit, the relationship of the parties hereunder, and/or the interpretation and enforcement of the rights and obligation of the parties hereunder shall be governed by, interpreted and construed in accordance with the laws of the State of New Jersey, without regard to conflict of law principles.

### **30. CROSS DEFAULT**

If any event described in the Lease as a ground for termination or event of default, shall occur, such event shall be a ground for revocation of this Permit in the same manner and to the same extent as if it had been explicitly enumerated in of Section 2 of the Terms and Conditions of this Permit.

**1. OTHER AGREEMENTS**

(a) If there shall be a conflict between any provision of this Permit and the Lease, the Lease shall control.


(b) Except as specifically provided herein to the contrary, the Permittee shall not, by virtue of the issue and acceptance of this Permit, be released or discharged from any liabilities or obligations whatsoever under any other Port Authority permits, leases or agreements including but not limited to any permits to make alterations.

(c) Throughout the period of permission pursuant to this Permit, the Permittee and the Space shall be subject to and in compliance with the following sections of the Lease as if the Permittee were the Lessee (as defined in the Lease) and the Space was the Premises (as used in the Lease), including any exhibits and schedules referenced thereto:

- (i) Section 13 of the Lease, entitled "*Environmental Responsibilities*";
- (ii) Section 22 of the Lease, entitled "*Assignment and Sublease*";
- (iii) Section 35 of the Lease, entitled "*Surrender*"; and
- (iv) Section 36 of the Lease, entitled "*Acceptance of Surrender of Lease*".

  
\_\_\_\_\_  
For the Port Authority

Initialed:

  
\_\_\_\_\_  
For the Permittee

**Exhibit B**

**TERMINAL OPERATOR**

**PERFORMANCE MEASURES AND STANDARDS**

- **Train Release:**
  - Measure: Frequency of on-time train releases to the railroad.
  - Standard: Loading completed and train released to railroad on time 92% of the time, subject to on-time train placement and rail car mix at the Space by the railroad.
  
- **Accurate Train Loading:**
  - Measure: Occurrence of mis-loads (including incorrect destinations, overheights, overweights).
  - Standard: The Permittee will pay for, or reimburse the railroad for, re-routing costs, if contractually required by agreement between the Permittee and the railroad. (measured on a case by case basis)
  
- **Terminal Turn-Time:**
  - Measure: Maximum total turnaround time for truckers from other terminals, from arrival at the in-bound gate, to departure from the out-bound gate.
  - Standard: Turn time at the Space will not exceed 30 minutes (gate to gate). Permittee will pay "detention" time to truck operators for each 15 minute increment over 30 minutes at the rate of \$12.50/15 min. on a single move and for each 15 minute increment over 45 minutes at the rate of \$12.50/15 min. on a double move provided in each case that the trucker has presented necessary documentation to the Permittee.
  
- **Import Unit Handling Efficiency:**
  - Measure: Percentage of units on hand loaded to train.
  - Standard: 100% of all loaded import units received to the Space by cut-off (to be defined) must be loaded on the train on the same day, given adequate railcar supply by railroad. (measured on a weekly basis)
  
- Export Unit Handling Efficiency:**
  - Measure: Percentage of units made available for customer pick up within stipulated time after train is placed.
  - Standard: On weekdays, 100% of all inbound containers must be made available within two hours of train placement or the start of business, whichever is later. Following

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weekends or holidays, all containers must be made available by 6:00 a.m. next business day. (measured on a weekly basis)

o E.D.I./Data Entry:

Measure: Compatibility of systems, and percent of information entered accurately and timely.

Standard: System and data entry must be compatible with equipment and standards of servicing railroad.

o Container Dwell Time in Terminal:

Measure: Min/max/avg time containers spend in Space.

Standard: Terminal operator may enforce a demurrage program consistent with tariff rates of servicing railroad. (measured on a case by case basis)

o Safe Operation:

Measure: Operation at the Space without injuries/fatalities; development and enforcement of a proactive safety program.

Standard: Demonstrated improvement (or zero deterioration) in the level of incident-free operating days per week, using the first three months of operational responsibility as the base standard. (measured on a weekly basis)



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For the Port Authority

Initialed:



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For the Permittee

**INSURANCE SCHEDULE**

(a) The Permittee named in the Permit to which this Insurance Schedule is attached and of which it constitutes an integral part, in its own name as insured and including the Port Authority as an additional insured, shall maintain and pay the premiums during the effective period of the Permit on a policy or policies of Commercial General Liability Insurance and Commercial Automobile Liability Insurance, including premises-operations and products-completed operations and covering bodily-injury liability, including death, and property damage liability, none of the foregoing to contain care, custody or control exclusions, and providing for coverage in the limit set forth below:

**Minimum Limits**

**Commercial General Liability Insurance**

Combined single limit per occurrence for death,  
bodily injury and property damage liability: \$25,000,000.00

**Commercial Automobile Liability Insurance**

Combined single limit per occurrence for death,  
bodily injury and property damage liability: \$25,000,000.00

**Workers' Compensation and Employers Liability Insurance**

Permittee's obligations under the applicable State  
Workers' Compensation Law for those employees of  
the Permittee employed in operations conducted  
pursuant to the Permit at or from the Port: Statutory (in no event less  
than \$1,000,000.00)

In the event the Permittee maintains the foregoing insurance in limits greater than aforesaid, the Port Authority shall be included therein as an additional insured, except for the Workers' Compensation and Employers Liability Insurance policies, to the full extent of all such insurance in accordance with all terms and provisions of the Permit, including without limitation this Insurance Schedule.

(b) Each policy of insurance, except for the Workers' Compensation and Employers Liability Insurance policies, shall also contain an ISO standard "separation of insureds" clause or a cross liability endorsement providing that the protections afforded the Permittee thereunder with respect to any claim or action against the Permittee by a third person shall pertain and apply with like effect with respect to any claim or action against the Permittee by the Port Authority and any claim or action against the Port Authority by the Permittee, as if the Port Authority were the named insured thereunder, but such clause or endorsement shall not limit, vary, change or affect the protections afforded the Port Authority thereunder as an additional insured. Each policy of insurance shall also provide or contain a contractual liability endorsement covering the obligations assumed by the Permittee under this Permit.

(c) All insurance coverages and policies required under this Insurance Schedule may be reviewed by the Port Authority for adequacy of terms, conditions and limits of coverage at any time and from time to time during the period of permission under the Permit. The Port Authority may, at any such time, require additions, deletions, amendments or modifications to the above-scheduled insurance requirements, or may require such other and



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additional insurance, in such reasonable amounts, against such other insurable hazards, as the Port Authority may deem required and the Permittee shall promptly comply therewith.

(d) Each policy must be specifically endorsed to provide that the policy may not be cancelled, terminated, changed or modified without giving thirty (30) days' written advance notice thereof to the Port Authority. Each policy shall contain a provision or endorsement that the insurer "shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority." The foregoing provisions or endorsements shall be recited in each policy or certificate to be delivered pursuant to the following paragraph (e).

(e) A certified copy of each policy or a certificate or certificates of insurance evidencing the existence thereof, or binders, shall be delivered to the Port Authority upon execution and delivery of the Permit by the Permittee to the Port Authority. In the event any binder is delivered it shall be replaced within thirty (30) days by a certified copy of the policy or a certificate of insurance. Any renewal policy shall be evidenced by a renewal certificate of insurance delivered to the Port Authority at least fifteen (15) days prior to the expiration of each expiring policy, except for any policy expiring after the date of expiration of the Permit. The aforesaid insurance shall be written by financially sound and responsible insurance providers authorized to do business in the State in which the Space is located, with a claims paying ability/financial strength rating of "A-" (or its equivalent) or better by Standard & Poor's, A.M. Best or an equivalent rating by a comparable insurance rating agency. If at any time any insurance policy shall be or become unsatisfactory to the Port Authority as to form or substance or if any of the carriers issuing such policy shall be or become unsatisfactory to the Port Authority, the Permittee shall promptly obtain a new and satisfactory policy in replacement. If the Port Authority at any time so requests, a certified copy of each policy shall be delivered to or made available for inspection by the Port Authority.

(f) The foregoing insurance requirements shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Permittee under the Permit. The foregoing insurance requirements shall not constitute a representation or warranty as to the adequacy of the required coverage to protect the Permittee with respect to the obligations imposed on the Permittee by the Permit or any other agreement or by law.

  
\_\_\_\_\_  
For the Port Authority

Initialed:

  
\_\_\_\_\_  
For the Permittee



**THE PORT AUTHORITY OF NY & NJ**

*Christopher O. Ward  
Executive Director*

June 14, 2011

Terminal Investment Limited,  
Nerine House, St George's Place,  
St Peter Port, Guernsey,  
Channel Islands, GY1 3ZG

Re: Port Newark Container Terminal Lease – TIL Change of Control Transactions

Dear Sirs,

This letter is to confirm that as we have discussed, notwithstanding the restrictions contained in the Amended and Restated Agreement of Lease between Port Newark Container Terminal LLC and The Port Authority of New York and New Jersey, Lease (LPN-264), in the event that Terminal Investments Limited ("TIL") and its parent company shall hereafter seek to enter into a transaction for the sale of not more than 49% of the issued and outstanding shares of TIL, the Port Authority will not unreasonably withhold its consent to the approval of such transaction.

In addition, under the appropriate circumstances, such as an unchanged effective control of TIL by its current shareholder, the Port Authority will consider waiving the Change of Control fee which may otherwise become due and payable as a result of such sale of TIL's limited partnership interests.

Sincerely,

Christopher O. Ward  
Executive Director

225 Park Avenue South, 15th Floor  
New York, NY 10003  
T: 212 435 7271 F: 212 435 6670

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of August 31, 2001, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the mutual agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. In addition to the premises heretofore let to the Lessee under the Lease, the letting as to which shall continue in full force and effect, subject to and in accordance with all the terms, provisions, covenants and conditions of the Lease as amended by this Agreement, the Port Authority hereby lets to the Lessee and the Lessee hires and takes from the Port Authority, at Port Newark aforesaid, the open area shown in diagonal crosshatching on the sketch attached hereto, hereby made a part hereof and marked "Exhibit A-2", together with the structures, fixtures, improvements and other property, if any, of the Port Authority located or to be located therein or thereon, the said open area, and the said structures, fixtures, improvements and other property (all of which is sometimes hereinafter in this Agreement called "the Additional Premises") to be and become a part of the premises under the Lease at 12:01 o'clock A.M. on September 1, 2001 let to the Lessee, subject to and in accordance with all of the terms, covenants and conditions of the Lease as herein amended, for a term expiring at 11:59 o'clock P.M. on August 31, 2005, unless sooner terminated. The parties hereby acknowledge that the Additional Premises constitute non-residential property.

2. The Lessee shall use the Additional Premises solely as a temporary intermodal rail facility in connection with its operations under the Lease.

3. The Port Authority shall deliver the Additional Premises to the Lessee in its presently existing "as is" condition. The Lessee acknowledges that prior to the execution of this Agreement, it has thoroughly examined and inspected the Additional Premises and, subject to the performance of the work set forth in paragraph 9 of this Agreement, has found it in good order and repair and has determined it to be suitable for the Lessee's operations therein under the Lease as herein amended. The Lessee agrees to and shall take the Additional Premises in its "as is" condition and the Port Authority shall have no obligations under the Lease as herein amended for finishing work or preparation of any portion of the Additional Premises for the Lessee's use.

4. The Lessee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the suitability of the Additional Premises for the operations permitted thereon by the Lease as herein amended. Without limiting any obligation of the Lessee to commence operations under the Lease as herein amended at the time and in the manner stated elsewhere in this Agreement, the Lessee agrees that no portion of the Additional Premises will be used initially or at any time during the letting thereof under the Lease as herein amended which is in a condition unsafe or improper for the conduct of the Lessee's operations therein under the Lease as herein amended so that there is possibility of injury or damage to life or property.

5. The Port Authority shall have no obligation to supply to the Lessee any services or utilities in the Additional Premises.

6. (a) In addition to all other rentals payable under the Lease as herein amended, the Lessee shall pay a basic rental for the Additional Premises at the annual rate of Sixty-eight Thousand Six Hundred Forty-five Dollars and Eighty-five Cents (\$68,645.85), payable in advance in the amount of Five Thousand Seven Hundred Twenty Dollars and Forty-nine Cents (\$5,720.49) on the "Rental Commencement Date", as hereinafter defined, and on the first day of each calendar month thereafter during the term of the letting of the Additional Premises, except that if the Rental Commencement Date shall be a day other than the first day of a calendar month the installment of basic rental payable on the Rental Commencement Date shall be an amount equal to the amount of the installment described in this subparagraph multiplied by a fraction the numerator of which shall be the number of days from the Rental Commencement Date to the last day of the calendar month in which the Rental Commencement Date shall fall and the denominator of which shall be the number of days in that calendar month.

(b) "Rental Commencement Date" shall mean the earliest of the following dates:

(1) November 1, 2001; or

(2) the date as of which the Port Authority shall certify that the Lessee has substantially completed performance of the "Lessee's Construction Work", described in paragraph 9 hereof to such an extent as to permit use and occupancy of the Additional Premises by the Lessee for the purposes stated in paragraph 2 of this Agreement; or

(3) the date on which the Lessee commences in the Additional Premises any of the operations authorized therein by paragraph 2 of this Agreement.

7. Abatement of basic rental, if any, to which the Lessee may be entitled with respect to the Additional Premises shall be computed in accordance with the provisions of Standard Endorsement No. L27.4 attached hereto and hereby made a part hereof.

8. (a) The Lessee shall pay to the Port Authority during the period from the Rental Commencement Date through the expiration of the term of the letting of the Additional Premises under the Lease as herein amended a "Rail Facility Container Lift Fee" for each "Rail Container Lift", as such term is defined in this subparagraph, at the following respective rate for each Rail Container Lift: (1) Twenty-three Dollars and Ninety-seven Cents (\$23.97) during the period from the Rental Commencement Date through December 31, 2001; (2) Twenty-four Dollars and Ninety-three Cents (\$24.93) during the period from January 1, 2002 through December 31, 2002; (3) Twenty-five Dollars and Ninety-three Cents (\$25.93) during the period from January 1, 2003 through December 31, 2003; (4) Twenty-six Dollars and Ninety-six Cents (\$26.96) during the period from January 1, 2004 through December 31, 2004; and (5) Twenty-eight Dollars and Four Cents (\$28.04) during the period from January 1, 2005 through August 31, 2005. The term "Rail Container Lift" shall mean each placement of a marine cargo container on a railroad train which subsequently carries such marine cargo container from the Additional Premises and shall also mean each removal of a marine cargo container from a railroad train which carried the marine cargo container to the Additional Premises.

(b) The Lessee shall pay the Rail Facility Container Lift Fee as follows: on the twentieth (20<sup>th</sup>) day of the month following the month in which the Rental Commencement Date shall occur, and on the twentieth (20<sup>th</sup>) day of each and every month thereafter occurring during each calendar year (with the first and last partial calendar years to be deemed calendar years for these purposes) to occur during the term of the letting of

the Additional Premises under the Lease as herein amended, including the twentieth (20<sup>th</sup>) day of the month following the last day of each such calendar year, and within the twentieth (20<sup>th</sup>) day following the effective date of the expiration or earlier termination of the letting of the Additional Premises, the Lessee shall render to the Port Authority a statement certified by a responsible officer of the Lessee showing the total number of Rail Container Lifts arising out of the operations of the Lessee on the Additional Premises during the preceding month and the cumulative number of Rail Container Lifts arising out of the operations of the Lessee on the Additional Premises from the date of the commencement of the calendar year for which the report is made through the last day of the preceding month of the calendar year for which the report is made; and the Lessee shall pay to the Port Authority at the time of rendering such statement and at the time of rendering each subsequent monthly statement for each such calendar year the amount of the Rail Facility Container Lift Fee payable for the month for which the report is made; provided, however, that if the letting of the Additional Premises shall expire or be earlier terminated effective on a date other than the last day of a calendar month, the final payment of the Rail Facility Container Lift Fee shall be due and payable within twenty (20) days after the effective date of expiration or earlier termination.

(c) The Lessee shall install and use such equipment or devices for recording Rail Container Lifts as may be necessary or desirable to keep accurate counts of Rail Container Lifts.

(d) The provisions of Section 43 of the Lease shall apply to all amounts payable to the Port Authority under this paragraph, except that the required records and books of account shall be maintained by the Lessee during the term of the letting of the Additional Premises and for three years thereafter.

9. (a) The Lessee understands that construction and installation work is required in order to prepare the Additional Premises for its occupancy and operations, and the Lessee agrees to and shall perform the following work to prepare the Additional Premises for the Lessee's operations therein (which work is hereinafter called "the Lessee's Construction Work"): removing obstructions where necessary, installing two (2) switches, removing and replacing railroad ties and tracks where necessary, removing guardrail, adding acceleration and deceleration lanes at ingress and egress points, and such other related site rail and/or traffic improvements (excluding installation, construction or relocation of traffic lights) that shall be agreed to by the parties and approved by the Port Authority. The Lessee's Construction Work shall be paid for by the Port Authority as provided for in subparagraphs (p) and (q) of this paragraph.

(b) With respect to the Lessee's Construction Work the Lessee shall indemnify and save harmless the Port Authority, and its Commissioners, officers, agents and employees against the following distinct and several risks, whether they arise from acts or omissions of the Lessee, any contractors of the Lessee, the Port Authority, third persons, or from acts of God or the public enemy, or otherwise, excepting only risks which result solely from affirmative wilful acts done by the Port Authority subsequent to commencement of the work:

(i) The risk of loss or damage to all such construction prior to the completion thereof. In the event of such loss or damage, the Lessee shall forthwith repair, replace and make good the work without cost to the Port Authority;

(ii) The risk of death, injury or damage, direct or consequential, to the Port Authority, and its Commissioners, officers, agents and employees, and to its or their property, arising out of or in connection with the performance of the work. The Lessee shall indemnify the Port Authority, and its Commissioners, officers, agents and employees, for all such injuries and damages, and for all loss suffered by reason thereof;

(iii) The risk of claims and demands, just or unjust, by third persons against the Port Authority, and its Commissioners, officers, agents and employees, arising or alleged to arise out of the performance of the work. The Lessee shall indemnify the Port Authority, and its Commissioners, officers, agents and employees, against and from all such claims and demands, and for all loss and expense incurred by it and by them in the defense, settlement or satisfaction thereof including without limitation thereto, claims and demands for death, for personal injury or for property damage, direct or consequential.

(c) Prior to the commencement of any of the Lessee's Construction Work, the Lessee shall submit to the Port Authority for its approval a Construction Application in the form supplied by the Port Authority, and containing such terms and conditions as the Port Authority may include, setting forth in detail by appropriate plans and specifications the work the Lessee proposes to perform and the manner of and time periods for performing the same, including without limitation a schedule listing each contract proposed to be entered into for the performance of the work and the estimated cost of the work to be performed under each such contract. The data to be supplied by the Lessee shall identify each of the items constituting the Lessee's Construction Work, and shall describe in detail the

systems, improvements, fixtures and equipment to be installed by the Lessee. The Lessee shall be responsible at its sole expense for retaining all architectural, engineering and other technical consultants and services as may be directed by the Port Authority and for developing, completing and submitting detailed plans and specifications for the work. The plans and specifications to be submitted by the Lessee shall be in sufficient detail for a contractor to perform the work and shall bear the seal of a qualified architect or professional engineer who shall be responsible for the administration of the work in accordance with the Port Authority's requirements. In connection with review by the Port Authority of the Lessee's submissions under this paragraph, the Lessee shall submit to the Port Authority, at the Port Authority's request, such data, detail or information as the Port Authority may find necessary. Following the Port Authority's receipt of the Lessee's Construction Application and complete plans and specifications, the Port Authority shall give its written approval or rejection thereof, or shall request such revisions or modifications thereto as the Port Authority may find necessary. The Port Authority shall endeavor to complete plan review within ten (10) days of receipt thereof. The Lessee shall not engage any contractor or permit the use of any subcontractor unless and until each such contractor or subcontractor, and the contract such contractor is operating under, have been approved by the Port Authority. The Lessee shall include in any such contract or subcontract such provisions as are required in accordance with the provisions of this Agreement and the Construction Application approved by the Port Authority. The Lessee shall obtain and maintain or cause each contractor to obtain and maintain in force such insurance coverage as is described in subparagraphs (j) and (k) of this paragraph and such performance bonds as the Port Authority may specify. All of the Lessee's Construction Work shall be performed by the Lessee in accordance with the Construction Application and final plans and specifications approved by the Port Authority, shall be subject to inspection by the Port Authority during the progress of the work and after the completion thereof, and the Lessee shall redo or replace at its own expense any work not done in accordance therewith. Upon final completion of all of the Lessee's Construction Work the Lessee shall deliver to the Port Authority a certificate to such effect signed by a responsible officer of the Lessee and by the architect or engineer who sealed the Lessee's plans pursuant to the provisions of this subparagraph certifying that all of the work has been performed in accordance with the approved plans and specifications and the provisions of this Agreement, and the Lessee shall supply the Port Authority with as-built drawings of the Lessee's Construction Work in such form and number requested by the Port Authority. The Lessee shall keep said drawings current during the term of the letting under the Lease as herein amended. No changes or modifications to such work shall be made without prior Port Authority consent. Following its receipt of the Lessee's certificate, the Port



Authority shall inspect the work and, unless such certification is not correct, or the Port Authority determines that the Additional Premises are unsuitable for occupancy and use by the Lessee, a certificate of final completion shall be delivered to the Lessee by the Port Authority:

(d) Except as set forth in subparagraph (e) of this paragraph, the Lessee shall not commence any portion of the Lessee's Construction Work until the Construction Application and plans and specifications covering such work, referred to in subparagraph (c) of this paragraph, have been finally approved by the Port Authority.

(e) If the Lessee desires to commence construction of portions of the Lessee's Construction Work prior to the approval by the Port Authority of the complete Construction Application and plans and specifications covering all of such work pursuant to subparagraph (c) of this paragraph, the Lessee shall submit to the Port Authority a separate Construction Application for each portion of the Lessee's Construction Work the Lessee so desires to commence (each such portion of the Lessee's Construction Work being hereinafter designated as "Partial Approval Work") which shall be executed by an authorized officer of the Lessee and shall be accompanied by final and complete plans, specifications, drawings, and data with respect to such portion of the Lessee's Construction Work (the final and complete plans, specifications, drawings, and data covering each such portion of the Lessee's Construction Work are hereinafter referred to as "the Partial Approval Work Plans" with respect to such portion of the Lessee's Construction Work) setting forth in detail the work to be performed in connection with each such portion of the Lessee's Construction Work. The Port Authority shall have full and complete discretion as to whether to permit the Lessee to proceed with the performance of any Partial Approval Work. If the Port Authority consents to the performance of any Partial Approval Work, the Port Authority shall review the Construction Application covering such work and shall give its written approval or rejection of the Partial Approval Work Plans with respect thereto or shall request such revisions or modifications thereto as the Port Authority may find necessary. Upon the Port Authority's approval of the Construction Application covering an item of Partial Approval Work and its approval of the Partial Approval Work Plans with respect thereto, the Lessee may proceed to perform such item of Partial Approval Work subject to and in accordance with the following terms and conditions:

(1) The performance by the Lessee of any item of Partial Approval Work in accordance with the Port Authority's approval will be at its sole risk and if for any reason the plans and specifications for the balance of the Lessee's Construction Work or, any part thereof, are not approved by the Port Authority

or if the approval thereof calls for modifications or changes in any item of Partial Approval Work undertaken by the Lessee under any approval granted by the Port Authority pursuant to this subparagraph, the Lessee will, as directed by the Port Authority, and at the Lessee's sole cost and expense, either restore the area affected to the condition existing prior to the commencement of such item of Partial Approval Work or make such modifications and changes to such work as may be required by the Port Authority.

(2) Nothing contained in any approval given pursuant to this subparagraph shall constitute a determination or indication by the Port Authority that the Lessee has complied with any laws, rules, orders, ordinances, enactments, resolutions, regulations, statutes, requirements, codes, directions, and executive orders, including but not limited to those of the City of Newark, which may pertain to the Partial Approval Work to be performed and which the Lessee is required to comply with pursuant to the Lease as herein amended.

(3) Each item of Partial Approval Work shall be performed in accordance with and subject to the terms and provisions of this Agreement covering the Lessee's Construction Work and in accordance with the approved Construction Application covering such item of Partial Approval Work and in accordance with the approved Partial Approval Work Plans constituting a part of such Construction Application, and subject to any requirements, stipulations, and provisions which the Port Authority may impose in its approval of the performance of such item of Partial Approval Work.

(4) No Partial Approval Work performed by the Lessee pursuant to the provisions of this subparagraph shall affect or limit the obligations of the Lessee under any prior approvals it may have obtained with respect to the Lessee's Construction Work.

(5) The fact that the Lessee has performed any item of Partial Approval Work and that the Port Authority has consented to the performance thereof shall not affect or limit the obligations of the Lessee under this Agreement with respect to the Lessee's Construction Work. The Lessee specifically understands that neither the Port Authority's approval of any Construction Application and Partial Approval Work Plans covering any item of Partial Approval Work nor the performance by the Lessee of any item of Partial Approval Work pursuant to such approval shall obligate the Port Authority to approve the Construction Application and plans and specifications submitted by the Lessee for the balance of the Lessee's Construction Work or shall create or be deemed to create any obligation on the part of the Port Authority to permit subsequent Partial Approval Work to be performed. Without limiting the generality of the

provisions of this subparagraph, it is specifically understood that the Port Authority may withhold its approval of a Construction Application and Partial Approval Work Plans covering any item of Partial Approval Work if the Port Authority determines that review of subsequent items of Partial Approval Work is required before the Port Authority can approve, reject, or comment upon such Partial Approval Work Plans.

(6) In the event that in the opinion of the Port Authority the Lessee at any time during the performance of any portion of any item of Partial Approval Work under the approval granted by the Port Authority pursuant to this subparagraph shall fail to comply with all of the provisions of this Agreement with respect to such work or shall fail to comply with the provisions of the Construction Application covering such work and the plans and specifications forming a part thereof, or shall fail to comply with any requirements, stipulations, or provisions imposed by the Port Authority in its approval of the performance of such item of Partial Approval Work, or if in the Port Authority's opinion the Lessee shall be in breach of any of the provisions of this Agreement covering such work or shall be in breach of any of the provisions of the Construction Application and plans and specifications covering the performance of such work, or shall be in breach of any requirements, stipulations, or provisions imposed by the Port Authority in its approval of the work, the Port Authority shall have the right to cause the Lessee to cease all or such part of such item of the Partial Approval Work as is being performed in violation of this Agreement, the Construction Application and plans and specifications, or the conditions of the Port Authority's approval. Upon written direction from the Port Authority, the Lessee shall promptly cease performance of the portion of the Partial Approval Work specified. The Lessee shall thereupon submit to the Port Authority for its written approval the Lessee's proposal for making modifications, corrections or changes in or to the item of Partial Approval Work that has been or is to be performed so that the same will comply with the provisions of this Agreement, the Construction Application and plans and specifications, or the conditions of the Port Authority's approval covering such work. The Lessee shall not commence construction of the portion of the Partial Approval Work that has been halted until it has received written approval of the proposed modifications, corrections or changes.

(7) It is hereby expressly understood and agreed that the Port Authority has no duty or obligation of any kind whatsoever to inspect or police the performance of any Partial Approval Work by the Lessee and the rights granted to the Port Authority hereunder shall not create or be deemed to create such a duty or obligation. Accordingly, the fact that the Port Authority has not exercised its right to require the Lessee to cease performance of all or any part of the Partial Approval Work shall not be or be deemed to be an agreement or acknowledgment on

the part of the Port Authority that the Lessee has in fact performed such work in accordance with the terms of this Agreement, the Construction Application and plans and specifications covering such work, or the conditions of the Port Authority's approval of such work, nor shall such fact be or be deemed to be a waiver by the Port Authority of any of the requirements of this Agreement with respect to such work, or any of the requirements of the Construction Application and plans and specifications covering such work, or any of the conditions of the Port Authority's approval of such work.

(f) Without limiting the generality of any of the provisions of this Agreement, the Lessee's Construction Work (including any Partial Approval Work performed by the Lessee) shall be performed in such a manner that there will be at all times during construction a minimum of air pollution, water pollution or any other type of pollution, and a minimum of noise emanating from, arising out of, or resulting from construction. Subject to the provisions of this Agreement, the Lessee shall construct such reasonable structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the objectives set forth in this subparagraph, and, without limiting the generality of the foregoing, such construction shall be subject to the Port Authority's review and approval in accordance with the provisions of this paragraph.

(g) Without limiting the generality of subparagraph (c) of this paragraph the Lessee shall be solely responsible for the plans and specifications used by it and for the adequacy or sufficiency of such plans, specifications and all the improvements, fixtures, and equipment depicted thereon or covered thereby, regardless of the consent thereto or approval thereof by the Port Authority or the incorporation therein of any Port Authority requirements or recommendations. The Port Authority shall have no obligation or liability in connection with the performance of any of the Lessee's Construction Work or for the contracts for the performance thereof entered into by the Lessee. Any warranties extended or available to the Lessee in connection with the aforesaid work shall be for the benefit of the Port Authority as well as the Lessee. The Lessee shall conduct no public operations in the Additional Premises with respect to any improvements, fixtures or equipment constituting the Lessee's Construction Work until the Port Authority shall have notified the Lessee in writing that the Lessee's Construction Work has been completed or substantially completed to its satisfaction. In the event of any inconsistency between the provisions of this Agreement and those of the Construction Application referred to in subparagraph (c) of this paragraph the provisions of this Agreement shall control.

(h) Without limiting or affecting any other term or provision of this Agreement, the Lessee shall be solely

responsible for the design, adequacy and operation of all utility, mechanical, electrical, communications and other systems installed in the Additional Premises by the Lessee and all other improvements, additions, fixtures, finishes, decorations and equipment made or installed by the Lessee in the Additional Premises and shall do all preventive maintenance and make all repairs, replacements, rebuilding (ordinary or extraordinary, structural or non-structural) and painting necessary to keep such systems, improvements, additions, fixtures, finishes, decorations and equipment (whether the same involves structural or non-structural work) in the condition they were in when made or installed except for reasonable wear which does not adversely affect the efficient or proper utilization of any part of the Additional Premises.

(i) The Lessee shall pay all claims lawfully made against it by its contractors, subcontractors, materialmen and workmen, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of the work, and shall cause its contractors and subcontractors to pay all such claims lawfully made against them. Nothing herein contained shall be deemed to constitute consent to the creation of any lien or claim against the Additional Premises or any part thereof, nor to prevent the Lessee from contesting claims in good faith.

(j) In addition to all policies of insurance otherwise required by the Lease as herein amended, the Lessee shall procure and maintain or cause to be procured and maintained in effect during the performance of the Lessee's Construction Work:

(i) Comprehensive General Liability Insurance including but not limited to coverage for Products Liability-Completed Operations and for Broad Form Property Damage and Independent Contractor coverage, with a contractual liability endorsement covering the obligations assumed by the Lessee under subparagraph (b) of this paragraph, which coverage shall not exclude claims arising out of or in connection with work performed within fifty feet of railroad property, and which are customarily insured under such a policy, with a minimum combined single limit coverage for bodily injury and property damage of \$25 million. Said insurance shall also include coverage for explosion, collapse and underground property damage hazards.

(ii) Comprehensive Automobile Liability Insurance covering all owned, non-owned or hired vehicles used in connection with said construction with a minimum combined single limit coverage for bodily injury and property damage of \$3 million.

(iii) Workers' Compensation and Employers' Liability Insurance in accordance with the requirements of law. The Workers' Compensation Policy shall be specially endorsed to include Coverage - B under the Federal Employers' Liability Act.

(k) In addition to the insurance required pursuant to the provisions of subparagraph (j) of this paragraph, the Lessee shall procure or cause to be procured prior to the commencement of any work Builder's Risk Insurance (All Risk) covering loss or damage (including any loss or damage resulting from flood or earthquake) to any structures, improvements, fixtures and equipment and furnishing and materials on the Additional Premises during said construction, whether or not attached to the land, in an amount equal to the full replacement cost. Such insurance shall name the Port Authority as an insured and such policy shall provide that the loss shall be adjusted with the Port Authority, and that the proceeds thereof shall be paid to the Port Authority and shall be made available to the Lessee for and applied strictly and solely to the payment of the cost of the repair, replacement, rebuilding or other performance of the Lessee's Construction Work.

(l) With the exception of the Workers' Compensation and Employers' Liability Insurance policy each policy of insurance described in subparagraph (j) of this paragraph shall include the Port Authority as an additional insured, and no such policy shall contain any care, custody or control exclusions, or any exclusion for bodily injury to or sickness, disease or death of any employee of the Lessee or of any of its contractors which would conflict with or in any way impair the coverages resulting from the Port Authority's status as an additional insured or the coverage under the contractual liability endorsement described in subdivision (i) of subparagraph (j) of this paragraph. Such insurance shall also contain an endorsement providing that the protection afforded the Lessee thereunder with respect to any claim or action against the Lessee by a third party shall pertain and apply with like effect with respect to any claim or action against the Lessee by the Port Authority and against the Port Authority by the Lessee, but said endorsement shall not limit, vary, change or affect the protections afforded the Port Authority as an additional insured. Such insurance shall contain a provision that the insurer shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority.

(m) Unless otherwise set forth herein, each policy of insurance described in subparagraphs (j) and (k) of this paragraph shall be subject to the applicable provisions of Section 15(e) of the Lease.

(n) Title to and property in all improvements and fixtures placed, constructed or installed in or on the Additional Premises, including all such improvements and fixtures as shall constitute the Lessee's Construction Work, shall vest in the Port Authority upon placement, construction or installation thereof and title to and property in any and all equipment and trade fixtures removable without substantial injury to the Additional Premises placed in or installed upon the Additional Premises shall vest in the Lessee upon the installation thereof. No equipment or trade fixtures shall be removed by the Lessee prior to the expiration date of the letting under the Lease as herein amended unless replaced with substantially similar property of equal or greater value. Without limiting any other term of the Lease as herein amended, and notwithstanding the foregoing provisions, upon notice given by the Port Authority either prior to or within sixty (60) days after expiration or earlier termination of the letting of the Additional Premises under the Lease as herein amended the Lessee shall remove from the Additional Premises any improvements, fixtures, trade fixtures, or equipment as the Port Authority may specify in its notice, and shall repair any damage to the Additional Premises caused by such removal.

(o) In the performance of the Lessee's Construction Work the Lessee shall not permit any situation or condition to continue that may cause or be conducive to any labor troubles at the Facility which interferes with the progress of other Construction Work at the Facility. The determinations of the Port Authority shall be conclusive on the Lessee and, upon notice from the Port Authority, the Lessee shall or shall cause its contractor to immediately rectify any condition specified in the notice. In the event of failure by the Lessee or any of its contractors to immediately comply with the requirements of this subparagraph (whether or not such failure is due to the Lessee's fault) the Port Authority by notice shall have the right to suspend the Port Authority's permission to the Lessee to proceed with any portion of the Lessee's Construction Work being performed by or on behalf of the Lessee, and the Lessee shall thereupon immediately cease the same. When labor troubles shall be so settled that such interference or the danger thereof no longer exists, the Port Authority by notice to the Lessee shall reinstate the permission to the Lessee to perform the work on all the same terms and conditions as before the suspension. "Labor troubles" shall mean and include strikes, boycotts, picketing, work-stoppages, slowdowns, complaints, disputes, controversies or any other type of labor trouble, regardless of the employer of the person involved or their employment status, if any.

(p) In consideration of the performance by the Lessee of the Lessee's Construction Work in accordance with the provisions of this Agreement, the Port Authority will pay to the Lessee a sum (which sum is hereinafter called "the Construction Work reimbursement Amount") equal to the lesser of: (1) the reasonable cost, as hereinafter defined, of the Lessee's Construction Work, or (2) Five Hundred Thousand Dollars and No Cents (\$500,000.00). To the extent permitted by sound accounting practice, and subject to the terms and conditions of subparagraph (q) of this paragraph, the sum of the following items of cost incurred by the Lessee in performing the Lessee's Construction Work shall constitute the cost thereof for the purposes of this Agreement:

- (1) The Lessee's payments to contractors;
- (2) The Lessee's payments for supplies and materials;
- (3) The Lessee's payments to persons, firms or corporations other than construction contractors or suppliers of materials, for services rendered or rights granted in connection with construction, not including services of the types mentioned in items (4), (5) and (6) of this subparagraph;
- (4) The Lessee's payments of premiums for performance bonds and for the insurance the Lessee is required to maintain in effect in accordance with the provisions of subparagraphs (j) and (k) of this paragraph during the period of construction only;
- (5) The Lessee's payments for engineering services in connection with the Lessee's Construction Work, and during the period of the construction only;
- (6) The Lessee's payments for architectural, planning and design services in connection with the Lessee's Construction Work;
- (7) The sum of the costs approved under items (4), (5) and (6) of this subparagraph shall not exceed 20% of the sum of the costs approved under items (1), (2) and (3) of this subparagraph; if in fact there is any such excess, such excess shall not be a part of the cost incurred by the Lessee in the performance of the Lessee's Construction Work for the purposes of this paragraph.

No payment or payments on account of administrative or other overhead costs and no payment to employees of the Lessee shall be included in the cost of the Lessee's Construction Work whether or not allocated to the cost of the Lessee's Construction Work by



the Lessee's own accounting practices. No payment to a firm or corporation wholly or partially owned by or in common ownership with the Lessee shall be included in the cost of the Lessee's Construction Work.

(q) Upon final completion of all of the Lessee's Construction Work to be performed by the Lessee as set forth in this paragraph, the Lessee shall submit to the Port Authority a certificate signed by a responsible officer of the Lessee certifying: (1) that all of the Lessee's Construction Work has been completed and was performed in accordance with the approved plans and specifications referred to in subparagraph (c) of this paragraph and the provisions of this Agreement; (2) the final cost of the Lessee's Construction Work and the total payments made by the Lessee on account of such cost; and (3) that except for the amount, if any, stated in such certificate to be due for services and materials, there is no outstanding indebtedness known to the person signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures described in the certificate or for labor, wages, materials, supplies or services in connection with any work described therein which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialmen statutory or similar lien or alleged lien upon such work or upon the Additional Premises or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment or fixtures described in such certificate secured by any liens, mortgages, security interests or other encumbrances. Nothing contained herein shall be deemed or construed as a submission by the Port Authority to the application to itself of any such lien. Such certificate shall also contain a certification by the architect or engineer who sealed the Lessee's plans and specifications pursuant to the provisions of subparagraph (c) of this paragraph certifying that all of the Lessee's Construction Work has been performed in accordance with the approved plans and specifications. The Lessee shall also supply to the Port Authority such supporting documents and records as the Port Authority shall deem necessary to substantiate the matters set forth in the Lessee's certificate. If all of the work has been completed in accordance with said approved plans and specifications and the provisions of this Agreement and the Lessee's certificate is fully satisfactory to the Port Authority, the Port Authority shall pay to the Lessee on account of the cost of the Lessee's Construction Work the Construction Work Reimbursement Amount. No payment made by the Port Authority to the Lessee pursuant to this subparagraph shall be deemed final until the cost of the Lessee's Construction Work has been finally determined by the Port Authority, nor shall any such payment be deemed a final determination by the Port Authority of the cost of the Lessee's Construction Work. Such final determination shall occur only after the Port Authority has examined and approved the Lessee's certificate of cost and such records and other documentation of the Lessee as the Port

Authority shall deem necessary to substantiate such cost. The Lessee shall permit the Port Authority by its agents, employees and representatives at all reasonable times prior to a final determination of the cost of the Lessee's Construction Work to examine and audit the records and other documentation of the Lessee which pertain to and will substantiate such cost. In no event whatsoever shall the cost of any portion of the Lessee's Construction Work as finally determined and computed in accordance with the provisions of subparagraph (p) of this paragraph and in accordance with the provisions of this subparagraph include any expenses, outlays or charges whatsoever by or for the account of the Lessee for or in connection with any improvements, equipment or fixtures or the performance of any work unless such are actually and completely installed in and/or made to the Additional Premises nor shall cost include the costs of any equipment, fixture or improvements which are secured by liens, mortgages, other encumbrances or conditional bills of sale. If the cost of the Lessee's Construction Work as finally determined shall be less than the amount of the payment previously made by the Port Authority to the Lessee on account of the cost the Lessee's Construction Work pursuant to this paragraph, the Lessee shall pay the difference to the Port Authority within ten (10) days after notification to the Lessee stating the amount thereof; and if such cost shall be greater than the amount of such payment, the Lessee shall be entitled to a credit against the basic rental payable hereunder for the difference. No amount paid by the Port Authority to the Lessee pursuant to the provisions of this paragraph shall or shall be deemed to imply that the Lessee's Construction Work has been completed in accordance with law or the provisions of this Agreement.

(r) The Port Authority's entire obligation under the Lease as herein amended to make any payment to the Lessee on account of the Lessee's Construction Work shall be limited in amount to the Construction Work Reimbursement Amount. No contractor or third party shall or shall be deemed to have acquired any rights against the Port Authority by virtue of the execution of this Agreement and nothing contained herein shall operate or give to any such contractor or third party any claim or right of action against the Port Authority and its Commissioners, officers, agents and employees.

(s) Without limiting any of the terms and conditions hereof, the Lessee understands and agrees that it shall put into effect prior to the commencement of the Lessee's Construction Work an affirmative action program and Minority Business Enterprise (MBE) program and Women-owned Business Enterprise (WBE) program in accordance with the provisions of Schedule E, attached hereto and hereby made a part hereof. The provisions of Schedule E shall be applicable to the Lessee's contractor or contractors and subcontractors at any tier of

construction as well as to the Lessee, and the Lessee agrees to include the provisions of Schedule E in all of its construction contracts so as to make the provisions and undertakings set forth in Schedule E the direct obligation of the construction contractor or contractors and subcontractors at any tier of construction. The Lessee agrees to and shall require its contractors and subcontractors to furnish to the Port Authority such data, including but not limited to compliance reports, relating to the operation and implementation of the affirmative action, MBE, and WBE programs of the Lessee and its contractor, contractors, and subcontractors at any tier of construction called for under the provisions of this paragraph and Schedule E annexed hereto as the Port Authority may request at any time and from time to time and the Lessee agrees to and shall also require that its contractors and subcontractors at any tier of construction make and put into effect such modifications and additions thereto as may be directed by the Port Authority pursuant to the provisions of this paragraph and Schedule E annexed hereto to effectuate the goals of affirmative action, MBE, and WBE programs. The obligations imposed on the Lessee under this paragraph and Schedule E annexed hereto shall not be construed to impose any greater requirements on the Lessee than those which may be imposed on the Lessee under applicable law.

(t) In addition to and without limiting any terms and provisions hereof, the Lessee shall provide in all of its contracts and subcontracts covering the Lessee's Construction Work, or any portion thereof, that:

(1) The contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeships and on-the-job training;

(2) At the request of either the Port Authority or the Lessee, the contractor shall request such employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Lessee to furnish a written statement that such employment agency, labor union or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will cooperate in the implementation of the contractor's obligations hereunder;

(3) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor in the performance of the contract, that all qualified applicants will be afforded equal employment opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status;

(4) The contractor will include the provisions of subdivisions (1) through (3) of this paragraph in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract;

(5) "Contractor" as used in paragraph (s) and in this paragraph shall include each contractor and subcontractor at any tier of construction.

10. In addition to all other rights under the Lease, the Port Authority and the Lessee shall each have the right to terminate the letting of the Additional Premises on sixty (60) days' prior written notice to the other party in the event that the Lessee's permanent intermodal rail facility shall become operational; provided, however, that any notice given by the Lessee in accordance with the provisions of this paragraph shall not be effective if the Lessee is under notice of default as to which any applicable period to cure has passed, or is under notice of termination, from the Port Authority, either on the date of the giving of said notice or on the intended effective date thereof. Termination under the provisions of this paragraph shall have the same effect as if the effective date of termination stated in the notice were the date of expiration of the term of the letting of the Additional Premises under the Lease as herein amended.

11. (a) Attached hereto as Exhibit Y is a form of election pursuant to Section 142(b) of the Internal Revenue Code of 1986, as amended. The Lessee acknowledges that two counterparts of said form of election have been delivered to it by the Port Authority. Upon the execution of this Agreement by the Lessee and its delivery to the Port Authority, the Lessee shall execute the said two counterparts and deliver one fully executed counterpart to the Port Authority with its delivery of this Agreement, and the Lessee shall keep the second executed counterpart with its records for the balance of the entire term of the letting under the Lease as herein amended.

(b) The Lessee is not acquiring an ownership interest in the premises under the Lease as herein amended (which premises, as therein defined, are hereinafter in this paragraph referred to as "the Property"). The Lessee hereby irrevocably elects not to claim for purposes of federal, state or local taxation of income any depreciation deductions or investment tax

credits, for which it may be eligible with respect to the Property, including without limitation the Lessee's Construction Work identified in subparagraph (a) of paragraph 9 hereof. The Lessee further agrees that this irrevocable election shall be binding upon its successors in interest, if any, under the Lease as herein amended, and as a condition of any permitted sale or assignment of the interest of the Lessee under the Lease as herein amended, every successor in interest shall furnish an executed irrevocable election in the form of the immediately preceding sentence to the Port Authority. The foregoing shall not grant or be deemed to grant to the Lessee the right to sell or assign, in any manner, its interests under the Lease as herein amended.

(c) In the event the Lessee records any documents in lieu of recording the Lease or this Agreement, such documents shall incorporate the substance of subparagraph (b) of this paragraph.

(d) It is understood that the election set forth in subparagraph (b) of this paragraph shall not apply to any personal property of the Lessee (including equipment and trade fixtures) removable without material damage to the premises leased to the Lessee pursuant to the Lease as herein amended which are installed by the Lessee in or on the premises leased to the Lessee pursuant to the Lease as herein amended and which shall be deemed to be and remain the property of the Lessee.

12. If the Port Authority shall not give possession of the Additional Premises on the date fixed in paragraph 1 hereof for the commencement of the term thereof, by reason of the fact that the Additional Premises or any part thereof are in the course of construction, repair, alteration or improvement or by reason of the fact that any occupant thereof failed or refused to deliver possession to the Port Authority, or by reason of any cause or condition beyond the control of the Port Authority, the Port Authority shall not be subject to any liability for the failure to give possession on said date. No such failure to give possession on the date of commencement of the term of the letting of the Additional Premises shall in any wise affect the validity of this Agreement or the Lease or the obligations of the Lessee hereunder or thereunder, nor shall the same be construed in any wise to extend the term of the letting of the Additional Premises beyond the date stated in paragraph 1 hereof for the expiration thereof. However, the Rental Commencement Date of November 1, 2001 set forth in paragraph 6(b)(1) hereof shall not commence until possession of the Additional Premises is tendered by the Port Authority to the Lessee and said Rental Commencement Date shall be postponed one day for each day past September 1, 2001 that the delivery of possession of the Additional Premises is delayed; the tender shall be made by notice given at least five (5) days prior to the effective date of the tender and in the

event that such notice of tender is not given for possession to commence on or before one hundred eighty-five (185) days after the date stated in paragraph 1 for the commencement of the term of the letting of the Additional Premises, then the contemplated letting of the Additional Premises shall be and be deemed cancelled, except that each party shall and does hereby release the other party of and from any and all claims or demands based on the contemplated letting of the Additional Premises, or a breach or alleged breach of any provision of this Agreement regarding the Additional Premises. Nothing contained in this paragraph shall affect in any way the letting under the Lease as herein amended of the premises other than the Additional Premises, the letting as to which shall continue in full force and effect notwithstanding any cancellation of the letting of the Additional Premises under this paragraph.

13. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect.

14. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

15. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

16. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and

the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

*[Handwritten Signature]*  
**ACTING SECRETARY**

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

By *[Handwritten Signature]*  
**RICHARD M. LARRABEE**  
(Title) **DIRECTOR, PORT COMMERCE DEPT.**  
(Seal)

WITNESS:

*[Handwritten Signature]*

PORT NEWARK CONTAINER TERMINAL LLC

By *[Handwritten Signature]*  
**THOMAS J. SIMMERS**  
(Title) **Manager**

**APPROVED:**

<b>FORM</b> <i>[Handwritten Signature]</i>	<b>TERMS</b> <i>[Handwritten Signature]</i>
---	--

*[Handwritten Signature]*

(a) If at any time the Lessee shall become entitled to an abatement of basic rental under the provisions of the Lease as herein amended or otherwise, such abatement shall be computed as follows:

(1) For each square foot of usable open area the use of which is denied to the Lessee, at the annual rate of \$ 0.22

(2) For each square foot of usable covered area the use of which is denied to the Lessee, at the annual rate of N/A

(b) If no rates are filled in above then the abatement of basic rental shall be made on an equitable basis, giving effect to the amount and character of the area the use of which is denied the Lessee, as compared with the entire area of such character included in the premises.

(c) If an exemption amount is fixed in the Lease as herein amended the basic rental shall be reduced in the same proportion as the total basic rental is abated.

(d) In the event that during the term of the letting under the Lease as herein amended the Lessee shall be partially evicted (actually or constructively) and shall remain in possession of the premises or the balance thereof, the Lessee agrees that notwithstanding it might have the right to suspend payment of the rent in the absence of this provision, it will pay at the times and in the manner herein provided, the full basic rental less only an abatement thereof computed in accordance with the above.

Standard Endorsement No. L27.4

Abatement

All Marine Terminals

10/6/68



SCHEDULE E

PART I

Affirmative Action Guidelines - Equal Employment Opportunity

I. The Lessee agrees to comply with and the Lessee shall require the Contractor, as hereinafter defined, to comply with the provisions set forth hereinafter and in paragraphs (s) and (t) of paragraph 9 of the Agreement to which this schedule is attached (herein called "the Agreement"). The provisions set forth in this Part I are similar to the conditions for bidding on federal government contracts adopted by the Office of Federal Contract Compliance and effective May 8, 1978.

The Lessee agrees fully to comply with and shall require each bidder, contractor and subcontractor of the Lessee and each subcontractor of a contractor at any tier of construction (herein collectively referred to as "the Contractor") fully to comply with the following conditions set forth in this Schedule as to each construction trade to be used on the construction work or any portion thereof (said conditions being herein called "Bid Conditions"). The Lessee hereby agrees to commit itself to the goals for minority and female utilization set forth below and all other requirements, terms and conditions of the Bid Conditions. The Lessee agrees to require the Contractor to commit itself to the said goals for minority and female utilization set forth below and all other requirements, terms and conditions of the Bid Conditions by submitting a properly signed bid.

II. The Lessee agrees to and shall require the Contractor to appoint an executive of its respective company to assume the responsibility for the implementation of the requirements, terms and conditions of the following Bid Conditions:

(a) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work are as follows:

- |                             |      |
|-----------------------------|------|
| (1) Minority participation: | 32%  |
| (2) Female participation:   | 6.9% |

These goals are applicable to all the Contractor's construction work performed in and for the premises.

The Contractor's specific affirmative action obligations set forth herein of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make good faith efforts to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract. Compliance with the goals will be measured against the total work hours performed.

(b) The Contractor shall provide written notification to the Lessee and the Lessee agrees to provide written notification to the Manager of the Equal Opportunity Programs Unit of the Port Authority within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

(c) As used in these specifications:

- (1) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- (2) "Minority" includes:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(d) Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the construction work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 those provisions which include the applicable goals for minority and female participation.

(e) The Contractor shall implement the specific affirmative action standards provided in subparagraphs (1) through (16) of paragraph (h) hereof. The goals set forth above are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the premises. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

(f) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations hereunder.

(g) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period, and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

(h) The Contractor shall take specific affirmative actions to ensure equal employment opportunity ("EEO").

The evaluation of the Contractor's compliance with these provisions shall be based upon its good faith efforts to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

(1) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each phase of the construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other supervisory personnel at the premises are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at the premises.

(2) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

(4) Provide immediate written notification to the Lessee when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and training programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (2) above.

(6) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the Contractor's newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the Contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

(7) Review, at least every six months the Contractor's EEO policy and affirmative action obligations hereunder with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-premises supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at the premises. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

(9) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations and to State-certified minority referral agencies serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the premises and in other areas of a Contractor's workforce.

(11) Tests and other selection requirements shall comply with 41 CFR Part 60-3.

(12) Conduct, at least every six months, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(13) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations hereunder are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and supplies, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least every six months, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

(i) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (subparagraphs (1)-(16) of Paragraph (h) above). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraph (h) hereof provided that the Contractor actively participates in the group, makes good faith efforts to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes good faith efforts to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.

(j) A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation hereof if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation hereof if a specific minority group of women is underutilized).

(k) The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

(l) The Contractor shall not enter into any sub-contract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

(m) The Contractor shall carry out such sanctions and penalties for violation of this clause including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered by the Lessee. Any Contractor who fails to carry out such sanctions and penalties shall be in violation hereof.

(n) The Contractor, in fulfilling its obligations hereunder shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (h) hereof so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of these provisions, the Lessee shall proceed accordingly.

(o) The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

(p) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(q) Without limiting any other obligation, term or provision under the Lease, the Contractor shall cooperate with all federal, state or local agencies established for the purpose of implementing affirmative action compliance programs and shall comply with all procedures and guidelines established or which may be established by the Port Authority.



PART II

Minority Business Enterprises/Women-Owned Business Enterprises

The Lessee agrees to and shall require the general contractor or other construction supervisor and each of the Lessee's contractors to use every good faith effort to provide for meaningful participation by Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBEs) in the construction work, pursuant to the provisions hereof and in accordance with the Agreement. For purposes hereof, Minority Business Enterprise (MBE) shall mean any business enterprise which is at least fifty-one percentum owned by or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by citizens or permanent resident aliens who are minorities and such ownership is real, substantial and continuing. For the purposes hereof, Women-owned Business Enterprise (WBE) shall mean any business enterprise which is at least fifty-one percentum owned by, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by women and such ownership is real, substantial and continuing. A minority shall be as defined in paragraph II(c) of Part I of this Schedule E. "Meaningful participation" shall mean that at least seventeen percent (17%) of the total dollar value of the construction contracts (including subcontracts) covering the construction work are for the participation of Minority Business Enterprises and Women-owned Business Enterprises, of which at least twelve percent (12%) are for the participation of Minority Business Enterprises. Good faith efforts to include meaningful participation by MBEs and WBEs shall include at least the following:

(a) Dividing the Work to be subcontracted into smaller portions where feasible.

(b) Actively and affirmatively soliciting bids for subcontracts from MBEs and WBEs, including circulation of solicitations to minority and female contractor associations. The Contractor shall maintain records detailing the efforts made to provide for meaningful MBE and WBE participation in the Work, including the names and addresses of all MBEs and WBEs contacted and, if any such MBE or WBE is not selected as a joint venturer or subcontractor, the reason for such decision.

(c) Making plans and specifications for prospective construction work available to MBEs and WBEs in sufficient time for review.

(d) Utilizing the list of eligible MBEs and WBEs maintained by the Port Authority or seeking minorities and women from other sources for the purpose of soliciting bids for subcontractors.

(e) Encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors, where appropriate, to insure that the Lessee and Contractor will meet their obligations hereunder.

(f) Insuring that provision is made to provide progress payments to MBEs and WBEs on a timely basis.

(g) Not requiring bonds from and/or providing bonds and insurance for MBEs and WBEs, where appropriate.

   
\_\_\_\_\_  
For the Port Authority

Initialed:


  
\_\_\_\_\_  
For the Lessee

EXHIBIT Y

ELECTION

(PURSUANT TO SECTION 142 (b) OF THE  
INTERNAL REVENUE CODE OF 1986)

1. PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee") pursuant to an Agreement of Lease bearing Port Authority Lease No. L-PN-264 (hereinafter, as the same has been heretofore amended, modified and supplemented, called "the Lease") made under date of December 1, 2000, between the Lessee and The Port Authority of New York and New Jersey (hereinafter called "the Port Authority"), as supplemented by that certain agreement made between the Port Authority and the Lessee, dated as of August 31, 2001 and denominated "Supplement No. 1" to the Lease (hereinafter called "the Supplement"), has leased a site and the structures, improvements, additions, buildings and facilities located or to be located thereon at Port Newark, all as described in the Lease and the Supplement (hereinafter called "the Leased Premises") to be used basically as marine terminal premises constituting a portion of a public port for a term commencing on December 1, 2000 and expiring November 30, 2030.

2. The principal office of the Port Authority is at One World Trade Center, New York, New York 10048 and its taxpayer identification number is

3. The principal office of the Lessee is at 99 Wood Avenue South, Iselin, New Jersey 08830, and its taxpayer identification number is

4. Capital expenditures in connection with the Leased Premises are expected to be made in whole or in part by the Port Authority from "exempt facility bonds" (within the meaning of Section 142(a) of the Internal Revenue Code of 1986) issued by the Port Authority from time to time with respect to "the Lessee's Construction Work" as defined in paragraph 9 of the Supplement (such capital expenditures with respect to the Lessee's Construction Work being hereinafter called "the Property").

5. The Lessee has not acquired and is not acquiring an ownership interest in the Property. The Lessee hereby irrevocably elects not to claim for purposes of federal, state or local taxation of income any depreciation or investment credits, with respect to the Property. The Lessee further agrees that this irrevocable election shall be binding upon its successors in interest, if any, under the Lease, and as a condition of any permitted sale or assignment of the interest of the Lessee under the Lease, every successor in interest shall furnish an executed irrevocable election in the form of the immediately preceding sentence to the Port Authority. The foregoing shall not grant or


be deemed to grant to the Lessee the right to sell or assign, in any manner, its interests under the Lease.

6. It is understood that the foregoing election shall not apply to any personal property of the Lessee (including equipment and trade fixtures) removable without material damage to the Leased Premises, installed by the Lessee in or on the Leased Premises pursuant to the Lease or the Supplement, and which are deemed to be and remain the property of the Lessee.

WITNESS:

RAL

PORT NEWARK CONTAINER TERMINAL LLC

By:   
THOMAS J. SIMMERS  
(Title) Manager

Dated: 6 September 2001

STATE OF Jersey )  
Essex ) ss.  
COUNTY OF NEW YORK )

On the 23<sup>rd</sup> day of October in the year 2001, before me, the undersigned, a Notary Public in and for said state, personally appeared RICHARD M. LARRABEE, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

**RICHARD M. LARRABEE**  
**DIRECTOR, PORT COMMERCE DEPT.**

Michele Leahey  
(notarial seal and stamp)

**MICHELE LEAHEY**  
**NOTARY PUBLIC OF NEW JERSEY**  
**MY COMMISSION EXPIRES APRIL 6, 2005**

STATE OF NEW JERSEY )  
 ) ss.  
COUNTY OF MIDDLESEX )

On the 6<sup>th</sup> day of Sept. in the year 2001, before me, the undersigned, a Notary Public in and for said state, personally appeared THOMAS J. SIMMERS, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Susan Aglipay  
(notarial seal and stamp)

**SUSAN AGLIPAY**  
**NOTARY PUBLIC OF NEW JERSEY**  
**MY COMMISSION EXPIRES JAN 20, 2003**

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of November 26, 2001, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the foregoing and the agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. (a) The Lessee has previously made representations to the Port Authority in Section 48 of the Lease regarding the entities having direct or indirect beneficial ownership of the Lessee, which Section 48 imposes restrictions on the transfer of certain ownership interests of certain of the aforesaid entities such that such transfers are subject to the Lessee's obtaining the prior written approval of the Port Authority. One such restriction applies to any transfer of the five hundred (500) membership interests in the Lessee (constituting fifty percent (50%) of all of the membership interests in the Lessee) owned by P&O Nedlloyd B.V. (which corporation is hereinafter called "PONLBV" and its five hundred (500) membership interests are hereinafter collectively called "the Nedlloyd Membership Interest"), a corporation organized and existing under the laws of the Netherlands and having an office and place of business at Boompjes 40, 3011 XB Rotterdam, Netherlands. The Lessee has requested that the Port Authority grant its approval to the transfer of the Nedlloyd Membership Interest to Farrell Lines Incorporated (hereinafter called "Farrell"), a corporation organized and existing under the laws of the State of Delaware and having an office and place of

business at One Meadowlands Plaza, East Rutherford, New Jersey 07094. The Lessee hereby represents, knowing that the Port Authority is relying on the accuracy of such representation, that the following two corporations have been formed for the purpose of effecting the transfer of the Nedlloyd Membership Interest from PONLBV to Farrell: (1) P&O Nedlloyd Container Terminals and Shipping B.V. (hereinafter called "Nedlloyd Container Terminals"), a corporation organized and existing under the laws of the Netherlands and having an office and place of business at Boompjes 40, 3011 XB Rotterdam, Netherlands, and which is a wholly-owned subsidiary of PONLBV; and (2) P&O Nedlloyd Terminal Holdings, Inc. (hereinafter called "Nedlloyd Terminal Holdings"), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at One Meadowlands Plaza, East Rutherford, New Jersey 07094, and which is a wholly-owned subsidiary of Nedlloyd Container Terminals. The Lessee hereby further represents, knowing that the Port Authority is relying on the accuracy of such representation, that P&O Nedlloyd Limited (hereinafter called "Nedlloyd Limited"), a corporation organized and existing under the laws of England and having an office and place of business at One Meadowlands Plaza, East Rutherford, New Jersey 07094, has one hundred percent (100%) of the direct beneficial ownership of Farrell. The Lessee hereby further represents, knowing that the Port Authority is relying on the accuracy of such representation, that the transfer of the Nedlloyd Membership Interest from PONLBV to Farrell will be effected as follows: (i) Nedlloyd Limited will transfer all of the issued and outstanding capital stock of Farrell to Nedlloyd Terminal Holdings, such that Farrell will be a wholly-owned subsidiary of Nedlloyd Terminal Holdings; (ii) PONLBV will thereafter cause the Nedlloyd Membership Interest to be contributed to Nedlloyd Container Terminals; (iii) Nedlloyd Container Terminals will thereafter cause the Nedlloyd Membership Interest to be contributed to Nedlloyd Terminal Holdings; and (iv) Nedlloyd Terminal Holdings will thereafter cause the Nedlloyd Membership Interest to be contributed to Farrell.

(b) Subject to the terms and conditions set forth below in this subparagraph and in subparagraph (c) of this paragraph, the Port Authority hereby grants its approval under Section 48 of the Lease to the transfer of the Nedlloyd Membership Interest from PONLBV to Farrell by means of the transactions described in subparagraph (a) of this paragraph. The Lessee agrees that from and after the effective date of said transfer of the Nedlloyd Membership Interest from PONLBV to Farrell, Section 48 of the Lease shall be and be deemed amended as follows: (1) Farrell shall be and be deemed substituted for PONLBV in paragraph (a) (1) of said Section 48 as the owner of

five hundred (500) of the membership interests in the Lessee; (2) Farrell shall be and be deemed substituted for PONLBV in paragraph (a)(3) of said Section 48 as one of the two entities subject to the restrictions on the transfer of membership interests in the Lessee, and all of said restrictions shall apply to Farrell as the direct owner of five hundred (500) membership interests in the Lessee; (3) the second sentence of paragraph (a)(4) of said Section 48 shall be and be deemed deleted therefrom and the following sentence shall be and be deemed substituted in lieu thereof: "The Lessee further represents and agrees for itself, PONL and Farrell, and any successor in interest thereof, respectively, that without the prior written approval of the Port Authority, PONL shall maintain direct or indirect beneficial ownership of one hundred percent (100%) of PONLBV and Farrell."; and (4) subdivision (ii) of paragraph (a)(6) of said Section 48 shall be and be deemed deleted therefrom and the following subdivision (ii) shall be and be deemed substituted in lieu thereof: "(ii) said acquiring corporation shall also acquire the direct or indirect beneficial ownership of one hundred percent (100%) of PONLBV and Farrell and said acquiring corporation shall continue the operation of the Shipping Business."

(c) The Lessee acknowledges and agrees that P&O Nedlloyd Container Line Limited (hereinafter called "PONL"), a corporation organized and existing under the laws of England and having an office and place of business at Beagle House, Braham Street, London E1 8EP, England, is engaged in "the Shipping Business" as defined in Section 48(a)(2) of the Lease, and Farrell is not engaged in the Shipping Business for any purpose of said Section 48.

2. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect, including without limitation all of the terms, provisions, covenants and conditions of Section 48 thereof.

3. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

4. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument



in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

Karen Lastman  
Acting Secretary

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

By Richard M. Larrabee  
(Title) RICHARD M. LARRABEE  
DIRECTOR, PORT COMMERCE DEPT.  
(Seal)

WITNESS:

Joseph Long

PORT NEWARK CONTAINER TERMINAL LLC

By Michael M. A.  
(Title) Manager

APPROVED:	
FORM	TERMS
<u>[Signature]</u>	<u>[Signature]</u>

[Handwritten initials]

PORT NEWARK CONTAINER TERMINAL L.L.C.

UNANIMOUS WRITTEN CONSENT OF THE  
BOARD OF MANAGERS IN LIEU OF A MEETING  
Pursuant to Delaware General Corporation Law

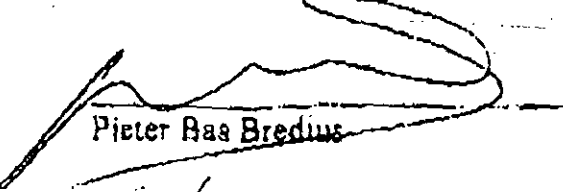
The undersigned, being all of the Managers of Port Newark Container Terminal L.L.C., a limited liability Delaware corporation (the "Corporation"), hereby adopt the following resolutions:

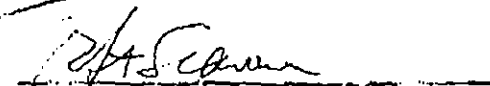
RESOLVED, that the form, terms and transactions contemplated by Supplemental Agreement No. 2 to Lease Agreement between The Port Authority of New York and New Jersey and Port Newark Container Terminal L.L.C. dated as of December 1, 2000, covering premises at Port Newark, State of New Jersey, a copy of which Supplemental Agreement No. 2 has been attached to and made a part of this Consent, be, and it hereby is in all respects, authorized, approved, adopted and ratified; and be it further

RESOLVED, that the form, terms and transactions contemplated by the Novation and Amendment Agreement novating the membership interest of P&O Nedlloyd B. V. to its indirect wholly-owned subsidiary, Farrell Lines Incorporated, a copy of which has been attached hereto, be in all respects, authorized, approved, adopted and ratified.

RESOLVED, that Michael J. White be, and he hereby is, authorized and directed, in the name and on behalf of the Corporation, to execute and deliver Supplemental Agreement No. 2 and to take all such other actions as may be necessary, appropriate or advisable in connection with the said Supplemental Agreement No. 2 as such person executing the same deems necessary or appropriate, the execution and delivery thereof by such person constituting conclusive evidence of such person's authority so to do.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Consent as of the 14th day of December, 2001.


  
Pieter Bas Bredius

  
Robert Scavone

  
Thomas J. Simms

  
Rutger van Slobbe

  
Patrick Walters

  
Michael J. White

PORT NEWARK CONTAINER TERMINAL L.L.C.

UNANIMOUS WRITTEN CONSENT OF THE  
BOARD OF MANAGERS IN LIEU OF A MEETING  
Pursuant to Delaware General Corporation Law

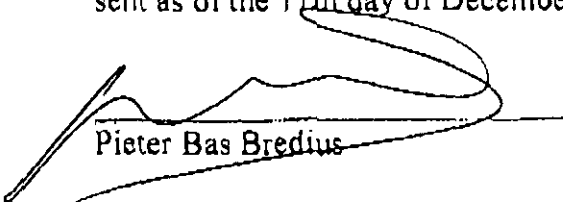
The undersigned, being all of the Managers of Port Newark Container Terminal L. L.C., a limited liability Delaware corporation (the "Corporation"), hereby adopt the following resolutions:

RESOLVED, that the form, terms and transactions contemplated by Supplemental Agreement No. 2 to Lease Agreement between The Port Authority of New York and New Jersey and Port Newark Container Terminal L.L.C. dated as of December 1, 2000, covering premises at Port Newark, State of New Jersey, a copy of which Supplemental Agreement No. 2 has been attached to and made a part of this Consent, be, and it hereby is in all respects, authorized, approved, adopted and ratified; and be it further

RESOLVED, that the form, terms and transactions contemplated by the Novation and Amendment Agreement novating the membership interest of P&O Nedlloyd B. V. to its indirect wholly-owned subsidiary, Farrell Lines Incorporated, a copy of which has been attached hereto, be in all respects, authorized, approved, adopted and ratified.

RESOLVED, that Michael J. White be, and he hereby is, authorized and directed, in the name and on behalf of the Corporation, to execute and deliver Supplemental Agreement No. 2 and to take all such other actions as may be necessary, appropriate or advisable in connection with the said Supplemental Agreement No. 2 as such person executing the same deems necessary or appropriate, the execution and delivery thereof by such person constituting conclusive evidence of such person's authority so to do.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Consent as of the 11th day of December, 2001.

  
\_\_\_\_\_  
Pieter Bas Bredius

  
\_\_\_\_\_  
Rutger van Slobbe

\_\_\_\_\_  
Robert Scavone

\_\_\_\_\_  
Patrick Walters

\_\_\_\_\_  
Thomas J. Simmers

  
\_\_\_\_\_  
Michael J. White

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the 15<sup>th</sup> day of January in the year 2001, before me, the undersigned, a Notary Public in and for said state, personally appeared **RICHARD M. LARRABEE**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

*Linda C Handel*  
\_\_\_\_\_  
(notarial seal and stamp)

LINDA C HANDEL  
My Commission Expires  
January 3 2006  
No. 01HA8035589

STATE OF *New Jersey* )  
 ) ss.  
COUNTY OF *Bergen* )

On the 21<sup>st</sup> day of Dec in the year 2001, before me, the undersigned, a Notary Public in and for said state, personally appeared **MICHAEL J. WHITE**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

*Kathleen Lovatt*  
\_\_\_\_\_  
(notarial seal and stamp)

KATHLEEN LOVATT  
Notary Public of New Jersey  
Commission Expires 6/29/2002

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of March 25, 2002, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the foregoing and the agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. Subject to all of the provisions of this Agreement, the Port Authority and the Lessee agree that the Port Authority shall perform on behalf of the Lessee the "Specific Work Items", as that term is defined in Section 8(a)(1) of the Lease, described in subdivisions (viii) and (ix) of said Section 8(a)(1) respectively as "the dredging of approximately one thousand eight hundred seventy-five (1,875) linear feet of the berthing area eastward from Station 31+50 to forty-nine (49) feet below mean low water" and "the dredging of approximately one thousand eight hundred seventy-five (1,875) linear feet of the berthing area eastward from Station 31+50 to fifty-two (52) feet below mean low water" (hereinafter collectively called "the Berths 57, 59 and 61 Dredging"). The Lessee acknowledges that "the Added Space", as that term is defined in Section 44 of the Lease, has not been added to the premises under the Lease and that as a result, and in accordance with the provisions of Section 8(a)(7) of the Lease, the Lessee does not have the right to perform the "Additional Specific Work Items", as that term is defined in said Section 8(a)(7), described in subdivisions (dd) and (ee) of said Section 8(a)(7) respectively as "the dredging of approximately four hundred twenty-five (425) linear feet of the berthing area

eastward from Station 50.75 to forty-nine (49) feet below mean low water" and "the dredging of approximately four hundred twenty-five (425) linear feet of the berthing area eastward from Station 50.75 to fifty-two (52) feet below mean low water" (hereinafter collectively called "the Berth 63 Dredging"). Notwithstanding the matters set forth in the immediately preceding sentence, the Lessee has requested that the Port Authority perform the Berth 63 Dredging on behalf of the Lessee, and the Port Authority and the Lessee agree that the Port Authority shall perform the Berth 63 Dredging in conjunction with the Berths 57, 59 and 61 Dredging (which two dredgings are hereinafter collectively called "the Fifty-two Foot Dredging"), subject to all of the terms and conditions of this Agreement including, without limitation, the payment by the Lessee of the cost of the Berth 63 Dredging as part of "the Port Authority's Costs of the Fifty-two Foot Dredging", as that term is defined in paragraph 3 hereof, in accordance with the provisions of said paragraph 3. The parties agree that this Agreement is being entered into solely for the purpose of facilitating the performance of certain of "the Lessee's Construction Work", as that term is defined in Section 8(a)(1) of the Lease, and except to the extent that any provision of this Agreement is specifically inconsistent with the provisions of the Lease, nothing contained in this Agreement shall increase, expand, alter, or limit any of the rights or obligations of either party as set forth in the Lease. Without limiting the generality of the provisions of the immediately preceding sentence, the parties agree that nothing contained in this Agreement shall create or be deemed to create any right on the part of the Lessee to have the Added Space added to the premises under the Lease as herein amended.

2. The Port Authority shall provide the Lessee with ten (10) days' prior written notice of the commencement of the Fifty-two Foot Dredging or any portion thereof, and if a portion thereof, a description of the berthing area to be dredged. Upon giving the aforesaid notice(s), and subject to the provisions of Section 36 of the Lease entitled "Force Majeure", the Port Authority shall proceed to deepen the berthing area to be dredged as specified in said notice (or such portion thereof as may be necessary), either directly or through a contractor, to a depth of fifty-two (52) feet below mean low water to such sloped depths as are deemed appropriate by the Port Authority, and which shall include normal overdraft amounts. The term "mean low water" as used in this paragraph shall mean mean low water as most recently at the time of execution of this Agreement determined by observations of the United States Coast and Geodetic Survey. Notwithstanding the foregoing, any dredging required under this

Agreement shall be only such as shall produce (or leave in place) such depths and slopes as may be required in the opinion of the Port Authority for underwater support of structures, which opinion shall be controlling. The Port Authority's obligation to perform the Fifty-two Foot Dredging shall be conditioned upon all necessary permits and governmental authorizations for said dredging having been obtained, including any such permits and governmental authorizations regarding the dredging, transportation or disposal of dredged material.

3. Upon completion of the Fifty-two Foot Dredging, the Port Authority shall by written certification notify the Lessee that the said dredging work has been completed and set forth the items of cost described below in this paragraph with respect to said work. Within sixty (60) days of its receipt of said certification, the Lessee shall pay to the Port Authority "the Port Authority's Costs of the Fifty-two Foot Dredging", as that term is hereinafter defined in this paragraph. "The Port Authority's Costs of the Fifty-two Foot Dredging" shall mean all payments by the Port Authority made on account of the performance by the Port Authority of the Fifty-two Foot Dredging, with said dredging to be calculated from the difference in bottom elevations as determined by pre-dredge soundings and the bottom elevations (including normal overdredge amounts) called for hereunder, and with such costs to include, but not be limited to, payments on account of dredging, transportation, processing (including amendment, separation, removal, transportation and disposal of trash and debris), disposal (including mobilization at disposal sites) of any dredged material, insurances, compliance with environmental laws (including any required testing) and obtaining necessary permits, work to address unanticipated site conditions, and an amount equal to one hundred fifteen percent (115%) of all of the direct staff costs to the Port Authority attributable to all of the foregoing, with such direct staff costs to include, without limitation, planning and engineering work relating to the Fifty-two Foot Dredging.

4. The provisions of Sections 8(c), 8(e), and 8(o) of the Lease shall not be applicable to the Fifty-two Foot Dredging if performed under this Agreement.

5. Section 8(a)(3) of the Lease shall be amended as follows: in lieu of the Lessee's being entitled to receive the credit set forth therein commencing on the first day of the first full calendar month following the delivery to the Lessee by the Port Authority of the certificate of final completion referred to in the eleventh through the thirteenth lines of said Section 8(a)(3), the Lessee shall be entitled to receive the credit set forth in said Section 8(a)(3) commencing on the first day of the

first full calendar month following the payment to the Port Authority by the Lessee of the Port Authority's Costs of the Fifty-two Foot Dredging in accordance with the provisions of paragraph 3 of this Agreement.

6. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect.

7. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

8. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

9. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and

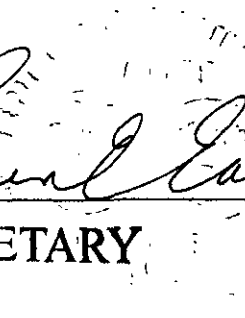


the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

  
*Kenneth Eastman*  
SECRETARY

By *Richard M. Larrabee*  
RICHARD M. LARRABEE  
DIRECTOR, PORT COMMERCE DEPT.  
(Title) \_\_\_\_\_ (Seal)

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

*Laura Szykiak*

By *[Signature]*  
(Title) \_\_\_\_\_ Manager

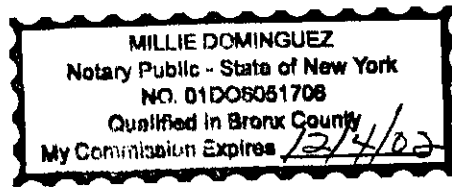
*AS*

APPROVED:	
FORM	TERMS
<i>[Signature]</i>	<i>[Signature]</i>

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the 1<sup>ST</sup> day of NOV. in the year 2002, before me, the undersigned, a Notary Public in and for said state, personally appeared **RICHARD M. LARRABEE** personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument. **DIRECTOR, PORT COMMERCE DEPT.**

*Millie Dominguez*  
(notarial seal and stamp)



STATE OF NEW JERSEY )  
 MIDDLESEX ) ss.  
COUNTY OF HUDSON )

On the 18<sup>TH</sup> day of JULY in the year 2002, before me, the undersigned, a Notary Public in and for said state, personally appeared THOMAS J. SIMMERS personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

*Susan Aglipay*  
(notarial seal and stamp)

**SUSAN AGLIPAY**  
NOTARY PUBLIC OF NEW JERSEY  
MY COMMISSION EXPIRES JAN 20, 2003

**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 3 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the performance of certain dredging activities required under the Lease, as more fully described in the Lease Supplement.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and officers of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further


RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or officer executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers; and it is further


RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all such certificates, instruments, notices and documents to be executed and delivered in such form


as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this 3rd day of June, 2002.

  
\_\_\_\_\_  
Rob Scavone

  
\_\_\_\_\_  
Patrick Walters

  
\_\_\_\_\_  
Thomas J. Simmers

\_\_\_\_\_  
Rutger van Slobbe

  
\_\_\_\_\_  
Pieter Bas Bredius

  
\_\_\_\_\_  
Michael White

Port Authority Lease No. L-PN-264  
Supplement No. 4

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made ab initio as of the 1<sup>st</sup> day of December, 2000, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the foregoing and the agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. The addendum attached hereto and marked "Addendum No. 1 to Exhibit I to Lease No. L-PN-264 between The Port Authority of New York and New Jersey and Port Newark Container Terminal LLC" is hereby made a part of Exhibit I of the Lease as set forth in Section 9 of the Lease (which addendum is herein and in the Lease referred to as "Addendum I")

2. The paragraph constituting Section 44 of the Lease, commencing with the phrase, "Subject to the provisions" and ending with the phrase, "Section 9 hereof" is hereby deleted in its entirety from the Lease ab initio as of the 1<sup>st</sup> day of December 2000 and the following paragraphs (a) through (f) shall be deemed to have been inserted ab initio as of the 1<sup>st</sup> day of December, 2000 in lieu thereof to read as follows:

"(a) The following terms when used in this Agreement shall have the respective meanings given below:

(1) 'Added Environmental Survey' shall mean Addendum I attached to Supplement No 4 of the Lease, as amended.

(2) 'Added Space' shall collectively mean the open area shown in stipple and the water area shown in honeycomb on Exhibit A, Sheet 4 of the Lease.

(3) 'Effective Date' shall mean June 1<sup>st</sup>, 2002.

(b) Effective at 12:01 o'clock A.M. on the Effective Date, in addition to the premises heretofore let to the Lessee under the Lease, the letting of which shall continue in full force and effect, the Port Authority hereby lets to the Lessee and the Lessee hires and takes from the Port Authority upon all the terms, provisions, covenants and conditions of the Lease, as amended, the Added Space at Port Newark in the City of Newark, in the County of Essex and State of New Jersey, together with the buildings, structures, fixtures, improvements, and other property, if any, of the Port Authority located or to be located or constructed therein or thereon (the Added Space and all of the foregoing buildings, structures, fixtures, improvements, and other property, if any, of the Port Authority being herein collectively called the "Added Premises"), all of the Added Premises to be and become a part of the premises let under the Lease subject to all the terms, provisions, covenants and conditions of the Lease, as amended.

(c) In the event that the Added Environmental Survey indicates that remediation of the Added Space and/or the assumption of additional obligations is required, such remediation and/or additional obligations shall be subject to and in accordance with the provisions of Section 9 of this Agreement.

(d) Effective as of the Effective Date, the Lessee shall pay an annual basic rental to the Port Authority for the Added Premises (which basic rental is herein called the 'Added Premises Basic Rental') throughout the remainder of the term of the letting as follows:

(i) during the period from the Effective Date through November 30, 2002, the Added Premises Basic Rental shall be in the amount of One Hundred Fifty-one Thousand Three Hundred Fifty-seven Dollars and Fifty Cents (\$151,357.50) per annum and shall be payable in advance in equal monthly installments of Twelve Thousand Six Hundred Thirteen Dollars and Thirteen Cents (\$12, 613.13) on the first day of each calendar month thereafter occurring during such period; and

(ii) during the period from December 1, 2002 through November 30, 2030, the Added Premises Basic Rental shall be in the amount of Two Hundred One Thousand Eight Hundred Ten Dollars and No Cents (\$201,810.00) per annum and shall be payable in advance in equal monthly installments of Sixteen Thousand Eight Hundred Seventeen Dollars and Fifty Cents (\$16,817.50) on the first day of each calendar month thereafter occurring during such period, as the same shall be adjusted in accordance with the provisions of paragraph (e) of this Section

(e) The Added Premises Basic Rental set forth in paragraph (d)(ii) of this Section, as the same may have been most recently adjusted in accordance with this paragraph (e), shall be adjusted during the term of the letting in accordance with the provisions of this paragraph (e).

(1) As used in this paragraph (e):

(i) 'Index' shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(ii) 'Added Premises Basic Rental Base Period' shall mean, as the context requires, the calendar month of November 2001 and the calendar month of November (excluding November 2029 and 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(iii) 'Added Premises Basic Rental Adjustment Period' shall mean, as the context requires, the calendar month of November 2002 and the calendar month of November (excluding November 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(iv) 'Added Premises Basic Rental Adjustment Date' shall mean, as the context requires, December 1, 2002 and each anniversary of such date which thereafter occurs during the term of the letting under this Agreement.

(v) 'Added Premises Basic Rental Percentage Increase' shall mean the percentage of increase in the Index on each Added Premises Basic Rental Adjustment Date equal to a fraction the numerator of which shall be the Index for the Added Premises Basic Rental Adjustment Period immediately preceding such Added Premises Basic Rental Adjustment Date less the Index for the Added Premises Basic Rental Base Period preceding such Added Premises Basic Rental Adjustment Period by one year and the denominator of which shall be the Index for the Added Premises Basic Rental Base Period preceding such Added Premises Basic Rental Adjustment Period by one year.

(2) Commencing on each Added Premises Basic Rental Adjustment Date and for the period commencing with such Added Premises Basic Rental Adjustment Date and continuing through to the day preceding the next Added Premises Basic Rental Adjustment Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, in lieu of the Added Premises Basic Rental set forth in paragraph (d)(ii) of this Section the Lessee shall pay a Added Premises Basic Rental at a rate per annum equal to the greater of:

(i) the sum obtained by adding to the Added Premises Basic Rental payable immediately prior to such Added Premises Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) the product obtained by multiplying such Added Premises Basic Rental by one hundred percent (100%) of the Added Premises Basic Rental Percentage Increase for such Added Premises Basic Rental Adjustment Date; provided, however, that for purposes of the calculation of the Added Premises Basic Rental payable for the one-year period commencing on December 1, 2002, the Added Premises Basic Rental payable immediately prior to such Added Premises Basic Rental Adjustment Date shall be deemed to be set forth in paragraph (e)(ii) of this Section; or

(ii) the product obtained by multiplying the Added Premises Basic Rental payable immediately prior to such Added Premises Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred two and five one-hundredths percent (102.5%); provided, however, that for purposes of the calculation of the Added Premises Basic Rental payable for the one-year period commencing on December 1, 2002, the Added Premises Basic Rental payable immediately prior to such Added Premises Basic Rental Adjustment Date shall be deemed to be the Added Premises Basic Rental set forth in paragraph (d)(ii) of this Section

(3) Notwithstanding any other provision of this Agreement, the Added Premises Basic Rental that shall be payable pursuant to paragraph (d)(ii) of this Section and this paragraph (e) commencing with each Added Premises Basic Rental Adjustment Date and continuing through to the day preceding the following Added Premises Basic Rental Adjustment Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, shall in no event exceed the product obtained by multiplying the Added Premises Basic Rental payable immediately prior to such Added Premises Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred four percent (104%); provided, however, that for purposes of the calculation of the Added Premises Basic Rental payable for the one-year period commencing on December 1, 2002, the Added Premises Basic Rental payable immediately prior to such Added Premises Basic Rental Adjustment Date shall be deemed to be the Added Premises Basic Rental set forth in paragraph (d)(ii) of this Section. For example, if the Added Premises Basic Rental Percentage Increase for the calendar month of November, 2002 is shown to be three percent (3%) then the Added Premises Basic Rental payable under paragraph (d)(ii) of this Section and this paragraph (e) for the one-year period commencing December 1, 2002 shall be \$201,810.00 plus three percent (3%) thereof or \$207,864.30, but if (1) said increase is shown to be two percent (2%) or less then the Added Premises Basic Rental for that one-year period shall be \$206,855.25, and if (2) said increase is shown to be five percent (5%) or more then the basic annual rental for that one-year period shall be \$209,882.40.

(4) In the event the Index to be used in computing any adjustment referred to in paragraph (b) of this Section is not available on the effective date of such adjustment, the Lessee shall continue to pay the Added Premises Basic Rental at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

(5) If after an adjustment in Added Premises Basic Rental shall have been fixed for any period, the Index used for computing such adjustment shall be changed



or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in the Added Premises Basic Rental due for such period as recomputed over amounts theretofore actually paid on account of the Added Premises Basic Rental for such period. If such change or adjustment results in a reduction in the Added Premises Basic Rental due for any period prior to notification, the Port Authority will credit the Lessee with the difference between the Added Premises Basic Rental as recomputed for that period and amounts of Added Premises Basic Rental actually paid.

(6) If any adjustment of Added Premises Basic Rental referred to in this paragraph (e) of this Section is effective on a day other than the first day of a calendar month, there shall be payable in advance on the effective date of rental adjustment an installment of Added Premises Basic Rental equal to 1/12th of the increment of annual Added Premises Basic Rental as adjusted multiplied by a fraction, the numerator of which shall be the number of days from the effective date of the rental adjustment to the end of the calendar month in which the rental adjustment was effective and the denominator of which shall be the number of days in that calendar month.

(f) The Lessee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of the Added Premises or the suitability thereof for the operations permitted on the Added Premises by this Agreement. The Port Authority shall deliver the Added Premises in its presently existing 'as is' condition. The Lessee, prior to the execution of Supplement No. 4 to the Lease, thoroughly examined the Added Premises as existing and has found the same to be suitable and satisfactory for the operations of the Lessee contemplated and permitted under this Agreement. The Lessee agrees to and shall take the Added Premises in its 'as is' condition and the Port Authority shall have no obligations under this Agreement for finishing work or preparation of any portion of the Added Premises for the Lessee's use. Without limiting any obligation of the Lessee to commence operations under this Agreement at the time and in the manner stated elsewhere in this Agreement, the Lessee agrees that no portion of the Added Premises will be used initially or at any time during the letting which is in a condition unsafe or improper for the conduct of the operations of the Lessee, so that there is possibility of injury or damage to life or property, and the lessee further agrees that before any use it will immediately correct any such unsafe or improper condition."

3. Effective as of the Effective Date, subparagraph (a)(29) of Section 9 of the Lease shall be deemed amended by redesignating clause (iv) of said subparagraph (a)(29) as clause "(v)" and by inserting the following new clause (iv) immediately after clause (iii) thereof to read as follows:

"(iv) the area within a radius of one hundred (100) feet from Soil Boring MW-1 as identified in the Initial Environmental Survey, "

4. It is recognized that the RAW contained tests results for certain Analyzed Items for monitoring wells MW-5 and MW-11 identified in the Initial Environmental Survey which were different than the test results set forth in the Initial Environmental Survey. It is hereby agreed that the test results set forth in the exhibit attached hereto, hereby made a part

hereof and marked "Exhibit I-A" and entitled "Addendum No. I to Initial Environmental Survey" shall be and become a part of the Initial Environmental Survey and the ground water test results for each of the Analyzed Items set forth in Exhibit I-A attached hereto shall with respect to monitoring wells MW-5 and MW-11 replace the tests results for such Analyzed Items set forth in the Initial Environmental Survey attached to the Lease when it was executed, provided, however, in making any determination of the concentration of arsenic in the ground water at the locations of MW-5 and MW-11, the ground water at the locations of MW-5 and MW-11 shall be sampled and analyzed using the United States Environmental Protection Agency low-flow sampling methods to minimize turbidity.

5. Without waiving any rights or remedies of the Port Authority or any obligations of the Lessee under the Lease as herein amended, including without limitation paragraph (n) of Section 9 of the Lease, as herein amended, the Lessee agrees that it shall promptly locate, overdrill and decommission at its sole cost and expense and in accordance with all Environmental Requirements, including without limitation NJAC7:9-9.1, the wells located on the premises that were installed as part of the Initial Environmental Survey. Without limiting the generality of the foregoing, a Well Abandonment Report is to be completed for each well and signed by the certified well sealer performing the work. If during the overdrilling, the well cannot be found, the certified well sealer must indicate in the Well Abandonment Report that every effort has been made to locate the well and provide an explanation as to why the well cannot be located. Photo documentation showing the overdrilling at the location of the former well is to be performed. All Well Abandonment Reports, including photo documentation, is to be provided to the Manager of the Facility.

6. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

7. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in

writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

*[Handwritten Signature]*  
\_\_\_\_\_  
(Secretary)

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

By *[Handwritten Signature]*  
\_\_\_\_\_  
RICHARD M. LARRABEE  
DIRECTOR, PORT COMMERCE DEPT.  
(Title) \_\_\_\_\_  
(Seal)

WITNESS:

PORT NEWARK CONTAINER  
TERMINAL LLC

*[Handwritten Signature]*  
\_\_\_\_\_  
(Secretary)

By *[Handwritten Signature]*  
\_\_\_\_\_  
DONALD P. HAMM  
(Title) PRESIDENT MANAGER  
(Seal)

*[Handwritten Signature]*  
JoAnn A. McAleer  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 10/16/2007

*[Handwritten Signature]*  
Gary Willmot  
Manager

*[Handwritten Signature]*  
Andrea Fox

**APPROVED:**  
FORM | TERMS  
SF by NR | *[Handwritten Signature]*

Exhibit A-1

Amendment No. 1 to Initial Environmental Survey


	MW-5	MW-11
Silver	1.5	ND
Arsenic	8	8
Chromium	2.1	ND
Copper	1.3	1.1
Thallium	ND	9.1
Nickel	ND	4.4
Selenium	2.2	ND
Zinc	36.1	38.4

Note: Values are stated in parts per billion

Initialed:

  
For the Port Authority

  
For the Lessee

  
JoAnn A. McAleer  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 10/16/2007

**ADDENDUM NO. 1**

**to EXHIBIT I**

**to Lease No. L-PN-264**

**Between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**


**And**

**PORT NEWARK CONTAINER TERMINAL LLC**

**Initialed**

  
\_\_\_\_\_  
For the Port Authority

  
\_\_\_\_\_  
For the Lessee

  
JOAnn A. McAisler  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 10/16/2007

**ADDED PREMISES  
SUBSURFACE BASELINE REPORT  
PORT NEWARK CONTAINER TERMINAL LLC**

**JULY 2001**

**THE ADDED PREMISES  
PORT NEWARK CONTAINER TERMINAL LLC  
ENVIRONMENTAL BASELINE ASSESSMENT**

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## SECTION 1.0

### INTRODUCTION

The purpose of this report is to establish surface and subsurface baseline conditions for an approximately 3.0 acre parcel of the former Naparano Iron and Metal Company (site). The location of the site is shown on Figure 1. The approximately 3.0 acre area is shown in Figure 2. The investigation on this portion of the property included the installation of 5 soil borings, 2 of which were completed as monitoring wells. Locations of the soil borings and monitoring wells are shown on Figure 3.

The work performed as part of this investigation was conducted in accordance with *Technical Requirements for Site Remediation (TRSR)* (N.J.A.C 7:26E) and the New Jersey Department of Environmental Protection's (NJDEP) *Field Sampling Procedures Manual*, May 1992.

The sampling results were compiled into data summary tables to document existing conditions at the particular sample locations.

## SECTION 2.0

### FIELD ACTIVITIES

In order to characterize the site in regard to potential contaminants and provide information about the geology and hydrogeology, a total of 5 soil borings were installed at the site. 2 of the 5 borings were completed as monitoring wells. The locations of the soil borings and monitoring wells are presented in Figure 3. In general, the soil borings were advanced until groundwater was observed in order to evaluate the potential for the presence and migration of hazardous substances.

#### 2.1 SOIL SAMPLING PROGRAM

The soil sampling program investigation followed the requirements specified in N.J.A.C. 7:26E-3.6. At all boring locations the first 6 to 8 ft of soils were drilled and sampled using a hand auger in an attempt to limit any contact with underground utilities. Soil borings were completed using a 4 and 5/8 inch inside diameter hollow-stem auger. After penetration of surface features, continuous split-spoon soil samples were collected at 2-foot intervals using a 2-inch-diameter split-spoon. All soils were (hand-auger samples and split-spoon cores) characterized by the on-site geologist and screened using an HNu photoionization detector. Additionally, HNu readings were recorded in the breathing zone of the on-site workers, and headspace readings were recorded from soil samples collected from each discrete 2-foot sampling interval. All information was recorded on boring log forms or in bound field logbooks.

Ten discrete soil samples were collected for contract laboratory analysis. For each boring, one soil sample was collected at a depth of 6 to 18 inches below the soil surface and a second sample procedure was collected at a distance of 0 to 6 inches above the saturated zone. HNu readings of the headspace from each sampling interval ranged from 0.0 to 1.0 parts per million (ppm). Field screening results along with the boring logs are provided as Appendix A. All soil samples were analyzed for total petroleum hydrocarbons (TPHC) and the complete list of priority pollutants with a forward library search (PP+40), including xylenes. Soil samples for volatile analysis were collected using methanol extraction methodology. In addition to collecting soil samples, trip blanks were submitted for laboratory analyses during the soil sampling task of this investigation. Field blanks and duplicate samples were not collected during the soil sampling phase of the investigation. All Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

Soil samples were transferred immediately to laboratory prepared sample containers, labeled, packed, and shipped for analysis in accordance with N.J.A.C. 7:26E 2.1. Soil samples were processed and labeled consistent with Section 2.3.3 of this document. Furthermore, sample chain-of-custody's (COCs) were prepared for all samples collected as part of this investigation. Sample documentation and COCs were prepared consistent with procedures detailed in Section 2.3.3. Each piece of sampling equipment was decontaminated prior to use at each new sample location and

prior to sampling the respective soil strata. All sampling equipment was constructed of stainless steel. For additional information on equipment decontamination procedures, see Section 2.3.2. Upon completion of each boring location, all soils and derived waste generated were handled consistent with the site specification Waste Management Plan detailed in the site-specific investigation work plan.

## **2.2 GROUNDWATER SAMPLING PROGRAM**

The groundwater investigation was conducted as per N.J.A.C. 7:26E-3.7. The program included the installation of two overburden on-site monitoring wells. The wells were installed in select boreholes created during the soil boring program. Approximate locations of these wells are shown on Figure 3. Craig Drilling, Inc. (a New Jersey-licensed well driller) installed the monitoring wells. The well driller obtained the required NJDEP well permits. The monitoring well construction logs are included in Appendix A.

### **2.2.1 Monitoring Well Installation**

Well construction materials consisted of 2-inch-diameter, schedule 40 PVC, well screens and riser pipe. The monitoring wells were constructed with 0.020-inch (20 slot) well screens; location-specific geologic conditions dictated well screen length. The well screens ranged in length from 10 to 15 ft in length. Groundwater was encountered during the drilling activities at approximately 8.0 ft bgs. The annular space between the well screen and the formation was filled with filter pack to an elevation approximately 2 ft above the top of the screen. The remaining filter pack consisted of approximately 1 foot of finer sand on top of the filter pack. This finer filter pack was designed to act as a sand choke between the formation material and the well materials, and to limit the potential for grout to enter the well from above.

A bentonite seal was emplaced above the filter pack to prevent infiltration to the cement grout into the filter pack and well screen. The seal thickness was dependent on the stratigraphy at each location and ranged from 0.5 to 1.0 ft.

A cement-bentonite grout mixture was placed above the seal and extended to ground surface. All wells were completed with flush-mount construction casings. Cement pads were constructed around each well to provide drainage away from the wells. Protective PVC caps were placed on the PVC riser pipe. Locks were placed on the outside of the protective casings. Metal tags with the monitoring well I.D. number and the NJDEP well permit number were affixed to the manhole covers. Each well was given a locking vacuum cap. A concrete pad was constructed and a flush-mounted manhole cover was grouted in place to secure these locations.

### **2.2.2 Well Development**

Each monitoring well was developed in accordance with the TRSR. Monitoring well development was performed in order to meet the following objectives:

- Remove materials that may have accumulated in the openings of the well screen during installation, and key the well screen and filter pack into the formation being monitored.
- Remove fine materials from the sides of the borehole that resulted from drilling procedures.
- Stabilize the fine materials remaining in the vicinity of the well to retard their movement into the well, increasing well yield.
- Provide an estimate of the well yield.

Monitoring well development was accomplished by over pumping the well using an appropriately sized pump. The pump was field-decontaminated, and new dedicated polyethylene tubing was used for each individual discharge line. To ensure that fine materials were removed during development, the pump intake was raised and lowered across the entire length of the well screen. Additionally, the pump was turned off and on and pumped at different rates during development to cause a surge effect to remove additional fine materials.

During development, field measurements of temperature, pH, specific conductivity, turbidity, and at some locations, salinity were obtained at the beginning of development, during development and upon completion of development. Observations related to groundwater appearance were recorded.

The development procedures for the monitoring wells continued until the following goals were met or exceeded:

- Discharge became clear.
- Flow rate stabilized.
- At least five volumes of water were removed and the well pumped for a minimum of 4 hours.
- Turbidity readings were less than 50 NTUs as determined by a nephelometer.

### 2.2.3 Water Sampling Procedure Summary

Groundwater sampling occurred on 21 September 1999 (at least 2 weeks after development of the last well installed on-site). During the groundwater sampling program, all monitoring wells were purged and sampled using low-flow protocol, a field-decontaminated pump equipped with

new, dedicated polyethylene, teflon-lined discharge tubing. During purging, wells were pumped at a low rate (lower than the recharge rate) so that the drawdown was kept to the lowest possible amount. Water level measurements were taken to ensure that the water column was not purged to dryness.

While monitoring wells were purged, water quality parameters including temperature, pH, and specific conductivity stabilized (less than 10% variation), and turbidity levels were less than 50 NTUs. Purge rates for wells did not exceed the purge rates at which the monitoring wells were developed. During well purging, groundwater was monitored for the presence of Volatile Organic Compounds (VOCs). Additional groundwater quality parameters including Eh (millivolts), salinity, and dissolved oxygen were obtained to provide additional water quality data. The groundwater sampling procedure employed during the sampling event is provided below.

1. Measure static water level in monitoring well using an electronic water level device to minimize disturbance to the water column.
2. Check for free product or sheen floating on water surface in the well.
3. Position low-flow pump in the water column with the intake placed at a point between the middle and top of the screened interval.
4. Purge the well using a low flow rate (<0.5 l/min) until indicator parameters (i.e., pH, conductivity, oxygen, etc.) have stabilized (Note: Goal during purging is to limit drawdown to < 0.1 m).
5. Collect groundwater samples using same flow rates as established during purging.
6. Fill sample bottles directly from the pump discharge avoiding excessive agitation of sample. Fill VOA sample vials first, then remaining sample bottles.
7. Pumps used for groundwater sampling will be decontaminated prior to use according to the procedures described herein. One sample shall be collected from each monitoring well. All samples are to be separate grab samples.

Each water sample was analyzed for TPHC, PP+40, VOCs + 15, total dissolved solids and total chlorides. Temperature, pH, and specific conductivity were measured in the field. Groundwater COCs and labeling procedures are detailed in Section 2.3.3.

## **2.3 QUALITY ASSURANCE AND QUALITY CONTROL**

In order to generate analytical data of known and defensible standards, quality assurance (QA) and quality control (QC) protocols for sampling and laboratory analysis complied with requirements specified in N.J.A.C. 7:26E-2.1. This was conducted to ensure that samples obtained in the field were representative of the particular environment from which they were collected and were of satisfactory quality to meet the project objectives.

### **2.3.1 QA/QC Samples**

#### **2.3.1.1 *Field Blanks***

A field blank composite sample was taken during the groundwater sampling portion of the investigation. A field blank was conducted using two identical sets of cleaned sample containers. One set of containers was empty and served as the sample containers to be analyzed. The second set of containers was filled with laboratory-demonstrated analyte-free water. At the field location, the analyte-free water was poured over the clean sample equipment (pump) and placed in the empty sample containers for analysis. The field blank was handled, transported, and analyzed in the same manner as samples acquired that day. The field blank was performed at the rate of one per sampling day per type of sampling equipment, and packaged with its associated matrix. The field blank for groundwater was analyzed for all of the same parameters as the samples collected that day.

#### **2.3.1.2 *Trip Blanks***

Trip blanks are required only for aqueous sampling events for volatile organics and for soil samples collected with the methanol preservation method. Sample bottles for aqueous trip blanks were filled at the laboratory with laboratory-demonstrated analyte-free water. Sample bottles for trip blanks associated with the volatile soil samples collected using the methanol preservation method were filled and weighed at the laboratory with pesticide-grade methanol. The trip blanks traveled with the sample bottles and are not opened in the field. They are handled, transported, and analyzed along with the other samples. For aqueous samples, one trip blank must be provided per shipment or 2-day sampling event. For soil samples collected using the methanol preservation method, one trip blank must accompany each sample shipment.

### **2.3.2 EQUIPMENT DECONTAMINATION**

#### **2.3.2.1 *Sampling Equipment Decontamination***

All soil and groundwater sampling equipment, except heavy machinery and submersible pumps, were decontaminated using these procedures.

Soil sampling equipment was decontaminated according to the following procedure:

1. Non-phosphate detergent plus tap water wash.
2. Tap water rinse.
3. Distilled/deionized water rinse.

Groundwater sampling equipment was decontaminated and packaged in the laboratory, and dedicated for exclusive use at one sample location only. The laboratory utilized the following decontamination procedure:

1. Non-phosphate detergent plus tap water wash.
2. Tap water rinse.
3. Distilled/deionized water rinse.
4. 10% nitric acid solution rinse.
5. Distilled/deionized water rinse.
6. Methanol (pesticide-grade) rinse.\*
7. Total air dry.
8. Distilled/deionized water rinse.

\* Methanol was used in place of acetone since acetone is a target analyte.

All decontaminated sampling equipment shall be stored and handled as appropriate to prevent contamination. Information concerning the decontamination methodology, date, time, and personnel was recorded in the field logbook.

#### ***2.3.2.2 Heavy Machinery Decontamination***

Prior to use on-site, heavy equipment was steam cleaned or manually washed. Parts that were prone to contact with contaminated materials required more frequent cleaning to prevent cross-contamination of environmental samples. For example, augers and split-spoon sampling devices were steam cleaned between sampling locations.

#### ***2.3.2.3 Pump Decontamination***

The pump used for evacuation of water from monitoring wells prior to sample collection was decontaminated to eliminate the possibility of contamination introduced by pump insertion.

The pump was cleaned and flushed between use at each monitoring well. The outside of the pump was manually washed using non-phosphate detergent and water, followed by a potable (tap) water rinse. The pump was then flushed with 20 gallons of potable water pumped through the housing and hose. After completion of the flushing, the exterior housing was rinsed with distilled and deionized water. Rinsate from the pump decontamination was collected in drums for disposal. After each use, the hose was cut up into manageable-sized pieces and disposed of with other investigation-derived wastes.

#### **2.3.2.4 Monitor Well Casing and Screen Decontamination**

Before installation, well casings and screens were manually scrubbed in the field to remove foreign material. Casings and screens were also thoroughly steam cleaned to remove all traces of oil and grease which may have been present, especially at threaded joints. Casings were carefully handled and stored to prevent cross-contamination prior to installation.

#### **2.3.3 SAMPLE DOCUMENTATION**

During sampling, all activities were recorded in a logbook to provide an accurate record of the sampling event and the procedures followed. Entries made by sampling personnel in the logbook included:

- Date/Time/Weather
- Sampler/Geologist/Soil Scientists' Names
- Sample Point Identification (including location, matrix, and sample depth)
- Sketch Showing the Sampling Point Location (including reference distances)
- Soil Profile
- Sample Size
- Sampling Equipment Used
- Field Measures (where appropriate)
- General Comments (e.g., odor, staining, etc.)

The field crew also labeled each sample container with the appropriate information necessary to identify the sample as listed below:

- Unique Sample Identification Number
- Date
- Time of Sampling
- Name
- Preservation
- Analyses
- Sampler's Initials

This information was then supplemented and cross referenced on a Chain-of-Custody form, providing documentation of the handling of each sample from collection to arrival at the laboratory.

A Chain-of-Custody form containing the information listed below was completed by the field crew and signed by the sampler and all personnel handling the samples before the samples were relinquished to the laboratory. The Chain-of-Custody form should contained the following information:

- Project Name
- Date



- Sampler's Initials
- Sample Identification Number
- Name/Description of Sample (Analytical Parameters)
- Preservation
- Number of Containers
- Holding Conditions and Locations
- Signature of all Handlers and Date and Time of Transfers
- Organization or Affiliation of all Handlers and Reason for Transfer

All samples were preserved at the time of collection and packaged in coolers of sufficient size to hold all containers, ice, and packing material to prevent breakage. Coolers were of suitable type and integrity to transport the samples.

At the laboratory, receipt of samples was recorded on the Chain-of-Custody form by laboratory personnel. The original or a copy of the form was returned to the shipper. The Chain-of-Custody record was checked by laboratory personnel against the information regarding the analysis requested. If any discrepancies were discovered, they were resolved with the person requesting the analysis and recorded to provide a permanent record of the event. A record of the information detailing the handling of a particular sample through each stage of analysis was provided by completing a laboratory chronicle form. This form typically provides the following information:

- Job Reference
- Sample Matrix
- Sample Number
- Date Sampled
- Date and Time Received by Laboratory
- Holding Conditions
- Analytical Parameter
- Extraction Date/Time and Extractor's Initials
- Analysis Date/Time and Analyst's Initials
- QA Batch Number, Date Reviewed, and Reviewer's Initials

#### **2.3.4 LABORATORY ANALYTICAL QUALITY ASSURANCE PROCEDURES**

Analyses of samples were performed in accordance with NJDEP and U.S. Environmental Protection Agency (USEPA) Methodologies.

The contract laboratory provided sample containers for the requested analyses appropriate for analysis of each matrix. The sample containers were of sufficient size to permit replicate analyses to be run from the sample matrix. All unused portions of samples were archived by the laboratory until written notification from the Port Authority regarding their disposition is received. The contract laboratory will also retain samples and sample extracts in a sample archive for future analyses if requested by Port Authority representatives.

Calibration and periodic inspection of laboratory instruments was in accordance with USEPA and/or the manufacturer's specifications. Reference standards and QC samples (spikes, blanks, and duplicates) were used as necessary to determine the accuracy and precision of procedures, instruments, and operators. If QC sample analysis results indicate QC values outside the control limit range, sample analysis was suspended until the instrument was recalibrated. In general, the following quality control requirements apply to all samples:

- Analysis of an appropriate blank with every set.
- Analysis of at least one standard at midrange concentration (preferably an additional standard near the detection level).
- Annual analysis of external reference samples.
- Annual analysis of split or double blind samples.
- Determination of a detection limit for each method and parameter.
- Laboratories must keep records of the following information:
  - Date, title, analytical method name, and reference
  - Time of analysis
  - Details of methods not specified in referenced procedures, sample numbers
  - All raw data (measurements)
  - Calculations
  - Results
  - Equipment used, and instrumental parameters
  - Analyst signature or initials.

- QC data was reported with the analytical results.

The laboratory provided as a final report reduced-data deliverables as per N.J.A.C 7:26E, Appendix A, Sections III and IV.

## 2.4 WASTE MANAGEMENT

Types of waste material generated during the site investigation included soil drilling cuttings, monitoring well development groundwater, decontamination rinsates, expendable materials, and personal protective equipment (e.g., gloves, towels, etc.).

Soil cuttings from borings and holes converted to monitoring wells were inspected for contamination by field observation (visual and odor) and instruments (HNU meter). When the material was not contaminated based on field observations, the facility environmental coordinator located an area at the work site to reuse the material as backfill. The material may have been used on-site in areas outside the work area, providing the area had similar subsurface characteristics or results of the soil analysis are below the residential cleanup criteria. This determination was the responsibility of the facility environmental coordinator. Material that could not be reused on-site

was properly disposed off-site utilizing the Port Facility Call-in Disposal Contractor.

Prior to pumping water from a monitoring well, a sample was obtained using a clear bottom teflon bailer. The water sample was inspected for contamination by observation (visual and odor), HNu measurements, and field tests (pH). If the water was not contaminated based on the field inspection, the water was reapplied to the ground surface in a manner not to allow water to run off-site or over stained areas.

## **SECTION 3.0**

### **SURVEYING**

The final latitude, longitude and elevation to the nearest 0.01 ft of all installed borings and wells were recorded in North American Datum (NAD ) 27 format. Elevation was measured from the top of the well casing. This information is presented in Appendix B.

## SECTION 4.0

### RESULTS

#### 4.1 SOIL SAMPLING RESULTS

The analytical results of the 10 soil samples and associated trip blanks collected by Port Authority personnel are contained in Tables 1 – 6.

- Table 1 summarizes the results of the VOCs analyses performed on the soil samples.
- Table 2 summarizes the results of the Base Neutral and Acid Extractables (BNA) analyses performed on the soil samples.
- Table 3 summarizes the results of the polychlorinated biphenols (PCB) analyses performed on the soil samples.
- Table 4 summarizes the results of the pesticide analyses performed on the soil samples.
- Table 5 summarizes the results of the inorganic analyses performed on the soil samples.
- Table 6 summarizes the results of the total petroleum hydrocarbons (TPHC) analyses performed on the soil samples.

#### 4.2 GROUNDWATER SAMPLING RESULTS

The analytical results of the groundwater samples and associated trip blanks collected by the Port Authority personnel from the 2 on-site monitoring wells are summarized in Tables 7 – 12.

- Table 7 summarizes the VOC analysis results for the groundwater samples.
- Table 8 summarizes the results of the BNA analyses for the groundwater samples.
- Table 9 summarizes the pesticides and PCB analyses results for the groundwater samples.
- Table 10 summarizes the priority pollutant metals analysis for the groundwater samples.
- Table 11 summarizes the chloride, phenol, and cyanide results for the groundwater samples.
- Table 12 summarizes the TPHC analysis for the groundwater samples.

**APPENDIX A**  
**FIELD SCREENING NOTES/SOIL BORING LOGS/WELL CONSTRUCTION**  
**FORMS**

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 of 1  
SURFACE ELEV.

PROJECT: PA NAPORAND SITE - BERTH 63 NAME OF CONTRACTOR: CRAIG BORING NO.: BH. N2

LOCATION: Laid out in THE FIELD AS PER DRAWING CONTRACT NO.: 426-99.007 DATE: 8/25/99

SPOON <u>3" O.D. 2 3/8" I.D.</u> CASING SIZE <u>H.S. AUG</u> HOLE TYPE HAMMER (Safety) <u>140 # FALL</u> <u>30</u> # FALL	GROUND WATER LEVEL <table border="1"> <tr> <th>Date</th> <th>Time</th> <th>Depth</th> <th>Remarks</th> </tr> <tr> <td><u>8/25</u></td> <td><u>Am</u></td> <td><u>7.9'</u></td> <td><u>found in S# 4</u></td> </tr> </table>	Date	Time	Depth	Remarks	<u>8/25</u>	<u>Am</u>	<u>7.9'</u>	<u>found in S# 4</u>
Date	Time	Depth	Remarks						
<u>8/25</u>	<u>Am</u>	<u>7.9'</u>	<u>found in S# 4</u>						
DRILLER: <u>J. BURNS</u>									
INSPECTOR: <u>M. OUDEH</u>									

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<u>CRUSHED ROCK</u>
		<u>HAND AUGER</u>	<u>full</u>	1	<u>fill br m.f sand, fr. gravel, fr. silt</u>
				2	<u>same</u>
	5			3	<u>fill br c.f sand fr. gravel, fr silt</u>
				4	<u>same</u>
		<u>15-15</u>	<u>21"</u>	5	<u>same</u>
	10	<u>13-15</u>			
		<u>5-8</u>	<u>22"</u>	6	<u>same</u>
		<u>11.9</u>			
					<u>Bottom of Boring</u> <span style="float: right;">12.0</span>
	15				NOTE: All samples were screened for VOC's with a PID. S# 1 (10.5'-15') and S# 4 (7-7.5') were saved and the remaining were discarded.
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of water, feet of...



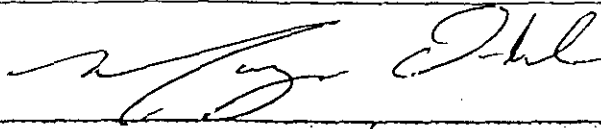


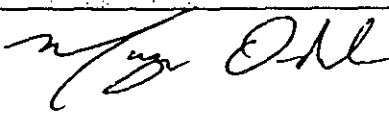
# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN NAPORANO SITE BERTH 63	
LOCATION: Laid out in the field as per Drawing	DATE: 8/25/99
BORING No: <del>BT</del> BH N2	TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING  


RELINQUISHED BY (SIGN)		DATE	8/25/99	RECEIVED BY (SIGN)
------------------------	---	------	---------	--------------------

RELINQUISHED BY (SIGN)		DATE		RECEIVED BY (SIGN)
------------------------	--	------	--	--------------------

RELINQUISHED BY (SIGN)		DATE		RECEIVED BY LAB
------------------------	--	------	--	-----------------

REMARKS: 2 Samples taken in 2 one pt. JARS & 2 UOA's  
and JAR # E148 0.5' - 1.5'  
JAR # E151 7' - 7.5'

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: PA NAPOFA JO SITE. BERTH 63 NAME OF CONTRACTOR: CRAIG BORING NO.: BH-N3

LOCATION: Land out in the field as per drawings CONTRACT NO.: 426-99-007 DATE: 8/25/99

SPOON: <u>3" O.D. 2 3/8" I.D. H.S. Aug</u> HAMMER (S.O.I.): <u>140 # FALL 30. # FALL</u>	CASING SIZE: <u>H.S. Aug</u> HAMMER: <u># FALL</u>	HOLE TYPE:	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
			<u>8/25</u>	<u>12:05 pm</u>	<u>8.4'</u>	<u>found in S#5</u>
DRILLER: <u>S. Burns</u>						
INSPECTOR: <u>M. Oudeh</u>						

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<u>Asphalt Pavement</u> <u>0.5'</u>
<u>Hand Auger</u>		<u>Hand Auger</u>	<u>Full</u>	<u>1</u>	<u>Mix. f. ll crushed rock, sand, silt, gravel</u>
				<u>2 A</u>	<u>SAME</u> <u>2.1</u>
				<u>2 B</u>	<u>fill br. mt sand, fr. gravel, fr. silt</u>
	5			<u>3</u>	<u>same</u>
				<u>4</u>	<u>fill br. c-f sand, fr. gravel, fr. silt</u>
<u>H.S. Auger</u>		<u>16-17</u>	<u>21"</u>		<u>same</u>
	10	<u>16-7</u>		<u>5</u>	<u>same</u>
		<u>10-11</u>	<u>22"</u>		<u>same</u>
		<u>15-15</u>		<u>6</u>	<u>12.0'</u>
					<u>Bottom of Boring</u>
	15				
	20				
	25				

NOTE: All samples were screened for vox's with a PTD. S# 1 (0.5'-1.5') and S# 4 (7.5'-8.0') were saved and the remaining were discarded.

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PN Naporano Site Borehole 63</i>	
LOCATION: <i>Laid out in the field as per drawing</i>	DATE: <i>8/25/99</i>
BORING No: <i>BH-N3</i>	TOTAL No. OF SAMPLES: <i>2</i>

SIGNATURE OF ALL PRESENT AT SAMPLING *[Signature]*

RELINQUISHED BY (SIGN) <i>[Signature]</i>	DATE <i>8/25/99</i>	RECEIVED BY (SIGN)
---	---------------------	--------------------

RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
------------------------	------	--------------------

RELINQUISHED BY (SIGN)	DATE	RECEIVED BY LAB
------------------------	------	-----------------

REMARKS: *2 Samples taken in 2 one pt. JARS, 2 UOAS and the following:*

JAR # *E150* *0.5'-1.5'*

JAR # *E149* *7.5'-8'*

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT RN NAPORAND SITE - BERTH 63		NAME OF CONTRACTOR CRAIG DRILLING		BORING NO. BH-N4	DATE 8/25/99	
LOCATION Laid out in the field as per drawing				CONTRACT NO. 426-99-007	DATE 8/25/99	
SPOON 3" O.D. 2 3/8" I.D.	CASING SIZE H.S. Auger	HOLE TYPE		GROUND WATER LEVEL		
HAMMER (Safety) 140 # FALL 30"	HAMMER # FALL	Date 8/25	Time Pm	Depth 8.6'	Remarks found in S#5	
DRILLER C. Burns				INSPECTOR M. Oudeth		

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Auger	full	1	Asphalt Pavement
				2	Misc. fill Sand, brick, wood, METAL, ETC
				3	Same
	5			4	fill bric-f Sand, tr. gravel, tr. silt
				5	Same
				6	Same
H.S. Auger	10	10-10	20"	7	Same
		8-13	12"	10	Same
	15				NOTE: Spoon is bouncing at ±10.4' Bottom of Boring
	20				All samples were screened for VOCs with a PID. S#1 (10.5'-11.5') AND S#4 (7.5'-8') were saved AND THE REMAINING WERE DISCARD.
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PN - NAPORANO SITE - BERTH 63</i>	
LOCATION: <i>Laid out in the field as per drawing</i>	DATE: <i>8/25/99</i>
BORING No: <i>BH-N4</i>	TOTAL No. OF SAMPLES: <i>2</i>

SIGNATURE OF ALL PRESENT AT SAMPLING *[Signature]*

RELINQUISHED BY (SIGN) <i>[Signature]</i>	DATE <i>8/25/99</i>	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY LAB

REMARKS: *2 Samples taken in 2 one ft. JAR, 2 UOAS and the following JAR # E153 0.5' - 1.5' JAR # E154 7.5' - 8'*

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Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF  
SURFACE ELEV.

PROJECT PN - Naperville Site, Boring 63		NAME OF CONTRACTOR Craig Drilling		BORING NO. MW-N3	SURFACE ELEV.
LOCATION Skid on Tr Field as per Drawing				CONTRACT NO. 426-99-006	DATE 9/3/79
SPOON 3	O.D. 2 3/8	I.D.	CASING SIZE AUGER	HOLE TYPE D' MON JOR	GROUND WATER LEVEL Date Time Depth Remarks 9/3 11:30 8.0 Top 5'
HAMMER 140	Safety	# FALL 30	HAMMER	# FALL	
DRILLER D Osuch					
INSPECTOR O Howe					

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand	0	Hand	Full	1	MISC. Fill - Silt, Concrete, Wood, Metal, Asphalt Etc
Auger		Auger		1	Fill - C-F Brown Sand, Tr Gravel, Tr Silt
				2	Same
	5			3	Same
Hollow Stem Auger		11-12		4	3' Layer of Fine Sand, Some Silt 6.5'-6.8'
		20-30	18"		Same
		25-25		5	
	10	28-30	20"	5	Fill - M-F Brown Sand, Tr Silt, Tr Gravel
		5-8		6	
		8-9	18"	6	Fill - M-F DK Gray Sand, Tr Silt, Tr Gravel
		6-7		7	
		9-11	19"	7	Same
	15	3-7		8	
		9-11	18"	8	Fill - F Brown Gray Sand, Tr Silt, Tr Gravel
					Bottom of Boring
	20				
					All Samples checked with PID Meter S# 1, 5-20' & S# 4 7-8' Sand for testing, Remaining Samples Discarded
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc



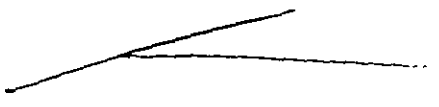



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CHAIN OF CUSTODY RECORD

Sheet 4 of

PROJECT: PN - Nyporum Side Borehole	
LOCATION: Island out in field	DATE: 9/3/99
BORING No: MU-N3	TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED 	DATE 9/3/99	RECEIVED
BY (SIGN)	TIME 1:30 PM	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:  
2 Soil Sample 5<sup>th</sup> / 15<sup>th</sup> 4 inches H. Long from 1<sup>st</sup> 1/2" then Soil Bo

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Materials Engineering Section

## BORING REPORT

SHEET 1 OF  
SURFACE ELEV.

PROJECT PN - Naparand Site Borehole 63	NAME OF CONTRACTOR Craig Drilling	BORING NO. TXU-NY	DATE 9/3/99
LOCATION As laid out in field as per Drawing	CONTRACT NO. 426-99-006	DATE 9/3/99	

SPOON 3 O.D. 8 3/8" I.D.	CASING SIZE Auger 15"	HOLE TYPE B'Monitor	GROUND WATER LEVEL			
HAMMER 140 # FALL 20'	HAMMER # FALL		Date	Time	Depth	Remarks
DRILLER D Osuch			9/3/99	8:50	8.0	Top of S#5
INSPECTOR D Howe						

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE. COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand Auger	C	Hand Auger	Full	1	Misc Fill - Sand, Asphalt, Metal, Wood, ETC 2.0
				2	Fill - M-F Brown Sand, Tr Silt, Tr Gravel, Tr Clusters 4.0
	5			3	Fill - M-F Brown Sand, Tr Gravel, Tr Silt
Hollow Stem Auger		24-21		4	Same
		33-34	18"	5	Same
	10	25-22		6	Same
		20-29	19"	7	Same
		8-11		8	Same
		11-10	18"	9	Same
		4-5		10	Same
	15	5-6	18"		
		3-4			
		4-6	17"		
		3-4			
		5-6	19"		
		3-3			
	20	3-5	11"		
					Bottom of Boring
					All samples checked with PID Meter, 5 <sup>th</sup> 1 & 5 <sup>th</sup> 4 saved for testing, Remaining samples discarded
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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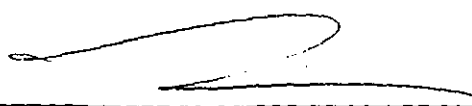
ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4

PROJECT: PN - Napier Ave S. Te, Berth 6B	
LOCATION: Island out in field	DATE: 9/3/73
BORING No: MW-NY	TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL

PRESENT AT SAMPLING

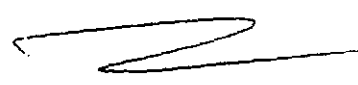


RELINQUISHED

DATE 9/3/73

RECEIVED

BY (SIGN)



TIME 1:30

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

-

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

2-Soil Sample s# 1 & 4 each in 1-16oz Just Methanol Sol Po

**APPENDIX B  
SURVEY DATA**

**Survey Data**  
**Boring and Monitoring Well Location and Elevations**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
BH-N2	673750.9	2144151.20	306.70	
MW-N3	673869.67	2144092.78	306.39 306.09 306.40	RIM P.V.C. G.L.
BH-N3	673661.88	2144271.70	307.70	
MW-N4	673576.87	2144372.58	307.75 307.55 307.60	RIM P.V.C. G.L.
BH-N4	673488.6	2144480.50	307.00	

**Table 1**  
**Summary Volatile Organics Soil Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Compound ID Sampling Point ID Vertical Sample ID Sampling Date Unit	WAS 02/15/99 02/15/99 10/KG	WAS 02/20/99 02/18/99 10/KG	WAS 02/15/99 02/18/99 10/KG	WAS 02/10/99 02/18/99 10/KG	WAS 02/10/99 02/18/99 10/KG	WAS 02/15/99 02/18/99 10/KG	WAS 02/10/99 02/18/99 10/KG	WAS 02/15/99 02/18/99 10/KG	WAS 02/15/99 02/18/99 10/KG	WAS 02/15/99 02/18/99 10/KG
1,1,1-Trichloroethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,1,2,2-Tetrachloroethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,1,2-Trichloroethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,1-Dichloroethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,1-Dichloroethene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,2-Dichlorobenzene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,2-Dichloroethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,2-Dichloropropane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,3-Dichlorobenzene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
1,4-Dichlorobenzene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
2-Butanone	3 U	3.3 U	3.1 U	3.3 U	3.1 U	2.9 U	3.2 U	2.8 U	2.8 U	3.4 U
2-Chloroethylvinylether	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
2-Hexanone	2.4 U	2.6 U	2.5 U	2.6 U	2.5 U	2.3 U	2.6 U	2.2 U	2.2 U	2.7 U
4-Methyl-2-Pentanone	2.4 U	2.6 U	2.5 U	2.6 U	2.5 U	2.3 U	2.6 U	2.2 U	2.2 U	2.7 U
Acetone	2.4 U	2.6 U	2.5 U	2.6 U	2.5 U	2.3 U	2.6 U	2.2 U	2.2 U	2.7 U
Acrolein	1.8 U	2 U	1.9 U	2 U	1.9 U	1.7 U	1.9 U	1.7 U	1.7 U	2.1 U
Acrylonitrile	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.3 U	1.1 U	1.1 U	1.4 U
Benzene	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.11 U	0.13 U	0.11 U	0.11 U	0.14 U
Bromodichloromethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Bromoforn	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Bromomethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Carbon Disulfide	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Carbon Tetrachloride	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Chlorobenzene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Chloroethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Chloroform	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Chloromethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
cis-1,2-Dichloroethene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
cis-1,3-Dichloropropene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Di-Isopropyl-ether	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Dibromochloromethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Ethylbenzene	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.11 U	0.13 U	0.11 U	0.11 U	0.14 U
M&P-Xylenes	0.24 U	0.26 U	0.22 U	0.26 U	0.25 U	0.23 U	0.26 U	0.11 U	0.11 U	0.22 U
Methyl-t-butyl ether	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.11 U	0.13 U	0.11 U	0.11 U	0.14 U
Methylene Chloride	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
O-Xylene	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.11 U	0.13 U	0.11 U	0.11 U	0.14 U
Styrene	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.11 U	0.13 U	0.11 U	0.11 U	0.17
t-Butyl Alcohol	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.3 U	1.1 U	1.1 U	1.4 U
Tetrachloroethene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Toluene	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.11 U	0.13 U	0.11 U	0.11 U	0.2
trans-1,2-Dichloroethene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
trans-1,3-Dichloropropene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Trichloroethene	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Trichlorofluoromethane	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U
Vinyl Acetate	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.3 U	1.1 U	1.1 U	1.4 U
Vinyl Chloride	0.59 U	0.65 U	0.62 U	0.66 U	0.63 U	0.57 U	0.64 U	0.56 U	0.56 U	0.68 U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration



**Table 2**  
**Summary of Semivolatile Organic Compounds Soil Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Sample ID	010101	010102	010103	010104	010105	010106	010107	010108	010109	010110
Sample Name	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
1,2,4-Trichlorobenzene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
1,2-Dichlorobenzene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
1,3-Dichlorobenzene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
1,4-Dichlorobenzene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2,4,5-Trichlorophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2,4,6-Trichlorophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2,4-Dichlorophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2,4-Dimethylphenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2,4-Dinitrophenol	0.35 U	0.35 U	1.1 U	0.35 U	0.34 U	0.35 U	0.35 U	0.17 U	0.91 U	0.17 U
2,4-Dinitrotoluene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.69 U	0.34 U	1.8 U	0.35 U
2,6-Dinitrotoluene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2-Chloronaphthalene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2-Chlorophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2-Methylnaphthalene	0.17 U	0.18 U	2.2	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2-Methylphenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	1.3	0.17 U	0.23 J	0.17 U
2-Nitroaniline	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
2-Nitrophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
3,4-Methylphenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
3,3'-Dichlorobenzidine	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
3-Nitroaniline	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4,6-Dinitro-2-methylphenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4-Bromophenyl-phenylether	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4-Chloro-3-methylphenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4-Chloroaniline	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4-Chlorophenyl-phenylether	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4-Nitroaniline	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
4-Nitrophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Acenaphthene	0.17 U	0.18 U	0.58	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Acenaphthylene	0.17 U	0.18 U	0.15 J	0.18 U	0.17 U	0.17 U	0.34 J	0.17 U	1.1	0.17 U
Anthracene	0.17 U	0.18 U	1	0.18 U	0.17 U	0.17 U	0.1 J	0.17 U	0.91 U	0.17 U
Benzenide	0.35 U	0.35 U	1.1 U	0.35 U	0.34 U	0.35 U	0.48	0.17 U	1.9	0.17 U
Benzo[a]anthracene	0.17 U	0.18 U	2.5	0.18 U	0.17 U	0.17 U	0.69 U	0.34 U	1.8 U	0.35 U
Benzo[a]pyrene	0.17 U	0.18 U	2.5	0.18 U	0.17 U	0.17 U	1.6	0.038 J	3.8	0.17 U
Benzo[b]fluoranthene	0.036 J	0.18 U	3.5	0.18 U	0.17 U	0.17 U	1.6	0.045 J	2.9	0.17 U
Benzo[g,h,i]perylene	0.17 U	0.18 U	0.92	0.18 U	0.17 U	0.17 U	2.4	0.062 J	4.6	0.17 U
Benzo[k]fluoranthene	0.17 U	0.18 U	1.6	0.18 U	0.17 U	0.17 U	0.54	0.17 U	0.77 J	0.17 U
Benzoic Acid	0.35 U	0.35 U	1.1 U	0.35 U	0.34 U	0.35 U	0.69 U	0.34 U	1.7	0.17 U
Benzyl Alcohol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Bis(2-Chloroethoxy)Methane	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Bis(2-Chloroethyl)ether	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Bis(2-Chloroisopropyl)ether	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Bis(2-Ethylhexyl)phthalate	0.39	0.093 J	8.8	0.18 U	0.27	0.11 J	3.8	0.17 J	10	0.21
Butylbenzylphthalate	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Carbazole	0.17 U	0.18 U	0.42 J	0.18 U	0.17 U	0.17 U	0.24 J	0.17 U	0.91 U	0.17 U
Chrysene	0.17 U	0.18 U	2.9	0.18 U	0.17 U	0.17 U	1.7	0.037 J	3.9	0.17 U
Di-n-butylphthalate	0.043 J	0.042 J	0.8	0.18 U	0.17 U	0.17 U	0.16 J	0.044 J	0.28 J	0.17 U
Di-n-octylphthalate	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.043 J	0.91 U	0.17 U
Dibenz[a,h]anthracene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.23 J	0.17 U
Dibenzofuran	0.17 U	0.18 U	0.33 J	0.18 U	0.17 U	0.17 U	0.15 J	0.17 U	0.38 J	0.17 U
Diethylphthalate	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.061 J	0.17 U	0.91 U	0.17 U
Dimethylphthalate	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Fluoranthene	0.046 J	0.18 U	5.7	0.18 U	0.17 U	0.17 U	3.4	0.071 J	9.5	0.056 J
Fluorene	0.17 U	0.18 U	0.75	0.18 U	0.17 U	0.17 U	0.53	0.17 U	1.2	0.17 U
Hexachlorobenzene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Hexachlorobutadiene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Hexachlorocyclopentadiene	0.52 U	0.53 U	1.6 U	0.53 U	0.52 U	0.52 U	1 U	0.52 U	2.7 U	0.52 U
Hexachloroethane	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Indeno[1,2,3-cd]pyrene	0.17 U	0.18 U	1	0.18 U	0.17 U	0.17 U	0.53	0.17 U	0.79 J	0.17 U
Isophorone	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
N-Nitroso-Di-N-Propylamine	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
N-Nitrosodimethylamine	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
N-Nitrosodiphenylamine	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Naphthalene	0.17 U	0.18 U	1.5	0.18 U	0.17 U	0.17 U	1.1	0.17 U	0.41 J	0.17 U
Nitrobenzene	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Pentachlorophenol	0.17 U	0.18 U	0.54 U	0.18 U	0.17 U	0.17 U	0.35 U	0.17 U	0.91 U	0.17 U
Phenanthrene	0.17 U	0.18 U	3.9	0.18 U	0.17 U	0.17 U	2	0.063 J	5.3	0.17 U
Phenol	0.17 U	0.18 U	0.18 J	0.18 U	0.17 U	0.17 U	4.9	0.078 J	11	0.062 J
Pyrene	0.098 J	0.18 U	10	0.18 U	0.17 U	0.17 U	1 U	0.52 U	2.7 U	0.52 U
Pyridine	0.52 U	0.53 U	1.8 U	0.53 U	0.52 U	0.52 U	1 U	0.52 U	2.7 U	0.52 U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration

**Table 3**  
**Summary of PCB Soil Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID:	MW-N3	MW-N2	MW-N1	MW-N4	BH-N2	BH-N2	BH-N3	BH-N3	BH-N4	BH-N4
Sampling Depth (ft)	0.5-1.0	7.0-7.5	0.5-1.0	7.0-7.5	0.5-1.0	7.0-7.5	0.5-1.0	7.0-8.0	0.5-1.0	7.5-8
Veritech Sample ID:	AA04658	AA04659	AA04660	AA04661	AA04151	AA04152	AA04153	AA04154	AA04155	AA04156
Sampling Date:	03/1999	03/1999	03/1999	03/1999	025/1999	025/1999	025/1999	025/1999	025/1999	025/1999
Units:	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Aroclor-1016	0.12	0.024	3.4	0.018 U	0.017 U	0.017 U	0.017 U	0.017 U	0.18 U	0.01
Aroclor-1221	0.017 U	0.018 U	0.18 U	0.018 U	0.017 U	0.017 U	0.017 U	0.017 U	0.18 U	0.01
Aroclor-1232	0.017 U	0.018 U	0.18 U	0.018 U	0.017 U	0.017 U	0.017 U	0.017 U	0.18 U	0.01
Aroclor-1242	0.017 U	0.018 U	0.18 U	0.018 U	0.017 U	0.017 U	0.017 U	0.017 U	0.18 U	0.01
Aroclor-1248	0.017 U	0.018 U	0.18 U	0.018 U	0.017 U	0.017 U	1.1	0.046	6.9	0.01
Aroclor-1254	0.051	0.018 U	3.4	0.018 U	0.017 U	0.017 U	0.76	0.017 U	7.6	0.01
Aroclor-1260	0.017 U	0.018 U	0.18 U	0.018 U	0.017 U	0.017 U	0.017 U	0.017 U	0.18 U	0.01

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration

**Table 4**  
**Summary of Pesticides Soil Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID	MW-N3	MW-N5	MW-N4	MW-N4	BH-N2	BH-N2	BH-N3	BH-N3	BH-N4	BH-N4
Sampling Depth (ft)	0.5-1.5	7.0-7.8	0-0.5	7.0-7.8	0.5-1.5	7.0-7.5	0.5-1.5	7.0-8.0	0.5-1.5	7.0-
Vertech Sample ID	AA04058	AA04058	AA04060	AA04061	AA04151	AA04152	AA04153	AA04154	AA04155	AA04
Sampling Date	02/11/99	02/11/99	02/11/99	02/11/99	02/25/99	02/25/99	02/25/99	02/25/99	02/25/99	02/25/
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/
Aldrin	0.0067	0.0035 U	0.17	0.0035 U	0.0034 U	0.0035 U	0.061	0.0034 U	0.038 U	0.00
Alpha-BHC	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Beta-BHC	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.1	0.00
Chlordane	0.0069 U	0.007 U	0.072 U	0.0071 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.072 U	0.00
Delta-BHC	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Dieldrin	0.0035 U	0.0035 U	0.12	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Endosulfan I	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.02	0.0034 U	0.038 U	0.00
Endosulfan II	0.0035 U	0.0035 U	0.069	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.18	0.00
Endosulfan Sulfate	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Endrin	0.0035 U	0.0035 U	0.2	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Endrin Aldehyde	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Endrin Ketone	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Gamma-BHC	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0085	0.0034 U	0.049	0.00
Heptachlor	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.033	0.0034 U	0.16	0.00
Heptachlor Epoxide	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
Methoxychlor	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.038 U	0.00
P,P'-DDD	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.053	0.00
P,P'-DDE	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.012	0.0034 U	0.17	0.00
P,P'-DDT	0.0035 U	0.0035 U	0.036 U	0.0035 U	0.0034 U	0.0035 U	0.0079	0.0034 U	0.14	0.00
Toxaphene	0.035 U	0.035 U	0.36 U	0.035 U	0.034 U	0.035 U	0.035 U	0.034 U	0.36 U	0.0

- Notes:
- NJDEP - New Jersey Department of Environmental Protection
  - mg/Kg - Milligrams per Kilograms, equivalent to parts per million
  - U - Not detected at the PQL
  - J - Analyte detected below PQL and/or estimated concentration

**Table 5**  
**Summary of Inorganic Compound Soil Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID	BH-N3	MY-N3	MY-N4	MY-N1	BH-N2	BH-N2	BH-N3	BH-N3	ERC-N4	BH-N4
Sampling Depth (ft)	0.5-10.5	7.5-8.0	0.5-1.5	7.5-8.0	0.5-1.5	7.0-7.5	0.5-1.5	7.5-8.0	0.5-1.5	7.5-8.0
Veritech Sample ID	AA04050	AA04050	AA04050	AA04051	AA04151	AA04151	AA04150	AA04151	AA04155	AA04156
Sampling Date	8/3/1999	8/3/1999	8/2/1999	8/2/1999	8/25/1999	8/25/1999	8/25/1999	8/25/1999	8/25/1999	8/25/1999
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Antimony	1.4 U	1.4 U	52	1.4 U	1.3 U	1.4 U	1.4 U	1.3 U	8.3	1.4 U
Arsenic	2 U	2 U	3	2 U	2 U	2 U	2 U	2 U	2.4	2 U
Barium	8.7	7	89	10	8.2	7.7	79	13	240	11
Beryllium	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.2 U	0.19 U
Cadmium	0.31 U	0.32 U	3.2	0.32 U	0.31 U	0.31 U	2.6	0.31 U	5.8	0.31 U
Chromium	19	18	66	6.9	18	12	60	39	120	12
Copper	11	7.3	1000	7.5	8	5.7	230	7.8	350	14
Lead	12	7.5	600	5.1	6.4	5.6	290	8.5	810	17
Mercury	0.034 U	0.034 U	1.2	0.034 U	0.033 U	0.034 U	1.1	0.033 U	4.5	2.2
Nickel	28	18	58	15	20	14	220	22	170	33
Selenium	2.8 U	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.8 U	2.9 U	2.8 U
Silver	1.2 U	1.3 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Thallium	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U
Zinc	48	29	800	21	23	19 U	480	22	2000	82
Cyanide	0.26 U	0.26 U	0.27 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U
Phenol	1.3 U	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
% Solids	96	95	92	94	97	96	96	97	92	96

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration

**Table 6**  
**Summary of Total Petroleum Hydrocarbons Soil Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID	BW-01	BW-02	BW-04	BW-04	BW-02	BW-02	BW-01	BW-02	BW-01
Sampling Depth (ft)	0-1.5	7.5-9.0	1.5-1.5	7.5-9.0	0-1.5	7.5-9.0	0-1.5	7.5-9.0	0-1.5
Reference Sample ID	AA04554	AA04555	AA04550	AA04551	AA04181	AA04182	AA04183	AA04184	AA04185
Sampling Date	8/21/99	8/21/99	8/21/99	8/21/99	8/25/1999	8/25/1999	8/25/1999	8/25/1999	8/25/1999
Unit	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Total Petroleum Hydrocarbons	140	49	13000	36 U	150	35 U	18000	230	9500

Notes:

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- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration

**Table 7**  
**Summary of Volatile Organic Compounds Groundwater Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	MW-N3 AA95333 9/21/1999 UG/L	MW-N4 AA95334 9/21/1999 UG/L	PB-1-092199 AA95336 9/21/1999 UG/L	TB-1-092199 AA95337 9/21/1999 UG/L
1,1,1-Trichloroethane	0.51 U	0.51 U	0.51 U	0.51 U
1,1,2,2-Tetrachloroethane	0.55 U	0.55 U	0.55 U	0.55 U
1,1,2-Trichloroethane	0.58 U	0.58 U	0.58 U	0.58 U
1,1-Dichloroethane	0.52 U	0.52 U	0.52 U	0.52 U
1,1-Dichloroethane	0.68 U	0.68 U	0.68 U	0.68 U
1,2-Dichlorobenzene	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichloroethane	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	0.39 U	0.39 U	0.39 U	0.39 U
1,3-Dichlorobenzene	0.76 U	0.76 U	0.76 U	0.76 U
1,4-Dichlorobenzene	0.4 U	0.4 U	0.4 U	0.4 U
2-Butanone	1.4 U	1.4 U	1.4 U	1.4 U
2-Chloroethylvinylether	1 U	1 U	1 U	1 U
2-Hexanone	0.76 U	0.76 U	0.76 U	0.76 U
4-Methyl-2-Pentanone	0.78 U	0.78 U	0.78 U	0.78 U
Acetone	4.8 U	4.8 U	4.8 U	4.8 U
Acrolein	9.4 U	9.4 U	9.4 U	9.4 U
Acrylonitrile	6.9 U	6.9 U	6.9 U	6.9 U
Benzene	0.47 U	0.47 U	0.47 U	0.47 U
Bromodichloromethane	0.85 U	0.85 U	0.85 U	0.85 U
Bromoform	1.3 U	1.3 U	1.3 U	1.3 U
Bromomethane	1.2 U	1.2 U	1.2 U	1.2 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.81 U	0.81 U	0.81 U	0.81 U
Chlorobenzene	0.64 U	0.64 U	0.64 U	0.64 U
Chloroethane	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	0.47 U	0.47 U	0.47 U	0.47 U
Chloromethane	0.65 U	0.65 U	0.65 U	0.65 U
cis-1,2-Dichloroethene	0.81 U	0.81 U	0.81 U	0.81 U
cis-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U
di-Isopropyl-ether	0.33 U	0.33 U	0.33 U	0.33 U
Dibromochloromethane	0.7 U	0.7 U	0.7 U	0.7 U
Dichlorodifluoromethane	0.67 U	0.67 U	0.67 U	0.67 U
Ethylbenzene	0.74 U	0.74 U	0.74 U	0.74 U
M&P-Xylenes	1.1 U	1.1 U	1.1 U	1.1 U
Methyl-t-butyl ether	0.43 U	0.43 U	0.43 U	0.43 U
Methylene Chloride	1.5 U	1.5 U	1.5 U	1.5 U
O-Xylene	0.69 U	0.69 U	0.69 U	0.69 U
Styrene	0.33 U	0.33 U	0.33 U	0.33 U
t-Butyl Alcohol	5.7 U	5.7 U	5.7 U	5.7 U
Tetrachloroethene	1 U	1 U	1 U	1 U
Toluene	0.45 U	0.45 U	0.45 U	0.45 U
trans-1,2-Dichloroethene	1.2 U	1.2 U	1.2 U	1.2 U
trans-1,3-Dichloropropene	0.42 U	0.42 U	0.42 U	0.42 U
Trichloroethene	0.79 U	0.79 U	0.79 U	0.79 U
Trichlorofluoromethane	0.81 U	0.81 U	0.81 U	0.81 U
Vinyl Acetate	0.32 U	0.32 U	0.32 U	0.32 U
Vinyl Chloride	1.1 U	1.1 U	1.1 U	1.1 U

NOTES:

ug / L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

**Table 8**  
**Summary of Semivolatile Organics Compounds Groundwater Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

1,2,4-Trichlorobenzene	0.43 U	0.43 U	0.43 U
1,2-Dichlorobenzene	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	0.68 U	0.68 U	0.68 U
2,4,5-Trichlorophenol	2.1 U	2.1 U	2.1 U
2,4,6-Trichlorophenol	1.5 U	1.5 U	1.5 U
2,4-Dichlorophenol	2.3 U	2.3 U	2.3 U
2,4-Dimethylphenol	2.5 U	2.5 U	2.5 U
2,4-Dinitrophenol	4 U	4 U	4 U
2,4-Dinitrotoluene	0.68 U	0.68 U	0.68 U
2,6-Dinitrotoluene	0.72 U	0.72 U	0.72 U
2-Chloronaphthalene	0.81 U	0.81 U	0.81 U
2-Chlorophenol	3.2 U	3.2 U	3.2 U
2-Methylnaphthalene	4.4 U	4.4 U	4.4 U
2-Methylphenol	3.3 U	3.3 U	3.3 U
2-Nitroaniline	2.8 U	2.8 U	2.8 U
2-Nitrophenol	2.4 U	2.4 U	2.4 U
3,4-Methylphenol	3.1 U	3.1 U	3.1 U
3,3'-Dichlorobenzidine	2.8 U	2.8 U	2.8 U
3-Nitroaniline	2.5 U	2.5 U	2.5 U
4,6-Dinitro-2-methylphenol	2.4 U	2.4 U	2.4 U
4-Bromophenyl-phenylether	0.54 U	0.54 U	0.54 U
4-Chloro-3-methylphenol	1.8 U	1.8 U	1.8 U
4-Chloroaniline	2.2 U	2.2 U	2.2 U
4-Chlorophenyl-phenylether	0.51 U	0.51 U	0.51 U
4-Nitroaniline	2.9 U	2.9 U	2.9 U
4-Nitrophenol	2.7 U	2.7 U	2.7 U
Acenaphthene	0.39 U	0.39 U	0.39 U
Acenaphthylene	0.29 U	0.29 U	0.29 U
Anthracene	0.23 U	0.23 U	0.23 U
Benzidine	24 U	24 U	24 U
Benzo[a]anthracene	0.25 U	0.25 U	0.25 U
Benzo[a]pyrene	0.36 U	0.36 U	0.36 U
Benzo[b]fluoranthene	0.51 U	0.51 U	0.51 U
Benzo[g,h,i]perylene	0.27 U	0.27 U	0.27 U
Benzo[k]fluoranthene	0.58 U	0.58 U	0.58 U
Benzoic Acid	0.53 U	0.53 U	0.53 U
Benzyl Alcohol	3.8 U	3.8 U	3.8 U
Bis(2-Chloroethoxy)Methane	0.4 U	0.4 U	0.4 U
Bis(2-Chloroethyl)ether	0.56 U	0.56 U	0.56 U
Bis(2-Chloroisopropyl)ether	1.6 U	1.6 U	1.6 U
Bis(2-Ethylhexyl)phthalate	1.2 U	0.76 U	0.76 U
Butylbenzylphthalate	0.49 U	0.49 U	0.49 U
Carbazole	0.29 U	0.29 U	0.29 U
Chrysene	0.27 U	0.27 U	0.27 U
Di-n-butylphthalate	0.78 U	0.78 U	0.78 U
Di-n-octylphthalate	0.53 U	0.53 U	0.53 U
Dibenzo[a,h]anthracene	0.2 U	0.2 U	0.2 U
Dibenzofuran	2.5 U	2.5 U	2.5 U
Diethylphthalate	1.7 U	1.7 U	1.7 U
Dimethylphthalate	0.23 U	0.23 U	0.23 U
Fluoranthene	0.26 U	0.26 U	0.26 U
Fluorene	0.26 U	0.26 U	0.26 U
Hexachlorobenzene	0.41 U	0.41 U	0.41 U
Hexachlorobutadiene	0.91 U	0.91 U	0.91 U
Hexachlorocyclopentadiene	11 U	11 U	11 U
Hexachloroethane	1.1 U	1.1 U	1.1 U
Indeno[1,2,3-cd]pyrene	0.29 U	0.29 U	0.29 U
Isophorone	0.47 U	0.47 U	0.47 U
N-Nitroso-Di-N-Propylamine	0.94 U	0.94 U	0.94 U
N-Nitrosodimethylamine	1.3 U	1.3 U	1.3 U
N-Nitrosodiphenylamine	0.64 U	0.64 U	0.64 U
Naphthalene	0.44 U	0.44 U	0.44 U
Nitrobenzene	0.92 U	0.92 U	0.92 U
Pentachlorophenol	5.7 U	5.7 U	5.7 U
Phenanthrene	0.35 U	0.35 U	0.35 U
Phenol	1.3 U	1.3 U	1.3 U
Pyrene	0.38 U	0.38 U	0.38 U
Pyridine	4.9 U	4.9 U	4.9 U

NOTES:

ug / L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

**Table 9**  
**Summary of Pesticides and PCB Groundwater Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID:	MW-30	MW-34	FB-1-092199
Veritech Sample ID:	AA65333	AA65334	AA65328
Sampling Date:	02/1/1999	02/1/1999	02/1/1999
Units:	UG/L	UG/L	UG/L
<b>PCBs:</b>			
Aroclor-1018	0.5 U	0.5 U	0.5 U
Aroclor-1221	0.5 U	0.5 U	0.5 U
Aroclor-1232	0.5 U	0.5 U	0.5 U
Aroclor-1242	0.5 U	0.5 U	0.5 U
Aroclor-1248	0.5 U	0.5 U	0.5 U
Aroclor-1254	0.5 U	0.5 U	0.5 U
Aroclor-1260	0.5 U	0.5 U	0.5 U
<b>Pesticides:</b>			
Aldrin	0.1 U	0.1 U	0.1 U
Alpha-BHC	0.1 U	0.1 U	0.1 U
Beta-BHC	0.1 U	0.1 U	0.1 U
Chlordane	0.2 U	0.2 U	0.2 U
Delta-BHC	0.1 U	0.1 U	0.1 U
Dieldrin	0.1 U	0.1 U	0.1 U
Endosulfan I	0.1 U	0.1 U	0.1 U
Endosulfan II	0.1 U	0.1 U	0.1 U
Endosulfan Sulfate	0.1 U	0.1 U	0.1 U
Endrin	0.1 U	0.1 U	0.1 U
Endrin Aldehyde	0.1 U	0.1 U	0.1 U
Endrin Ketone	0.1 U	0.1 U	0.1 U
Gamma-BHC	0.1 U	0.1 U	0.1 U
Heptachlor	0.1 U	0.1 U	0.1 U
Heptachlor Epoxide	0.1 U	0.1 U	0.1 U
Methoxychlor	0.1 U	0.1 U	0.1 U
P,P'-DDD	0.1 U	0.1 U	0.1 U
P,P'-DDE	0.1 U	0.1 U	0.1 U
P,P'-DDT	0.1 U	0.1 U	0.1 U
Toxaphene	1 U	1 U	1 U

**NOTES:**

- ug / L - Micrograms per Liter, equivalent to parts per billion
- U - Not detected at the MDL
- J - Analyte detected below MDL and/or estimated concentration



**Table 10**  
**Summary of the Priority Pollutant Metals Analysis For Groundwater Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID:	MW-N3	MW-N4	FB-1-092199
Veritech Sample ID:	A495333	A495334	A495336
Sampling Date:	9/21/1999	9/21/1999	9/21/1999
Units:	UG/L	UG/L	UG/L
Antimony	1.5 U	1.5 U	1.5 U
Arsenic	3.7 U	3.7 U	3.7 U
Barium	86	53	4.5 U
Beryllium	0.86 U	0.86 U	0.86 U
Cadmium	1.2 U	1.2 U	1.2 U
Chromium	10 U	10 U	10 U
Copper	2.7 U	14	5.7
Lead	3.1 U	5	3.1 U
Mercury	0.19 U	0.19 U	0.19 U
Nickel	27	13	12 U
Selenium	3.7 U	3.7 U	3.7 U
Silver	0.78 U	0.78 U	0.78 U
Thallium	3.6 U	3.6 U	3.6 U
Zinc	38 U	38 U	38 U
Total Suspended Solids	20000	11000	4000 U

NOTES:

- ug / L - Micrograms per Liter, equivalent to parts per billion
- U - Not detected at the MDL
- J - Analyte detected below MDL and/or estimated concentration

**Table 11**  
**Summary of the Chloride, Phenol, and Cyanide Groundwater Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID	MWEN3	MWEN4	FB-TR021997
Veritech Sample ID	AA05333	AA05334	AA05336
Sampling Date	9/21/88	9/21/88	9/21/88
Units	UG/L	UG/L	UG/L
Cyanide	10 U	10 U	10 U
Phenol	50 U	50 U	50 U
Chloride	520000	5400000	1000 U

NOTES:

ug / L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

**Table 12**  
**Summary of Total Petroleum Hydrocarbons Groundwater Sampling Results**  
**Port Newark Container Terminal LLC**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID:	MW-N3	MW-N4	FB-1-092199
Veritech Sample ID:	AA95333	AA95334	AA95336
Sampling Date:	8/21/1999	8/21/1999	8/21/1999
Units:	UG/L	UG/L	UG/L
Total Petroleum Hydrocarbons	1000 U	1100 U	1000 U

NOTES:

ug / L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

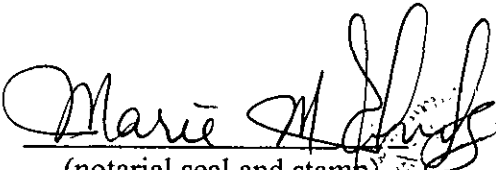
J - Analyte detected below MDL and/or estimated concentration

ACKNOWLEDGEMENT

FOR THE PORT AUTHORITY

STATE OF NEW YORK )  
 )ss.  
COUNTY OF NEW YORK )

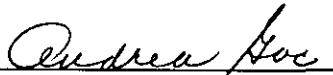
On the 5<sup>th</sup> day of October in the year 2007<sup>4</sup>, before **RICHARD M. LARRABEE**  
undersigned, a Notary Public in and for said state, personally appeared **DIRECTOR, PORT COMMERCE DEPT.**  
, personally known to me or proved to me on the basis of satisfactory evidence to be the  
individual whose name is subscribed to the within instrument and acknowledged to me that  
he/she executed the same in his/her capacity, and that by his/her signature on the instrument,  
the individual, or the person upon behalf of which the individual acted, executed the  
instrument.

  
(notarial seal and stamp)  
Marie M. Edwards  
Notary Public, State of New York  
No. 01ED4959893  
Qualified in Kings County  
Commission Expires Jan-6, 2006

FOR THE LESSEE

STATE OF NEW JERSEY )  
 )ss.  
COUNTY OF ESSEX )

On the 1<sup>ST</sup> day of OCTOBER in the year 2007<sup>4</sup>, before me, the  
undersigned, a Notary Public in and for said state, personally appeared DONALD P. HAMM  
, personally known to me or proved to me on the basis of satisfactory evidence to be the  
individual whose name is subscribed to the within instrument and acknowledged to me that  
he/she executed the same in his/her capacity, and that by his/her signature on the instrument,  
the individual, or the person upon behalf of which the individual acted, executed the  
instrument.

  
(notarial seal and stamp)

**ANDREA GOC**  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 2/27/07

ACKNOWLEDGEMENT

FOR THE PORT AUTHORITY

STATE OF NEW YORK )  
 )ss.  
COUNTY OF NEW YORK )

On the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2003, before me, the undersigned, a Notary Public in and for said state, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

\_\_\_\_\_  
(notarial seal and stamp)

FOR THE LESSEE

STATE OF *New Jersey* )  
 )ss.  
COUNTY OF *Middlesex* )

On the *Fifth* day of *October* in the year <sup>*2004*</sup>~~2003~~, before me, the undersigned, a Notary Public in and for said state, personally appeared *GARY WILLMOT*, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

*Antonina M. Cronin*  
\_\_\_\_\_  
(notarial seal and stamp)

**ANTONIA M. CRONIN**  
**NOTARY PUBLIC OF NEW JERSEY**  
**My Commission Expires May 7, 2007**

**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 4 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a three-acre area to the Lease (the "Added Space"), as such Added Space is more fully depicted on Exhibit A, Sheet 4 of the Lease.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and officers of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or officer executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers; and it is further

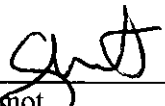
RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all such certificates, instruments, notices and documents to be executed and delivered in such form

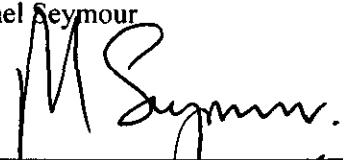
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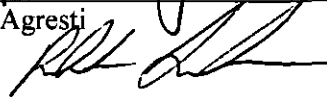
as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

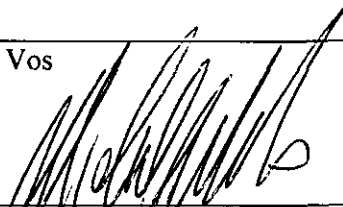

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this \_\_\_\_ day of November, 2003.

  
\_\_\_\_\_  
Gary Willmot

\_\_\_\_\_  
Michael Seymour  


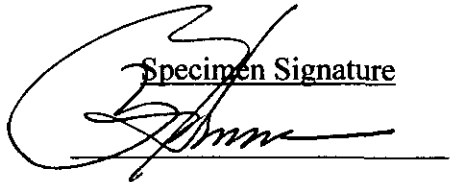
\_\_\_\_\_  
Robert Agresti  


\_\_\_\_\_  
Lucas Vos  
  
\_\_\_\_\_  
Michael White  


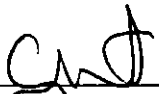
PORT NEWARK CONTAINER TERMINAL, L.L.C.

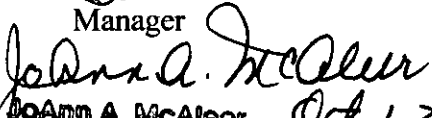
CERTIFICATE OF MANAGER

For purposes of reliance by The Port Authority of New York & New Jersey (the "Port Authority") in connection with supplement nos. 4 and 5 (collectively, the "Lease Supplements") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) between the Port Authority and Port Newark Container Terminal, L.L.C., a Delaware limited liability company (the "Company"), the undersigned hereby certifies that he is a manager of the Company, and further certifies that Don Hamm, whose specimen signature appears below, is the duly appointed President of the Company and that he is authorized to execute and deliver each of the Lease Supplements on behalf of the Company.

<u>Name</u>	<u>Title</u>	<u>Specimen Signature</u>
Don Hamm	President	

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of this 29th day of September, 2004.

  
\_\_\_\_\_  
Gary Willmot  
Manager

  
JoAnn A. McAleer  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 10/16/2007

Oct. 1, 2004



**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 4 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a three-acre area to the Lease (the "Added Space"), as such Added Space is more fully depicted on Exhibit A, Sheet 4 of the Lease.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and officers of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or officer executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers; and it is further

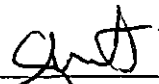
RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all such certificates, instruments, notices and documents to be executed and delivered in such form

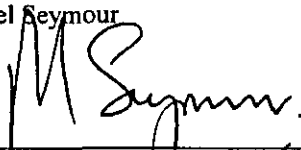
*MS @ Jan MW*  
*TSS LC*

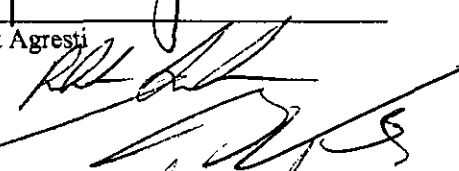
as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

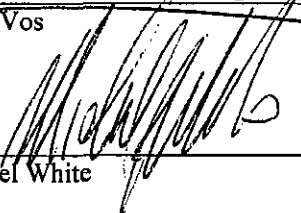
The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.


IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this \_\_\_\_ day of November, 2003.

  
\_\_\_\_\_  
Gary Willmot

\_\_\_\_\_  
Michael Seymour  
  
\_\_\_\_\_  
Robert Agresti

  
\_\_\_\_\_  
Lucas Vos

  
\_\_\_\_\_  
Michael White

  
\_\_\_\_\_  
Tom Boardley

SUPPLEMENTAL AGREEMENT

**THIS AGREEMENT**, made *ab initio* as of the first day of October, 2002, by and between **THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY** (hereinafter called the "Port Authority") and **PORT NEWARK CONTAINER TERMINAL LLC** (hereinafter called the "Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (the said agreement of lease, as it has heretofore been amended, modified and supplemented, being hereinafter called the "Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to add to the premises under the Lease and to amend the Lease in certain other respects;

NOW, THEREFORE, for and in consideration of the foregoing and the agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. In addition to the premises heretofore let to the Lessee under the Lease, the letting of which shall continue in full force and effect upon all the terms, provisions, covenants and conditions of the Lease, the Port Authority hereby lets to the Lessee and the Lessee hires and takes from the Port Authority at Port Newark (hereinafter called the "Facility") in the City of Newark, in the County of Essex and State of New Jersey, the space shown in diagonal cross hatching outlined by the points numbered 1 through 6 on the sketch annexed hereto, marked "Exhibit A-1a" and hereby made a part hereof, together with all the buildings, structures, fixtures, improvements, additions, facilities and other property, if any, of the Port Authority located or to be located or constructed therein or thereon (the said space and all of the foregoing buildings, structures, fixtures, improvements, additions, facilities and other property, if any, of the Port Authority being hereinafter sometimes collectively called "Area A1A"), all of Area A1A to be and become a part of the premises under the Lease from and after October 8, 2002 (said date being hereinafter called the "Area A1A Commencement Date"), at 12:01 o'clock A.M. and continuing through the expiration or earlier termination of the Lease.

2. The Lessee shall use Area A1A for the purposes set forth in the Section of the Lease entitled "*Rights of User*" and for no other purpose whatsoever.

3. (a) The Lessee shall pay to the Port Authority a basic rental for Area A1A (the "A1A Basic Rental") as follows:

(1) For the period from the Area A1A Commencement Date through November 30, 2004, at the annual rate of Two Hundred Forty-four Thousand Two Hundred Eighty-seven Dollars and Eighty-four Cents (\$244,287.84) payable in advance in equal monthly installments of Twenty Thousand Three Hundred Fifty-seven Dollars and Thirty-two Cents (\$20,357.32) on the Area A1A Rent Commencement Date, as defined in paragraph (b) of this Section, and on the first day of each calendar month thereafter through November 30, 2004;

(2) For the period from December 1, 2004, through November 30, 2005, at the annual rate of Seven Hundred Thirty-two Thousand Eight Hundred Sixty-three Dollars and Twenty-eight Cents (\$732,863.28) payable in advance in equal monthly installments of Sixty-one Thousand Seventy-one Dollars and Ninety-four Cents (\$61,071.94) on said December 1, 2004, and on the first day of each calendar month thereafter through November 30, 2005;

(3) For the period from December 1, 2005, through November 30, 2010, at the annual rate of Nine Hundred Seventy-seven Thousand One Hundred Fifty-one Dollars and No Cents (\$977,151.00) payable in advance in equal monthly installments of Eighty-one Thousand Four Hundred Twenty-nine Dollars and Twenty-five Cents (\$81,429.25) on said December 1, 2005, and on the first day of each calendar month thereafter through November 30, 2010, as the same shall be adjusted in accordance with the provisions of Section 4 of this Agreement; and

(4) For the period from December 1, 2010, throughout the balance of the term of the letting under the Lease, at an annual rate equal to the product obtained by multiplying (i) the adjusted annual basic rental for all of the premises shown on Sheets 1, 2, 3 and 4 of Exhibit A attached to the Lease pursuant to the provisions of Sections 3 and 4 of the Lease and paragraphs (d) and (e) of Section 2 of Supplement No. 4 thereto for the one-year period commencing on December 1, 2009, and ending on November 30, 2010, by (ii) a factor of Nine and Three Hundred Fourteen Thousandths Percent (.09314), subject to adjustment as set forth in the following sentences, payable in advance in equal monthly installments of one-twelfth of said annual amount on said December 1, 2010, and on the first day of each calendar month thereafter throughout the balance of the term of the letting under the Lease, as the same shall be adjusted in accordance with the provisions of Section 4 of this Agreement. The factor set forth in clause (ii) of this subparagraph (4) is the ratio of 653,858.4, being the size of Area A1A in rentable square feet, divided by 7,020,129.6, being the size in rentable square feet of the portions of the premises shown on Sheets 1, 2, 3, and 4 of Exhibit A attached to the Lease, in each case as of the effective date of this Agreement. In the event that a part of the portions of the premises shown on said sheets or a portion of Area A1A shall be surrendered to the Port Authority pursuant to written agreement with the Lessee or

additional areas at the facility shall be let to the Lessee at the same rate, and adjusted on the same basis, as set forth in Sections 3 and 4 of the Lease and paragraphs (d) and (e) of Section 2 of Supplement No. 4 thereto with respect to the portions of the premises shown on said sheets, then, in such event, the factor set forth in said clause (ii) shall be recomputed by dividing (W) the rentable square footage in Area A1A, as set forth above or, if a portion of Area A1A has been surrendered, as may be set forth in the agreement providing for such surrender, by (X) the rentable square footage in the continuing portions of the premises shown on said sheets, as set forth above, or if a part of the portions of the premises shown on said sheets has been surrendered to the Port Authority or additional areas at the facility shall be let to the Lessee at the rate set forth in said Sections of the Lease and Supplement No. 4 thereto, as set forth in the surrender agreement or the supplemental or other agreement providing for such surrender or for the letting of such additional area or areas at the facility, and rounding the result at five decimal places. In the further event that such agreement or agreements reducing the size of Area A1A or reducing or enlarging the portions of the premises let to the Lessee at the rates set forth in Sections 3 and 4 of the Lease and paragraphs (d) and (e) of Section 2 of Supplement No. 4 thereto do not set forth the size in rentable square feet of the areas surrendered or added, do not set forth the resulting size of Area A1A or of the portions of the premises let to the Lessee at such rates, and do not amend this subparagraph (4) to adjust the factor set forth in said clause (ii), or in the event that a part of Area A1A or of such portions of the premises shall be taken by condemnation or required by the Port Authority to comply with governmental requirements as provided in Section 19 of the Lease, then, in either event, the parties, acting in good faith, shall by agreement between them make such adjustment to said factor as they shall deem proper, prior to computing the basic rental for Area A1A for the one-year period commencing on December 1, 2009, and ending on November 30, 2010, as the same shall be adjusted in accordance with the provisions of Section 4 of this Agreement.

(b) For the purposes of this Agreement the term "Area A1A Rent Commencement Date" shall mean December 1, 2003.

4. The Area A1A Basic Rental set forth in subparagraphs (3) and (4) of paragraph (a) of Section 3 of this Agreement, as the same may have been most recently adjusted in accordance with this Section 4, shall be adjusted during the term of the letting in accordance with the provisions of this Section 4.

(a) As used in this Section:

(1) "Index" shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(2) "Area A1A Basic Rental Base Period" shall mean, as the context requires, the calendar month of November 2004 and the calendar month of November (excluding November 2029 and 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(3) "Area A1A Basic Rental Adjustment Period" shall mean, as the context requires, the calendar month of November 2005 and the calendar month of November (excluding November 2030) in each calendar year which thereafter occurs during the term of the letting under this Agreement.

(4) "Area A1A Basic Rental Adjustment Date" shall mean, as the context requires, December 1, 2005, and each anniversary of such date which thereafter occurs during the term of the letting under this Agreement.

(5) "Area A1A Basic Rental Percentage Increase" shall mean the percentage of increase in the Index on each Area A1A Basic Rental Adjustment Date equal to a fraction, the numerator of which shall be the Index for Area A1A Basic Rental Adjustment Period immediately preceding such Area A1A Basic Rental Adjustment Date less the Index for Area A1A Basic Rental Base Period preceding such Area A1A Basic Rental Adjustment Period by one year and the denominator of which shall be the Index for Area A1A Basic Rental Base Period preceding such Area A1A Basic Rental Adjustment Period by one year.

(b) Commencing on each Area A1A Basic Rental Adjustment Date and for the period commencing with such Area A1A Basic Rental Adjustment Date and continuing through to the day preceding the next Area A1A Basic Rental Adjustment Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, in lieu of Area A1A Basic Rental set forth in subparagraphs (3) and (4) of paragraph (a) of this Section 3 of this Agreement the Lessee shall pay an Area A1A Basic Rental at a rate per annum equal to the greater of:

(1) the sum obtained by adding to the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) the product obtained by multiplying such Area A1A Basic Rental by one hundred percent (100%) of the Area A1A Basic Rental Percentage Increase for such Area A1A Basic Rental Adjustment Date; *provided, however*, that for purposes of the calculation of the Area A1A Basic Rental payable for the one-year periods commencing on December 1, 2005, and December 1, 2010, the Area A1A Basic Rentals payable immediately prior to such Area A1A Basic Rental Adjustment Date shall be deemed to be the annual amounts set forth in subparagraphs (3) and (4), respectively, of paragraph (a) of Section 3 of this Agreement; or

(2) the product obtained by multiplying the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date

(including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred two and five tenths percent (102.5%); *provided, however*, that for purposes of the calculation of Area A1A Basic Rental payable for the one-year periods commencing on December 1, 2005, and December 1, 2010, the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date shall be deemed to be the annual amounts set forth in subparagraphs (3) and (4), respectively, of paragraph (a) of Section 3 of this Agreement.

(c) Notwithstanding any other provision of this Agreement, the Area A1A Basic Rental that shall be payable pursuant to subparagraphs (3) and (4) of paragraph (a) of Section 3 of this Agreement and this Section commencing with each Area A1A Basic Rental Adjustment Date and continuing through to the day preceding the following Area A1A Basic Rental Adjustment Date, or the expiration date of the term of the letting under this Agreement, as the case may be, both dates inclusive, shall in no event exceed the product obtained by multiplying the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this paragraph) by one hundred four percent (104%); *provided, however*, that for purposes of the calculation of the Area A1A Basic Rental payable for the one-year periods commencing on December 1, 2005, and December 1, 2010, the Area A1A Basic Rental payable immediately prior to such Area A1A Basic Rental Adjustment Date shall be deemed to be the annual amounts set forth in subparagraphs (3) and (4), respectively, of paragraph (a) of Section 3 of this Agreement. For example, if the Area A1A Basic Rental Percentage Increase for the calendar month of November, 2005, is shown to be three percent (3%) then the Area A1A Basic Rental payable under subparagraph (3) of paragraph (a) of Section 3 of this Agreement and this Section for the one-year period commencing December 1, 2005, shall be Nine Hundred Seventy-seven Thousand One Hundred Fifty-one Dollars and No Cents (\$977,151.00) plus three percent (3%) thereof or One Million Six Hundred Thousand Four Hundred Sixty-five Dollars and Fifty-three Cents (\$1,006,465.53), but if (1) said increase is shown to be two and four tenths percent (2.4%) or less then the Area A1A Basic Rental for that one-year period shall be One Million One Hundred Thousand Five Hundred Seventy-nine Dollars and Seventy-eight Cents (\$1,001,579.78), and if (2) said increase is shown to be five percent (5%) or more then the basic annual rental for that one-year period shall be One Million Sixteen Hundred Thousand Two Hundred Thirty-seven Dollars and Four Cents (\$1,016,237.04).

(d) In the event the Index to be used in computing any adjustment referred to in paragraph (b) of this Section is not available on the effective date of such adjustment, the Lessee shall continue to pay the Area A1A Basic Rental at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, *provided, however*, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items,

unadjusted 1982-84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

(e) If after an adjustment in Area A1A Basic Rental shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in Area A1A Basic Rental due for such period as recomputed over amounts theretofore actually paid on account of Area A1A Basic Rental for such period. If such change or adjustment results in a reduction in Area A1A Basic Rental due for any period prior to notification, the Port Authority will credit the Lessee with the difference between Area A1A Basic Rental as recomputed for that period and amounts of Area A1A Basic Rental actually paid.

(f) If any adjustment of Area A1A Basic Rental referred to in this Section is effective on a day other than the first day of a calendar month, there shall be payable in advance on the effective date of the rental adjustment an installment of Area A1A Basic Rental equal to 1/12th of the increment of the annual Area A1A Basic Rental as adjusted multiplied by a fraction, the numerator of which shall be the number of days from the effective date of the rental adjustment to the end of the calendar month in which the rental adjustment was effective and the denominator of which shall be the number of days in that calendar month.

5. (a) Effective as of the date of the Lease, Section 45 of the Lease shall be deleted in its entirety and shall be of no force or effect.

(b) Effective as of the date of the Lease, the words and figure, "Two Million Dollars and No Cents (\$2,000,000.00)", set forth in the seventeenth and eighteenth lines of Section 8B of the Lease shall be deemed deleted and the words and figure, "Three Million Eight Hundred Thousand Dollars and No Cents (\$3,800,000.00)", shall be deemed inserted in lieu thereof, and for all the purposes of the Lease the term "Wharf Rehabilitation Reimbursement Amount" shall mean up to Three Million Eight Hundred Thousand Dollars and No Cents (\$3,800,000.00).

(c) Effective as of the date of Supplement No. 1 to the Lease, paragraph (b) of Section 6 of said Supplement No. 1 shall be deemed deleted and the following shall be deemed inserted in lieu thereof:

"(b) 'Rental Commencement Date' shall mean October 1, 2002."

(d) Effective as of the date of Supplement No. 1 to the Lease, Section 12 of said Supplement No. 1 shall be deemed deleted in its entirety.



(e) Effective as of the date of Supplement No.1 to the Lease, the words and figure, "Five Hundred Thousand Dollars and No Cents (\$500,000.00)", set forth in the eighth and ninth lines of paragraph (p) of Section 9 of said Supplement No.1 shall be deemed deleted and the words and figure, "Nine Hundred Seventy Thousand Dollars and No Cents (\$970,000.00)", shall be deemed inserted in lieu thereof, and for all the purposes of said Supplement No. 1 the term "Construction Work Reimbursement Amount" shall mean the lesser of (1) the reasonable cost, as defined in said Supplement No.1, of the Lessee's Construction Work (as also defined therein), or (2) Nine Hundred Seventy Thousand Dollars and No Cents (\$970,000.00).

(f) Effective as of January 1, 2004, (1) paragraphs (b), (c) and (d) of Section 41 of the Lease entitled "*Terminal Guarantee*" shall be deemed deleted and Addendum A attached to this Agreement and incorporated by reference herein shall be deemed inserted in lieu thereof; (2) paragraphs (f) and (g) of said Section 41 shall be deemed deleted and Addendum B attached to this Agreement and incorporated by reference herein shall be deemed inserted in lieu thereof; and (3) Schedule D and Schedule E attached to the Lease shall be deemed deleted and Schedule D and Schedule E attached to this Agreement and incorporated by reference herein shall be deemed substituted therefor. From and after January 1, 2004, the Lessee shall pay the Guaranteed Rental, as defined in the Lease as amended hereby, in accordance with the provisions of said Section 41 as so amended.

(g) On or before December 31, 2005, the Lessee shall purchase not less than four (4) straddle container carriers for use at the premises under the Lease, as amended hereby, which straddle carriers shall have an aggregate cost of not less than three million dollars and no cents (\$3,000,000.00) and the Lessee shall supply to the Port Authority evidence satisfactory to it of such purchase and of the location of such straddle carriers.

6. (a) The Lessee acknowledges that is has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of Area A1A or the suitability thereof for the operations permitted on Area A1A by this Agreement. The Port Authority shall deliver Area A1A in its presently existing "as is" condition. The Lessee, prior to the execution of this Agreement, thoroughly examined Area A1A as existing and has found the same to be suitable and satisfactory for the operations of the Lessee contemplated and permitted under this Agreement. The Lessee agrees to and shall take Area A1A in its "as is" condition and, except as expressly provided in Section 7 of this Agreement with respect to the Remediation Work (as defined in paragraph (a) of Section 7 of this Agreement), the Port Authority shall have no obligations under this Agreement for finishing work or preparation of any portion of Area A1A for the Lessee's use. The Lessee agrees that no portion of Area A1A will be used initially or at any time during the letting which is in a condition unsafe or improper for the conduct of the operations of the Lessee, so that there is possibility of injury or damage to life or property, and the lessee further agrees that before any use it will immediately correct any such unsafe or improper condition.

(b) The Lessee agrees to perform at its sole cost and expense, except as provided in paragraphs (c), (d) and (e) of this Section, all demolition work and all construction and installation work that it may require to prepare Area A1A for its use, including without limitation thereto all work necessary to prepare Area A1A for the Lessee's container operations (hereinafter sometimes called the "Area A1A Construction Work"), pursuant to the applicable provisions of the Lease, including without limitation Sections 8 and 20 thereof entitled "*Construction by the Lessee*", excluding paragraphs (a) and (o) of said Section 8, and for the purpose of said provisions, the term "the Lessee's Construction Work" shall be deemed to include the Area A1A Construction Work and the term "Specific Work Items" shall be deemed to include each of the individual items of work set forth in subparagraphs (1) through (4) of this paragraph. The Lessee will perform the Area A1A Construction work in compliance with the requirements of such Lease provisions, including without limitation thereto the requirement that all Area A1A Construction work be performed in accordance with a Construction Application and plans and specification approved by the Port Authority and, in the case of all Area A1A Construction Work performed subsequent to November 20, 2003, in accordance with the requirements of the plans and certifications enumerated on Exhibit S, attached hereto and hereby made a part hereof, which plans and certifications, prior to the commencement of such Area A1A Construction Work, shall be delivered to the Port Authority and shall be acceptable to and approved by the Port Authority in its sole discretion. The Lessee shall perform the following items of construction work as part of the Area A1A Construction Work:

(1) the paving of the entire open area of Area A1A in a manner suitable for the Lessee's container operations, including the installation of any necessary lighting towers, lighting fixtures and related underground electrical, storm drain and water utility pipes, conduits, mains and wires, the excavation of all geotechnically unsuitable material, the screening of large debris from such material, the reuse of a portion of such material as a base for the new pavement and the disposal of the remaining material excavated or removed from Area A1A in connection with such paving, but excluding any material excavated, removed and disposed of as part of the Remediation Work (such paving, installation, screening, reuse and disposal being hereinafter called the "Paving Work");

(2) the installation of approximately two thousand three hundred (2,300) feet of twelve inch (12") water main on the premises under the Lease, as amended hereby, near Starboard Street and the disposal of any material excavated or removed from Area A1A in connection with such installation (hereinafter called the "Water Main Work");

(3) the demolition of the building numbered 186 at the northwest corner of the premises under the Lease, shown on Sheets 1 and 2 of Exhibit A attached to the Lease (hereinafter called the "Demolition Work"); and

(4) the performance by the Lessee of that portion of the Remediation Work which the Port Authority shall designate by notice to the Lessee as set forth in subparagraph (2) of paragraph (a) of Section 7 of this Agreement.

(c) (1) In consideration of the Lessee's performance of the Area A1A Construction Work, the Port Authority will pay to the Lessee the following amounts:

(i) the lesser of (X) the cost (as defined in paragraph (e) of this Section) of the Paving Work, or (Y) Nineteen Million Six Hundred Thousand Dollars and No Cents (\$19,600,000.00) (such lesser amount being hereinafter called the "Paving Reimbursement Amount"); and

(ii) the lesser of (X) the cost (as defined in said paragraph (e)) of the Water Main Work and the Demolition Work, or (Y) Six Hundred Fifty Thousand Dollars and No Cents (\$650,000.00) (such lesser amount being hereinafter called the "Additional Reimbursement Amount").

(2) In consideration of the Lessee's performance of the Remediation Work, if the Port Authority shall request the Lessee to perform all or a part of the Remediation Work, the Port Authority will pay to the Lessee the lesser of (i) the cost (as defined in paragraph (e) of this Section) of the Remediation Work, or (ii) an amount equal to the excess of Four Hundred Thousand Dollars and No Cents (\$400,000.00) over the amount expended by the Port Authority on the investigation and remediation of the High TPH Areas (as defined in Section 7 of this Agreement) prior to the performance by the Lessee of its portion of the Remediation Work, including without limitation thereto amounts expended by the Port Authority on its portion of the Remediation Work, *provided*, that the cost of the Remediation Work performed by the Port Authority shall not include any costs incurred prior to the date of this Agreement. Such lesser amount is hereinafter called the "Remediation Reimbursement Amount". The Port Authority will notify the Lessee of the available amount described in clause (ii) of this subparagraph at the time the Port Authority requests the Lessee to perform a portion of the Remediation Work and will notify the Lessee of the Port Authority's good faith estimate of the cost of performing such portion of the Remediation Work; in the event that the aggregate of the Lessee's contractors' bids for performing such portion of the Remediation Work, obtained as required by subparagraph (2) of paragraph (a) of Section 7 of this Agreement, exceed the available amount described in said clause (ii), the Port Authority will adjust the portion of the Remediation Work to be performed by the Lessee so that the aggregate of such contractor bids does not exceed such available amount. The Lessee shall not be required to perform any portion of the Remediation Work which portion, if performed, would result in the cost of such Remediation Work exceeding the available amount described in clause (ii) of this subparagraph; in making

such determination, the rendered bills shall be used to determine the cost of work already performed and contractor's bids shall be used to determine the cost of work not yet performed.

(d) The amounts set forth in paragraph (c) of this Section will be paid to the Lessee as follows: On or about the 10th day of the calendar month following the calendar month in which the Lessee commences the Paving Work, the Water Main Work, the Demolition Work or the Remediation Work, as the case may be, in the premises pursuant to the provisions of this Section and on the 10th day of each calendar month thereafter during the period of performance of such work, the Lessee shall deliver a certificate to the Port Authority signed by a responsible officer of the Lessee familiar with the subject matter which shall certify as follows:

(1) the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, performed by the Lessee in the preceding calendar month separately stating the cost, as defined in this Section, for which reimbursement is sought, of performing each of the Paving Work, Water Main Work, Demolition Work and Remediation Work, as the case may be, described in the certificate, the amount of the cost of each type of work which is on that date due and payable by the Lessee and the amount of such cost which on that date has actually been paid by the Lessee;

(2) except in the case of the first such certificate delivered to the Port Authority, the cumulative amount of the cost of performing each of the Paving Work, Water Main Work, Demolition Work and Remediation Work, as the case may be, paid by the Lessee from the commencement of the Area A1A Construction Work or the Remediation Work, as the case may be, to the date of the certificate and the cumulative amount of all payments made by the Lessee which are properly includible in the cost of performing each of such types of Work, from the commencement of such work to the date of the certificate;

(3) that there is no outstanding indebtedness known to the person executing such certificate, after due inquiry, then due for labor, wages, materials, supplies or services in connection with any construction and installation work described therein which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialman's statutory or similar lien or alleged lien upon such work, the premises, any part thereof or the Lessee's leasehold interest therein;

(4) that the portion of the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, performed by the Lessee since the last such certificate (or since the earlier of the commencement of the Area A1A Construction Work or of the Remediation Work, in the case of the first such certificate) and covered by such certificate has been performed in accordance with the terms of this Agreement and the construction application; and

(5) that attached to such certificate are copies of cancelled checks, bills or invoices marked paid by the issuer or other evidence of payment satisfactory to the Port Authority for all amounts certified as paid in such certificate.

Nothing contained in this Agreement shall be deemed or construed as a submission by the Port Authority to the application to it of any vendor's, mechanic's, laborer's or materialman's statutory or similar lien. Within forty-five (45) days after the delivery of each such certificate by the Lessee, the Port Authority shall pay to the Lessee the amount constituting the cost of performing the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, certified by the Lessee as paid in its certificate relating to the preceding calendar month less ten percent (10%) thereof and also less the amount of any claims made against the Port Authority by subcontractors, materialmen or workmen, if any, in connection with any of the work described in such certificate and not bonded or discharged prior to the date of such payment, *provided*, that the total of such periodic payments made by the Port Authority shall not exceed ninety (90%) of the Paving Reimbursement Amount, Additional Reimbursement Amount or Remediation Reimbursement Amount, as the case may be. Upon final completion of all of the Paving Work, of all the Water Main Work and Demolition Work, or of all the Remediation Work, as the case may be, to be performed by the Lessee as set forth in this Section, the Lessee shall submit to the Port Authority a certificate signed by a responsible officer of the Lessee familiar with the subject matter certifying: (A) that all of the Paving Work, all the Water Main Work and Demolition Work, or all of the Remediation Work, as the case may be, has been completed and was performed in accordance with the approved plans and specifications referred to in paragraph (c) of Section 8 of the Lease and the provisions of this Agreement; (B) the final cost of the Paving Work, the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, and the total payments made by the Lessee on account of such cost; and (3) that there is no outstanding indebtedness known to the person signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures described in the certificate or for labor, wages, materials, supplies or services in connection with any work described therein which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialmen statutory or similar lien or alleged lien upon such work or upon the premises under the Lease, as amended hereby, or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment or fixtures described in such certificate secured by any liens, mortgages, security interests or other encumbrances. Such certificate shall also contain a certification by the architect or engineer who sealed the Lessee's plans and specifications pursuant to the provisions of paragraph (c) of Section 8 of the Lease certifying that all of the Paving Work, all of the Water Main Work and Demolition Work, or all of the Remediation Work, as the case may be, has been performed in accordance with the approved plans and specifications. The Lessee shall also supply to the Port Authority such supporting documents and records as the Port Authority shall deem necessary to substantiate the matters set forth in the Lessee's certificate. If all of the work has been completed in accordance with said approved plans and specifications and the provisions of this Agreement, the Lessee's certificate is fully satisfactory to the Port Authority and the Port Authority has examined and approved the Lessee's certificate and such records and other documentation of the Lessee as the Port Authority shall deem necessary to substantiate such cost, the Port Authority shall finally determine the cost of

the Paving Work and the Paving Reimbursement Amount, the cost of the Water Main Work and Demolition Work and the Additional Reimbursement Amount, or the cost of the Remediation Work and the Remediation Reimbursement Amount, as the case may be. No payment made by the Port Authority to the Lessee pursuant to this paragraph (d) shall be deemed final until the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, has been finally determined by the Port Authority, nor shall any such payment be deemed a final determination by the Port Authority of the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be. The Lessee shall permit the Port Authority by its agents, employees and representatives at all reasonable times prior to a final determination of the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, to examine and audit the records and other documentation of the Lessee which pertain to and will substantiate such cost. If the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, as the case may be, as finally determined shall exceed payments previously made of the Paving Reimbursement Amount, the Additional Reimbursement Amount or the Remediation Reimbursement Amount, respectively, whether by reason of the ten percent (10%) deductions made in connection with the prior periodic payments of such amounts or otherwise, the Port Authority will pay the same to the Lessee less the amount of any claims made against the Port Authority by subcontractors, materialmen or workmen, if any, in connection with the construction and installation work described in such certificate and not bonded or discharged prior to the date of such payment; but if the payments previously made of the Paving Reimbursement Amount, the Additional Reimbursement Amount or the Remediation Reimbursement Amount, as the case may be, exceed the cost of the Paving Work, of the Water Main Work and Demolition Work, or of the Remediation Work, respectively, or if any component of such payments exceed the twenty percent (20%) or other limitation set forth in the definition of cost set forth in this Section, the Lessee shall repay such excess to the Port Authority within ten (10) days after demand therefor. No amount paid by the Port Authority to the Lessee pursuant to the provisions of this paragraph shall or shall be deemed to imply that the Area A1A Construction Work or the Remediation Work has been completed in accordance with law or the provisions of this Agreement.

(e) To the extent permitted by sound accounting practice, and subject to the terms and conditions of paragraph (d) of this Section, the sum of the following items of cost incurred by the Lessee in performing the Paving Work, Water Main Work, Demolition Work or Remediation Work shall constitute the cost thereof for the purposes of this Agreement:

(1) The Lessee's payments to contractors for services rendered and equipment employed in such work, including, in the case of the Paving Work, the cost of environmental sampling and testing and including in such cost, without limitation thereto, the cost of such sampling and testing as may be required by subparagraph (3) of paragraph (m) of Section 9 of the Lease, as amended by subparagraph (3) of paragraph (b) of Section 7 of this Agreement;

(2) The Lessee's payments for supplies and materials, including, without limitation thereto, equipment installed in the premises;

(3) The Lessee's payments to persons, firms or corporations other than construction contractors or suppliers of materials, for services rendered or rights granted in connection with such work, not including services of the types mentioned in items (4), (5) and (6) of this paragraph;

(4) The Lessee's payments of premiums for performance bonds and for the insurance the Lessee is required to maintain in effect in accordance with the provisions of paragraphs (i), (j) and (k) of this Section 8 of the Lease during the period of construction only;

(5) The Lessee's payments for engineering services in connection with the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, and during the period of the construction only;

(6) The Lessee's payments for architectural, planning and design services in connection with the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be; and

(7) The sum of the costs approved under items (4), (5) and (6) of this paragraph shall not exceed 20% of the sum of the costs approved under items (1), (2) and (3) of this paragraph; if in fact there is any such excess, such excess shall not be a part of the cost incurred by the Lessee in the performance of the Paving Work, Water Main Work, Demolition Work or Remediation Work, as the case may be, for the purposes of this paragraph.

No payment or payments on account of administrative or other overhead costs and no payment to employees of the Lessee shall be included in the cost of the Paving Work, Water Main Work, Demolition Work or Remediation Work, whether or not allocated to the cost of the such work by the Lessee's own accounting practices. No payment to a firm or corporation wholly or partially owned by or in common ownership with the Lessee shall be included in the cost of the Paving Work, Water Main Work, Demolition Work or Remediation Work. In no event whatsoever shall the cost of any portion of the Paving Work, Water Main Work, Demolition Work or Remediation Work as finally determined and computed in accordance with the provisions of paragraph (d) of this Section and in accordance with the provisions of this paragraph (e) include any expenses, outlays or charges whatsoever by or for the account of the Lessee for or in connection with any improvements, equipment or fixtures or the performance of any work unless such are actually and completely installed in and/or made to the premises under the Lease, as amended hereby, nor shall cost include the costs of any equipment, fixture or improvements installed in the premises which are secured by liens, mortgages, other encumbrances or conditional bills of sale. Notwithstanding the provisions of subparagraph (1) of paragraph (k) of Section 9 of the Lease, the cost of the Disposal of Matter (each as defined in said subparagraph (1)) excavated as part of

the Paving Work, the Water Main Work or the Remediation Work (if the Port Authority shall request the Lessee to perform the Disposal of Matter resulting from the Remediation Work) may be included in the Lessee's cost of performing such work to be reimbursed pursuant to this Section.

(f) The parties to this Agreement recognize that the contracts to be entered into by the Lessee for the performance of the Area A1A Construction Work may cover construction work which does not constitute Paving Work, Water Main Work, Demolition Work or Remediation Work. The Lessee shall at all times maintain, and each certificate submitted by the Lessee pursuant to this Section shall set forth, a proper breakdown and allocation of costs and payments as between the Paving Work, Water Main Work, Demolition Work, Remediation Work (if the Port Authority shall request the Lessee to perform all or a part of the Remediation Work) and other construction work at the Facility, the cost of which is not eligible for reimbursement under this Agreement, and the Lessee shall assure that each applicable contract provides for such breakdown and allocation or, in the case of work done before June 1, 2004, that the contract identifies the kind and location of work with enough specificity to allocate its cost between such categories of the Area A1A Construction Work. In submitting the statements and certifications required of the Lessee hereunder, the Lessee shall in each case specifically and separately state the amounts expended under each such contract for the portions of the Area A1A Construction Work which respectively constitute Paving Work, Water Main Work, Demolition Work and Remediation Work (if the Port Authority shall request the Lessee to perform all or a part of the Remediation Work) in addition to those portions of the construction work at the Facility, the cost of which is not eligible for reimbursement under this Agreement.

7. (a) (1) The Port Authority, as an undertaking collateral to the letting of Area A1A hereunder, and subject to all of the provisions of the Lease and this Agreement (including but not limited to the Section of the Lease entitled "*Force Majeure*"), through its employees, agents, representatives, contractors and subcontractors, at its cost and expense, shall cause the soil in the vicinity of the four (4) locations designated as Area A, Area C, Area D and Area E (sometimes hereinafter called "High TPH Areas") on the attached drawing marked "Exhibit T" and entitled "Total Petroleum Hydrocarbons Delineation Borings", to be removed, disposed in accordance with all applicable Environmental Requirements, as defined in subparagraph (8) of paragraph (a) of Section 9 of the Lease, including without limitation thereto those relating to the remediation of Hazardous Substances pursuant to a remedial action work plan approved by the New Jersey Department of Environmental Protection ("NJDEP"), and replaced with fill which does not exceed the NJDEP guidances for unrestricted use. Such removal, disposal and replacement is referred to in this Agreement and the Lease, as amended hereby, as the "Remediation Work." The obligation set forth in this paragraph (a) is limited to the High TPH Areas and to the remediation work expressly set forth in this paragraph (a).

(2) At the election of the Port Authority, by notice to the Lessee, the Lessee shall perform the Remediation Work or that portion of the



Remediation Work set forth in the Port Authority's notice, as the case may be, subject to the provisions of this subparagraph (2) and the portion of the Remediation Work so designated by the Port Authority shall be a part of the Area A1A Construction Work. The Lessee shall perform the Remediation Work pursuant to the applicable provisions of the Lease, including without limitation Sections 8 and 20 thereof entitled "*Construction by the Lessee*", excluding paragraphs (a) and (o) of said Section 8, and for the purpose of said provisions, the term "the Lessee's Construction Work" shall be deemed to include the Remediation Work, *provided*, that the Lessee shall file a separate Construction Application for the Remediation Work distinct from those filed in connection with the performance of the rest of the Area A1A Construction Work, such Remediation Work Construction Application shall incorporate plans and specifications supplied by the Port Authority for the portion of the Remediation Work to be performed by the Lessee and may be reviewed separately from such other Construction Applications and shall be subject to separate approval by the Port Authority. The Lessee shall prepare separate cost estimates for the Remediation Work and shall obtain bids from its contractors separately setting forth the cost of performing the Remediation Work as a separate portion of the Area A1A Construction Work. The Lessee shall not perform any Remediation Work covered by the Lessee's Construction Application therefor until receiving specific Port Authority approval for such Construction Application as set forth in the Lease. Remediation Work performed by the Lessee shall be at the Lessee's expense, except as set forth in paragraphs (c), (d) and (e) of Section 6 of this Agreement. The Port Authority shall not be required pursuant to subparagraph (1) of this paragraph (a) to perform any portion of the Remediation Work which it has elected to have the Lessee perform pursuant to this subparagraph (2).

(b) Section 9 of the Lease, entitled "*Environmental Responsibilities*" is hereby amended as follows:

(1) Paragraph (a) of said Section 9 shall be amended as follows:

(i) Subparagraph (4) of said paragraph (a) shall be amended to read as follows:

"(4) With respect to ground water, 'Analyzed Item' shall mean each of, and 'Analyzed Items' shall mean all of, the constituents for which ground water was tested and the results thereof reported (i) in the Area A1A Initial Baseline, with respect to the ground water under Area A1A, and (ii) in the Initial Environmental Survey, with respect to the ground water under all other portions of the premises, and with respect to soil, 'Analyzed Item' shall mean each of, and 'Analyzed Items' shall mean all of, the constituents for which soil was tested

and the results thereof reported (i) in the Area A1A Initial Baseline, with respect to Area A1A, and (ii) in the Initial Environmental Survey, with respect to all other portions of the premises.”

(ii) The phrase, “, and on or after the Area A1A Commencement Date, with respect to Area A1A”, shall be inserted immediately after the word, “Space”, and before the semi-colon appearing in the last line of clause (iii) of subparagraph (5) of said paragraph (a).

(iii) The phrase, “, the Area A1A Construction Work, the Remediation Work (if the Lessee performs any of such work)”, shall be inserted immediately after the term, “Wharf Rehabilitation Work”, and before the word, “and”, appearing in the sixth (6th) line of clause (iii) of subparagraph (7) of said paragraph (a).

(iv) Subparagraph (14) of paragraph (a) of Section 9 shall be amended to read as follows:

“(14) ‘Exhibit I’ shall mean the Initial Environmental Survey, all Additional Sampling Reports and all Remediation Completion Reports, if any, together with (i) the Added Environmental Survey, from and after the Effective Date, and (ii) the Area A1A Initial Baseline, from and after the Area A1A Commencement Date, and (iii) the Area A1A Revised Baseline, from and after the Area A1A Revised Baseline Effective Date.”

(v) Subparagraph (15) of paragraph (a) of Section 9 shall be amended to read as follows:

“(15) ‘Existing Condition’ shall mean:

“(A) for the period from December 1, 2000 to the day immediately preceding the Effective Date, both dates inclusive, the levels of Analyzed Items in the soil and ground water for all portions of the premises as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the test results in the Initial Environmental Survey, as such test results may be superceded and supplemented by the test results in each Additional Sampling Report and in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section, and

“(B) (i) from and after the Effective Date with respect to all portions of the premises except for Area A1A shall mean the levels of Analyzed Items in the soil and ground water for all portions of the premises except for Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the test results in the Initial Environmental Survey and the Added Environmental Survey, as such test results may be superceded and supplemented by the test results in each Additional Sampling Report and in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section 9, and

“(ii) from and after the Area A1A Commencement Date to the day immediately preceding the Area A1A Revised Baseline Effective Date, both dates inclusive, with respect to the portion of the premises constituting Area A1A shall mean the levels of Analyzed Items in the soil and ground water for all portions of Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section to the test results in the Area A1A Initial Baseline, as such test results may be superceded and supplemented by the test results in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section, and

“(iii) from and after the Area A1A Revised Baseline Effective Date with respect to the portion of the premises constituting Area A1A shall mean for the ground water the levels of Analyzed Items in the ground water for all portions of Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the ground water test results in the Area A1A Initial Baseline Area and shall mean for the soil the levels of Analyzed Items in the soil for all portions of Area A1A as derived by applying the methodology set forth in paragraph (j) of this Section 9 to the soil test results in the Area A1A Revised Baseline, as such test results may be

superceded and supplemented by the test results in each Remediation Completion Report in accordance with the provisions of paragraph (m) of this Section.”

(vi) Subparagraph (25) of paragraph (a) of Section 9 of the Lease shall be deleted and the following shall be inserted in lieu thereof:

“(25) ‘Ground Area C’ shall mean the ground area defined as ‘Area A1A’ in Section 1 of Supplement No. 5 to the Lease.”

(vii) The phrase, “or the Area A1A Construction Work or the Remediation Work”, shall be inserted immediately after the phrase, “Lessee’s Construction Work”, in both instances where such phrase appears in subparagraph (30) of said paragraph (a).

(viii) The following new subparagraphs (34) through (40) shall be inserted immediately after subparagraph (33) of paragraph (a) to read as follows:

“(34) ‘Area A1A’ shall have the meaning set forth in Section 1 of Supplement No. 5 to the Lease.

“(35) ‘Area A1A Commencement Date’ shall have the meaning set forth in Section 1 of Supplement No. 5 to the Lease.

“(36) ‘Area A1A Construction Work’ shall have the meaning set forth in paragraph (b) of Section 6 of Supplement No. 5 to the Lease.

“(37) ‘Area A1A Initial Baseline’ shall mean Addendum No. 2 to Exhibit I to the Lease attached to Supplemental Agreement No. 5 of this Lease.

“(38) ‘Area A1A Revised Baseline’ shall have the meaning set forth in subparagraph (3) of paragraph (m) of this Section, as amended.

“(39) ‘Area A1A Revised Baseline Effective Date’ shall have the meaning set forth in

subparagraph (3) of paragraph (m) of this Section, as amended.

“(40) ‘Remediation Work’ shall have the meaning set forth in paragraph (a) of Section 7 of Supplement No. 5 of the Lease.”

(2) The phrase, “or the performance of the Area A1A Construction Work (as defined in paragraph (b) of Section 6 of Supplement No. 5 to the Lease) or the Remediation Work (as defined in paragraph (a) of Section 7 of said Supplement No. 5, if the Lessee performs any of such work,)”, shall be inserted immediately after the phrase, “(as defined in Section 8C of this Agreement)”, in the eighteenth (18th) and nineteenth (19th) lines of subparagraph (1) of Paragraph (k) of Section 9 of the Lease.

(3) The following new subparagraph (3) shall be deemed to have been inserted immediately after subparagraph (2) of paragraph (m) of said Section 9 to read as follows:

“(3) It is hereby recognized that as a result of the performance of the Area A1A Construction Work and the Remediation Work, a substantial portion of the subsurface soil of the premises will be disturbed, removed and/or replaced thereby causing the test results for the soil in Area A1A set forth in Addendum No. 2 to Exhibit I to be no longer relevant. The Lessee hereby agrees that prior to submitting to the Port Authority the certificate of the Lessee and of the Lessee’s architect or engineer referred to in paragraph (c) of Section 8 of the Lease certifying that all of the Paving Work has been performed in accordance with the approved plans and specifications and the provisions of the Lease, the Lessee shall at its sole cost and expense (except as provided in paragraphs (c), (d) and (e) of Section 6 of Supplement No. 5 to the Lease) as part of the Paving Work (as defined in subparagraph (1) of paragraph (b) of said Section 6) and subject to the terms and provisions of Section 8 of the Lease entitled “*Construction by the Lessee*” and of Section 6 of Supplement No. 5 to the Lease, sample and test the soil of Area A1A for the Analyzed Items for Area A1A or the sixty (60) pollutants plus forty (40) tentatively identified compounds set forth in the latest edition of the New Jersey Department of Environmental Protection Field Sampling and Procedures Manual (the “Manual”) in accordance with the Manual in not less than one location in each acre of Area A1A as specified by the Port Authority. The testing and analysis shall be performed by a laboratory with a current Data Certification in accordance

with NJAC 7:18. The Lessee shall set forth the test results of such sampling in a report, which report shall be in the same form as Exhibit I of the Lease (such report is herein referred to as the "Area A1A Revised Baseline"). All such sampling, testing and the preparation of the Area A1A Revised Baseline shall be performed by an independent consultant and laboratory licensed by the State of New Jersey. The Lessee shall deliver a copy of the Area A1A Revised Baseline to the Port Authority prior to or at the same time as the Lessee delivers to the Port Authority the certificate of the Lessee and of its architect or engineer referred to above, and after such delivery of the Area A1A Revised Baseline by the Lessee to the Port Authority the Area A1A Revised Baseline shall replace the Area A1A Baseline for all purposes under this Lease for determining the Existing Condition of the soil in Area A1A of the premises. The date of receipt by the Port Authority of the A1A Revised Baseline is herein called the "Area A1A Revised Baseline Effective Date."

(4) (i) The phrase, ", or whose presence in, on or under Area A1A occurred after the Area A1A Commencement Date", shall be inserted immediately after the word, "any" and before the period appearing in the eighth (8th) line from the end of subparagraph (i) of paragraph (u) of said Section 9.

(ii) The phrase, "or the obligations set forth in subparagraph (iv) of this paragraph (u), as amended by Supplement No. 5 to the Lease", shall be inserted immediately after the words and figures, "Sections 11 and 16 hereof", and before the word, "and", appearing in the third line of subparagraph (iii) of said paragraph (u).

(iii) The following shall be inserted immediately after subparagraph (iii) of paragraph (u) as subparagraph (iv) of said paragraph (u):

"(iv) Notwithstanding anything to the contrary in this Lease, in the event that after the performance of the Paving Work on any portion of Area A1A any Governmental Authority or any Environmental Requirement shall require, either as a condition of any approval or otherwise, that the Existing Condition on such portion of Area A1A be removed or remediated, the Lessee shall, when such removal and/or remediation is completed or upon earlier written notice from the Port Authority, expeditiously at its sole cost and expense repair and/or replace the pavement that may be damaged or destroyed by such remediation or removal on such

portion of Area A1A, including without limitation performing all required backfilling of such portion of Area A1A in accordance with all Environmental Requirements (including without limitation any remedial action work plan covering such soil removal and/or remediation).”

(5) Addendum No. 2 and Addendum No. 3 attached hereto are hereby made a part hereof, of the Lease and of Exhibit I to the Lease.

(c) The Lessee has requested that it be allowed to perform the Paving Work at its risk (except as expressly provided in paragraphs (c), (d) and (e) of Section 6 of this Agreement), to accommodate the needs of the Lessee’s expanding business, even though sampling and testing of the groundwater at Area A1A indicate the presence of Hazardous Substances (as defined in subparagraph (26) of paragraph (a) of Section 9 of the Lease) in the soil which exceed the NJDEP soil clean up guidances for both restricted and unrestricted use and in the groundwater which exceed applicable NJDEP ground water criteria, *provided*, that the Port Authority shall perform, or reimburse the Lessee for performing in the manner set forth in Section 6 of this Agreement, the Remediation Work, as set forth in paragraph (a) of this Section.

(1) The Port Authority has advised the Lessee that it is reluctant to permit the Lessee to perform the Paving Work until (i) all governmental approvals have been obtained with respect to addressing the presence of Hazardous Substances currently in, on or under Area A1A which exceed or are in violation of any Environmental Requirement (including without limitation the soil clean up criteria used by NJDEP and applicable NJDEP groundwater criteria), which approvals include but are not limited to, the approval by the prior tenants of Area A1A and the NJDEP of all relevant remedial action work plans for Hazardous Substances currently in, on and under Area A1A, the reclassification or waiver of classification with respect to the groundwater under Area A1A and the approval by NJDEP of the conditions upon which it will permit Area A1A to be used for container terminal operations (all of the foregoing required approvals referred to in this clause (i) being herein collectively called the “Required Environmental Approvals” and all the terms, conditions, provisions and requirements of all of the Required Environmental Approvals when given are herein referred to as the “Regulatory Environmental Conditions”), and (ii) the Port Authority has determined that it can and will comply with all the Regulatory Environmental Conditions (such determination by the Port Authority being herein referred to as the “Port Authority Environmental Determination”). Nevertheless, the Lessee has advised the Port Authority that it wishes to proceed with the Paving Work prior to all of the Required Environmental Approvals having been obtained and prior to the Port Authority Environmental Determination having been made. Without limiting any other term or condition of this Agreement, if the Lessee proceeds with the Paving Work, except as expressly provided with respect to cost reimbursement in paragraphs (c), (d) and (e) of Section 6 of this Agreement, subject to the provisions of subparagraph (2) of paragraph (b) of Section 9 of the Lease, and unless the Port Authority elects to perform all or part of the Remediation

Work itself, the Lessee shall assume all risks arising out of or in connection with all Hazardous Substances on Area A1A, all Environmental Requirements relating to Area A1A or its use and occupancy and the Paving Work, all Required Environmental Approvals, all Regulatory Environmental Conditions and the Port Authority Environmental Determination, including without limitation, the fact that not all of the Environmental Approvals may be obtained, the fact that the NJDEP may never approve, or may not continue any approval of the extent of the remediation to be performed in, on or under Area A1A or on the conditions that Area A1A may be used for container terminal operations, the fact that the Port Authority may determine that it will not comply or can not comply with all of the Regulatory Environmental Conditions (including without limitation the conditions imposed by NJDEP for use of Area A1A for container terminal operations), the fact that the NJDEP or Environmental Requirements may require remediation of the soil in, on or under Area A1A after all or some of the Paving Work has been performed which may require the removal of all or some of the Paving Work, the removal of all or part of the soil beneath the paved portion of Area A1A and the repaving of the affected portions of Area A1A, and the fact that the Hazardous Substances in, on and under Area A1A may increase the cost to the Lessee to perform the Paving Work.

(2) The Lessee acknowledges that the Port Authority has provided the Lessee results of soil sampling and testing previously performed at Area A1A entitled "Soil Sample Exceedence Plan, Semivolatile Organic Compounds"; "Soil Sample Exceedence Plan, Polychlorinated Biphenols/Pesticides"; "Soil Sample Exceedence Plan, Inorganic Compounds; and "Soil Sample Exceedence Plan, Total Petroleum Hydrocarbon each dated December 2001, a map dated 6/27/02 entitled "Total Petroleum Hydrocarbon Excavation Areas" and an environmental report entitled "Environmental Baseline Environmental Evaluation - Former Naprano Iron and Metal Company and Metro Metals Facility (15 Acre Site) - Port Newark Port Authority Marine Terminal", dated July 2001 (hereinafter collectively called the "Subsurface Environmental Reports") which show Hazardous Substances in, on and under Area A1A that exceed NJDEP's soil clean up guidances for both restricted and unrestricted use and applicable ground water criteria. Without limiting the generality of any other term or provision of the Lease, as amended by this Agreement, including without limitation thereto paragraph (l) of Section 9 thereof and Section 22 thereof, the Lessee shall not rely on the Subsurface Environmental Reports being comprehensive or representative of the complete extent of the presence of Hazardous Substances on, under or about Area A1A. The Lessee hereby grants permission to the Port Authority, or to any third person designated by the Port Authority by notice to the Lessee, to enter upon Area A1A on seven (7) days' prior notice for the purpose of performing soil remediation of any Hazardous Substance which exceeds NJDEP's soil clean up guidances for unrestricted use and for the purpose of performing groundwater remediation of any Hazardous Substance that exceeds any applicable groundwater quality standards, it hereby being understood and agreed that, except as expressly set forth in the Lease or in this Agreement, the Port Authority shall have no obligation whatsoever to the Lessee to



perform or pay for any such remediation and no permission or approval of the Port Authority hereunder, or of the Paving Work, or in connection with either, shall be or be deemed to have imposed any obligation whatsoever on the Port Authority to perform or pay for any soil, groundwater or other remediation in, on or under Area A1A. The Lessee agrees that no performance of any remediation work in, on or under Area A1A shall constitute an eviction or constructive eviction of the Lessee nor be grounds for any abatement of fees or charges payable by the Lessee under the Permit or otherwise nor give rise to or be the basis of any claim or demand by the Lessee against the Port Authority, its Commissioners, officers, employees or agents for damages, consequential or otherwise. Further, the Port Authority shall have no obligation whatsoever to the Lessee arising out of the performance of any remediation work on, in or under Area A1A, including without limitation, any obligation to back fill the excavations, replace the millings installed on Area A1A by the Lessee, repave the affected portions of Area A1A or otherwise restore Area A1A to the condition existing immediately prior to the performance of any such remediation work. Prior to the date set forth in any notice to the Lessee from the Port Authority of the performance of any remediation work in, on or under Area A1A, the Lessee shall make available the areas designated in such notice for the performance of the remediation, including without limitation the removal of all containers and other personal property from said designated areas and the removal of required portions of the Paving Work and all millings installed by the Lessee on such designated areas.

(3) Notwithstanding this Agreement, or the approval of the Paving Work by the Port Authority or any other Port Authority approvals in connection therewith, or the performance of any remediation work by the Port Authority, the Lessee or others, including without limitation any excavation or disposal of soil which contains any Hazardous Substances whether in the performance of the Paving Work or pursuant to an approved remedial action work plan or on a voluntary basis or otherwise, the Port Authority shall have no obligation whatsoever, in law or equity under the Lease, this Agreement, any Construction Application or otherwise, to the Lessee to obtain any Required Environmental Approvals, to comply with any Regulatory Environmental Conditions or Environmental Requirements, or to perform any remediation in, on or under Area A1A or to make the Port Authority Environmental Determination.

(4) The Lessee hereby specifically acknowledges and agrees that neither this Agreement nor any approval of the Paving Work by the Port Authority nor any performance of the Paving Work nor any expenditure of monies thereon shall grant or shall be deemed to have granted any rights whatsoever in the Lessee (i) to be reimbursed by the Port Authority for the Lessee's cost of performing the Paving Work or any portion thereof, except as expressly provided in Section 6 of this Agreement, (ii) to be reimbursed by the Port Authority for the Lessee's cost of removal of any of the Paving Work or repairing of the affected portions of Area A1A, if required as provided for in this Agreement, (iii) to the performance of any Regulatory Environmental Approvals or any other Environmental Requirements by the Port Authority or any third person, or (iv) to

the Port Authority Environmental Determination being made. The Lessee understands that there may be many problems to be resolved before all Required Environmental Approvals are obtained and before the Port Authority Environmental Determination is made, and that all such problems may not be resolved. The Lessee hereby acknowledges and agrees that if it proceeds with the Paving Work covered by this Agreement, it shall do so at its sole risk being fully cognizant of the fact that the entire expenditure of monies by it on the performance of the Paving Work may be of limited or no benefit to the Lessee and without consideration in that the Lessee may not enjoy any or only limited beneficial use of the Paving Work in that remediation of Area A1A may be required after the Paving Work has been performed or NJDEP may not approve or may not continue its approval of the use of Area A1A for container terminal purposes on conditions that are acceptable to the Port Authority, and all or any other Required Environmental Approvals may not be obtained or the Port Authority Environmental Determination may not be made.

8. (a) The Port Authority and the Lessee have heretofore entered into a Space Permit dated as of July 12, 2001, bearing Port Authority Agreement No. MNS-263 and covering Area A1A; a Supplement to Permit, dated as of March 18, 2002, extending said permit; and a construction letter agreement dated August 23, 2002, relating to construction to be performed on Area A1A, said permit and agreement, as the same have heretofore been supplemented and amended, being hereinafter called the "Existing Agreements."

(b) Effective at 11:59 o'clock P.M. on the day preceding the Area A1A Commencement Date, the Existing Agreements and the permission granted the Lessee to occupy Area A1A thereunder shall be revoked with the same force and effect as if the period of the said permission were in and by the provisions of the Existing Agreements originally fixed to expire on said preceding day and the Lessee and the Port Authority each do by these presents release and discharge the other from any and all obligations of every kind whatsoever on the part of the other to be performed under the Existing Agreements with respect to Area A1A for that portion of the period of permission subsequent to said preceding day; it being understood that nothing herein contained shall release, relieve or discharge the Lessee from any liability for fees, charges or other amounts that may be due or become due to the Port Authority for any period or periods prior to said preceding day, or for breach of any other obligation on the Lessee's part to be performed under the Existing Agreements for or during such period or periods or maturing on the revocation of such permission, *provided*, that the construction letter agreement referred to in paragraph (a) of this Section shall remain in effect with respect to any Construction Application and plans and specifications filed by the Lessee prior to the Area A1A Commencement Date and with respect to any Area A1A Construction Work performed prior to the Area A1A Commencement Date.

9. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its

execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

10. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

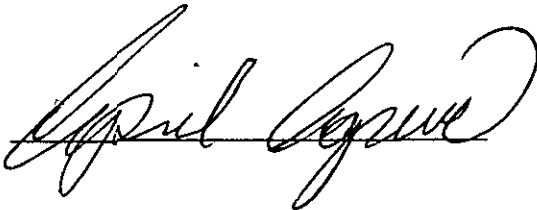
ATTEST:

  
\_\_\_\_\_  
(Secretary)

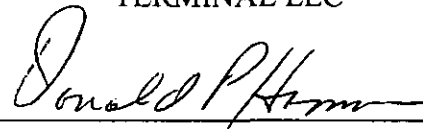
THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

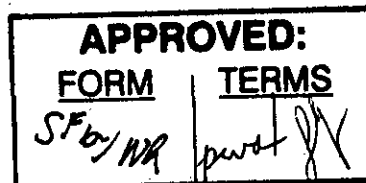
By   
\_\_\_\_\_  
RICHARD M. LARRABEE  
(Title) DIRECTOR, PORT COMMERCE DEPT.  
\_\_\_\_\_  
(Seal)

WITNESS:

  
\_\_\_\_\_

PORT NEWARK CONTAINER  
TERMINAL LLC

By   
\_\_\_\_\_  
(Title) President  
\_\_\_\_\_



## Exhibit S

1. Soil Erosion and Sediment Control Plan covering the Area A1A Construction Work (as defined in the agreement to which this Exhibit S is attached) certified by the governing Soil Conservation District in accordance with the provisions of the New Jersey Soil Erosion and Sediment Control Act, Chapter 251, P.L. 1975, as amended (N.J.S.A. 4:24-39 *et seq.*).
2. Authorization to Discharge Stormwater covering the Area A1A Construction Work issued by the New Jersey Department of Environmental Protection under New Jersey Pollutant Discharge Elimination System General Permit No. NJG0088323 (N.J.A.C. 7:14A-11 Appendix B) for Stormwater Discharge Associated with Construction Activity pursuant to the New Jersey Water Pollution Control Act, Chapter 74, P.L. 1977, as amended (N.J.S.A. 58:10A-1 *et seq.*).
3. Excavated Material Management Plan covering the Area A1A Construction Work as approved by the Port Authority.

**PNCT LLC TERMINAL GUARANTEE**  
**Schedules D and E**  
**(Effective January 1, 2004)**

**Annual Containers Handled**

<b><u>Year Commencing</u></b>	<b><u># of Containers (Schedule D)</u></b>	<b><u>60% (Schedule E)</u></b>
1/1/2004	350,000	210,000
1/1/2005	355,000	213,000
1/1/2006	360,000	216,000
1/1/2007	365,000	219,000
1/1/2008	396,000	237,600
1/1/2009	401,000	240,600
1/1/2010	406,000	243,600
1/1/2011	411,000	246,600
1/1/2012	416,000	249,600
1/1/2013	421,000	252,600
1/1/2014	426,000	252,600
1/1/2015	431,000	252,600
1/1/2016	436,000	252,600
1/1/2017	441,000	252,600
1/1/2018	446,000	252,600
1/1/2019	451,000	252,600
1/1/2020	456,000	252,600
1/1/2021	461,000	252,600
1/1/2022	466,000	252,600
1/1/2023	471,000	252,600
1/1/2024	476,000	252,600
1/1/2025	476,000	252,600
1/1/2026	476,000	252,600
1/1/2027	476,000	252,600
1/1/2028	476,000	252,600
1/1/2029	476,000	252,600
1/1/2030	476,000	252,600

## ADDENDUM A

(b) The Lessee shall be subject to the payment of a guaranteed rental (hereinafter called the "Guaranteed Rental") for the Terminal Throughput Year commencing on January 1, 2004, and ending on December 31, 2004, and in each subsequent Terminal Throughput Year to occur thereafter during the term of the letting under this Agreement as follows: in the event that the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during any such Terminal Throughput Year shall not exceed the Rent Guarantee Number for that Terminal Throughput Year, the Lessee shall pay to the Port Authority a Guaranteed Rental equal to the product obtained by multiplying

(1) the excess of the Rent Guarantee Number for that Terminal Throughput Year over the greater of (i) the actual number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during that Terminal Throughput Year, or (ii) the Exemption Number (as defined in subparagraph (5) of paragraph (a) of Section 5 hereof); by

(2) the Throughput Rental Rate in effect on the last day of that Terminal Throughput Year pursuant to the provisions of Sections 5 and 6 hereof.

Any Guaranteed Rental owed under this Section shall be paid by the Lessee to the Port Authority within ten (10) days after notification by the Port Authority to the Lessee stating the amount thereof.

(c) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of three hundred fifty thousand (350,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at three hundred fifty thousand (350,000) for purposes of the calculation of the Guaranteed Rental in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of three hundred fifty thousand (350,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of three hundred fifty thousand (350,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Rent Guarantee Number of three hundred fifty-five thousand (355,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be three hundred fifty-five thousand (355,000). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee

Number of four hundred one thousand (401,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2009 Rent Guarantee Number"), shall not be increased and shall remain at the 2009 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Guaranteed Rental shall be made based on the 2009 Rent Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number. Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D.

(d) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of three hundred fifty-five thousand (355,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at three hundred fifty-five thousand (355,000) for purposes of the calculation of the Guaranteed Rental in the event that the Dredging, as defined in Section 8 (a) (3) hereof, shall not have been completed by December 31, 2005, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of three hundred fifty-five thousand (355,000) until such time as the Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of three hundred fifty-five thousand (355,000) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Rent Guarantee Number of three hundred sixty thousand (360,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be three hundred sixty thousand (360,000). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of four hundred six thousand (406,000), as set forth in Schedule D hereto for the Terminal Throughput

Year ending on December 31, 2010, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2010 Rent Guarantee Number"), shall not be increased and shall remain at the 2010 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty-two Foot Dredging, as defined in Section 8(a)(5) hereof, shall not have been completed by December 31, 2010, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform Fifty-two Foot Dredging. The calculation of the Guaranteed Rental shall be made based on the 2010 Rent Guarantee Number until such time as the fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number. Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. The postponement of the respective increase in the Rent Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.



## ADDENDUM B

(f) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred ten thousand (210,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at two hundred ten thousand (210,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of two hundred ten thousand (210,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of two hundred ten thousand (210,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Terminal Guarantee Number of two hundred thirteen thousand (213,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be two hundred thirteen thousand (213,000). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred forty thousand six hundred (240,600), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2009 Terminal Guarantee Number"), shall not be increased and shall remain at the 2009 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2009 Terminal Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the

Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E.

(g) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred thirteen thousand (213,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at two hundred thirteen thousand (213,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Dredging, as defined in Section 8 (a) (3) hereof, shall not have been completed by December 31, 2005, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of two hundred thirteen thousand (213,000) until such time as the Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of two hundred thirteen thousand (213,000) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Terminal Guarantee Number of two hundred sixteen thousand (216,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be two hundred sixteen thousand (216,000). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred forty-three thousand six hundred (243,600), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2010, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2010 Terminal Guarantee Number"), shall not be increased and shall remain at the 2010 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty-two Foot Dredging, as defined in Section 8 (a) (5) hereof, shall not have been completed by December 31, 2010, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Fifty-two Foot Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2010 Terminal Guarantee Number until such time as the Fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2010 Terminal Guarantee Number for any portion of the

Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. The postponement of the respective increase in the Terminal Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 5 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a 15-acre area to the Lease (the "Area A1A"), as such Area A1A is more fully depicted on Exhibit A-1a attached to the Lease Supplement.

NOW, THEREFORE, it is

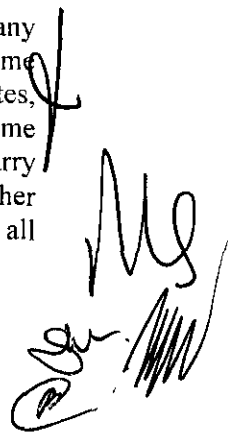
RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all

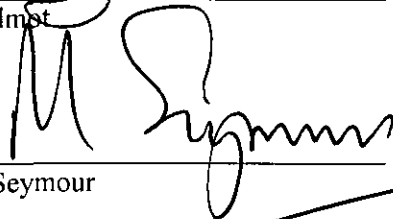


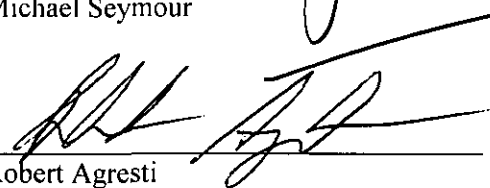
such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

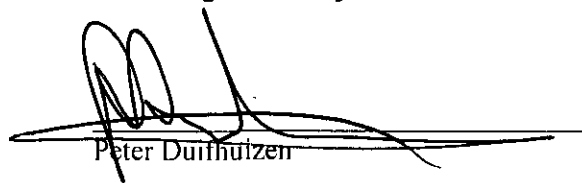
The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

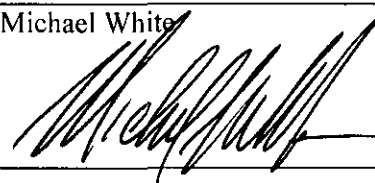
IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this 21 day of September, 2004.

  
\_\_\_\_\_  
Gary Willmet

  
\_\_\_\_\_  
Michael Seymour

  
\_\_\_\_\_  
Robert Agresti

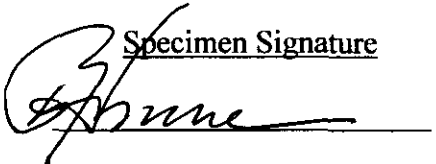
  
\_\_\_\_\_  
Peter Duijhuizen

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Michael White  
  
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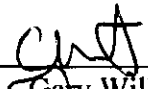
PORT NEWARK CONTAINER TERMINAL, L.L.C.


CERTIFICATE OF MANAGER

For purposes of reliance by The Port Authority of New York & New Jersey (the "Port Authority") in connection with supplement nos. 4 and 5 (collectively, the "Lease Supplements") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) between the Port Authority and Port Newark Container Terminal, L.L.C., a Delaware limited liability company (the "Company"), the undersigned hereby certifies that he is a manager of the Company, and further certifies that Don Hamm, whose specimen signature appears below, is the duly appointed President of the Company and that he is authorized to execute and deliver each of the Lease Supplements on behalf of the Company.

<u>Name</u>	<u>Title</u>	<u>Specimen Signature</u>
Don Hamm	President	

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of this 29th day of September, 2004.

  
\_\_\_\_\_  
Gary Willmot  
Manager

  
JoAnn A. McAleer  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 10/16/2007  
Oct 1, 2004

**ADDENDUM NO. 2**

**to**

**EXHIBIT I**

**to Lease No. L-PN-264**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

  
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**For the Port Authority**

**Initialed:**

  
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**For the Lessee**

**SUBSURFACE BASELINE REPORT  
FORMER NAPORANO IRON AND METAL COMPANY  
AND HUGH NEU SCHNITZER EAST FACILITIES**

**ADDENDUM NO. 2**

**to**

**EXHIBIT I**

**to**

**Lease No. L-PN-264**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**September 2002**



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FORMER NAPORANO IRON AND METAL COMPANY  
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## SECTION 1.0

### INTRODUCTION

The purpose of this Subsurface Baseline Environmental Evaluation (SBEE) is to establish surface and subsurface baseline conditions for an approximately 15-acre parcel formerly occupied by the Naporano Iron and Metal Company (Naporano) and the Hugo Neu Schnitzer East (Hugo Neu). The location of the site is shown on Figure 1. The approximately 15-acre area is shown in Figure 2. The investigation on this portion of the property included the installation of 43 soil borings, five of which were completed as monitoring wells. A sixth monitoring well, MW-C5, was installed and sampled as part of the SBEE. However, MW-C5 was excavated during the remediation activities at the site. Soil analytical data for MW-C5 is not provided since the soil was excavated. However, since groundwater is not as location-specific as soil, analytical data for the groundwater samples collected from MW-C5 is included in this report. Locations of the soil borings and monitoring wells are shown on Figures 3 and 4.

The work performed as part of this investigation was conducted in accordance with *Technical Requirements for Site Remediation* (TRSR) (N.J.A.C 7:26E) and the New Jersey Department of Environmental Protection (NJDEP) *Field Sampling Procedures Manual*, May 1992.

## SECTION 2.0

### FIELD ACTIVITIES

A total of 43 borings were installed in order to characterize the site in regard to potential contaminants and provide information about the geology and hydrogeology. Thirty-three of these borings were installed by Port Authority personnel on both the former Naparano and Hugo Neu sites. Five of these borings were completed as monitoring wells. The remaining 10 borings were installed by Hugo Neus's consultant Excel Environmental Resources, Inc. (Excel) solely on the former Hugo Neu site. The locations of the soil borings and monitoring wells are presented in Figures 3 and 4. In general, the soil borings installed by Port Authority personnel were advanced until groundwater was observed in order to evaluate the potential for the presence and migration of hazardous substances or to delineate contamination seen in earlier investigative rounds. Soil borings installed by Excel were drilled and sampled at pre-determined depths. Additional information regarding sampling procedures is described below.

#### 2.1 SOIL SAMPLING PROGRAM

The soil sampling program investigation followed the requirements specified in N.J.A.C. 7:26E-3.6. All borings performed by Port Authority personnel were installed utilizing either a bucket auger or a 4 5/8-inch inside diameter hollow-stem auger. In areas where subsurface features (utilities) were a concern or proposed sampling depths were limited, a bucket auger was used to penetrate surface features or collect the samples. After subsurface features were penetrated, continuous split-spoon soil samples were collected at 2-foot intervals using a carbon steel split-spoon. All soils were characterized by the on-site geologist (from the hand-auger samples and split-spoon cores) and screened using an HNu photoionization detector. Additionally, HNu readings were recorded in the breathing zone of the on-site workers, and headspace readings were recorded from soil samples collected from each discrete sampling interval. All information was recorded on boring log forms or in bound field logbooks.

Table 1 summarizes the soil sampling program, including sample ID, sampler, site, number of samples, depth, date, and analysis.

Ten of the borings, BH-N1, BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1, BH-N5A, BH-N5B, BH-N5C, BH-N5D, and MW-N2 were installed on the former Naparano Facility portion of the site. MW-N2 was completed as a monitoring well. All ten borings were installed on the Naparano facility by Port Authority personnel. A total of 24 soil samples were collected from the six borings. Two samples were collected from both BH-N1 and MW-N2 at depths 0.5 to 1.5 feet (ft) below ground surface (bgs) and between 4.0 and 5.0 ft bgs. Four samples were collected from BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1 from depths between 2.0 and 4.0 ft bgs. Samples from BH-N5A, BH-N5B, BH-N5C, and BH-N5D were collected from 0.5 to 2.5 ft. bgs.

The remaining 33 borings were installed on the former Hugo Neu portion of the facility. Port Authority personnel installed 23 of the borings on the Hugo Neu portion of the site and collected samples at various depths. The remaining 10 borings were installed by Excel. Excel collected a total of 28 soil samples. One to four samples were collected per boring by Excel. A detailed breakdown of the sampling program is presented in the sections below.

Due to logistical reasons, the soil and groundwater investigation at each of the former facilities were performed separately. Since the sampling approach for each facility was based on site-specific conditions, unique investigative methods (i.e., sampling depth and parameters) were utilized at each facility. The sampling methodology employed at each facility is presented in the sections below.

#### Summary of Investigation at Former Naporano Facility Portion of the Site

At the former Naporano Facility, 24 discrete soil samples were collected from ten soil borings for contract laboratory analysis in this portion of the site. Soil samples were collected from each boring at depths ranging from 0.5 to 5.0 ft bgs. HNu readings of the headspace from each sampling interval ranged from 0.0 to 1.5 parts per million (ppm). Field screening results along with the boring logs are provided as Appendix A. BH-N1 and MW-N2 were analyzed for total petroleum hydrocarbons (TPHC) and the complete list of priority pollutants with a forward library search (PP+40), including xylenes. A PP+40 scan is comprised of priority pollutant volatile organic compounds with a forward library search (VO+15) plus xylenes, priority pollutant base/neutral and acid extractable organics with a forward library search (BNA+25), polychlorinated biphenyls (PCBs), pesticides, and priority pollutant metals. Soil samples for Volatile Organic Compound (VOC) analysis were collected using methanol extraction methodology. Soil borings BH-N1-N1, BH-N1-S1, BH-N1-E1, BH-N1-W1, BH-N5A, BH-N5B, BH-N5C, and BH-N5D were analyzed for TPHC only. Trip blanks were submitted for laboratory analyses during the soil sampling task of this investigation. Field blanks and duplicate samples were not collected during the soil sampling phase of the investigation. All Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

#### Former Hugo Neu Facility

Within the former Hugo Neu portion of the facility, Port Authority personnel installed 23 soil borings. Hollow stem auger drilling equipment was used to install seven soil borings in this portion of site. Continuous split spoon sampling was collected at intervals of 0.0 to 0.5 ft bgs and 1.5 to 2.0 ft bgs. Bucket augers were used to collect soil samples at the other four locations. Each sample was characterized by the on-site supervisor and screened using an HNu photoionization detector. All field screening information was recorded on boring log forms (see Appendix A).

For each soil boring there was anywhere from one to three samples taken from depths ranging from 0.5 ft bgs to 9.5 ft bgs (See Table 1). HNu readings of the headspace from each sampling interval ranged from 0.0 to 2.3 ppm. Field screening results along with the boring logs are provided as

Appendix A. Samples collected from BH-N6 and BH-N7 were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), PCBs, Aldrin, Heptachlor, Dieldrin, Lead and TPHC analyses. Samples collected from MW-C1, MW-C2, MW-C3, and MW-C4 were analyzed for TPHC, Phenols, BNA+25, cyanide, PP+40, and PCBs. The remaining samples were only analyzed for TPHC.

As noted previously, in addition to the above-noted sampling, 10 additional soil borings were installed at the Hugo Neu site by Excel. These soil borings were advanced using Geoprobe<sup>®</sup> drilling equipment. The boring locations are shown on Figure 3. A total of 25 discrete soil samples were collected for contract laboratory analysis. Two to four samples were collected from each soil boring location at varying depths ranging from 0.0 to 0.5 foot bgs to 7.0 –7.5 ft bgs. Each sampling sleeve was characterized by the on-site supervisor and screened using an HNu photoionization detector. All field screening information was recorded on boring log forms (see Appendix A). All soil samples were analyzed for VO+15, BNA+25, PCBs, and priority pollutant metals.

Soil samples were transferred immediately to laboratory-prepared sample containers, labeled, packed, and shipped for analysis in accordance with N.J.A.C. 7:26E 2.1. Soil samples were processed and labeled consistent with Section 2.3.3 of this document. Sample chain-of-custody forms (COCs) were prepared for all samples collected as part of this investigation. Sample documentation and COCs were prepared consistent with procedures detailed in Section 2.3.3. Each piece of sampling equipment was decontaminated prior to use at each new sample location and prior to sampling the respective soil strata. All sampling equipment was constructed of stainless steel. For additional information on equipment decontamination procedures, see Section 2.3.2.

Soil samples for volatile analysis were collected using methanol extraction methodology. Field blanks, trip blanks and duplicate samples were submitted for laboratory analyses during the soil sampling task of this investigation. Quality Assurance/Quality Control (QA/QC) procedures are detailed in Section 2.3 of this report.

Upon completion of each boring location, all soils and investigation-derived waste generated were handled consistent with the site-specific Waste Management Plan detailed in the site-specific investigation work plan.

## **2.2 GROUNDWATER SAMPLING PROGRAM**

The groundwater investigation was conducted as per N.J.A.C. 7:26E-3.7. The program included the installation of six overburden on-site monitoring wells. The wells were installed in select boreholes created during the soil boring program. One of the wells (MW-N2) was installed on the former Naporano facility. Four wells (MW-C1, MW-C2, MW-C3, MW-C4) were installed on the former Hugo Neu facility. MW-C5 (its correlated boring was excavated during remedial activities) was also installed on the former Hugo Neu facility. Approximate locations of these wells are shown on Figure 3. Craig Drilling, Inc. (a New Jersey-licensed well driller) installed the monitoring wells. The well driller obtained the required NJDEP well permits. All the wells were installed under the supervision of Port Authority personnel. The monitoring well construction logs

are included in Appendix A.

### **2.2.1 Monitoring Well Installation**

Well construction materials consisted of 2-inch-diameter (Former Naporano Facility) and 4-inch-diameter (Former Hugo Neu Facility), schedule 40 PVC, well screens and riser pipe. The monitoring wells were constructed with 0.020-inch (20 slot) well screens; location-specific geologic conditions dictated well screen length. The well screens ranged from 3.5 to 8 ft in length. Groundwater was encountered during the drilling activities at 3.5 to 7 ft bgs. The annular space between the well screen and the formation was filled with filter pack to an elevation approximately 2 ft above the top of the screen. The remaining filter pack consisted of approximately 1 foot of finer sand on top of the filter pack. This finer filter pack was designed to act as a sand choke between the formation material and the well materials, and to limit the potential for grout to enter the well from above.

A bentonite seal was emplaced above the filter pack to prevent infiltration to the cement grout into the filter pack and well screen. The seal thickness was dependent on the stratigraphy at each location and ranged from 0.5 to 1.0 foot.

A cement-bentonite grout mixture was placed above the seal and extended to ground surface. All wells were completed with flush-mount construction casings. Cement pads were constructed around each well to provide drainage away from the wells. Protective PVC caps were placed on the PVC riser pipe. Locks were placed on the outside of the protective casings. Metal tags with the monitoring well I.D. number and the NJDEP well permit number were affixed to the manhole covers. Each well was given a locking vacuum cap. A concrete pad was constructed and a flush-mounted manhole cover was grouted in place to secure these locations.

### **2.2.2 Well Development**

Each monitoring well was developed in accordance with the TRSR. Monitoring well development was performed in order to meet the following objectives:

- Remove materials that may have accumulated in the openings of the well screen during installation, and key the well screen and filter pack into the formation being monitored.
- Remove fine materials from the sides of the borehole that resulted from drilling procedures.
- Stabilize the fine materials remaining in the vicinity of the well to retard their movement into the well, increasing well yield.

- Provide an estimate of the well yield.

Monitoring well development was accomplished by overpumping the well using an appropriately sized pump. The pump was field-decontaminated, and new dedicated polyethylene tubing was used for each individual discharge line. To ensure that fine materials were removed during development, the pump intake was raised and lowered across the entire length of the well screen. Additionally, the pump was turned off and on and pumped at different rates during development to cause a surge effect to remove additional fine materials.

During development, field measurements of temperature, pH, specific conductivity, turbidity, and (at some locations) salinity were obtained at the beginning of development, during development and upon completion of development. Observations related to groundwater appearance were recorded.

The development procedures for the monitoring wells continued until the following goals were met or exceeded:

- Discharge became clear.
- Flow rate stabilized.
- At least five volumes of water were removed and the well pumped for a minimum of four hours.
- Turbidity readings were less than 50 NTUs as determined by a nephelometer.

### **2.2.3 Water Sampling Procedure Summary**

Groundwater sampling occurred at the former Naporano Metals Facility on 21 September 1999 and at the former Hugo Neu Facility on 12 and 13 July 1999; all sampling was at least two weeks after development of the last well installed on site. During the groundwater sampling program at the former Hugo Neu site, monitoring well MW-C1 could not be located and therefore was not sampled. During the groundwater sampling program, all monitoring wells were purged and sampled according to low-flow protocol, using a field-decontaminated pump equipped with new, dedicated polyethylene and Teflon-lined discharge tubing. During purging, wells were pumped at a low rate (lower than the recharge rate) so that the drawdown was kept to the lowest possible amount. Water level measurements were taken to ensure that the water column was not purged to dryness.

Monitoring wells were purged until water quality parameters including temperature, pH, and specific conductivity stabilized (less a 10% variation) and turbidity levels were less than 50 NTUs. Purge rates for wells did not exceed the purge rates at which the monitoring wells were



developed. During well purging, groundwater was monitored for the presence of VOCs. Additional groundwater quality parameters including Eh (millivolts), salinity, and dissolved oxygen were obtained to provide additional water quality data. The groundwater sampling procedure employed during the sampling event is provided below.

1. Measure static water level in monitoring well using an electronic water level device to minimize disturbance to the water column.
2. Check for free product or sheen floating on water surface in the well.
3. Position low-flow pump in the water column with the intake placed at a point between the middle and top of the screened interval.
4. Purge the well using a low flow rate (<0.5 l/min) until indicator parameters (i.e., pH, conductivity, oxygen, etc.) have stabilized (Note: Goal during purging is to limit drawdown to < 0.1 m).
5. Collect groundwater samples using same flow rates as established during purging.
6. Fill sample bottles directly from the pump discharge avoiding excessive agitation of sample. Fill Volatile Organic Analysis (VOA) sample vials first, then remaining sample bottles.
7. Decontaminate pumps used for groundwater sampling prior to use according to the procedures described herein. One sample was collected from each monitoring well. All samples were separate grab samples.

Each water sample at the Former Naporano Facility was analyzed for TPHC, PP+40, VOCs + 15, total dissolved solids and total chlorides. Each water sample at the Former Hugo Neu Facility was analyzed for TPHC, PP+40, total suspended solids and total chlorides. Temperature, pH, and specific conductivity were measured in the field at both facilities. Groundwater COCs and labeling procedures are detailed in Section 2.3.3.

## **2.3 QUALITY ASSURANCE AND QUALITY CONTROL**

In order to generate analytical data of known and defensible standards, quality assurance (QA) and quality control (QC) protocols for sampling and laboratory analysis were complied with in accordance with the requirements specified in N.J.A.C. 7:26E-2.1. This was conducted to ensure that samples obtained in the field were representative of the particular environment from which they were collected and were of satisfactory quality to meet the project objectives.

### **2.3.1 QA/QC Samples**

#### **2.3.1.1 Field Blanks**

A field blank composite sample was taken during the groundwater sampling portion of the investigation. A field blank was conducted using two identical sets of cleaned sample containers. One set of containers was empty and served as the sample containers to be analyzed. The second

set of containers was filled with laboratory-demonstrated analyte-free water. At the field location, the analyte-free water was poured over the clean sample equipment (pump) and placed in the empty sample containers for analysis. The field blank was handled, transported, and analyzed in the same manner as samples acquired that day. The field blank was performed at the rate of one per sampling day per type of sampling equipment, and packaged with its associated matrix. The field blank for groundwater was analyzed for all of the same parameters as the samples collected that day.

### **2.3.1.2 Trip Blanks**

Trip blanks are required only for aqueous sampling events for volatile organics and for soil samples collected with the methanol preservation method. Sample bottles for aqueous trip blanks were filled at the laboratory with laboratory-demonstrated analyte-free water. Sample bottles for trip blanks associated with the volatile soil samples collected using the methanol preservation method were filled and weighed at the laboratory with pesticide-grade methanol. The trip blanks traveled with the sample bottles and were not opened in the field. They were handled, transported, and analyzed along with the other samples. For aqueous samples, one trip blank was provided per shipment or two-day sampling event. For soil samples collected using the methanol preservation method, one trip blank accompanied each sample shipment.

## **2.3.2 EQUIPMENT DECONTAMINATION**

### **2.3.2.1 Sampling Equipment Decontamination**

All soil and groundwater sampling equipment, except heavy machinery and submersible pumps, were decontaminated using these procedures.

Soil sampling equipment was decontaminated according to the following procedure:

1. Non-phosphate detergent plus tap water wash.
2. Tap water rinse.
3. Distilled/deionized water rinse.

Groundwater sampling equipment was decontaminated and packaged in the laboratory, and dedicated for exclusive use at one sample location only. The laboratory utilized the following decontamination procedure:

1. Non-phosphate detergent plus tap water wash.
2. Tap water rinse.
3. Distilled/deionized water rinse.
4. 10% nitric acid solution rinse.
5. Distilled/deionized water rinse.
6. Methanol (pesticide-grade) rinse.\*
7. Total air dry.

8. Distilled/deionized water rinse.

\* Methanol was used in place of acetone since acetone was a target analyte.

All decontaminated sampling equipment was stored and handled as appropriate to prevent contamination. Information concerning the decontamination methodology, date, time, and personnel was recorded in the field logbook.

#### ***2.3.2.2 Heavy Machinery Decontamination***

Prior to use on site, heavy equipment was steam cleaned or manually washed. Parts that were prone to contact with contaminated materials required more frequent cleaning to prevent cross-contamination of environmental samples. For example, augers and split-spoon sampling devices were steam cleaned between sampling locations.

#### ***2.3.2.3 Pump Decontamination***

The pump used for evacuation of water from monitoring wells prior to sample collection was decontaminated to eliminate the possibility of contamination introduced by pump insertion.

The pump was cleaned and flushed between use at each monitoring well. The outside of the pump was manually washed using non-phosphate detergent and water, followed by a potable (tap) water rinse. The pump was then flushed with 20 gallons of potable water pumped through the housing and hose. After completion of the flushing, the exterior housing was rinsed with distilled and deionized water. Rinsate from the pump decontamination was collected in drums for disposal. After each use, the hose was cut up into manageable-sized pieces and disposed of with other investigation-derived wastes.

#### ***2.3.2.4 Monitor Well Casing and Screen Decontamination***

Before installation, well casings and screens were manually scrubbed in the field to remove foreign material. Casings and screens were also thoroughly steam cleaned to remove all traces of oil and grease which may have been present, especially at threaded joints. Casings were carefully handled and stored to prevent cross-contamination prior to installation.

### **2.3.3 SAMPLE DOCUMENTATION**

During sampling, all activities were recorded in a logbook to provide an accurate record of the sampling event and the procedures followed. Entries made by sampling personnel in the logbook included:

- Date/Time/Weather
- Sampler/Geologist/Soil Scientists' Names

- Sample Point Identification (including location, matrix, and sample depth)
- Sketch Showing the Sampling Point Location (including reference distances)
- Soil Profile
- Sample Size
- Sampling Equipment Used
- Field Measures (where appropriate)
- General Comments (e.g., odor, staining, etc.)

The field crew also labeled each sample container with the appropriate information necessary to identify the sample as listed below:

- Unique Sample Identification Number
- Date
- Time of Sampling
- Name
- Preservation
- Analyses
- Sampler's Initials

This information was then supplemented and cross-referenced on a COC form, providing documentation of the handling of each sample from collection to arrival at the laboratory.

The COC was completed by the field crew and signed by the sampler and all personnel handling the samples before the samples were relinquished to the laboratory. The COC contained the following information:

- Project Name
- Date
- Sampler's Initials
- Sample Identification Number
- Name/Description of Sample (Analytical Parameters)
- Preservation
- Number of Containers
- Holding Conditions and Locations
- Signature of all Handlers and Date and Time of Transfers
- Organization or Affiliation of all Handlers and Reason for Transfer

All samples were preserved at the time of collection and packaged in coolers of sufficient size to hold all containers, ice, and packing material to prevent breakage. Coolers were of suitable type and integrity to transport the samples.

At the laboratory, receipt of samples was recorded on the COC form by laboratory personnel. The original or a copy of the form was returned to the shipper. The COC record was checked by laboratory personnel against the information regarding the analysis requested. If any discrepancies

were discovered, they were resolved with the person requesting the analysis and recorded to provide a permanent record of the event. A record of the information detailing the handling of a particular sample through each stage of analysis was provided by completing a laboratory chronicle form. This form typically provides the following information:

- Job Reference
- Sample Matrix
- Sample Number
- Date Sampled
- Date and Time Received by Laboratory
- Holding Conditions
- Analytical Parameter
- Extraction Date/Time and Extractor's Initials
- Analysis Date/Time and Analyst's Initials
- QA Batch Number, Date Reviewed, and Reviewer's Initials

#### **2.3.4 LABORATORY ANALYTICAL QUALITY ASSURANCE PROCEDURES**

Analyses of samples were performed in accordance with NJDEP and U.S. Environmental Protection Agency (USEPA) methodologies.

The contract laboratory provided sample containers for the requested analyses appropriate for analysis of each matrix. The sample containers were of sufficient size to permit replicate analyses to be run from the sample matrix. All unused portions of samples will be archived by the laboratory until written notification from the Port Authority regarding their disposition is received. The contract laboratory will also retain samples and sample extracts in a sample archive for future analyses if requested by Port Authority representatives.

Calibration and periodic inspection of laboratory instruments was in accordance with USEPA and/or the manufacturer's specifications. Reference standards and QC samples (spikes, blanks, and duplicates) were used as necessary to determine the accuracy and precision of procedures, instruments, and operators. If QC sample analysis results indicated QC values outside the control limit range, sample analysis was suspended until the instrument was recalibrated. In general, the following quality control requirements applied to all samples:

- Analysis of an appropriate blank with every set.
- Analysis of at least one standard at midrange concentration (preferably an additional standard near the detection level).
- Annual analysis of external reference samples.
- Annual analysis of split or double blind each method and parameter.
- Laboratories must keep records of the following samples.
- Determination of a detection limit for information:
  - Date, title, analytical method name, and reference
  - Time of analysis
  - Details of methods not specified in referenced procedures, sample numbers

- All raw data (measurements)
- Calculations
- Results
- Equipment used, and instrumental parameters
- Analyst signature or initials.

QC data was reported with the analytical results. The laboratory provided as a final report reduced-data deliverables as per N.J.A.C 7:26E, Appendix A, Sections III and IV.

## **2.4 WASTE MANAGEMENT**

Types of waste material generated during the site investigation included soil drilling cuttings, monitoring well development groundwater, decontamination rinsates, expendable materials, and personal protective equipment (e.g., gloves, towels, etc.).

Soil cuttings from borings and holes converted to monitoring wells were inspected for contamination by field observation (visual and odor) and instruments (HNU meter). When the material was not contaminated based on field observations, the facility environmental coordinator located an area at the work site to reuse the material as backfill. The material may have been used on site in areas outside the work area, providing the area had similar subsurface characteristics or results of the soil analysis are below the residential cleanup criteria. This determination was the responsibility of the facility environmental coordinator. Material that could not be reused on site was properly disposed of off site utilizing the Port Facility Call-in Disposal Contractor.

Prior to pumping water from a monitoring well, a sample was obtained using a clear-bottom Teflon bailer. The water sample was inspected for contamination by observation (visual and odor), HNU measurements, and field tests (pH). If the water was not contaminated based on the field inspection, the water was reapplied to the ground surface in a manner not to allow water to run off site or over stained areas.

## SECTION 3.0

### SURVEYING

Table B-1 of Appendix B provides the final latitude, longitude and elevation to the nearest 0.01 foot of all borings and wells installed by Port Authority personnel. The data is presented in North American Datum (NAD) 83 format. The elevation for all monitoring wells is measured from the top of the well casing. The elevation for all soil borings is measured from ground surface. Survey data was not collected for borings installed by Excel. The locations presented in Table B-2 of Appendix B and Figure 3 were scaled off from the figure provided by Excel in their March 1999 Report (Figure 3 - Proposed Soil Boring Locations, *Preliminary Assessment Report and Site Investigation Work Scope Technical Report and Appendices*, Excel Environmental Resources, Inc., March 1999).

## SECTION 4.0

### RESULTS

#### 4.1 SOIL SAMPLING RESULTS

The analytical results of the soil samples and associated trip blanks collected by Port Authority and Excel. personnel at the Former Naporano and Hugo Neu Facilities are contained in Tables 2 through 12.

- Table 2 summarizes results of VOC analyses performed on the soil samples collected by the Port Authority.
- Table 3 summarizes results of SVOC analyses performed on the soil samples collected by the Port Authority.
- Table 4 summarizes results of PCBs analyses performed on the soil samples collected by the Port Authority.
- Table 5 summarizes results of pesticide analyses performed on the soil samples collected by the Port Authority.
- Table 6 summarizes results of inorganic analyses performed on the soil samples collected by the Port Authority.
- Table 7 summarizes results of TPHC analyses performed on the soil samples collected by the Port Authority.
- Table 8 summarizes results of VOC analyses performed on the soil samples collected by Excel.
- Table 9 summarizes results of SVOC analyses performed on the soil samples collected by Excel.
- Table 10 summarizes results of PCBs analyses performed on the soil samples collected by Excel.
- Table 11 summarizes results of inorganic analyses performed on the soil samples collected by Excel.
- Table 12 summarizes results of THPC analyses performed on the soil samples collected by Excel.



## 4.2 GROUNDWATER SAMPLING RESULTS

The analytical results of the groundwater samples collected by the Port Authority personnel from the monitoring wells located at the former Naporano and Hugo Neu Facilities are contained in Tables 13-17.

- Table 13 summarizes the VOC analyses performed on the groundwater samples.
- Table 14 summarizes the results of the SVOC analyses performed on groundwater samples.
- Table 15 summarizes the PCB and pesticide analyses performed on the groundwater samples.
- Table 16 summarizes the inorganic analyses performed on the groundwater samples.
- Table 17 summarizes the results of the TPHC analyses performed on the groundwater samples.

**FIGURES**

**TABLES**

**Table 1  
Summary of Soil Sampling Program  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Location ID	Collected by	Site	Date
SB-1	Excel	Metro Metals	6/23/1999
SB-2	Excel	Metro Metals	6/23/1999
SB-3	Excel	Metro Metals	6/23/1999
SB-4A <sup>1</sup>	Excel	Metro Metals	6/24/1999
SB-4B <sup>1</sup>	Excel	Metro Metals	6/24/1999
SB-5A	Excel	Metro Metals	6/23/1999
SB-5B	Excel	Metro Metals	6/23/1999
SB-5C	Excel	Metro Metals	6/23/1999
SB-5D	Excel	Metro Metals	6/25/1999
SB-5E	Excel	Metro Metals	6/23/1999
SB-5F	Excel	Metro Metals	6/25/1999
MW-C1	PA	Metro Metals	6/23/1999
MW-C2	PA	Metro Metals	6/22/1999
MW-C3	PA	Metro Metals	6/23/1999
MW-C4	PA	Metro Metals	6/23/1999
MW-C5	PA	Metro Metals	12/5/2001
PA-C6	PA	Metro Metals	6/24/1999
PA-C7	PA	Metro Metals	6/24/1999
BH-N6	PA	Metro Metals	10/2/2000
BH-N7	PA	Metro Metals	10/2/2000
BH-N5A	PA	Naporano	8/25/1999
BH-N5B	PA	Naporano	8/27/1999
BH-N5C	PA	Naporano	8/27/1999
BH-N5D	PA	Naporano	8/27/1999
BH-N5F	PA	Naporano	8/11/2001
BH-N1	PA	Naporano	8/25/1999
MW-N2	PA	Naporano	8/27/1999
PA-C6-E1	PA	Metro Metals	12/3/2001
PA-C6-E2	PA	Metro Metals	12/5/2001
PA-C6-E3 <sup>2</sup>	PA	Metro Metals	12/7/2001
PA-C6-E3A <sup>2</sup>	PA	Metro Metals	12/11/2001
PA-C6-E4	PA	Metro Metals	12/11/2001
PA-C6-E5	PA	Metro Metals	4/29/2002
PA-C6-E6	PA	Metro Metals	4/29/2002

**Table 1**  
**Summary of Soil Sampling Program**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Location ID	Collected by	Site	Date
PA-C6-E7	PA	Metro Metals	4/29/2002
PA-C6-E8	PA	Metro Metals	4/29/2002
PA-C6-E9	PA	Metro Metals	5/16/2002
PA-C6-E10	PA	Metro Metals	5/16/2002
PA-C6-E11	PA	Metro Metals	5/16/2002
PA-C6-N1	PA	Metro Metals	12/3/2001
PA-C6-N2	PA	Metro Metals	12/5/2001
PA-C6-N3	PA	Metro Metals	12/7/2001
PA-C6-W1	PA	Metro Metals	12/3/2001
PA-C6-W2	PA	Metro Metals	12/5/2001
PA-C6-W3	PA	Metro Metals	12/7/2001
PA-C6-S1	PA	Metro Metals	12/3/2001
PA-C6-S2	PA	Metro Metals	12/5/2001
PA-C6-S3	PA	Metro Metals	12/7/2001
PA-C6-S4	PA	Metro Metals	12/11/2001
PA-C6-S5	PA	Metro Metals	4/29/2002
PA-C6-S5A	PA	Metro Metals	4/29/2002
PA-C6-S6	PA	Metro Metals	4/29/2002
PA-C6-S7	PA	Metro Metals	4/29/2002
PA-C7-N1	PA	Metro Metals	12/4/2001
PA-C7-S1	PA	Metro Metals	12/4/2001
PA-C7-E1	PA	Metro Metals	12/4/2001
PA-C7-W1	PA	Metro Metals	12/4/2001
BH-N1-N1	PA	Naporano	12/4/2001
BH-N1-W1	PA	Naporano	12/4/2001
BH-N1-S1	PA	Naporano	12/4/2001
BH-N1-E1	PA	Naporano	12/4/2001
MW-C5-N1	PA	Metro Metals	12/5/2001
MW-C5-W1	PA	Metro Metals	12/5/2001
MW-C5-S1	PA	Metro Metals	12/5/2001
MW-C5-E1	PA	Metro Metals	12/5/2001

Notes:

- <sup>1</sup> - SB-4A and SB-4B from same location
- <sup>2</sup> - PA-C6-E3 and PA-C6-E3A from same location.

Excel - Excel Environmental Resources, Inc.

PA - Port Authority

**APPENDIX A**

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3

PROJECT <b>PJ METRO METALS</b>	NAME OF CONTRACTOR <b>EPI</b>	BORING NO. <b>SB-1</b>	SURFACE ELEV.
LOCATION <b>Laid out by Consultant (Excel)</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>6-23-99</b>

HOLE NO.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
"O.D.	"I.D.		Date	Time	Depth	Remarks
HAMMER <b>Large Probe</b>		HAMMER				
# FALL		# FALL				
OPERATOR <b>B. kokot</b>						
SUPERVISOR <b>Excel</b>						
LABORER <b>Midudeh / R. HARDWOOD</b>						

CASING LOGS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
		<b>MAURO</b>			
	1		48"	1	Use felt
	2				
	3				
	4				
	5				Bottom of Boring <span style="float: right;">4.0'</span>
					0.5'-1.0' bottle #C067
					2'-2.5' bottle #C068

NOTES: 1 — Length recovered; 0' — Loss of Sample, T — Trap used  
 2 — U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 — Log depth of change in color of wash water, loss of water, excessive water, sand, heavy...





# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN metro Metals

LOCATION: Laid out by Consultant DATE: 6/23/99

RING No: SB-1 TOTAL No. OF SAMPLES: 2

**NATURE OF ALL PRESENT AT SAMPLING**

*Stacy Oehl*

RELINQUISHED	DATE	RECEIVED
<i>Stacy Oehl</i>	6/23/99	
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS: 2 samples taken in 2 one pt. JARS  
and bottle # C067 0.5' - 1.0'  
# C068 2' - 2.5'

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: **PJ METRO METALS** NAME OF CONTRACTOR: **EPI** BORING NO.: **SB-2**

LOCATION: **ad out by Consultant** CONTRACT NO.: **d26-99-006** DATE: **6-23-99**

Casing Size		Hole Type	GROUND WATER LEVEL			
"O.D.	"I.D.		Date	Time	Depth	Remarks
HAMMER						
# FALL		# FALL				
OPERATOR: <b>B. KOKOT</b>						
MOTOR: <b>EXCEL</b>						
<b>YI. OUDER / R. HARDWOOD</b>						

DEPTH (FEET)	SPOON BLOWS/FT	RE-CO'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	MACEO			A Asphalt PAVEMENT 0.5'
1				B CRushed rock, little br. m.F sand SUBGRADE 10'
1.5		48"		C Fill grey-br. m.F Sand, some gravel, tr. silt (Sample saved Bottle #C072) 1.5'
2				D Fill red-br. m.F Sand, tr. silt, tr. gravel 3.0'
3				E Fill red-br. m.F Sand, tr. silt, tr. gravel (Sample saved Bottle #C073) 3.5'
4				F Fill red-br. m.F Sand, tr. silt, tr. gravel 4.0'
5				Bottom of Boring
				#C072 1'-1.5'
				#C073 3'-3.5'

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used



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# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN Metro Metals*

LOCATION: *Laid out by Consultant* DATE: *6-23-99*

DRILLING No: *SB-2* TOTAL No. OF SAMPLES: *2*

NATURE OF ALL PRESENT AT SAMPLING *Wing Odd*

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
<i>Wing Odd</i>	<i>6/23/99</i>	

REMARKS: *2 samples taken in 2 core pt. TMS*  
*and bottle #C072 1.0' - 1.5'*  
*#C073 3.0' - 3.5'*

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

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SHEET 1 OF 3

<b>CONTRACTOR</b> PJ METRO METALS	<b>NAME OF CONTRACTOR</b> EPI	<b>BORING NO.</b> SB-3	<b>SURFACE ELEV.</b>
<b>LOCATION</b> Laid out by Consultant		<b>CONTRACT NO.</b> 426-99-006	<b>DATE</b> 6-23-99

<b>WELL</b> G.W. Probe	<b>CASING SIZE</b> 4"	<b>HOLE TYPE</b> HAMMER	<b>GROUND WATER LEVEL</b>			
<b>WELLER</b> B. KOKOT	<b>WELL</b> EXCEL	<b>WELL</b> P. HARTWOOD	<b>Date</b>	<b>Time</b>	<b>Depth</b>	<b>Remarks</b>

BORING NO.	DEPTH	SPOON BLOWS/3"	RE-COND	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	MACRO			
	1				Misc. fill
	2		48"	1	
	3				
	4				Bottom of Boring. <span style="float: right;">4.0'</span>
	5				1'-1.5' #1071 3'-3.5' #1074

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane



# THE PORT AUTHORITY OF N.Y & N.J.


ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

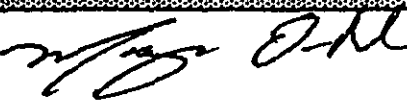
Sheet 3 of 3

PROJECT: PN metro Metals

LOCATION: Laid out by Consultant | DATE: 6/23/99

WORKING No: 5B-3 | TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL REPRESENTATIVES AT SAMPLING  


RECEIVED	DATE	RECEIVED
	<u>6/23/99</u>	
(SIGN)	TIME	BY (SIGN)

RECEIVED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

RECEIVED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS: 2 samples taken in 2 one pt. TANS  
and bottle # C071 1'-1.5'  
# C074 3'-3.5'

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.  
DATE 6.24.99

PROJECT  
PN METRO METALS

NAME OF CONTRACTOR  
EPI

BORING NO.  
SB 4-A

LOCATION  
Bid out by Consultant

CONTRACT NO.  
426-99-006

ION  
C.O.D. I.D.  
CASING SIZE HOLE TYPE  
HAMMER  
# FALL  
DRILLER  
BRIAN KOKOT  
SECTOR  
Dudeh / EXCEL  
E. HARDWOOD

GROUND WATER LEVEL			
Date	Time	Depth	Remarks

CASING L' IN FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		MACRO			
2			4 1/2"	1	Misc. Fill
4		MACRO			Misc. Fill
6			32"	2	Fill br. m-f sand, tr. gravel, tr. silt
8					Bottom of boring
10					10'-1.5' Bottle # C204 5.5'-6' Bottle # C205

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane





# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN METRO METALS*

LOCATION: *Laid out by Consultant excel* DATE: *6-24-99*

DRILLING No: *SB4-A* TOTAL No. OF SAMPLES: *2*

NATURE OF ALL

PRESENT AT SAMPLING *[Signature]*

UNWITNESSED <i>[Signature]</i>	DATE <i>6-24-99</i>	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

UNWITNESSED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS: *2 samples taken in 2 one pt. JARS*

*bottle # C204 1.0' - 1.5'*

*# C205 5.5' - 6'*

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.  
DATE 6-24-99

PROJECT  
PN METRO METALS SITE

NAME OF CONTRACTOR  
EPI

BORING NO.  
SB4-B

LOCATION  
LAID OUT BY Consultant

CONTRACT NO.  
426-99-006

NO. ON  
CASING SIZE HOLE TYPE  
O.D. I.D.  
NUMBER  
Geo HAMMER  
# FALL # FALL  
DRILLER  
B. KOKOT  
DIRECTOR  
M. OUDEH / R. HARDWOOD  
EXCEL

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
6/24	Am	6'	Found in S#2

CASING L' / V'FT.	DEPTH	SPOON BLOWS/8"	RE-COY'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		MACRO			
2			48"	1	4.5c. Fill (typical)
4		MACRO			
6			48"	2	Fill br. m.f. Sand, fr. gravel, fr. silt
8					
10					Bottom of Boring 8.0'
					0.5'-1.0' # C210
					5.5'-6' # C211

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - 11 - undisturbed; A - ...



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN METRO METALS

LOCATION: Laid out by Consultant

DATE: 6-24-99

BORING No: SB4-B

TOTAL No. OF SAMPLES: 2

NATURE OF ALL

PRESENT AT SAMPLING

*[Signature]*

RELINQUISHED

*[Signature]*

DATE 6-24-99 RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

2 samples taken in 2 one pt. JARS

0.5' - 1.0' # C210

5.5' - 6' # C211

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: **IN METRO METALS SITE**  
NAME OF CONTRACTOR: **EPI**  
BORING NO.: **SB 5-A**

LOCATION: **11D out by the consultant as per drawing**  
CONTRACT NO.: **426-49-006**  
DATE: **6-23-99**

NO.	O.D.	I.D.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
					Date	Time	Depth	Remarks
1					6/23	Am	7'	Found in s#2

OPERATOR: **Brian Kokot**  
SUPERVISOR: **DUBBH / Consultant EXCEL R. HARWOOD**

CASING NO.	DEPTH	SPOON BLOWS/6"	RE-COY'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	MACRO			
	2		48"	1	Misc. Fill
	4	MACRO			
	6		48"	2	fill red br m.F Sand, tr. gravel, tr. silt, tr. shell
	8				
	10				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = airer; CFR = clean and free; V = void

#C1670 0'-0.5' #C1677 2.5'-3.0'  
#C165 1.5'-2.0' #C166 6.5'-7'



# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PJ Metro Metals Site*

LOCATION: *Laid out in the field by consultant* | DATE: *6-23-99*

TESTING No: *SB5-A* | TOTAL No. OF SAMPLES: *4*

CHARACTER OF ALL PRESENT AT SAMPLING *[Signature]*

ACQUIRED	<i>[Signature]</i>	DATE	<i>6-23-99</i>	RECEIVED
(SIGN)		TIME		BY (SIGN)

ACQUIRED		DATE		RECEIVED
(SIGN)		TIME		BY (SIGN)

ACQUIRED		DATE		RECEIVED
(SIGN)		TIME		BY LAB

REMARKS: *4 samples taken in 4 one pt. Jars*

*and the following bottles*

*# C070 0' - 0.5'*

*# C165 1.5' - 2.0'*

*# C077 2.5' - 3.0'*

*# C166 6.5' - 7.0'*



**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: **PN METRO METALS SITE** NAME OF CONTRACTOR: **CRAIG** BORING NO.: **SB 5-B**

LOCATION: **Laid out by Consultant as per dwg.** CONTRACT NO.: **426-99-006** DATE: **6-23-99**

NO.	O.D.	I.D.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
					Date	Time	Depth	Remarks
1								
2								
3								
4								
5								

CASING L. VS. FT.	DEPTH	SPOON BLOWS/FT.	RE- COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
			46"	1	
3					misc. fill dk. br. c.f. sand, wood, concrete fragments, tile, gravel, silt
		MACRO			No Recovery (broke off)
6			36"	2	
					Fill grey to br. c.f. sand, tr. gravel, tr. silt
9					
12					
15					

#C121 0'-0.5'  
#C135 2'-2.5'  
#C133 7'-7.5'

Bottom of boring

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN METRO METALS

LOCATION: Laid out by Consultant as per Dwg. DATE: 6-23-99

DRING No: SBS-B TOTAL NO. OF SAMPLES: 3

NATURE OF ALL PRESENT AT SAMPLING [Signature] [Signature]

RELINQUISHED <u>[Signature]</u> <u>[Signature]</u>	DATE <u>6/23/99</u>	RECEIVED
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS: 3 samples taken in 3 one pt. JARS  
and bottle # C171 0'-0.5'  
# C135 2'-2.5'  
# C133 7'-7.5'

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: **PN METRO METALS SITE** NAME OF CONTRACTOR: **EPI** BORING NO.: **SBS-C**

LOCATION: **2 out in the field as per drawing by the consultant** CONTRACT NO.: **42699-006** DATE: **6-23-99**

NO.	DEPT.	O.D.	I.D.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
						Date	Time	Depth	Remarks
1	DRILLER								
2	OPERATOR								
3	SPINNER								
4	RECORDER								
5	DATE								
6	TIME								
7	DEPTH								
8	REMARKS								
9									
10									
11									
12									
13									
14									
15									

DEPTH (FT.)	SPOON BLOWS/FT.	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
3		22"	1	Misc. fill br. Sand, wood, crushed Rock, gravel, silt.
4.0'				Fill grey br. s.f. Sand, tr. gravel, tr. silt
6	MACRO	24"	2	Fill grey m.f. Sand tr. gravel, tr. silt
7.7'				CLAY and SILT
8.0'				Bottom of Boring
9				#C 146 2'-2.5'
				#C 164 3.5'-4'
12				NOTE: S#2 had br. Sand, gravel on top this is from S#1. The Driller did not clean out hole 0' to 4' (this is common practice with Geo probe).
15				

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used



# THE PORT AUTHORITY OF N.Y. & N.J.

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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

OBJECT: *PN METAL METALS SITE*

LOCATION: *Lead out by consultant* DATE: *6-23-99*

RING No: *SB 5-e* TOTAL No. OF SAMPLES: *2*

NATURE OF ALL PRESENT AT SAMPLING

*inty Odl*

UNQUISHED *inty Odl* DATE *6-23-99* RECEIVED  
SIGN TIME BY (SIGN)

UNQUISHED DATE RECEIVED  
SIGN TIME BY (SIGN)

UNQUISHED DATE RECEIVED  
SIGN TIME BY LAB

REMARKS: *2 samples taken in 2 one pt. JARS*

*and*

*Bottle # 140 2' - 2.5'*

*# 164 3.5' - 4'*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: N METRO Metals Site C  
NAME OF CONTRACTOR: EPI  
BORING NO.: SB5-D

OPERATION: Aid out by Consultant  
CONTRACT NO.: 426-99-006  
DATE: 6-25-99

NO.	O.D.	I.D.	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
					Date	Time	Depth	Remarks
1					6/25	pm	4.5'	

DRILLER: Paul BARKALOW  
SUPERVISOR: R. HARDWOOD (EXCEL CONSULTANT)

DEPTH (FT.)	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	MACRO			
1		24"	1	Misc. Fill (Typical)
2				refusal → 2.5'
3				→ 3.0'
4	MACRO			Grey med Sand
5		40"	2	
6				Clay & Silt
7				
8				
9				Bottom of Boring → 7.0'
10				0'-0.5' bottle # C213 1.5'-2.0' # C214 3.5'-4.0' # C215

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used

# THE PORT AUTHORITY OF N.Y & N.J.

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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION PID READINGS

Sheet 2 of

PROJECT: PN Metro Metals Site C	DATE: 6/25/99
RING No. SB5-D	
FIELD READINGS BY: R. HARDWOOD	PID Model: Mini PAE

TIME	SAMPLE No.	IN-SITU Split Spoon Reading	HEAD-Space Reading	BREATHING Zone Reading	REMARKS
0-0.5	—	—	0.1	0	
0.5-1.0	—	—	0	↓	
1.0-1.5	—	—	0		
1.5-2.0	—	—	0.1		
2.0-2.5	—	—	0		
2.5-3.0	—	—	0		
3.0-3.5	—	—	0.2		
3.5-4.0	—	—	0.9		
4.0-4.5	—	—	0.5		
4.5-5.0	—	—	0.0		
5.0-5.5	—	—	0.0		
5.5-6.0	—	—	0.0		
6.0-6.5	—	—	0.0		
6.5-7'	—	—	0.0		↓



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

OBJECT: PN Metro Metals Site C

LOCATION: Laid out by consultant      DATE: 6-25-99

RING No: SB5D      TOTAL No. OF SAMPLES: 3

NATURE OF ALL

SENT AT SAMPLING *W. Payne O.H.*

ACCOMPLISHED	DATE	RECEIVED
<i>W. Payne O.H.</i>	<i>6/25/99</i>	
SIGN)	TIME	BY (SIGN)

ACCOMPLISHED	DATE	RECEIVED
SIGN)	TIME	BY (SIGN)

ACCOMPLISHED	DATE	RECEIVED
SIGN)	TIME	BY LAB

REMARKS: 3 samples taken in 3 JARS

and bottle # C213 0'-0.5'

# C214 1.5'-2'

# C215 3.5'-4'

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Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV. \_\_\_\_\_

PROJECT: **PN Metro Metals Site** NAME OF CONTRACTOR: \_\_\_\_\_ BORING NO.: **SB 5-E**

LOCATION: **set out in the field as per drawing** CONTRACT NO.: **416-99-006** DATE: **6-23-99**

DRILLER: **Boboche "LD."** CASING SIZE: \_\_\_\_\_ HOLE TYPE: \_\_\_\_\_  
 METHOD: **HAMMER** # FALL: \_\_\_\_\_

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
6/23	12 <sup>20</sup> PM	9'	found in S#3

OPERATOR: **BRIAN KOKOT**  
 SUPERVISOR: **CONSUANT / MADEH / Ron HARDWOOD**

DEPTH (SFT.)	DEPTH	SPOON BLOWS/8"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0	MACRO			Misc. Fill Asphalt fragment, Sand, Crushed Rock 0.5'
					Misc. fill dk-brown mt sand, crushed rock, metal, gravel 1.0'
			42"	1	Misc. fill dk-brown to black fine sand, silt, crushed rock fragments, metal fragments, glass, asphalt fragments
3	3				Fill grey mt sand, fr. gravel, fr. silt 3.5'
		MACRO			Misc. fill dk-grey-black mt sand, silt, wood fragment some gravel 4.0'
			48"	2	Fill red br. mt sand, fr. gravel, fr. silt 6.0'
6	6				Same 6.5'
					8.0'
		MACRO			Same
9	9		48"	3	Fill red br. mt sand, fr. gravel, fr. silt 9.5'
					Same 10.0'
					11.5'
12	12				Fill grey mt sand, fr. gravel, fr. silt 12.0'
					Bottom of boring. ↑
					Saved 0.5' to 1.0' # C167 6'-6.5' # C168
					" 2.5' to 3.0' # C169 9.5'-10' # C170
15	15				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end mt. V = ...



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

OBJECT: PN Metro Metals Site

LOCATION: Laid out by the consultant as per drawing DATE: 6-23-99

RING No: SB 5-E TOTAL No. OF SAMPLES: 4

NATURE OF ALL PRESENT AT SAMPLING  
*Stage 1*

RELINQUISHED	<i>Stage 1</i>	DATE	6/23/99	RECEIVED
(SIGN)		TIME		BY (SIGN)

RELINQUISHED		DATE		RECEIVED
(SIGN)		TIME		BY (SIGN)

RELINQUISHED		DATE		RECEIVED
(SIGN)		TIME		BY LAB

REMARKS: Took 4 Samples in 4 one pt. JARS and the following ~~Jars~~ bottles

- Bottle # C167 0.5' - 1.0'
- ↓ # C169 2.5' - 3.0'
- # C168 6' - 6.5'
- ↓ # C170 9.5' - 10'

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Construction Division  
Materials Engineering Section

BORING REPORT

METRO METALS		NAME OF CONTRACTOR EPI	BORING NO. SB 5F	SHEET / OF / SURFACE ELEV.
Laid out by consultant		CONTRACT NO. 426-99-006	DATE 6-25-99	

CASING SIZE		HOLE TYPE		GROUND WATER LEVEL			
*O.D.	*I.D.	HAMMER		Date	Time	Depth	Remarks
# FALL 6 ft		# FALL					
OPER Paul BARKALOW							
DIRECTOR R. HARDWOOD (EXCEL Consultant)							

DEPTH OF SFT.	DEPTH	SPOON BLOWS/6"	RE-CO'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0					<p>DID NOT OBTAIN SAMPLES. The consultant, EXCEL, DID NOT CALL P.A. MATERIALS ENGINEERING TO NOTIFY OF THE TIME AND DATE <u>SB5-F</u> WILL BE SAMPLED.</p>
5					
10					
15					
20					
25					

NOTES: 1 -- Length recovered; 0\* -- Loss of Sample, T -- Trap used  
 2 -- U = undisturbed; A = auger; OER = open end rod; V = vane

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Materials Engineering Section

**BORING REPORT**

NAME OF CONTRACTOR Metro Metals Site Craig Drilling		BORING NO. MW-C1	SHEET 1 OF 4 SURFACE ELEV.
CONTRACT NO. 426-99-006		DATE 6/23/99	

and cut in field as per Drawing

0.D. 2 3/8 I.D. BURGERS 1 1/2" Monitor

Safety HAMMER

0 FALL 30 0 FALL

D O'such

D Howe

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
6/23/99	9:30	3.5	White Hand Boreing

DEPTH FT.	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0	Hand	Full	1	Misc Fill - sand, silt, gravel, wood, etc	0.0
	Bugor			Fill-M-P Gray Sand, Tr Silt, Tr Gravel	0.5
			2	Same	
			3	Same	
5	2-3			Same	5.0
	3-2	22"	4	Black Gray Organic Silty Clay	7.0
				Bottom of Boring	
10	3.5' SCREEN	4'-5.5'			
	8'	4'-12'			
	5'	4'-9'			
	6'	3'-9'			
15	10'				
20					
26					

All Samples checked with PID Meter, S#1 15-2' & S#2 3-3.5' sand for Testing Remaining Samples Discarded

Methanol Sol Bottle S#1 C075  
" " " S#2 C076

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 4 of 4

OBJECT: PN-Metro Metals Site

LOCATION: As laid out in Field as per Drawing DATE: 6/23/59

WORKING No: MU-C1 TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL

PRESENT AT SAMPLING

<u>[Signature]</u>	DATE <u>6/23/59</u>	RECEIVED
(SIGN)	TIME	BY (SIGN)

	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

	DATE	RECEIVED
(SIGN)	TIME	BY LAB

REMARKS:

2 - Soil Samples 1 - 16oz. jar 1 - Methanol Sol. Bottle Each



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**BORING REPORT**

PROJECT <b>UN-Metro Metro Site</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>MU-C2</b>	SHEET <b>1</b> OF <b>4</b>
LOCATION <b>Laid out in field as per Drawings</b>	CONTRACT NO. <b>426 99-006</b>	DATE <b>6/22/99</b>	SURFACE ELEV.

BOREHOLE NO. <b>2</b>	CASING SIZE <b>3" O.D. 2 3/8" I.D.</b>	HOLE TYPE <b>4" MONITOR</b>	GROUND WATER LEVEL			
DRILLER <b>D Osack</b>	DRILLING METHOD <b>HAMMER</b>	LOGGERS <b>D Howe</b>	Date	Time	Depth	Remarks
			<b>6/22/99</b>	<b>1:15 P</b>	<b>7.0</b>	<b>S#4</b>

DEPTH (FT.)	SPOON BLOWS/FT.	RE-COND.	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
0				Asphalt Crushed Stone	0.0 0.3 1.0
	Hand Auger	Full	1	Misc Fill - Gravel, Sand, Silt, Shales, ETC	
			2	Fill - M-F Brown Sand, Tr Silt, Tr Gravel	
5			3	Same	
	8-13		4	Same	8.0
	17-24	19"			
	8-7		5	Fill - M-F Gray Sand, Tr Silt, Tr Gravel	
10	7-9	18"			
	15-5		6	Fill - MF Gray Sand, Lt Dio Red Brown clayey Silt, Tr Silt, Red	
	5-6	16"			
	8-7		7 A	Fill - Red Brown Silty Clay, Tr P Sand	
	6-6	18"	B	Blue & Gray organic silty clay	13.5 14.0
15				Bottom of Boring	
20				All Samples checked with PID Meter S# 1 1-2' & S# 4 6-7' Saved for Testing Remaining Samples Discarded	
25				Method of soil bottle	
				C078 S#1 1-2'	
				C079 S#4 6-7'	

NOTES: 1 - Length recovered: 0\* - Loss of Sample. T - Trap used



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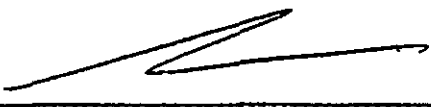
## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD


Sheet 4 of 4

PROJECT: PN - Metro Metals

LOCATION: Aslaid within field as per Drawing DATE: 6/22/99

DRILLING No: MW-C2 TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED	DATE 6/22/99	RECEIVED
(SIGN) 	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

MARKS:

2 Soil Samples each in 1-lb bag and 1 Methanol Sol Bottle

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## BORING REPORT

SHEET 1 OF 4  
SURFACE ELEV. \_\_\_\_\_  
DATE 6/23/99

PROJECT: PN - Metro Metals Site  
LOCATION: Laid out in fields per Drawing  
BOON: 2  
CER: Safety  
FALL: 30  
DIA: 0.0 such  
DIA: 0.0 none

NAME OF CONTRACTOR: Craig Drilling  
BORING NO.: MUC-03  
CONTRACT NO.: 976-99-006

CASING SIZE: 2 3/8" O.D. / 2" I.D.  
HOLE TYPE: Auger  
HAMMER: Safety  
# FALL: 30

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
6/23/99	12:45 PM	7.0	S#4

DEPTH (FT.)	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hand Auger	Full	1	Misc. Fill, Silt, Sand, Metal, Gravel, Cracks, ETC
			2	Same 4.0
5			3	Fine M-F Gray Sand, Tr Silt, Tr Gravel
	17-19		4	Same
	17-17	21"		Same
	9-7		5 A	Same 9.0
10	5-4	19"	5 B	Black Gray Organic Silty Clay 10.0
				Bottom of Poring
15				All Samples checked with PID Meter, S#1, 5-20 & S#4 6-7' saved for Testing. Remaining samples discarded.
20				
26				Metanol Sol Bottle S#1 C-069 " " " S#4 C-067

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used





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**BORING REPORT**

SHEET 1 OF 4  
SURFACE ELEV.

PROJECT: PN - Metro Metals Site

NAME OF CONTRACTOR: Craig Drilling

BORING NO.: MW-C4

DATE: 6/23/99

LOCATION: 5 Land out in field 95 per drawing

CONTRACT NO.: 476-99-006

DIAMETER: 3" O.D. 2 3/8" I.D.  
CASING SIZE: 3" O.D. 2 3/8" I.D.  
HOLE TYPE: Safety  
HAMMER: 4" FALL 30"  
FALL: 30"

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
6/23/99	2:00 PM	5.5'	While Hand Augering
6/24/99	7:30 AM	5.6'	Checked well

OPERATOR: D. Howe

CASING FT./FT.	DEPTH	SPOON BLOWS/S'	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0	Hand Auger	Full	1	Misc Fill, Sand, SILT, Gravel, Nuts, Wire, ETC
				2	Same
	5			3	Fill - M-F Gray Sand, Tr SILT, Tr Gravel
		73-40		4	Same
		28-18	22"	5	Same
		4-4		5	Same
	10	4-4	22"	5	Black & Gray organic silty clay
					Bottom of Boring
	15				
					All Samples checked with PID Meter S# 1, 5'-2' & S# 3 5'-5.5' saved for Toxicity Remaining Samples discarded
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used

Methanol Sol Bottle S# 1 C172  
" " " S# 3 C173





**Table 15**  
**Summary of Pesticides and PCB Groundwater Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class Ila Ground Water Quality Standards UG/L	MW-N2 AA95332 9/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L
Aldrin	309-00-2	0.04	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Alpha-BHC	319-84-6	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Beta-BHC	319-85-7	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlordane	57-74-9	0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Delta-BHC	319-86-8	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dieldrin	60-57-1	0.03	0.1 U	NA	NA	NA	NA	NA	NA	0.1 U
Endosulfan I	959-98-8	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	33213-65-9	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan Sulfate	1031-07-8	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	72-20-8	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin Aldehyde	7421-93-4	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin Ketone	53494-70-5	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Gamma-BHC	58-89-9	0.2	0.1 U	0.1 U	0.23	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	76-44-8	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor Epoxide	1024-57-3	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	72-43-5	40	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
P,P'-DDD	72-54-8	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
P,P'-DDE	72-55-9	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
P,P'-DDT	50-29-3	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toxaphene	8001-35-2	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1016	12674-11-2	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1221	11104-28-2	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1232	11141-16-5	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1242	53469-21-9	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1248	12672-29-6	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1254	11097-69-1	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1260	11096-82-5	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

NOTES:

- J - Analyte detected below MDL and/or estimated concentration
- UG/L Micrograms per Liter, equivalent to parts per billion
- U Not detected at the PQL
- NA Not Available
- Shaded Values Exceeded Corresponding Cleanup Criteria

**Table 16**  
**Summary of the Inorganic Analysis For Groundwater Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class Ila Ground Water Quality Standards (ppm)	MW-N2 AA95332 9/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L
Antimony	7440-36-0	20	2.1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Arsenic	7440-38-2	8	3.7 U	12	11	3.8	6.2	3.7 U	3.7 U	3.7 U
Barium	7440-39-3	2000	24	67	120	28	56	4.5 U	4.5 U	4.5 U
Beryllium	7440-41-7	20	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Cadmium	7440-43-9	4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chromium	7440-47-3	100	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U
Copper	7440-50-8	1000	6.1	4.4	3.1	4.1	3.2	2.7 U	2.7 U	5.7
Lead	7439-92-1	10	12	3.1 U	3.1 U	5.7	3.1 U	3.1 U	3.1 U	3.1 U
Mercury	7439-97-6	2	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U
Nickel	7440-02-0	100	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Selenium	7782-49-2	50	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
Silver	7440-22-4	NA	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Thallium	7440-28-0	10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Zinc	7440-66-6	5000	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U
Cyanide	57-12-5	200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	103-95-2	4000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Chloride	16887-00-6	250000	380000	1100000	1700000	180000	1200000	1800 U	1800 U	1000 U
Total Suspended Solids	-	NA	140000	27999	20000	5200	24000	4000 U	3999 U	4000 U

NOTES:

ug/L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

NA - Not Available

Shaded Values Exceeded Corresponding Cleanup Criteria

**Table 17**  
**Summary of Total Petroleum Hydrocarbons Groundwater Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	Number	Class IIA Ground Water Quality (ppm)	MW-N2 AA95332 9/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L
Total Petroleum Hydrocarbons	23135-22-0	NA	1000 U	1100 U	5100	1100 U	1100 U	1000 U	1100 U	1000 U

NOTES:

ug/L - Micrograms per Liter, equivalent to parts per billion

U - Not detected at the MDL

J - Analyte detected below MDL and/or estimated concentration

NA - Not Available

**Table 12  
Summary of Excel's Total Petroleum Hydrocarbons Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-1 0.0-0.5 139896 6/23/1999 mg/kg	SB-1 2.0-2.5 139897 6/23/1999 mg/kg	SB-2 1.0-1.5 139892 6/23/1999 mg/kg	SB-3 1.0-1.5 139894 6/23/1999 mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B 0.5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg	SB-5A 0.0-0.5 139898 6/23/1999 mg/kg	SB-5A 2.5-3.0 139899 6/23/1999 mg/kg	SB-5B 0.0-0.5 139907 6/23/1999 mg/kg	SB-5B 2.5-3.0 139908 6/23/1999 mg/kg	SB-5C 2.0-2.5 139905 6/23/1999 mg/kg	SB-5D 0.0-0.5 140189 6/25/1999 mg/kg	SB-5D 1.5-2.0 140190 6/25/1999 mg/kg	SB-5D 3.5-4.0 140196 6/25/1999 mg/kg
Total Petroleum Hydrocarbons	10000	10000	10000	16000	25.5	144	94.6	12200	33.9	13700	28.2	16600	ND	11200	6260	3640	5200	ND	ND

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg	SB-5E 2.5-3.0 139903 6/23/1999 mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/25/1999 mg/kg	SB-5F 2.5-3.0 140192 6/25/1999 mg/kg	SB-5F 5.5-6.0 140193 6/25/1999 mg/kg	FB-1 - 139910 6/23/1999 mg/kg	FB-2 - 140194 6/24/1999 mg/kg
Total Petroleum Hydrocarbons	10000	10000	10000	13000	11900	130	9670	NA	NA	ND	ND

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA - Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 13**  
**Summary of Volatile Organic Compounds Groundwater Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class IIa Ground Water Quality Standards UG/L	MW-N2 AA95332 9/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	T-BLANK AA91299 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	T-BLANK AA91357 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L	TB-1-092199 AA95337 9/21/1999 UG/L
1,1,1-Trichloroethane	71-55-6	30	0.51 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.51 U	0.51 U
1,1,2,2-Tetrachloroethane	79-34-5	2	0.55 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.55 U	0.55 U
1,1,2-Trichloroethane	79-00-5	3	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.58 U
1,1-Dichloroethane	75-34-3	50	0.52 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.52 U	0.52 U
1,1-Dichloroethene	75-35-4	2	0.68 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.68 U	0.68 U
1,2-Dichlorobenzene	95-50-1	600	0.25 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.25 U	0.25 U
1,2-Dichloroethane	107-06-2	2	0.43 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.43 U	0.43 U
1,2-Dichloropropane	78-87-5	1	0.39 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.39 U	0.39 U
1,3-Dichlorobenzene	541-73-1	600	0.76 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.76 U	0.76 U
1,4-Dichlorobenzene	106-46-7	75	0.4 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.4 U	0.4 U
2-Butanone	78-93-3	300	1.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.4 U	1.4 U
2-Chloroethylvinylether	110-75-8	NA	1 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	1 U	1 U
2-Hexanone	591-78-6	NA	0.76 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.76 U	0.76 U
4-Methyl-2-Pentanone	108-10-1	400	0.78 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.78 U	0.78 U
Acetone	67-64-1	700	4.8 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.8 U	4.8 U
Acrolein	107-02-8	NA	9.4 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	9.4 U	9.4 U
Acrylonitrile	107-13-1	50	6.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	6.9 U	6.9 U
Benzene	71-43-2	1	0.47 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.47 U	0.47 U
Bromodichloromethane	75-27-4	1	0.85 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.85 U	0.85 U
Bromoform	75-25-2	4	1.3 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.3 U	1.3 U
Bromomethane	74-83-9	10	1.2 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	1.2 U	1.2 U
Carbon Disulfide	75-15-0	NA	0.4 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.4 U	0.4 U
Carbon Tetrachloride	56-23-5	2	0.81 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.81 U	0.81 U
Chlorobenzene	108-90-7	4	0.64 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.64 U	0.64 U
Chloroethane	75-00-3	NA	2.5 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	2.5 U	2.5 U
Chloroform	67-66-3	6	0.47 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.47 U	0.47 U
Chloromethane	74-87-3	30	0.65 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.65 U	0.65 U
cis-1,2-Dichloroethene	156-59-2	10	0.81 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.81 U	0.81 U
cis-1,3-Dichloropropene	10061-01-5	NA	0.45 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.45 U	0.45 U
di-Isopropyl-ether	108-20-3	NA	0.33 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.33 U	0.33 U
Dibromochloromethane	124-48-1	10	0.7 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.7 U	0.7 U
Dichlorodifluoromethane	75-71-8	NA	0.67 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.67 U	0.67 U
Ethylbenzene	100-41-4	700	0.74 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.74 U	0.74 U
Methyl-t-butyl ether	1634-04-4	NA	3.4	0.42 U	4.3	0.42 U	9.4	0.42 U	0.42 U	0.42 U	0.42 U	0.43 U	0.43 U
Methylene Chloride	75-09-2	2	1.5 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	1.5 U	1.5 U
Styrene	100-42-5	100	0.33 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.33 U	0.33 U
t-Butyl Alcohol	75-65-0	NA	5.7 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	5.7 U	5.7 U
Tetrachloroethene	127-18-4	1	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	1 U	1 U
Toluene	108-88-3	1000	0.45 U	0.23 U	0.23 U	1.2	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.45 U
trans-1,2-Dichloroethene	156-60-5	100	1.2 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	1.2 U	1.2 U
trans-1,3-Dichloropropene	10061-02-6	NA	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.42 U
Trichloroethene	79-01-6	1	0.79 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.79 U	0.79 U
Trichlorofluoromethane	75-69-4	NA	0.81 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.81 U	0.81 U
Vinyl Acetate	108-05-4	NA	0.32 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.32 U	0.32 U
Vinyl Chloride	75-01-4	5	1.1 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.1 U	1.1 U
M&P-Xylenes	1330-20-7	NA	1.1 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	1.1 U	1.1 U
O-Xylene	95-47-6	NA	0.69 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.69 U	0.69 U

NOTES:  
ug / L - Micrograms per Liter, equivalent to parts per billion  
U - Not detected at the MDL  
J - Analyte detected below MDL and/or estimated concentration  
Shaded Values Exceeded Corresponding Cleanup Criteria  
NA Not Available

**Table 14**  
**Summary of Semivolatile Organic Compounds Groundwater Results**  
**Naporano and Hugo Neu**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Veritech Sample ID: Sampling Date: Units:	CAS Number	Class Iia Ground Water Quality Standards UG/L	MW-N2 AA95332 9/21/1999 UG/L	MW-C2 AA91353 7/13/1999 UG/L	MW-C3 AA91297 7/12/1999 UG/L	MW-C4 AA91354 7/13/1999 UG/L	MW-C5 AA91355 7/13/1999 UG/L	F-BLANK AA91298 7/12/1999 UG/L	F-BLANK AA91356 7/13/1999 UG/L	FB-1-092199 AA95336 9/21/1999 UG/L
1,2,4-Trichlorobenzene	120-82-1	9	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichlorobenzene	95-50-1	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene	541-73-1	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	106-46-7	75	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
2,4,5-Trichlorophenol	95-95-4	700	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2,4,6-Trichlorophenol	88-06-2	3	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
2,4-Dichlorophenol	120-83-2	20	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,4-Dimethylphenol	105-67-9	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-Dinitrophenol	51-28-5	40	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
2,4-Dinitrotoluene	121-14-2	10	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
2,6-Dinitrotoluene	606-20-2	10	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
2-Chloronaphthalene	91-58-7	NA	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
2-Chlorophenol	95-57-8	40	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
2-Methylnaphthalene	91-57-6	NA	4.4 U	4.4 U	4.4 U	1.3 J	4.4 U	4.4 U	4.4 U	4.4 U
2-Methylphenol	95-48-7	NA	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
2-Nitroaniline	88-74-4	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2-Nitrophenol	88-75-5	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
3,4-Methylphenol	106-44-5	NA	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
3,3'-Dichlorobenzidine	91-94-1	60	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
3-Nitroaniline	99-09-2	NA	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4,6-Dinitro-2-methylphenol	121-14-2	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Bromophenyl-phenylether	101-55-3	NA	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Chloro-3-methylphenol	59-50-7	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
4-Chloroaniline	106-47-8	NA	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
4-Chlorophenyl-phenylether	7005-72-3	NA	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
4-Nitroaniline	100-01-6	NA	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Nitrophenol	100-02-7	NA	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acenaphthene	83-32-9	400	1	0.39 U	0.39 U	11	0.39 U	0.39 U	0.39 U	0.39 U
Acenaphthylene	208-96-8	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Anthracene	120-12-7	2000	0.23 U	0.23 U	1.2	3.2	0.23 U	0.23 U	0.23 U	0.23 U
Benidine	92-87-5	50	24 U	24 U	24 U	24 U	24 U	24 U	24 U	24 U
Benzo[a]anthracene	56-55-3	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Benzo[a]pyrene	50-32-8	NA	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Benzo[b]fluoranthene	205-99-2	NA	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Benzo[g,h,i]perylene	191-24-2	NA	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Benzo[k]fluoranthene	207-08-9	NA	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Benzoic Acid	65-85-0	NA	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Benzyl Alcohol	100-51-6	2000	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Bis(2-Chloroethoxy)Methane	111-91-1	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Bis(2-Chloroethyl)ether	111-44-4	10	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Bis(2-Chloroisopropyl)ether	108-60-1	300	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bis(2-Ethylhexyl)phthalate	117-81-7	30	1.2	3.4	1.2	2.9	6	0.76 U	2.2	0.76 U
Butylbenzylphthalate	85-68-7	100	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Carbazole	86-74-8	NA	0.29 U	0.29 U	0.29 U	12	0.29 U	0.29 U	0.29 U	0.29 U
Chrysene	218-01-9	NA	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Di-n-butylphthalate	84-74-2	900	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Di-n-octylphthalate	117-84-0	100	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Dibenzo[a,h]anthracene	53-70-3	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibenzofuran	132-64-9	NA	2.5 U	2.5 U	2.5 U	3.7	2.5 U	2.5 U	2.5 U	2.5 U
Diethylphthalate	84-66-2	5000	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dimethylphthalate	131-11-3	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Fluoranthene	206-44-0	300	0.26 U	0.26 U	0.26 U	3.8	0.26 U	0.26 U	0.26 U	0.26 U
Fluorene	86-73-7	300	0.26 U	0.26 U	0.26 U	8.3	0.26 U	0.26 U	0.26 U	0.26 U
Hexachlorobenzene	118-74-1	10	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Hexachlorobutadiene	87-68-3	1	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorocyclopentadiene	77-47-4	50	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Hexachloroethane	67-72-1	10	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Indeno[1,2,3-cd]pyrene	193-39-5	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Isophorone	78-59-1	100	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
N-Nitroso-Di-N-Propylamine	621-64-7	20	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
N-Nitrosodimethylamine	62-75-9	20	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
N-Nitrosodiphenylamine	86-30-6	20	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
Naphthalene	91-20-3	300	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Nitrobenzene	98-95-3	10	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
Pentachlorophenol	87-86-5	1	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
Phenanthrene	85-01-8	NA	0.35 U	0.35 U	2.2	4.3	1.5	0.35 U	0.35 U	0.35 U
Phenol	108-95-2	4000	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Pyrene	129-00-0	200	0.38 U	0.38 U	0.38 U	1.7	0.38 U	0.38 U	0.38 U	0.38 U
Pyridine	110-86-1	NA	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U

NOTES:  
UG/L Micrograms per Liter, equivalent to parts per billion  
U Not detected at the PQL  
J Analyte detected below PQL and/or estimated concentration  
NA Not Available  
Shaded values exceeded the corresponding criteria.

**Table 8**  
**Summary of Excel's Volatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B .5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg
Trichlorofluoromethane	NA	NA	NA	0.67	ND	1.8	ND
Tetrachloroethene	1	4	6	ND	ND	0.41	ND
Toluene	500	1000	1000	0.98 J	ND	0.31	ND
Ethylbenzene	100	1000	1000	ND	ND	0.15	ND
Xylene	67	410	1000	ND	ND	0.74	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 9**  
**Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-1 0.0-0.5 139896 6/23/1999 mg/kg	SB-1 2.0-2.5 139897 6/23/1999 mg/kg	SB-2 1.0-1.5 139892 6/23/1999 mg/kg	SB-4A 1.0-1.5 140185 6/24/1999 mg/kg	SB-4A 5.5-6.0 140186 6/24/1999 mg/kg	SB-4B* 0.5-1.0 140187 6/24/1999 mg/kg	SB-4B 5.5-6.0 140188 6/24/1999 mg/kg
Naphthalene	100	230	4200	0.080 J	ND	ND	0.210 J	ND	0.490 J	ND
Acenaphthylene	NA	NA	NA	0.160 J	ND	ND	0.290 J	ND	0.540 J	ND
Acenaphthene	100	3400	10000	0.030 J	ND	ND	0.220 J	ND	0.580 J	ND
Fluorene	100	2300	10000	0.041 J	ND	ND	0.260 J	ND	0.610 J	ND
Phenanthrene	NA	NA	NA	0.810 J	ND	ND	1.60 J	0.014 J	4.9	0.0081 J
Anthracene	100	10000	10000	0.220 J	ND	ND	0.520 J	ND	1.40 J	ND
Fluoranthene	100	2300	10000	1.7	0.012 J	ND	3.30 J	ND	10.0	0.0074 J
Pyrene	100	1700	10000	1.6	0.012 J	ND	4.0 J	ND	8.7	0.012 J
Benzo[a]anthracene	500	0.9	4	1.1	0.017 J	ND	1.5	ND	4.7	ND
Chrysene	500	9	40	1.2	0.0096 J	ND	1.50 J	ND	5.3	ND
Benzo[b]fluoranthene	50	0.9	4	3.4	0.012 J	ND	3.4	ND	5.6	ND
Benzo[k]fluoranthene	500	0.9	4	1.2	ND	ND	1.1	ND	2.0	ND
Benzo[a]pyrene	100	0.66	0.66	1.7	0.011 J	ND	2.0	ND	3.5	ND
Indeno[1,2,3-cd]pyrene	500	0.9	4	0.350 J	0.0079 J	ND	0.85	ND	1.4	ND
Dibenzo[a,h]anthracene	100	0.66	0.66	ND	ND	ND	ND	ND	0.390	ND
Benzo[g,h,i]perylene	NA	NA	NA	0.320 J	0.0076 J	ND	0.650 J	ND	1.40 J	ND

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria



**Table 9**  
**Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5A 0.0-0.5 139898 6/23/1999 mg/kg	SB-5A 6.5-7.0 139901 6/23/1999 mg/kg	SB-5B 0.0-0.5 139907 6/23/1999 mg/kg	SB-5B 7.0-7.5 109909 6/23/1999 mg/kg	SB-5C 2.0-2.5 139905 6/23/1999 mg/kg	SB-5C 3.5-4.0 139906 6/23/1999 mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg
Naphthalene	100	230	4200	1.0 J	ND	0.220 J	ND	5.3	0.240 J	0.610 J
Acenaphthylene	NA	NA	NA	1.60 J	ND	0.480 J	ND	0.240 J	0.070 J	0.360 J
Acenaphthene	100	3400	10000	0.170 J	ND	0.170 J	ND	1.20 J	0.360 J	1.5 J
Fluorene	100	2300	10000	0.370 J	ND	0.180 J	ND	0.920 J	0.52	1.8 J
Phenanthrene	NA	NA	NA	2.4	ND	1.70 J	ND	4.8	1.3	18.0
Anthracene	100	10000	10000	1.50 J	ND	0.710 J	ND	1.4 J	0.290 J	4.6
Fluoranthene	100	2300	10000	4.4	ND	4.70 J	ND	7.5	0.670 J	21.0
Pyrene	100	1700	10000	11.0	ND	4.50 J	ND	5.0	0.47	15.0
Benzo[a]anthracene	500	0.9	4	2.6	ND	2.1	ND	3.6	0.14	6.3
Chrysene	500	9	40	2.7	ND	2.60 J	ND	2.6	0.120 J	8.3
Benzo[b]fluoranthene	50	0.9	4	34.0	ND	4.6	ND	2.9	0.1	10.0
Benzo[k]fluoranthene	500	0.9	4	ND	ND	1.6	ND	1.2	0.036 J	4.0
Benzo[a]pyrene	100	0.66	0.66	4.4	ND	3.0	ND	1.7	0.059	6.2
Indeno[1,2,3-cd]pyrene	500	0.9	4	1.1	ND	1.4	ND	0.5	0.028 J	1.4
Dibenzo[a,h]anthracene	100	0.66	0.66	0.3	ND	0.40 J	ND	0.150 J	0.012 J	0.58
Benzo[g,h,i]perylene	NA	NA	NA	1.01	ND	1.20 J	ND	0.420 J	0.029 J	1.20 J

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 9**  
**Summary of Excel's Semivolatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/25/1999 mg/kg	SB-5F 5.5-6.0 140193 6/25/1999 mg/kg
Naphthalene	100	230	4200	ND	0.960 J	ND
Acenaphthylene	NA	NA	NA	ND	0.280 J	ND
Acenaphthene	100	3400	10000	ND	2.70 J	ND
Fluorene	100	2300	10000	ND	2.70 J	ND
Phenanthrene	NA	NA	NA	ND	21.0	ND
Anthracene	100	10000	10000	ND	6.3	ND
Fluoranthene	100	2300	10000	ND	37.0	ND
Pyrene	100	1700	10000	ND	32.0	ND
Benzo[a]anthracene	500	0.9	4	ND	15.0	ND
Chrysene	500	9	40	ND	17.0	ND
Benzo[b]fluoranthene	50	0.9	4	ND	17.0	ND
Benzo[k]fluoranthene	500	0.9	4	ND	6.9	ND
Benzo[a]pyrene	100	0.66	0.66	ND	12.0	ND
Indeno[1,2,3-cd]pyrene	500	0.9	4	0.0084 J	4.4	ND
Dibenzo[a,h]anthracene	100	0.66	0.66	ND	11.3	ND
Benzo[g,h,i]perylene	NA	NA	NA	0.0098 J	3.8	ND

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 10**  
**Summary of Excel's PCB Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-4A	SB-4A	SB-4B	SB-4B	SB-5A	SB-5A
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	1.0-1.5	5.5-6.0	0.5-1.0	5.5-6.0	0.0-0.5	2.5-3.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	140185	140186	140187	140188	139898	139899
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/23/1999	6/23/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor 1242	50	0.49	2	8.5	ND	22	ND	ND	ND
Aroclor 1248	50	0.49	2	ND	ND	ND	ND	9.3	ND
Aroclor 1254	50	0.49	2	4.90	ND	7.5	ND	5.8	ND
Aroclor 1260	50	0.49	2	2.1	ND	4.5	ND	ND	ND

**Notes:**

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 10**  
**Summary of Excel's PCB Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-5B	SB-5B	SB-5B	SB-5C	SB-5C	SB-5D	SB-5D
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	0.0-0.5	2.5-3.0	7.0-7.5	2.0-2.5	3.5-4.0	0.0-0.5	1.5-2.0
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	139907	139908	139909	139905	139906	140189	140190
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/25/1999	6/25/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor 1242	50	0.49	2	ND	14	ND	ND	ND	15	ND
Aroclor 1248	50	0.49	2	53	ND	ND	27	ND	ND	0.4
Aroclor 1254	50	0.49	2	20	9.3	ND	10	ND	5.5	0.34
Aroclor 1260	50	0.49	2	ND	5	ND	ND	ND	2.1	0.19

**Notes:**

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 10**  
**Summary of Excel's PCB Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5D 3.5-4.0 140196 6/25/1999 mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg	SB-5E 2.5-3.0 139903 6/23/1999 mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/25/1999 mg/kg	SB-5F 2.5-3.0 140192 6/25/1999 mg/kg
Aroclor 1242	50	0.49	2	0.56	ND	15	ND	15	ND
Aroclor 1248	50	0.49	2	ND	12	ND	ND	ND	ND
Aroclor 1254	50	0.49	2	0.44	9	82	0.15	87	ND
Aroclor 1260	50	0.49	2	0.26	ND	53	ND	22	ND

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 11  
Summary of Excel's Inorganic Soil Sampling Results  
Naporano and Hugo Neu  
Port Newark  
Newark, New Jersey**

Client Sample ID:	NJDEP Impact to	NJDEP	NJDEP	SB-4A	SB-4A	SB-4B	SB-4B	SB-5A	SB-5A	SB-5A	SB-5B	SB-5B
Sampling Depth (ft)	Groundwater	Residential	Non-Residential	1.0-1.5	5.5-6.0	0.5-1.0	5.5-6.0	0.0-0.5	2.5-3.0	6.5-7.0	0.0-0.5	7.0-7.5
Lab Sample ID:	Soil Cleanup	Direct Contact Soil	Direct Contact Soil	140185	140186	140187	140188	139898	139899	139901	139907	139909
Sampling Date:	Criteria	Cleanup Criteria	Cleanup Criteria	6/24/1999	6/24/1999	6/24/1999	6/24/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999	6/23/1999
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	NA	14	340	NA	NA	NA	NA	18.9	ND	ND	9.0 B	NA
Arsenic	NA	20	20	NA	NA	NA	NA	7.5	NA	NA	8.4	NA
Beryllium	NA	2	2	NA	NA	NA	NA	0.23 B	NA	NA	0.28 B	NA
Cadmium	NA	39	100	NA	NA	NA	NA	6.2	NA	NA	28.4	NA
Chromium	NA	500	500	NA	NA	NA	NA	135	NA	NA	321	NA
Copper	NA	600	600	NA	NA	NA	NA	762	6.9	5.3	5,150	0.93 B
Lead	NA	400	600	189	ND	2,540	ND	3,060	4.8	4.2	2,090	1.2
Mercury	NA	14	270	NA	NA	NA	NA	1.3	NA	NA	6.3	NA
Nickel	NA	250	2400	NA	NA	NA	NA	96.6	NA	NA	324	2.8 B
Selenium	NA	63	3100	NA	NA	NA	NA	3.7	NA	NA	ND	NA
Thallium	NA	2	2	NA	NA	NA	NA	ND	NA	NA	ND	NA
Silver	NA	110	4100	NA	NA	NA	NA	36.1	NA	NA	1.5 B	NA
Zinc	NA	1500	1500	NA	NA	NA	NA	1,440	NA	NA	3,580	5.3 B

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA - Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 11**  
**Summary of Excel's Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Lab Sample ID: Sampling Date: Units:	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5C 2.0-2.5 139905 6/23/1999 mg/kg	SB-5C 3.5-4.0 139906 6/23/1999 mg/kg	SB-5D 0.0-0.5 140189 6/25/1999 mg/kg	SB-5D 3.5-4.0 140196 6/25/1999 mg/kg	SB-5E 0.5-1.0 139902 6/23/1999 mg/kg	SB-5E 6.0-6.5 139904 6/23/1999 mg/kg	SB-5F 1.0-1.5 140191 6/25/1999 mg/kg	SB-5F 2.5-3.0 140192 6/25/1999 mg/kg	SB-5F 5.5-6.0 140193 6/25/1999 mg/kg
Antimony	NA	14	340	24.1	ND	ND	NA	ND	NA	ND	NA	NA
Arsenic	NA	20	20	16.4	NA	11.9	NA	13.1	NA	16.1	NA	NA
Beryllium	NA	2	2	ND	NA	ND	NA	ND	NA	0.19 B	NA	NA
Cadmium	NA	39	100	11.4	NA	15.6	NA	19.2	NA	104	NA	NA
Chromium	NA	500	500	1,270	NA	841	NA	38,200	NA	182	NA	NA
Copper	NA	600	600	1,770	2.5 B	579	NA	1,600	6.1	50,800	7.1	4.2 B
Lead	NA	400	600	1,710	3.4	882	38.1	1,960	6.0	1,160	7.1	3.2
Mercury	NA	14	270	4.1	NA	3.8	NA	0.27	NA	5.0	NA	NA
Nickel	NA	250	2400	571	6.1 B	577	18.3	20,600	21.9	176	NA	NA
Selenium	NA	63	3100	ND	NA	ND	NA	ND	NA	ND	NA	NA
Thallium	NA	2	2	ND	NA	ND	NA	ND	NA	ND	NA	NA
Silver	NA	110	4100	3.7 B	NA	ND	NA	2.9 B	NA	2.5 B	NA	NA
Zinc	NA	1500	1500	2,720	55.1	2,230	99.3	3,420	19.6	2180	25.4	13.3

Notes:

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA - Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 6**  
**Summary of Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB1 2-2.5 2-2.5 AA90503 6/23/1999 mg/kg	SB1 0.5-1 0.5-1 AA90504 6/23/1999 mg/kg	SB2 1-1.5 1-1.5 AA90505 6/23/1999 mg/kg	SB2 3-3.5 3-3.5 AA90506 6/23/1999 mg/kg	SB3 1-1.5 1-1.5 AA90507 6/23/1999 mg/kg	SB3 3-3.5 3-3.5 AA90508 6/23/1999 mg/kg	SB-5A 0-0.5 0-0.5 AA90509 6/23/1999 mg/kg	SB-5A 1.5-2 1.5-2 AA90510 6/23/1999 mg/kg	SB-5A 2.5-3 2.5-3 AA90511 6/23/1999 mg/kg	SB-5A 6.5-7 6.5-7 AA90512 6/23/1999 mg/kg	SB-5B 0-0.5 0-0.5 AA90513 6/23/1999 mg/kg
Antimony	7440-36-0	NA	14	340	1.4 U	3	1.4 U	1.4 U	1.3 U	1.4 U	3.9	5.5	1.3 U	1.4 U	50
Arsenic	7440-38-2	NA	20	20	2 U	5.5	2 U	2 U	1.9 U	2 U	6.6	7.2	1.9 U	2 U	10
Barium	7440-39-3	NA	700	47000	15	100	48	18	41	6.4	170	180	10	8.2	410
Beryllium	7440-41-7	NA	2	2	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.2 U
Cadmium	7440-43-9	NA	39	100	0.31 U	3	0.31 U	0.31 U	0.31 U	0.31 U	4.1	5.4	0.31 U	0.32 U	20
Chromium	7440-47-3	NA	500	500	9	65	25	7.7	20	3.1	53	80	5.5	4.5	170
Copper	7440-50-8	NA	600	600	11	250	39	7.6	44	3.1 U	200	210	6.2	5.1	680
Lead	7439-92-1	NA	400	600	6.8	340	3.1	5.8	7.2	2.2 U	1200	850	2.8	3.3	1800
Mercury	7439-97-6	NA	14	270	0.12	1.2	0.031 U	0.041	0.042	0.031 U	3.2	2.2	0.03 U	0.091	5.1
Nickel	7440-02-0	NA	250	2400	17	56	19	12	16	6.3	48	56	19	17	170
Selenium	7782-49-2	NA	63	3100	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.9 U	2.9 U	2.8 U	2.9 U	2.9 U
Silver	7440-22-4	NA	110	4100	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U
Thallium	7440-28-0	NA	2	2	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U
Zinc	7440-66-6	NA	1500	1500	39	590	47	24	34	19 U	730	860	18 U	19 U	3500
Cyanide	57-12-5	NA	1100	21000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	103-95-2	50	10000	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Solids	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

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- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA Not Available
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria



**Table 6**  
**Summary of Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5B 2.5-3 2.5-3 AA90514 6/23/1999 mg/kg	SB-5B 7-7.5 7-7.5 AA90515 6/23/1999 mg/kg	SB-5C 2-2.5 2-2.5 AA90516 6/23/1999 mg/kg	SB-5C 3.5-4 3.5-4 AA90517 6/23/1999 mg/kg	SB-5D 0-0.5 0-0.5 AA90528 6/25/1999 mg/kg	SB-5D 3.5-4 3.5-4 AA90529 6/25/1999 mg/kg	SB-5E 0.5-1 0.5-1 AA90518 6/23/1999 mg/kg	SB-5E 2.5-3 2.5-3 AA90519 6/23/1999 mg/kg	SB-5E 6-6.5 6-6.5 AA90520 6/23/1999 mg/kg	SB-5E 9.5-10 9.5-10 AA90521 6/23/1999 mg/kg
Antimony	7440-36-0	NA	14	340	16	1.4 U	100	1.4 U	8.6	2.8	17	12	3.1	1.4 U
Arsenic	7440-38-2	NA	20	20	23	2 U	27	2 U	11	3.4	8.9	13	2.6	2 U
Barium	7440-39-3	NA	700	47000	320	6 U	400	6 U	210	48	250	330	34	5.8 U
Beryllium	7440-41-7	NA	2	2	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U
Cadmium	7440-43-9	NA	39	100	28	0.32 U	40	0.32 U	9.5	0.67	12	12	1	0.31 U
Chromium	7440-47-3	NA	500	500	250	3.3	290	2.5	230	67	1100	110	16	2.9
Copper	7440-50-8	NA	600	600	700	3.4	2800	6.7	440	120	530	610	130	3.1 U
Lead	7439-92-1	NA	400	600	2800	3.8	4900	10	730	130	820	1500	460	2.2 U
Mercury	7439-97-6	NA	14	270	3.3	0.032 U	2.5	0.044	2.2	0.49	2.5	4.4	0.049	0.031 U
Nickel	7440-02-0	NA	250	2400	220	3.6	1900	5.4	150	65	630	150	29	3.8
Selenium	7782-49-2	NA	63	3100	3.1 U	2.9 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	3 U	2.8 U	2.8 U
Silver	7440-22-4	NA	110	4100	1.4 U	1.3 U	1.3 U	1.3 U	1.2 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U
Thallium	7440-28-0	NA	2	2	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U
Zinc	7440-66-6	NA	1500	1500	2100	56	6400	77	1500	340	1600	1800	310	19 U
Cyanide	57-12-5	NA	1100	21000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	103-95-2	50	10000	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Solids	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

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Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 6**  
**Summary of Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 1-1.5 AA90524 6/24/1999 mg/kg	SB-4A 5.5-6 5.5-6 AA90525 6/24/1999 mg/kg	SB-4B 0.5-1 0.5-1 AA90526 6/24/1999 mg/kg	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999 mg/kg	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999 mg/kg	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999 mg/kg
Antimony	7440-36-0	NA	14	340	1.7	1.3 U	16	1.4 U	NR	NR
Arsenic	7440-38-2	NA	20	20	3	1.9 U	14	2 U	NR	NR
Barium	7440-39-3	NA	700	47000	46	6	520	5.8 U	NR	NR
Beryllium	7440-41-7	NA	2	2	0.19 U	0.18 U	0.2 U	0.19 U	NR	NR
Cadmium	7440-43-9	NA	39	100	0.93	0.31 U	14	0.31 U	NR	NR
Chromium	7440-47-3	NA	500	500	25	4.8	560	3.3	NR	NR
Copper	7440-50-8	NA	600	600	230	4.6	1200	3.1 U	NR	NR
Lead	7439-92-1	NA	400	600	120	16	1600	3.1	110	990
Mercury	7439-97-6	NA	14	270	0.53	0.03 U	5.8	0.031 U	NR	NR
Nickel	7440-02-0	NA	250	2400	22	5.6	300	4	NR	NR
Selenium	7782-49-2	NA	63	3100	2.9 U	2.8 U	3 U	2.8 U	NR	NR
Silver	7440-22-4	NA	110	4100	1.3 U	1.2 U	1.3 U	1.2 U	NR	NR
Thallium	7440-28-0	NA	2	2	1.1 U	1 U	1.1 U	1 U	NR	NR
Zinc	7440-66-6	NA	1500	1500	170	47	2000	19 U	NR	NR
Cyanide	57-12-5	NA	1100	21000	NA	NA	NA	NA	NR	NR
Phenol	103-95-2	50	10000	10000	NA	NA	NA	NA	NR	NR
% Solids	-	NA	NA	NA	NA	NA	NA	NA	NR	NR

Notes:

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J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup criteria

Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 7**  
**Summary of Total Petroleum Hydrocarbons Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.5-5.0 AA94325 8/27/1999 mg/kg	BH-N5F 0.5-2.0 AA94655 9/2/1999 mg/kg	BH-N5F 6.0-8.0 AA94656 9/2/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/25/1999 mg/kg	BH-N1 4.0-4.5 AA94150 8/25/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 6/23/1999 mg/kg	MW-C1 S-2 3-3.5 AA90434 6/23/1999 mg/kg	MW-C2 S-1 1-2 AA90327 6/22/1999 mg/kg	MW-C2 S-4 6-7 AA90328 6/22/1999 mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90436 6/23/1999 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	9700	1300	29000	570	570	55	160	48	15000	96	14000	50

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 5-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C5 S-5 8-8.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 0-1 AA90533 6/24/1999 mg/kg	PA-C6 S-5 8-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 0-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 8-8.5 AA90536 6/24/1999 mg/kg	BH-N6 0.0-0.5 AB16065 10/2/2000 mg/kg	BH-N7 0.0-0.5 AB16066 10/2/2000 mg/kg	BH-N5A 0.5-2.5 AB38335 7/23/2001 mg/kg	BH-N5B 0.5-2.5 AB38336 7/23/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	1200	98	37000	77	42000	180	30000	60	28000	13000	4300	430

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	BH-N5C 0.5-2.5 AB38337 7/23/2001 mg/kg	BH-N5D 0.5-2.5 AB38338 7/23/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	5700	6900

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**Table 7**  
**Summary of Total Petroleum Hydrocarbons Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C5-N1-01 2.0-2.5 AB47874 12/5/2001 mg/kg	MW-C5-N1-02 2.5-3.0 AB47875 12/5/2001 mg/kg	MW-C5-N1-03 3.0-3.5 AB47876 12/5/2001 mg/kg	MW-C5-N1-04 3.5-4.0 AB47877 12/5/2001 mg/kg	MW-C5-S1-01 2.0-2.5 AB47878 12/5/2001 mg/kg	MW-C5-S1-02 2.5-3.0 AB47879 12/5/2001 mg/kg	MW-C5-S1-03 3.0-3.5 AB47880 12/5/2001 mg/kg	MW-C5-S1-04 3.5-4.0 AB47881 12/5/2001 mg/kg	MW-C5-E1-01 2.0-2.5 AB47882 12/5/2001 mg/kg	MW-C5-E1-02 2.5-3.0 AB47883 12/5/2001 mg/kg	MW-C5-E1-03 3.0-3.5 AB47884 12/5/2001 mg/kg	MW-C5-E1-04 3.5-4.0 AB47885 12/5/2001 mg/kg			
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	9600	95	35	U	38	7500	1200	35	35	U	9000	900	35	U	45

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C5-W1-01 2.0-2.5 AB47886 12/5/2001 mg/kg	MW-C5-W1-02 2.5-3.0 AB47887 12/5/2001 mg/kg	MW-C5-W1-03 3.0-3.5 AB47888 12/5/2001 mg/kg	MW-C5-W1-04 3.5-4.0 AB47889 12/5/2001 mg/kg	PA-C6-S1-01 2.0-2.5 AB47671 12/3/2001 mg/kg	PA-C6-S1-02 2.5-3.0 AB47672 12/3/2001 mg/kg	PA-C6-S1-03 3.0-3.5 AB47673 12/3/2001 mg/kg	PA-C6-S1-04 3.5-4.0 AB47674 12/3/2001 mg/kg	PA-C6-W1-01 2.0-2.5 AB47675 12/3/2001 mg/kg	PA-C6-W1-02 2.5-3.0 AB47676 12/3/2001 mg/kg	PA-C6-W1-03 3.0-3.5 AB47677 12/3/2001 mg/kg	PA-C6-W1-04 3.5-4.0 AB47678 12/3/2001 mg/kg		
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	4700	130	35	U	35	U	29000	28000	24000	21000	18000	17000	40000	35000

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E1-01 2.0-2.5 AB47679 12/3/2001 mg/kg	PA-C6-E1-02 2.5-3.0 AB47680 12/3/2001 mg/kg	PA-C6-E1-03 3.0-3.5 AB47681 12/3/2001 mg/kg	PA-C6-E1-04 3.5-4.0 AB47682 12/3/2001 mg/kg	PA-C6-N1-01 2.0-2.5 AB47683 12/3/2001 mg/kg	PA-C6-N1-02 2.5-3.0 AB47684 12/3/2001 mg/kg	PA-C6-N1-03 3.0-3.5 AB47685 12/3/2001 mg/kg	PA-C6-N1-04 3.5-4.0 AB47686 12/3/2001 mg/kg	PA-C6-S2-01 2.0-2.5 AB47890 12/5/2001 mg/kg	PA-C6-S2-02 2.5-3.0 AB47891 12/5/2001 mg/kg	PA-C6-S2-03 3.0-3.5 AB47892 12/5/2001 mg/kg	PA-C6-S2-04 3.5-4.0 AB47893 12/5/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	19000	17000	15000	35000	33000	12000	8200	6400	17000	17000	18000	36000

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E2-01 2.0-2.5 AB47894 12/5/2001 mg/kg	PA-C6-E2-02 2.5-3.0 AB47895 12/5/2001 mg/kg	PA-C6-E2-03 3.0-3.5 AB47896 12/5/2001 mg/kg	PA-C6-E2-04 3.5-4.0 AB47897 12/5/2001 mg/kg	PA-C6-W2-01 2.0-2.5 AB47898 12/5/2001 mg/kg	PA-C6-W2-02 2.5-3.0 AB47899 12/5/2001 mg/kg	PA-C6-W2-03 3.0-3.5 AB47900 12/5/2001 mg/kg	PA-C6-W2-04 3.5-4.0 AB47901 12/5/2001 mg/kg	PA-C6-N2-01 2.0-2.5 AB47902 12/5/2001 mg/kg	PA-C6-E3A-01 6.0-6.5 AB48317 12/11/2001 mg/kg	PA-C6-E3A-02 8.0-8.5 AB48318 12/11/2001 mg/kg	PA-C6-E3-01 2.0-2.5 AB48116 12/7/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	16000	18000	14000	37000	13000	14000	22000	39000	15000	8500	360	18000

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**Table 7**  
**Summary of Total Petroleum Hydrocarbons Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E3-02 2.5-3.0 AB48117 12/7/2001 mg/kg	PA-C6-E3-03 3.0-3.5 AB48118 12/7/2001 mg/kg	PA-C6-E3-04 3.5-4.0 AB48119 12/7/2001 mg/kg	PA-C6-W3-01 2.0-2.5 AB48112 12/7/2001 mg/kg	PA-C6-W3-02 2.5-3.0 AB48113 12/7/2001 mg/kg	PA-C6-W3-03 3.0-3.5 AB48114 12/7/2001 mg/kg	PA-C6-W3-04 3.5-4.0 AB48115 12/7/2001 mg/kg	PA-C6-S3-01 2.0-2.5 AB48120 12/7/2001 mg/kg	PA-C6-S3-02 2.5-3.0 AB48121 12/7/2001 mg/kg	PA-C6-S3-03 3.0-3.5 AB48122 12/7/2001 mg/kg	PA-C6-S3-04 3.5-4.0 AB48123 12/7/2001 mg/kg	PA-C6-N3-01 2.0-2.5 AB48124 12/7/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	13000	34000	35000	16000	15000	13000	17000	25000	25000	28000	36000	17000

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-S4-01 2.0-2.5 AB48323 12/11/2001 mg/kg	PA-C6-S4-02 2.5-3.0 AB48324 12/11/2001 mg/kg	PA-C6-S4-03 3.0-3.5 AB48325 12/11/2001 mg/kg	PA-C6-S4-04 3.5-4.0 AB48326 12/11/2001 mg/kg	PA-C6-E4-01 2.0-2.5 AB48319 12/11/2001 mg/kg	PA-C6-E4-02 2.5-3.0 AB48320 12/11/2001 mg/kg	PA-C6-E4-03 3.0-3.5 AB48321 12/11/2001 mg/kg	PA-C6-E4-04 3.5-4.0 AB48322 12/11/2001 mg/kg	PA-C6-S5-01 2.0-3.0 AB56538 4/29/2002 mg/kg	PA-C6-S5A-02 3.0-4.0 AB56539 4/29/2002 mg/kg	PA-C6-S5A-03 9.0-9.5 AB56540 4/29/2002 mg/kg	PA-C6-S6-01 2.0-3.0 AB56541 4/29/2002 mg/kg	
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	25000	26000	33000	69000	21000	25000	15000	16000	11000	8900	36	U	18000

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-S6-02 3.0-4.0 AB56542 4/29/2002 mg/kg	PA-C6-S6-03 9.0-9.5 AB56543 4/29/2002 mg/kg	PA-C6-E5-01 2.0-3.0 AB56544 4/29/2002 mg/kg	PA-C6-E5-02 3.0-4.0 AB56545 4/29/2002 mg/kg	PA-C6-E5-03 9.0-9.5 AB56546 4/29/2002 mg/kg	PA-C6-E6-01 2.0-3.0 AB56547 4/29/2002 mg/kg	PA-C6-E6-02 3.0-4.0 AB56548 4/29/2002 mg/kg	PA-C6-E6-03 9.0-9.5 AB56549 4/29/2002 mg/kg	PA-C6-E7-01 2.0-3.0 AB56550 4/29/2002 mg/kg	PA-C6-E7-02 3.0-4.0 AB56551 4/29/2002 mg/kg	PA-C6-E7-03 8.5-9.0 AB56552 4/29/2002 mg/kg	PA-C6-S7-01 2.0-3.0 AB56557 4/29/2002 mg/kg	
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	7600	36	U	23000	28000	96	31000	18000	20000	23000	32000	110	18000

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-S7-02 3.0-4.0 AB56558 4/29/2002 mg/kg	PA-C6-S7-03 9.0-9.5 AB56559 4/29/2002 mg/kg	PA-C6-E8-01 2.0-3.0 AB56553 4/29/2002 mg/kg	PA-C6-E8-02 3.0-4.0 AB56554 4/29/2002 mg/kg	PA-C6-E8-03 6.0-8.0 AB56555 4/29/2002 mg/kg	PA-C6-E8-04 8.5-9.0 AB56556 4/29/2002 mg/kg	PA-C6-E9-01 3.0-4.0 AB57515 5/16/2002 mg/kg	PA-C6-E9-04 8.5-9.0 AB57516 5/16/2002 mg/kg	PA-C6-E10-01 2.0-3.0 AB57517 5/16/2002 mg/kg	PA-C6-E10-02 3.0-4.0 AB57518 5/16/2002 mg/kg	PA-C6-E10-05 8.5-9.0 AB57519 5/16/2002 mg/kg	PA-C6-E11-01 2.0-3.0 AB57520 5/16/2002 mg/kg			
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	27000	36	U	13000	12000	5900	310	15000	39	U	15000	17000	36	U	17000

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Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C6-E11-02 3.0-4.0 AB57521 5/16/2002 mg/kg	PA-C6-E11-05 9.0-9.5 AB57522 5/16/2002 mg/kg	PA-C7-S1-01 2.0-2.5 AB47748 12/4/2001 mg/kg	PA-C7-S1-02 2.5-3.0 AB47749 12/4/2001 mg/kg	PA-C7-S1-03 3.0-3.5 AB47750 12/4/2001 mg/kg	PA-C7-S1-04 3.5-4.0 AB47751 12/4/2001 mg/kg	PA-C7-N1-01 2.0-2.5 AB47752 12/4/2001 mg/kg	PA-C7-N1-02 2.5-3.0 AB47753 12/4/2001 mg/kg	PA-C7-N1-03 3.0-3.5 AB47754 12/4/2001 mg/kg	PA-C7-N1-04 3.5-4.0 AB47755 12/4/2001 mg/kg	PA-C7-W1-01 2.0-2.5 AB47756 12/4/2001 mg/kg	PA-C7-W1-02 2.5-3.0 AB47757 12/4/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	110	35 U	4300	4600	240	74	5500	3500	200	110	5100	2700

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	PA-C7-W1-03 3.0-3.5 AB47758 12/4/2001 mg/kg	PA-C7-W1-04 3.5-4.0 AB47759 12/4/2001 mg/kg	PA-C7-E1-01 2.0-2.5 AB47760 12/4/2001 mg/kg	PA-C7-E1-02 2.5-3.0 AB47761 12/4/2001 mg/kg	PA-C7-E1-03 3.0-3.5 AB47762 12/4/2001 mg/kg	PA-C7-E1-04 3.5-4.0 AB47763 12/4/2001 mg/kg	BH-N1-N1-01 2.0-2.5 AB47764 12/4/2001 mg/kg	BH-N1-N1-02 2.5-3.0 AB47765 12/4/2001 mg/kg	BH-N1-N1-03 3.0-3.5 AB47766 12/4/2001 mg/kg	BH-N1-N1-04 3.5-4.0 AB47767 12/4/2001 mg/kg	BH-N1-S1-01 2.0-2.5 AB47768 12/4/2001 mg/kg	BH-N1-S1-02 2.5-3.0 AB47769 12/4/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	380	48	11000 U	6400	100	110	74	37 U	35 U	42	74	35 U

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	BH-N1-S1-03 3.0-3.5 AB47770 12/4/2001 mg/kg	BH-N1-S1-04 3.5-4.0 AB47771 12/4/2001 mg/kg	BH-N1-E1-01 2.0-2.5 AB47772 12/4/2001 mg/kg	BH-N1-E1-02 2.5-3.0 AB47773 12/4/2001 mg/kg	BH-N1-E1-03 3.0-3.5 AB47774 12/4/2001 mg/kg	BH-N1-E1-04 3.5-4.0 AB47775 12/4/2001 mg/kg	BH-N1-W1-01 2.0-2.5 AB47776 12/4/2001 mg/kg	BH-N1-W1-02 2.5-3.0 AB47777 12/4/2001 mg/kg	BH-N1-W1-03 3.0-3.5 AB47778 12/4/2001 mg/kg	BH-N1-W1-04 3.5-4.0 AB47779 12/4/2001 mg/kg
Total Petroleum Hydrocarbons	23135-22-0	10000	10000	10000	51	38 U	50	47	41	46	40 U	36 U	36 U	36 U

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration  
 Shaded value exceeded the corresponding soil cleanup criteria

**Table 5**  
**Summary of Pesticides Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.5-5.0 AA94325 8/27/1999 mg/kg	BH-N5F 0.5-2.0 AA94655 9/2/1999 mg/kg	BH-N5F 6.0-8.0 AA94656 9/2/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/25/1999 mg/kg	BH-N1 4.0-4.5 AA94150 8/25/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 6/23/1999 mg/kg	MW-C1 S-2 3-3.5 AA90434 6/23/1999 mg/kg	MW-C2 S-1 1-2 AA90327 6/22/1999 mg/kg
Aldrin	309-00-2	50	0.04	0.17	0.18 U	0.015	0.057 U	0.085 U	0.38 U	0.0035 U	0.032	0.014	0.01 U
Alpha-BHC	319-84-6	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Beta-BHC	319-85-7	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Chlordane	57-74-9	NA	NA	NA	0.036 U	0.0069 U	0.069 U	0.0069 U	0.14 U	0.0069 U	0.0067 U	0.0071 U	0.03 U
Delta-BHC	319-86-8	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Dieldrin	60-57-1	50	0.042	0.18	0.018 U	0.0035 U	0.035 U	0.036	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan I	959-98-8	50	340	6200	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan II	33213-65-9	50	340	6200	0.073	0.0081	0.035 U	0.016	0.3	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endosulfan Sulfate	1031-07-8	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endrin	72-20-8	50	17	310	0.16	0.013	0.056	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Endrin Aldehyde	7421-93-4	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0041	0.0035 U	0.01 U
Endrin Ketone	53494-70-5	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0062	0.0035 U	0.01 U
Gamma-BHC	58-89-9	NA	0.52	2.2	0.018 U	0.0035 U	0.035 U	0.021	0.072 U	0.0035 U	0.007	0.0035 U	0.01 U
Heptachlor	76-44-8	50	0.15	0.65	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.023	0.0086	0.1
Heptachlor Epoxide	1024-57-3	NA	NA	NA	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
Methoxychlor	72-43-5	50	280	5200	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.29
P,P'-DDD	72-54-8	50	3	12	0.018 U	0.0035 U	0.035 U	0.0035 U	0.072 U	0.0035 U	0.0034 U	0.0035 U	0.01 U
P,P'-DDE	72-55-9	50	2	9	0.097	0.0035 U	0.035 U	0.0035 U	0.34	0.0035 U	0.0074	0.0035 U	0.01 U
P,P'-DDT	50-29-3	500	2	9	0.018 U	0.0035 U	0.035 U	0.0035 U	0.44	0.0035 U	0.0088	0.0035 U	0.01 U
Toxaphene	8001-35-2	50	0.1	0.2	0.18 U	0.035 U	0.35 U	0.035 U	0.72 U	0.035 U	0.034 U	0.035 U	0.19 U

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

**Value exceeded the NJDEP residential soil cleanup criteria**

**Value exceeded the NJDEP non-residential soil cleanup criteria**

**Value exceeded the NJDEP impact to ground water soil cleanup criteria**

**Table 5**  
**Summary of Pesticides Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C2 S-4 6-7 AA90328 6/25/1999 mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90436 6/23/1999 mg/kg	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 5-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C5 S-5 8-8.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 0-1 AA90533 6/24/1999 mg/kg	PA-C6 S-5 8-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 0-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 8-8.5 AA90536 6/24/1999 mg/kg	BH-N6 00.0-0.5 AB16065 10/2/2000 mg/kg	BH-N7 0.0-0.5 AB16066 10/2/2000 mg/kg
Aldrin	309-00-2	50	0.04	0.17	0.0035 U	0.3	0.0037 U	0.078 U	0.0078 U	0.18	0.0035 U	0.017 U	0.0078	0.047	0.0034 U	0.071 U	0.18 U
Alpha-BHC	319-84-6	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Beta-BHC	319-85-7	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.07	0.0034 U	NR	NR
Chlordane	57-74-9	NA	NA	NA	0.0071 U	0.037 U	0.0073 U	0.16 U	0.016 U	0.036 U	0.0071 U	0.035 U	0.0071 U	0.035 U	0.0069 U	NR	NR
Delta-BHC	319-86-8	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Dieldrin	60-57-1	50	0.042	0.18	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.02	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	0.071 U	0.25
Endosulfan I	959-98-8	50	340	6200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endosulfan II	33213-65-9	50	340	6200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endosulfan Sulfate	1031-07-8	NA	NA	NA	0.0035 U	0.25	0.0037 U	0.078 U	0.0078 U	0.1	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endrin	72-20-8	50	17	310	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endrin Aldehyde	7421-93-4	NA	NA	NA	0.0035 U	0.031	0.0037 U	0.41	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Endrin Ketone	53494-70-5	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Gamma-BHC	58-89-9	NA	0.52	2.2	0.0035 U	0.075	0.0037 U	0.078 U	0.0078 U	0.041	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Heptachlor	76-44-8	50	0.15	0.65	0.0035 U	0.25	0.0037 U	0.21	0.017	0.14	0.0035 U	0.017 U	0.0066	0.036	0.0034 U	0.071 U	0.18 U
Heptachlor Epoxide	1024-57-3	NA	NA	NA	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Methoxychlor	72-43-5	50	280	5200	0.0035 U	0.018 U	0.0037 U	0.078 U	0.0078 U	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
P,P'-DDD	72-54-8	50	3	12	0.0035 U	0.018 U	0.0037 U	0.078 U	0.011	0.018 U	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
P,P'-DDE	72-55-9	50	2	9	0.0035 U	0.067	0.0037 U	1.6	0.036	0.048	0.0035 U	0.017 U	0.0035 U	0.027	0.0034 U	NR	NR
P,P'-DDT	50-29-3	500	2	9	0.0035 U	0.063	0.0037 U	1.4	0.034	0.033	0.0035 U	0.017 U	0.0035 U	0.018 U	0.0034 U	NR	NR
Toxaphene	8001-35-2	50	0.1	0.2	0.03 U	0.18 U	0.037 U	0.78 U	0.078 U	0.18 U	0.035 U	0.17 U	0.035 U	0.18 U	0.034 U	NR	NR

Notes:

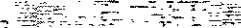

- NJDEP - New Jersey Department of Environmental Protection
- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NR - Analysis Not Requested
- Value exceeded the NJDEP residential soil cleanup criteria
- Value exceeded the NJDEP non-residential soil cleanup criteria
- Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria



**Table 6**  
**Summary of Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.5-5.0 AA94325 8/27/1999 mg/kg	BH-N5F 0.5-2.0 AA94655 9/2/1999 mg/kg	BH-N5F 6.0-8.0 AA94656 9/2/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/25/1999 mg/kg	BH-N1 4.0-4.5 AA94150 8/25/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 6/23/1999 mg/kg	MW-C1 S-2 3-3.5 AA90434 6/23/1999 mg/kg	MW-C2 S-1 1-2 AA90327 6/22/1999 mg/kg	MW-C2 S-4 6-7 AA90328 6/25/1999 mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90436 6/23/1999 mg/kg
Antimony	7440-36-0	NA	14	340	9.2	1.4 U	1.4 U	1.4 U	22	1.4 U	1.3 U	1.4 U	5.2	1.4 U	14	1.4 U
Arsenic	7440-38-2	NA	20	20	2 U	2 U	3.1	2 U	14	2 U	1.9	2 U	14	2 U	10	2.5
Barium	7440-39-3	NA	700	47000	180	6.5	100	20	420	9.7	12	6	240	9.3	340	6.2 U
Beryllium	7440-41-7	NA	2	2	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U
Cadmium	7440-43-9	NA	39	100	21	0.31 U	1.2	0.31 U	22	0.31 U	0.3 U	0.32 U	6.4	0.32 U	12	0.33 U
Chromium	7440-47-3	NA	500	500	220	3.9	37	13	150	7	7.4	4.8	130	9.9	190	5.5
Copper	7440-50-8	NA	600	600	680	5.9	100	28	900	8.5	24	8.3	430	6.1	490	7.9
Lead	7439-92-1	NA	400	600	690	15	410	60	3000	22	30	11	570	7.9	1400	3.1
Mercury	7439-97-6	NA	14	270	3.7	0.11	1.4	0.17	10	0.034 U	0.055	0.084	0.47	0.03 U	3.7	0.033 U
Nickel	7440-02-0	NA	250	2400	120	4.3	33	30	430	8	10	6.5	110	11	180	6.4
Selenium	7782-49-2	NA	63	3100	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U	2.8 U	2.7 U	2.9 U	3 U	2.9 U	3 U	3 U
Silver	7440-22-4	NA	110	4100	1.3 U	1.2 U	1.2 U	1.2 U	1.9	1.2 U	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Thallium	7440-28-0	NA	2	2	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Zinc	7440-66-6	NA	1500	1500	1100	35	410	110	3900	26	94	53	1300	19	1700	20 U
Cyanide	57-12-5	NA	1100	21000	0.27 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.25 U	9.7	0.28 U	0.27 U	7.7	9.7
Phenol	103-95-2	50	10000	10000	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.4 U	1.4 U
% Solids	-	NA	NA	NA	93	96	96	96	93	96	99	94	89	94	91	91

Notes:

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- mg/Kg - Milligrams per Kilograms, equivalent to parts per million
- U - Not detected at the PQL
- J - Analyte detected below PQL and/or estimated concentration
- NA - Not Available
- NR - Analysis Not Requested
-  Value exceeded the NJDEP residential soil cleanup criteria
-  Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 6**  
**Summary of Inorganic Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 5-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C5 S-5 8-8.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 0-1 AA90533 6/24/1999 mg/kg	PA-C6 S-5 8-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 0-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 8-8.5 AA90536 6/24/1999 mg/kg
Antimony	7440-36-0	NA	14	340	130	1.5 U	15	1.4 U	1.4 U	1.5	2	1.3 U
Arsenic	7440-38-2	NA	20	20	3.9	2.4	2.5	2.3	2.6	3.3	5.6	3
Barium	7440-39-3	NA	700	47000	250	20	90	12	22	48	80	7.8
Beryllium	7440-41-7	NA	2	2	0.21 U	0.21 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Cadmium	7440-43-9	NA	39	100	41	0.35 U	4.6	0.32 U	0.31 U	0.97	1.8	0.31 U
Chromium	7440-47-3	NA	500	500	11000	13	1300	14	12	120	54	12
Copper	7440-50-8	NA	600	600	1300	32	190	10	18	75	190	8.8
Lead	7439-92-1	NA	400	600	1000	63	390	10	8.2	200	210	4.8
Mercury	7439-97-6	NA	14	270	6.5	0.18	0.96	0.032 U	0.031 U	0.13	0.79	0.031 U
Nickel	7440-02-0	NA	250	2400	4000	15	650	34	9.9	89	58	17
Selenium	7782-49-2	NA	63	3100	3.1 U	3.1 U	2.9 U	2.9 U	2.8 U	2.9 U	2.8 U	2.8 U
Silver	7440-22-4	NA	110	4100	1.4 U	1.4 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.2 U
Thallium	7440-28-0	NA	2	2	1.2 U	1.2 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1 U
Zinc	7440-66-6	NA	1500	1500	2600	140	980	31	27	310	360	25
Cyanide	57-12-5	NA	1100	21000	9.7	1.2	0.63	0.27 U	0.26 U	0.57	0.68	0.6
Phenol	103-95-2	50	10000	10000	1.4 U	1.4 U	1.3 U	1.3 U	2.6	1.3 U	3.7	1.3 U
% Solids		NA	NA	NA	86	86	93	94	96	94	95	97

Notes:


NJDEP - New Jersey Department of Environmental Protection  
mg/Kg - Milligrams per Kilograms, equivalent to parts per million


U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NA Not Available

NR - Analysis Not Requested

 Value exceeded the NJDEP residential soil cleanup criteria

 Value exceeded the NJDEP non-residential soil cleanup criteria

**Table 4  
Summary of PCB Soil Sampling Results  
Naporano Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 5-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C5 S-5 8-8.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 0-1 AA90533 6/24/1999 mg/kg	PA-C6 S-5 8-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 0-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 8-8.5 AA90536 6/24/1999 mg/kg	SB1 2-2.5 2-2.5 AA90503 6/23/1999 mg/kg	SB1 0.5-1 0.5-1 AA90504 6/23/1999 mg/kg	SB2 1-1.5 1-1.5 AA90505 6/23/1999 mg/kg	SB2 3-3.5 3-3.5 AA90506 6/23/1999 mg/kg
Aroclor-1016	12674-11-2	50	0.49	2	1.9 U	0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Aroclor-1221	11104-28-2	50	0.49	2	1.9 U	0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Aroclor-1232	11141-16-5	50	0.49	2	1.9 U	0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Aroclor-1242	53469-21-9	50	0.49	2	1.9 U	0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U
Aroclor-1248	12672-29-6	50	0.49	2	1.9 U	0.79	5.5	0.018 U	0.017 U	0.12	0.87	0.017 U	0.035 U	2.1	0.035 U	0.035 U
Aroclor-1254	11097-69-1	50	0.49	2	1.9 U	1.5	2.2	0.018 U	0.017 U	0.018 U	0.77	0.017 U	0.035 U	1.1	0.035 U	0.035 U
Aroclor-1260	11096-82-5	50	0.49	2	1.9 U	0.019 U	0.18 U	0.018 U	0.017 U	0.018 U	0.018 U	0.017 U	0.035 U	0.035 U	0.035 U	0.035 U

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup standard.

Value exceeded the NJDEP residential and non-residential soil cleanup standards.

Bolded value exceeded the NJDEP impact to groundwater cleanup standard.

Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB3 1-1.5 1-1.5 AA90507 6/23/1999 mg/kg	SB3 3-3.5 3-3.5 AA90508 6/23/1999 mg/kg	SB-5A 0-0.5 0-0.5 AA90509 6/23/1999 mg/kg	SB-5A 1.5-2 1.5-2 AA90510 6/23/1999 mg/kg	SB-5A 2.5-3 2.5-3 AA90511 6/23/1999 mg/kg	SB-5A 6.5-7 6.5-7 AA90512 6/23/1999 mg/kg	SB-5B 0-0.5 0-0.5 AA90513 6/23/1999 mg/kg	SB-5B 2.5-3 2.5-3 AA90514 6/23/1999 mg/kg	SB-5B 7-7.5 7-7.5 AA90515 6/23/1999 mg/kg
Aroclor-1016	12674-11-2	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1221	11104-28-2	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1232	11141-16-5	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1242	53469-21-9	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1248	12672-29-6	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1254	11097-69-1	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U
Aroclor-1260	11096-82-5	50	0.49	2	0.034 U	0.035 U	0.18 U	0.18 U	0.034 U	0.036 U	0.36 U	0.38 U	0.035 U

Notes:

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J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

**50** Value exceeded the NJDEP residential soil cleanup standard.

**0.49** Value exceeded the NJDEP residential and non-residential soil cleanup standards.

**2** Bolded value exceeded the NJDEP impact to groundwater cleanup standard.

Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5C 2-2.5 2-2.5 AA90516 6/23/1999 mg/kg	SB-5C 3.5-4 3.5-4 AA90517 6/23/1999 mg/kg	SB-5D 0-0.5 0-0.5 AA90528 6/25/1999 mg/kg	SB-5D 3.5-4 3.5-4 AA90529 6/25/1999 mg/kg	SB-5E 0.5-1 0.5-1 AA90518 6/23/1999 mg/kg	SB-5E 2.5-3 2.5-3 AA90519 6/23/1999 mg/kg	SB-5E 6-6.5 6-6.5 AA90520 6/23/1999 mg/kg	SB-5E 9.5-10 9.5-10 AA90521 6/23/1999 mg/kg
Aroclor-1016	12674-11-2	50	0.49	2	0.36 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Aroclor-1221	11104-28-2	50	0.49	2	0.36 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Aroclor-1232	11141-16-5	50	0.49	2	0.36 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Aroclor-1242	53469-21-9	50	0.49	2	0.36 U	0.035 U	0.17 U	0.035 U	0.36 U	0.37 U	0.038 U	0.035 U
Aroclor-1248	12672-29-6	50	0.49	2	<b>8.3</b>	0.035 U	<b>4.8</b>	<b>0.66</b>	<b>7.2</b>	<b>12</b>	0.2	0.035 U
Aroclor-1254	11097-69-1	50	0.49	2	<b>4.3</b>	0.035 U	<b>1.7</b>	<b>0.59</b>	<b>5.9</b>	0.37 U	0.34	0.035 U
Aroclor-1260	11096-82-5	50	0.49	2	0.36 U	0.035 U	0.17 U	0.035 U	0.36 U	<b>6.3</b>	0.038 U	0.035 U

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

**U** Value exceeded the NJDEP residential soil cleanup standard.

**J** Value exceeded the NJDEP residential and non-residential soil cleanup standards.

**U** Bolded value exceeded the NJDEP impact to groundwater cleanup standard.

**Table 4**  
**Summary of PCB Soil Sampling Results**  
**Naporano Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4A 1.0-1.5 1-1.5 AA90524 6/24/1999 mg/kg	SB-4A 5.5-6 5.5-6 AA90525 6/24/1999 mg/kg	SB-4B 0.5-1 0.5-1 AA90526 6/24/1999 mg/kg	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999 mg/kg	BH-N6 00.0-0.5 AB16065 10/2/2000 mg/kg	BH-N7 0.0-0.5 AB16066 10/2/2000 mg/kg
Aroclor-1016	12674-11-2	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	0.035 U	0.18 U
Aroclor-1221	11104-28-2	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Aroclor-1232	11141-16-5	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Aroclor-1242	53469-21-9	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	NR	NR
Aroclor-1248	12672-29-6	50	0.49	2	0.96	0.034 U	0.15	0.035 U	0.035 U	0.18 U
Aroclor-1254	11097-69-1	50	0.49	2	0.48	0.034 U	0.59	0.035 U	0.74	0.18 U
Aroclor-1260	11096-82-5	50	0.49	2	0.035 U	0.034 U	0.37 U	0.035 U	0.035 U	2.7

Notes:

NJDEP - New Jersey Department of Environmental Protection

mg/Kg - Milligrams per Kilograms, equivalent to parts per million

U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

Value exceeded the NJDEP residential soil cleanup standard.

Value exceeded the NJDEP residential and non-residential soil cleanup standards.

Bolded value exceeded the NJDEP impact to groundwater cleanup standard.



**Table 3  
Summary of Semivolatile Organic Compounds Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria ma/ka	NJDEP Residential Direct Contact Soil Cleanup Criteria ma/ka	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria ma/ka	BH-N7 0.0-0.5 AB16066 10/2/2000 ma/ka
1,2,4-Trichlorobenzene	120-82-1	100	68	1200	NR
1,2-Dichlorobenzene	95-50-1	50	5100	10000	NR
1,3-Dichlorobenzene	541-73-1	100	5100	10000	NR
1,4-Dichlorobenzene	106-46-7	100	570	10000	NR
2,4,5-Trichlorophenol	95-95-4	50	5600	10000	NR
2,4,6-Trichlorophenol	88-06-2	10	62	270	NR
2,4-Dichlorophenol	120-83-2	10	170	3100	NR
2,4-Dimethylphenol	105-87-9	10	1100	10000	NR
2,4-Dinitrophenol	51-28-5	10	110	2100	NR
2,4-Dinitrotoluene	121-14-2	10	1	4	NR
2,6-Dinitrotoluene	606-20-2	10	1	4	NR
2-Chloronaphthalene	91-58-7	NA	NA	NA	NR
2-Chlorophenol	95-57-8	10	280	5200	NR
2-Methylnaphthalene	91-57-6	NA	NA	NA	NR
2-Methylphenol	95-48-7	NA	2800	10000	NR
2-Nitroaniline	88-74-4	NA	NA	NA	NR
2-Nitrophenol	88-75-5	NA	NA	NA	NR
3&4-Methylphenol	106-44-5	NA	2800	10000	NR
3,3'-Dichlorobenzidine	91-94-1	100	2	6	NR
3-Nitroaniline	89-09-2	NA	NA	NA	NR
4,6-Dinitro-2-methylphenol	121-14-2	NA	NA	NA	NR
4-Bromophenyl-phenylether	101-55-3	NA	NA	NA	NR
4-Chloro-3-methylphenol	59-50-7	100	10000	10000	NR
4-Chloroaniline	106-47-8	NA	230	4200	NR
4-Chlorophenyl-phenylether	7005-72-3	NA	NA	NA	NR
4-Nitroaniline	100-01-6	NA	NA	NA	NR
4-Nitrophenol	100-02-7	NA	NA	NA	NR
Acenaphthene	83-32-9	100	3400	10000	0.9 U
Acenaphthylene	208-96-8	NA	NA	NA	0.9 U
Anthracene	120-12-7	100	10000	10000	0.9 U
Benzo[a]anthracene	92-87-5	NA	NA	NA	NR
Benzo[a]pyrene	56-55-3	500	0.9	4	0.42 J
Benzo[b]fluoranthene	50-32-8	100	0.66	0.66	0.47 J
Benzo[b]fluoranthene	205-99-2	50	0.9	4	0.64 J
Benzo[g,h,i]perylene	191-24-2	NA	NA	NA	0.2 J
Benzo[k]fluoranthene	207-08-9	500	0.9	4	0.44 J
Benzoic Acid	65-85-0	NA	NA	NA	NR
Benzyl Alcohol	100-51-6	50	10000	10000	NR
Bis(2-Chloroethoxy)Methane	111-91-1	NA	NA	NA	NR
Bis(2-Chloroethyl)ether	111-44-4	10	0.66	3	NR
Bis(2-Chloroisopropyl)ether	108-60-1	10	2300	10000	NR
Bis(2-Ethylhexyl)phthalate	117-81-7	100	49	210	NR
Butylbenzylphthalate	85-68-7	100	1100	10000	NR
Carbazole	86-74-8	NA	NA	NA	NR
Chrysene	218-01-9	500	9	40	0.5 J
Di-n-butylphthalate	84-74-2	100	5700	10000	NR
Di-n-octylphthalate	117-84-0	100	1100	10000	NR
Dibenzo[a,h]anthracene	53-70-3	100	0.66	0.66	0.9 U
Dibenzofuran	132-64-9	NA	NA	NA	NR
Diethylphthalate	84-66-2	50	10000	10000	NR
Dimethylphthalate	131-11-3	50	10000	10000	NR
Fluoranthene	206-44-0	100	2300	10000	0.85 J
Fluorene	86-73-7	100	2300	10000	0.9 U
Hexachlorobenzene	118-74-1	100	0.66	2	NR
Hexachlorobutadiene	87-68-3	100	1	21	NR
Hexachlorocyclopentadiene	77-47-4	100	400	7300	NR
Hexachloroethane	67-72-1	100	6	100	NR
Indeno[1,2,3-cd]pyrene	193-39-5	500	0.9	4	0.23 J
Isophorone	78-59-1	50	1100	10000	NR
N-Nitroso-Di-N-Propylamine	621-64-7	10	0.66	0.66	NR
N-Nitrosodimethylamine	62-75-9	NA	NA	NA	NR
N-Nitrosodiphenylamine	86-30-6	100	140	600	NR
Naphthalene	91-20-3	100	230	4200	0.9 U
Nitrobenzene	98-95-3	10	28	520	NR
Pentachlorophenol	87-86-5	100	6	24	NR
Phenanthrene	85-01-8	NA	NA	NA	0.51 J
Phenol	108-95-2	50	10000	10000	NR
Pyrene	129-00-0	100	1700	10000	1.1
Pyridine	110-88-1	NA	NA	NA	NR

Notes:  
 NJDEP - New Jersey Department of Environmental Protection  
 mg/Kg - Milligrams per Kilograms, equivalent to parts per million  
 U - Not detected at the PQL  
 J - Analyte detected below PQL and/or estimated concentration  
 NR - Analysis not requested  
 Value exceeded the NJDEP residential soil cleanup criteria.  
 Value exceeded the NJDEP non-residential soil cleanup criteria.



Table 4  
 Summary of PCB Soil Sampling Results  
 Naporano Neu Facilities  
 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.5-5.0 AA94325 8/27/1999 mg/kg	BH-N5F 0.5-2.0 AA94655 9/2/1999 mg/kg	BH-N5F 6.0-8.0 AA94656 9/2/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/25/1999 mg/kg	BH-N1 4.0-4.5 AA94150 8/25/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 6/23/1999 mg/kg	MW-C1 S-2 3-3.5 AA90434 6/23/1999 mg/kg	MW-C2 S-1 1-2 AA90327 6/22/1999 mg/kg	MW-C2 S-4 6-7 AA90328 6/25/1999 mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90436 6/23/1999 mg/kg
Aroclor-1016	12674-11-2	50	0.49	2	0.18 U	0.017 U	<b>0.82</b>	<b>2.1</b>	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1221	11104-28-2	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1232	11141-16-5	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1242	53469-21-9	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	0.18 U	0.018 U
Aroclor-1248	12672-29-6	50	0.49	2	<b>5.8</b>	0.4	0.017 U	0.087 U	<b>9</b>	0.017 U	<b>0.8</b>	0.29	<b>2.8</b>	0.01 U	<b>9.7</b>	0.018 U
Aroclor-1254	11097-69-1	50	0.49	2	<b>5.2</b>	0.44	<b>1.1</b>	0.93	0.36 U	0.017 U	0.017 U	0.018 U	0.09 U	0.01 U	<b>3.7</b>	0.018 U
Aroclor-1260	11096-82-5	50	0.49	2	0.18 U	0.017 U	0.017 U	0.087 U	<b>8.7</b>	0.092	0.21	0.064	<b>1.7</b>	0.01 U	0.18 U	0.018 U

Notes:

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U - Not detected at the PQL

J - Analyte detected below PQL and/or estimated concentration

NR - Analysis Not Requested

**Value exceeded the NJDEP residential soil cleanup standard.**

**Value exceeded the NJDEP residential and non-residential soil cleanup standards.**

**Bolded value exceeded the NJDEP impact to groundwater cleanup standard.**



**Table 2  
Summary of Volatile Organic Compounds Soil Sampling Results  
Naporano and Hugo Neu Facilities  
Port Newark  
Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-N2 0.5-1.5 AA94324 8/27/1999 mg/kg	MW-N2 4.2-5.0 AA94325 8/27/1999 mg/kg	TB 8/27 N/A AA94328 8/27/1999 mg/kg	T-BLANK 9/7 N/A AA94745 9/7/1999 mg/kg	BH-N5F 0.5-2.0 AA94655 9/2/1999 mg/kg	BH-N5F 6.0-8.0 AA94656 9/2/1999 mg/kg	TB 9/2 N/A AA94657 9/2/1999 mg/kg	TB 9/3 N/A AA94662 9/2/1999 mg/kg	BH-N1 0.5-1.5 AA94149 8/25/1999 mg/kg	BH-N1 4.0-4.5 AA94150 8/25/1999 mg/kg	MW-C1 S-1 1.5-2.0 AA90433 6/23/1999 mg/kg	MW-C1 S-2 3-3.5 AA90434 6/23/1999 mg/kg	MW-C2 S-1 1-2 AA90327 6/22/1999 mg/kg	MW-C2 S-4 6-7 AA90328 6/25/1999 mg/kg
1,1,1-Trichloroethane	71-55-6	50	210	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,1,2,2-Tetrachloroethane	79-34-5	1	34	70	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,1,2-Trichloroethane	79-00-5	1	22	420	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,1-Dichloroethane	75-34-3	10	570	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,1-Dichloroethene	75-35-4	10	8	150	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,2-Dichlorobenzene	95-50-1	50	5100	10000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,2-Dichloroethane	107-06-2	1	6	24	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,2-Dichloropropane	78-87-5	NA	10	43	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,3-Dichlorobenzene	541-73-1	100	5100	10000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
1,4-Dichlorobenzene	106-46-7	100	570	10000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
2-Butanone	78-93-3	50	1000	1000	3 U	3.2 U	3.1 U	3.1 U	3 U	2.7 U	3.1 U	3.1 U	3.2 U	3.3 U	2.9 U	3.1 U	3.4 U	3.2 U
2-Chloroethylvinylether	110-75-8	NA	NA	NA	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
2-Hexanone	591-78-6	NA	NA	NA	2.4 U	2.6 U	2.5 U	2.5 U	2.4 U	2.2 U	2.5 U	2.5 U	2.5 U	2.6 U	2.3 U	2.5 U	2.7 U	2.6 U
4-Methyl-2-Pentanone	108-10-1	50	1000	1000	2.4 U	2.6 U	2.5 U	2.5 U	2.4 U	2.2 U	2.5 U	2.5 U	2.5 U	2.6 U	2.3 U	2.5 U	2.7 U	2.6 U
Acetone	67-64-1	100	1000	1000	2.4 U	2.6 U	2.5 U	2.5 U	2.4 U	2.2 U	2.5 U	2.5 U	2.5 U	2.6 U	2.3 U	2.5 U	2.7 U	2.6 U
Acrolein	107-02-8	NA	NA	NA	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U	1.6 U	1.9 U	1.9 U	1.9 U	2 U	1.7 U	1.9 U	2 U	1.9 U
Acrylonitrile	107-13-1	1	1	5	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	1.2 U	1.3 U	1.4 U
Benzene	71-43-2	1	3	13	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.14 U	0.13 U
Bromodichloromethane	75-27-4	1	11	46	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Bromoform	75-25-2	1	86	370	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Bromomethane	74-83-9	1	79	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Carbon Disulfide	75-15-0	NA	NA	NA	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Carbon Tetrachloride	56-23-5	1	2	4	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Chlorobenzene	108-90-7	1	37	680	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Chloroethane	75-00-3	NA	NA	NA	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Chloroform	67-66-3	1	19	28	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Chloromethane	74-87-3	10	520	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
cis-1,2-Dichloroethene	156-59-2	1	79	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
cis-1,3-Dichloropropene	10061-01-5	1	4	5	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
di-Isopropyl-ether	108-20-3	NA	NA	NA	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Dibromochloromethane	124-48-1	1	110	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Ethylbenzene	100-41-4	100	1000	1000	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.14 U	0.13 U
M&P-Xylenes	108-38-3	67	410	1000	0.24 U	0.26 U	0.25 U	0.25 U	0.16 J	0.22 U	0.25 U	0.25 U	0.25 U	0.26 U	0.23 U	0.25 U	0.35	0.26 U
Methyl-t-butyl ether	1634-04-4	NA	NA	NA	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.14 U	0.13 U
Methylene Chloride	75-09-2	1	49	210	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
O-Xylene	95-47-6	67	410	1000	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.27	0.13 U
Styrene	100-42-5	100	23	97	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.14 U	0.13 U
t-Butyl Alcohol	75-65-0	NA	NA	NA	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.3 U	1.4 U	1.3 U
Tetrachloroethene	127-18-4	1	4	6	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Toluene	108-88-3	500	1000	1000	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.25	0.13 U
trans-1,2-Dichloroethene	156-60-5	50	1000	1000	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
trans-1,3-Dichloropropene	10061-02-6	1	4	5	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Trichloroethene	79-01-6	1	23	54	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Trichlorofluoromethane	75-69-4	NA	NA	NA	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U
Vinyl Acetate	108-05-4	NA	NA	NA	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.3 U	1.4 U	1.3 U
Vinyl Chloride	75-01-4	10	2	7	0.6 U	0.65 U	0.63 U	0.63 U	0.6 U	0.55 U	0.63 U	0.63 U	0.63 U	0.65 U	0.58 U	0.63 U	0.68 U	0.64 U

**LEGEND**

NJDEP New Jersey Department of Environmental Protection  
mg/kg Milligrams per Kilograms, equivalent to parts per million  
U Not detected at the PQL  
J Analyte detected below PQL, and/or estimated concentration  
NA Not Available  
Shaded value exceeded the NJDEP residential soil cleanup criteria.  
Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria.

**Table 2**  
**Summary of Volatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	MW-C3 S-1 1.5-2.0 AA90435 6/23/1999 mg/kg	MW-C3 S-4 6-7 AA90436 6/23/1999 mg/kg	MW-C4 S-1 1.5-2.0 AA90437 6/23/1999 mg/kg	MW-C4 S-3 5-5.5 AA90438 6/23/1999 mg/kg	MW-C5 S-1 1-2 AA90531 6/24/1999 mg/kg	MW-C5 S-5 8-8.5 AA90532 6/24/1999 mg/kg	PA-C6 S-1 0-1 AA90533 6/24/1999 mg/kg	PA-C6 S-5 8-8.5 AA90534 6/24/1999 mg/kg	PA-C7 S-1 0-1 AA90535 6/24/1999 mg/kg	PA-C7 S-5 8-8.5 AA90536 6/24/1999 mg/kg	TB 6/22 NA AA90329 6/22/1999 mg/kg	TB 6/23 NA AA90439 6/23/1999 mg/kg	TB 6/24 NA AA90329 6/24/1999 mg/kg
1,1,1-Trichloroethane	71-55-6	50	210	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,1,2,2-Tetrachloroethane	79-34-5	1	34	70	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,2-Trichloroethane	79-00-5	1	22	420	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,1-Dichloroethane	75-34-3	10	570	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,1-Dichloroethene	75-35-4	10	8	150	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,2-Dichlorobenzene	95-50-1	50	5100	10000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,2-Dichloroethane	107-06-2	1	6	24	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,2-Dichloropropane	78-87-5	NA	10	43	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,3-Dichlorobenzene	541-73-1	100	5100	10000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1,4-Dichlorobenzene	106-46-7	100	570	10000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
2-Butanone	78-93-3	50	1000	1000	3.4 U	3.4 U	3.5 U	3.5 U	3 U	3.1 U	2.9 U	3 U	3.1 U	2.8 U	3.1 U	3.1 U	3.1 U
1-Chloroethylvinylether	110-75-8	NA	NA	NA	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
1-Hexanone	591-78-6	NA	NA	NA	2.7 U	2.7 U	2.8 U	2.8 U	2.4 U	2.5 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	108-10-1	50	1000	1000	2.7 U	2.7 U	2.8 U	2.8 U	2.4 U	2.5 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
Acetone	67-64-1	100	1000	1000	2.7 U	2.7 U	2.8 U	2.8 U	2.4 U	2.4 U	2.3 U	2.4 U	2.4 U	2.3 U	2.5 U	2.5 U	2.5 U
Acrolein	107-02-8	NA	NA	NA	2 U	2 U	2.1 U	2.1 U	1.8 U	1.9 U	1.7 U	1.8 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U
Acrylonitrile	107-13-1	1	1	5	1.4 U	1.3 U	1.4 U	1.4 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
Benzene	71-43-2	1	3	13	0.14 U	0.13 U	0.17	0.14 U	0.12 U	0.12 U	0.11 U	0.12 U	0.26	0.11 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	75-27-4	1	11	46	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Bromoform	75-25-2	1	86	370	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Bromomethane	74-83-9	1	79	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Carbon Disulfide	75-15-0	NA	NA	NA	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Carbon Tetrachloride	56-23-5	1	2	4	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Chlorobenzene	108-90-7	1	37	680	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Chloroethane	75-00-3	NA	NA	NA	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Chloroform	67-66-3	1	19	28	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Chloromethane	74-87-3	10	520	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
cis-1,2-Dichloroethene	156-59-2	1	79	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
cis-1,3-Dichloropropene	10061-01-5	1	4	5	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Di-Isopropyl-ether	108-20-3	NA	NA	NA	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Dibromochloromethane	124-48-1	1	110	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Dibutylbenzene	100-41-4	100	1000	1000	0.14 U	0.13 U	0.37	0.14 U	0.12 U	0.12 U	0.13	0.12 U	0.81	0.11 U	0.13 U	0.13 U	0.13 U
M&P-Xylenes	108-38-3	67	410	1000	0.34	0.27 U	0.33	0.28 U	0.15 J	0.25 U	0.36	0.24 U	3.8	0.23 U	0.25 U	0.25 U	0.25 U
Methyl-t-butyl ether	1634-04-4	NA	NA	NA	0.14 U	0.13 U	0.14 U	0.14 U	0.12 U	0.12 U	0.11 U	0.12 U	1.4	0.11 U	0.13 U	0.13 U	0.13 U
Methylene Chloride	75-09-2	1	49	210	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
m-Xylene	95-47-6	67	410	1000	0.14 U	0.13 U	0.14 U	0.14 U	0.12 U	0.12 U	0.2	0.12 U	1.6	0.11 U	0.13 U	0.13 U	0.13 U
o-Xylene	100-42-5	100	23	97	0.35	0.13 U	0.65	0.14 U	0.12 U	0.12 U	0.11 U	0.12 U	3.2	0.11 U	0.13 U	0.13 U	0.13 U
n-Butyl Alcohol	75-65-0	NA	NA	NA	1.4 U	1.3 U	1.4 U	1.4 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
Tetrachloroethene	127-18-4	1	4	6	0.16 J	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Toluene	108-88-3	500	1000	1000	0.15	0.13 U	0.42	0.14 U	0.21	0.12 U	0.2	0.12 U	3.2	0.11 U	0.13 U	0.13 U	0.13 U
trans-1,2-Dichloroethene	156-60-5	50	1000	1000	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
trans-1,3-Dichloropropene	10061-02-6	1	4	5	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Trichloroethene	79-01-6	1	23	54	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Trichlorofluoromethane	75-69-4	NA	NA	NA	0.69	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U
Vinyl Acetate	108-05-4	NA	NA	NA	1.4 U	1.3 U	1.4 U	1.4 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
Vinyl Chloride	75-01-4	10	2	7	0.68 U	0.67 U	0.69 U	0.69 U	0.59 U	0.62 U	0.57 U	0.6 U	0.61 U	0.57 U	0.63 U	0.63 U	0.63 U

**LEGEND**

NJDEP New Jersey Department of Environmental Protection  
 mg/kg Milligrams per Kilograms, equivalent to parts per million  
 U Not detected at the PQL  
 J Analyte detected below PQL and/or estimated concentration  
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 Port Newark  
 Newark, New Jersey

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB1 2-2.5 2-2.5 AA90503 6/23/1999 mg/kg	SB1 0.5-1 0.5-1 AA90504 6/23/1999 mg/kg	SB2 1-1.5 1-1.5 AA90505 6/23/1999 mg/kg	SB2 3-3.5 3-3.5 AA90506 6/23/1999 mg/kg	SB3 1-1.5 1-1.5 AA90507 6/23/1999 mg/kg	SB3 3-3.5 3-3.5 AA90508 6/23/1999 mg/kg	SB-5A 0-0.5 0-0.5 AA90509 6/23/1999 mg/kg	SB-5A 1.5-2 1.5-2 AA90510 6/23/1999 mg/kg	SB-5A 2.5-3 2.5-3 AA90511 6/23/1999 mg/kg	SB-5A 6.5-7 6.5-7 AA90512 6/23/1999 mg/kg	SB-5B 0-0.5 0-0.5 AA90513 6/23/1999 mg/kg	SB-5B 2.5-3 2.5-3 AA90514 6/23/1999 mg/kg	SB-5B 7-7.5 7-7.5 AA90515 6/23/1999 mg/kg
1,1,1-Trichloroethane	71-55-6	50	210	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,1,2,2-Tetrachloroethane	79-34-5	1	34	70	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,1,2-Trichloroethane	79-00-5	1	22	420	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,1-Dichloroethane	75-34-3	10	570	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,1-Dichloroethene	75-35-4	10	8	150	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,2-Dichlorobenzene	95-50-1	50	5100	10000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,2-Dichloroethane	107-06-2	1	6	24	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,2-Dichloropropane	78-87-5	NA	10	43	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,3-Dichlorobenzene	541-73-1	100	5100	10000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1,4-Dichlorobenzene	106-46-7	100	570	10000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
2-Butanone	78-93-3	50	1000	1000	3 U	3.2 U	4.2 U	3 U	3.1 U	3.4 U	4 U	2.7 U	3.1 U	4.2 U	3.2 U	3.2 U	3 U
1-Chloroethylvinylether	110-75-8	NA	NA	NA	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
1-Hexanone	591-78-6	NA	NA	NA	2.4 U	2.6 U	3.3 U	2.4 U	2.5 U	2.7 U	3.2 U	2.2 U	2.4 U	3.4 U	2.5 U	2.5 U	2.4 U
4-Methyl-2-Pentanone	108-10-1	50	1000	1000	2.4 U	2.6 U	3.3 U	2.4 U	2.5 U	2.7 U	3.2 U	2.2 U	2.4 U	3.4 U	2.5 U	2.5 U	2.4 U
Acetone	67-64-1	100	1000	1000	2.4 U	2.6 U	3.3 U	2.4 U	2.5 U	2.7 U	3.2 U	2.2 U	2.4 U	3.4 U	2.5 U	2.5 U	2.4 U
Acrolein	107-02-8	NA	NA	NA	1.8 U	1.9 U	2.5 U	1.8 U	1.9 U	2 U	2.4 U	1.6 U	1.8 U	2.5 U	1.9 U	1.9 U	1.8 U
Acrylonitrile	107-13-1	1	1	5	1.2 U	1.3 U	1.7 U	1.2 U	1.2 U	1.4 U	1.6 U	1.1 U	1.2 U	1.7 U	1.3 U	1.3 U	1.2 U
Benzene	71-43-2	1	3	13	0.12 U	0.13 U	0.17 U	0.12 U	0.12 U	0.14 U	0.16 U	0.11 U	0.12 U	0.17 U	0.13 U	0.13 U	0.12 U
Bromodichloromethane	75-27-4	1	11	46	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Bromoform	75-25-2	1	86	370	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Bromomethane	74-83-9	1	79	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Carbon Disulfide	75-15-0	NA	NA	NA	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Carbon Tetrachloride	56-23-5	1	2	4	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Chlorobenzene	108-90-7	1	37	680	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Chloroethane	75-00-3	NA	NA	NA	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Chloroform	67-66-3	1	19	28	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Chloromethane	74-87-3	10	520	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
cis-1,2-Dichloroethene	156-59-2	1	79	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
cis-1,3-Dichloropropene	10061-01-5	1	4	5	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Di-Isopropyl-ether	108-20-3	NA	NA	NA	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Dibromochloromethane	124-48-1	1	110	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Dihylbenzene	100-41-4	100	1000	1000	0.12 U	0.13 U	0.17 U	0.12 U	0.12 U	0.14 U	0.16 U	0.11 U	0.12 U	0.17 U	0.13 U	0.13 U	0.12 U
M&P-Xylenes	108-38-3	67	410	1000	0.24 U	0.26 U	0.33 U	0.24 U	0.25 U	0.27 U	0.32 U	0.17 U	0.24 U	0.34 U	0.25 U	0.25 U	0.24 U
Methyl-t-butyl ether	1634-04-4	NA	NA	NA	0.12 U	0.13 U	0.17 U	0.12 U	0.12 U	0.14 U	0.16 U	0.11 U	0.12 U	0.17 U	0.13 U	0.13 U	0.12 U
Methylene Chloride	75-09-2	1	49	210	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
m-Xylene	95-47-6	67	410	1000	0.12 U	0.13 U	0.17 U	0.12 U	0.12 U	0.14 U	0.16 U	0.11 U	0.12 U	0.17 U	0.13 U	0.13 U	0.12 U
Styrene	100-42-5	100	23	97	0.12 U	0.13 U	0.17 U	0.12 U	0.12 U	0.14 U	0.16 U	0.11 U	0.12 U	0.17 U	0.13 U	0.13 U	0.12 U
t-Butyl Alcohol	75-65-0	NA	NA	NA	1.2 U	1.3 U	1.7 U	1.2 U	1.2 U	1.4 U	1.6 U	1.1 U	1.2 U	1.7 U	1.3 U	1.3 U	1.2 U
Tetrachloroethene	127-18-4	1	4	6	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Toluene	108-88-3	500	1000	1000	0.12 U	0.13 U	0.17 U	0.12 U	0.12 U	0.14 U	0.16 U	0.11 U	0.12 U	0.17 U	0.13 U	0.13 U	0.12 U
trans-1,2-Dichloroethene	156-60-5	50	1000	1000	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
trans-1,3-Dichloropropene	10061-02-6	1	4	5	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Trichloroethene	79-01-6	1	23	54	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U
Trichlorofluoromethane	75-69-4	NA	NA	NA	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	1.1	0.64 U	0.6 U
Vinyl Acetate	108-05-4	NA	NA	NA	1.2 U	1.3 U	1.7 U	1.2 U	1.2 U	1.4 U	1.6 U	1.1 U	1.2 U	1.7 U	1.3 U	1.3 U	1.2 U
Vinyl Chloride	75-01-4	10	2	7	0.6 U	0.65 U	0.83 U	0.59 U	0.62 U	0.68 U	0.81 U	0.54 U	0.61 U	0.85 U	0.64 U	0.64 U	0.6 U

LEGEND

NJDEP New Jersey Department of Environmental Protection  
 mg/kg Milligrams per Kilograms, equivalent to parts per million  
 U Not detected at the PQL  
 J Analyte detected below PQL and/or estimated concentration  
 NA Not Available  
 Shaded value exceeded the NJDEP residential soil cleanup criteria.  
 Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria.

**Table 2**  
**Summary of Volatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-5C 2-2.5 2-2.5 AA90516 6/23/1999 mg/kg	SB-5C 3.5-4 3.5-4 AA90517 6/23/1999 mg/kg	SB-5D 0-0.5 0-0.5 AA90528 6/25/1999 mg/kg	SB-5D 3.5-4 3.5-4 AA90529 6/25/1999 mg/kg	SB-5E 0.5-1 0.5-1 AA90518 6/23/1999 mg/kg	SB-5E 2.5-3 2.5-3 AA90519 6/23/1999 mg/kg	SB-5E 6-6.5 6-6.5 AA90520 6/23/1999 mg/kg	SB-5E 9.5-10 9.5-10 AA90521 6/23/1999 mg/kg	SB-4A 1.0-1.5 1-1.5 AA90524 6/24/1999 mg/kg	SB-4A 5.5-6 5.5-6 AA90525 6/24/1999 mg/kg
1,1,1-Trichloroethane	71-55-6	50	210	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,1,2,2-Tetrachloroethane	79-34-5	1	34	70	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,1,2-Trichloroethane	79-00-5	1	22	420	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,1-Dichloroethane	75-34-3	10	570	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,1-Dichloroethene	75-35-4	10	8	150	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,2-Dichlorobenzene	95-50-1	50	5100	10000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,2-Dichloroethane	107-06-2	1	6	24	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,2-Dichloropropane	78-87-5	NA	10	43	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,3-Dichlorobenzene	541-73-1	100	5100	10000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
1,4-Dichlorobenzene	106-46-7	100	570	10000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
2-Butanone	78-93-3	50	1000	1000	3 U	3.1 U	2.9 U	2.9 U	2.7 U	3.1 U	3.3 U	3 U	2.9 U	2.9 U
2-Chloroethylvinylether	110-75-8	NA	NA	NA	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
2-Hexanone	591-78-6	NA	NA	NA	2.4 U	2.4 U	2.4 U	2.3 U	2.2 U	2.4 U	2.6 U	2.4 U	2.3 U	2.3 U
4-Methyl-2-Pentanone	108-10-1	50	1000	1000	2.4 U	2.4 U	2.4 U	2.3 U	2.2 U	2.4 U	2.6 U	2.4 U	2.3 U	2.3 U
Acetone	67-64-1	100	1000	1000	2.4 U	2.4 U	2.4 U	2.3 U	2.2 U	2.4 U	2.6 U	2.4 U	2.3 U	2.3 U
Acrolein	107-02-8	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	2 U	1.8 U	1.7 U	1.7 U
Acrylonitrile	107-13-1	1	1	5	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Benzene	71-43-2	1	3	13	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U
Bromodichloromethane	75-27-4	1	11	46	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Bromofom	75-25-2	1	86	370	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Bromomethane	74-83-9	1	79	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Carbon Disulfide	75-15-0	NA	NA	NA	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Carbon Tetrachloride	56-23-5	1	2	4	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Chlorobenzene	108-90-7	1	37	680	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Chloroethane	75-00-3	NA	NA	NA	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Chloroform	67-66-3	1	19	28	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Chloromethane	74-87-3	10	520	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
cis-1,2-Dichloroethene	156-59-2	1	79	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
cis-1,3-Dichloropropene	10061-01-5	1	4	5	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
di-Isopropyl-ether	108-20-3	NA	NA	NA	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Dibromochloromethane	124-48-1	1	110	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Ethylbenzene	100-41-4	100	1000	1000	0.12 U	0.12 U	0.12 U	0.12 U	3.4	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U
M&P-Xylenes	108-38-3	67	410	1000	0.23 J	0.24 U	0.24 U	0.23 U	7.8	0.27	0.26 U	0.24 U	0.23 U	0.23 U
Methyl-t-butyl ether	1634-04-4	NA	NA	NA	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U
Methylene Chloride	75-09-2	1	49	210	0.6 U	0.61 U	0.48 J	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
O-Xylene	95-47-6	67	410	1000	0.12 U	0.12 U	0.12 U	0.12 U	2.7	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U
Styrene	100-42-5	100	23	97	0.12 U	0.12 U	0.49	0.12 U	0.7	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U
t-Butyl Alcohol	75-65-0	NA	NA	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Tetrachloroethene	127-18-4	1	4	6	0.29 J	0.61 U	0.59 U	0.58 U	0.77	0.15 J	0.65 U	0.61 U	0.58 U	0.58 U
Toluene	108-88-3	500	1000	1000	0.14	0.12 U	0.12 U	0.12 U	0.22	0.18	0.13 U	0.12 U	0.12 U	0.12 U
trans-1,2-Dichloroethene	156-60-5	50	1000	1000	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
trans-1,3-Dichloropropene	10061-02-6	1	4	5	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Trichloroethene	79-01-6	1	23	54	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Trichlorofluoromethane	75-69-4	NA	NA	NA	0.6 U	0.61 U	0.38 J	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U
Vinyl Acetate	108-05-4	NA	NA	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Vinyl Chloride	75-01-4	10	2	7	0.6 U	0.61 U	0.59 U	0.58 U	0.54 U	0.61 U	0.65 U	0.61 U	0.58 U	0.58 U

**LEGEND**

NJDEP New Jersey Department of Environmental Protection  
mg/kg Milligrams per Kilograms, equivalent to parts per million  
U Not detected at the PQL  
J Analyte detected below PQL and/or estimated concentration  
NA Not Available  
Shaded value exceeded the NJDEP residential soil cleanup criteria.  
Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria.

**Table 2**  
**Summary of Volatile Organic Compounds Soil Sampling Results**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

Client Sample ID: Sampling Depth (ft) Veritech Sample ID: Sampling Date: Units:	CAS Number	NJDEP Impact to Groundwater Soil Cleanup Criteria mg/kg	NJDEP Residential Direct Contact Soil Cleanup Criteria mg/kg	NJDEP Non-Residential Direct Contact Soil Cleanup Criteria mg/kg	SB-4B 0.5-1 0.5-1 AA90526 6/24/1999 mg/kg	SB-4B 5.5-6 5.5-6 AA90527 6/24/1999 mg/kg	TB 6/23 NA AA90522 6/23/1999 mg/kg	TB 6/24 NA AA90523 6/24/1999 mg/kg	TB 6/25 NA AA90530 6/25/1999 mg/kg	PA-C6-E6-01 2.0-2.5 AB56547 4/29/2002 mg/kg	PA-C6-E7-02 3.0-4.0 AB56551 4/29/2002 mg/kg	PA-C6-S7-02 3.0-4.0 AB56558 4/29/2002 mg/kg
1,1,1-Trichloroethane	71-55-6	50	210	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,1,2,2-Tetrachloroethane	79-34-5	1	34	70	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,1,2-Trichloroethane	79-00-5	1	22	420	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,1-Dichloroethane	75-34-3	10	570	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,1-Dichloroethene	75-35-4	10	8	150	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,2-Dichlorobenzene	95-50-1	50	5100	10000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U			
1,2-Dichloroethane	107-06-2	1	6	24	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,2-Dichloropropane	78-87-5	NA	10	43	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
1,3-Dichlorobenzene	541-73-1	100	5100	10000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U			
1,4-Dichlorobenzene	106-46-7	100	570	10000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U			
2-Butanone	78-93-3	50	1000	1000	3.2 U	2.8 U	3.1 U	3.1 U	3.1 U	0.028 U	0.027 U	0.027 U
2-Chloroethylvinylether	110-75-8	NA	NA	NA	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
2-Hexanone	591-78-6	NA	NA	NA	2.6 U	2.2 U	2.5 U	2.5 U	2.5 U	0.022 U	0.021 U	0.022 U
4-Methyl-2-Pentanone	108-10-1	50	1000	1000	2.6 U	2.2 U	2.5 U	2.5 U	2.5 U	0.022 U	0.021 U	0.022 U
Acetone	67-64-1	100	1000	1000	2.6 U	2.2 U	2.5 U	2.5 U	2.5 U	0.078 U	0.0137 U	0.047 U
Acrolein	107-02-8	NA	NA	NA	1.9 U	1.7 U	1.9 U	1.9 U	1.9 U	0.017 U	0.016 U	0.016 U
Acrylonitrile	107-13-1	1	1	5	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	0.0077 U	0.0074 U	0.0075 U
Benzene	71-43-2	1	3	13	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U	0.0011 U	0.0011 U	0.0011 U
Bromodichloromethane	75-27-4	1	11	46	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Bromoform	75-25-2	1	86	370	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Bromomethane	74-83-9	1	79	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Carbon Disulfide	75-15-0	NA	NA	NA	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0011 U	0.0054 U
Carbon Tetrachloride	56-23-5	1	2	4	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Chlorobenzene	108-90-7	1	37	680	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Chloroethane	75-00-3	NA	NA	NA	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Chloroform	67-66-3	1	19	28	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Chloromethane	74-87-3	10	520	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
cis-1,2-Dichloroethene	156-59-2	1	79	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
cis-1,3-Dichloropropene	10061-01-5	1	4	5	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
di-Isopropyl-ether	108-20-3	NA	NA	NA	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U			
Dibromochloromethane	124-48-1	1	110	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Ethylbenzene	100-41-4	100	1000	1000	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U	0.0064 U	0.0013 U	0.0016 U
M&P-Xylenes	108-38-3	67	410	1000	0.59 U	0.22 U	0.25 U	0.25 U	0.25 U	0.0051 U	0.0017 U	0.0065 U
Methyl-t-butyl ether	1634-04-4	NA	NA	NA	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U			
Methylene Chloride	75-09-2	1	49	210	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0062 U	0.008 U	0.007 U
O-Xylene	95-47-6	67	410	1000	0.26 U	0.11 U	0.13 U	0.13 U	0.13 U	0.011 U	0.0028 U	0.0031 U
Styrene	100-42-5	100	23	97	0.57 U	0.11 U	0.13 U	0.13 U	0.13 U	0.0028 U	0.0011 U	0.0011 U
t-Butyl Alcohol	75-65-0	NA	NA	NA	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U			
Tetrachloroethene	127-18-4	1	4	6	0.37 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0026 U	0.0022 U	0.0012 U
Toluene	108-88-3	500	1000	1000	0.13 U	0.11 U	0.13 U	0.13 U	0.13 U	0.0036 U	0.0021 U	0.0011 U
trans-1,2-Dichloroethene	156-60-5	50	1000	1000	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
trans-1,3-Dichloropropene	10061-02-6	1	4	5	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Trichloroethene	79-01-6	1	23	54	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	0.0054 U
Trichlorofluoromethane	75-69-4	NA	NA	NA	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U			
Vinyl Acetate	108-05-4	NA	NA	NA	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U			
Vinyl Chloride	75-01-4	10	2	7	0.64 U	0.56 U	0.63 U	0.63 U	0.63 U	0.0056 U	0.0053 U	ND

**LEGEND**

NJDEP New Jersey Department of Environmental Protection  
mg/kg Milligrams per Kilograms, equivalent to parts per million  
U Not detected at the PQL  
J Analyte detected below PQL and/or estimated concentration  
NA Not Available  
Shaded value exceeded the NJDEP residential soil cleanup criteria.  
Bolded value exceeded the NJDEP impact to ground water soil cleanup criteria.





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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: PN- Motra Metals Site

LOCATION: Asland out in Field 95 per Drawing DATE: 6/23/99

CRING No: MAU-CY TOTAL No. OF SAMPLES: 2

CHARACTER OF ALL PRESENT AT SAMPLING

RELINQUISHED	DATE	RECEIVED
<u>[Signature]</u>	<u>6/23/99</u>	
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
(SIGN)	TIME	BY LAB

MARKS:

- Soil Samples for 1-16oz jar & 1 Met hand Sed. Bottle Each





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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: <i>PN-Metro Metals Site</i>	
LOCATION: <i>As laid out ± 180' So. of C-6</i>	DATE: <i>6-24-99</i>
BORING No: <i>MW-C5</i>	TOTAL No. OF SAMPLES: <i>2</i>

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Ryan*

RELINQUISHED

DATE *6-24-99*

RECEIVED

BY (SIGN)

*T. Ryan*

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS: *2 samples in 2-16 oz jars & 2 meth jars*

PA 547  
6-90

**THE PORT AUTHORITY OF NY & NJ**  
Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3

PROJECT PN - Metro Metals Site	NAME OF CONTRACTOR Crag	BORING NO. PA-CL6	SURFACE ELEV.
LOCATION as laid out per drawing	CONTRACT NO. 426-99-006	DATE 6-24-99	

SPOON 3 O.D. 2 3/8 I.D. Augers	HOLE TYPE 1	GROUND WATER LEVEL	
HAMMER 140 # FALL 30"	HAMMER # FALL	Date 6-24-99	Time AM
DRILLER D Oauch	INSPECTOR T. Ryan	Depth 8.5'	Remarks In S-5

CASING LOW/FT.	DEPTH	SPOON BLOWERS*	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hand Auger	Fell Rec	1	Fill - Bl C-F Sand, little cinders, lit Gr. <small>RISE FILL - Metals, Salt, Sand, Water</small>
				2	More Fell - Metals, Sand, Wood.
	5			3	Same
				4	Fill - Bl C-F Sand, lit Shells, lit Gr. to
				5	Same
	10				Bottom of Boring <span style="float: right;">10.0'</span>

Meth Bottle # C-138 was used for S-1  
" " # C-136 was used for S-5

Note: Samples # 1 & 5 were saved for testing. all other samples were screened w/ #10 & then discarded.

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - (1) - undisturbed; A - auger; OFR - open end rod; V - vane



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN - Metro Metals Site*

LOCATION: *As laid out per drawing*

DATE: *6-24-99*

BORING No: *PA - C6*

TOTAL No. OF SAMPLES: *2*

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Ryan*

RELINQUISHED

DATE *6-24-99* RECEIVED

BY (SIGN)

*T. Ryan*

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*2 samples in 2-16oz jars & 2-meth jars*

PA 547  
6-90

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**BORING REPORT**

SHEET 1 OF 3

PROJECT PN - Metro Metal Site		NAME OF CONTRACTOR Craig		BORING NO. PA-C7	SURFACE ELEV.
LOCATION As laid out per drawing				CONTRACT NO. 426-99-006	DATE 6-24-99
SPOON 3 O.D. 2 3/8 I.D.	CASING SIZE Auger	HOLE TYPE 1	GROUND WATER LEVEL		
HAMMER 140 # FALL 30'	HAMMER		Date 6-24-99	Time PM	Depth 8.5'
DRILLER D. Osuch			Remarks In S-5		
INSPECTOR T. Ryan					

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/FT.	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
		Hand Auger	Full Rec	1	Fill - Rd M-F Sand, lit Gr, to Surf
				2	Fill - Br C-F Sand, to Shells, to Gr.
				3	Same
	5			4	Fill - Rd Br Sand & Gr, to Shells
		7-12	18"		
		15-20			
		15-17			
	16	20-20	20"	5	Same
					Bottom of Boring

Meth Bottle = C-132 was used for S-1  
" " # C-141 was used for S-5

Note: Samples # 1 & 5 were saved for testing. All other samples were screened w/ PIA & then discarded.

NOTES: 1 - Length recovered; 0 - Loss of Sample, T - Trap used  
2 - 11 - unattached; 2 - auger; OER = open end rod; V = vane







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Materials Engineering Section

**BORING REPORT**

PROJECT <b>Pt O Port's Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BM-N6</b>	SHEET <b>1</b> OF <b>3</b>
TOWN <b>Leadw by Pt Survey</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>10/2/00</b>	SURFACE ELEV.

1" O.D. Auger "I.D.	CASING SIZE	HOLE TYPE <b>↓</b>
# FALL	HAMMER	# FALL
OPERATOR <b>P. Pasculli</b> <b>D. Howe</b>		

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
10/2	8:10 AM	Dry	

DEPTH (FT.)	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	C.O. OR
0	Hand Auger ↓	F/U ↓	1	Disc fill - Sand, gravel, wood, silt, etc.	15
5					
10					
15					
20					
26					

*Bottom of Boring* ↗

*All Soil checked with PID Meter  
5<sup>th</sup> L Saved for Testing  
Remaining Soil Discarded*

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD


Sheet 3 of 3

1. SUBJECT: PN- Pto Parts Fec

2. LOCATION: As laid out by OA Survey DATE: 10/2/00

3. IDENTIFYING No: BH-N6 TOTAL No. OF SAMPLES: 1 Seal

4. NATURE OF ALL PRESENT AT SAMPLING 

UNOBTAINED (SIGN)	DATE	RECEIVED
	10/2/00	

UNOBTAINED (SIGN)	DATE	RECEIVED

UNOBTAINED (SIGN)	DATE	RECEIVED

5. REMARKS:  
Seal ~~sample~~ <sup>sample</sup> by 1-bag per

Cel

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## BORING REPORT

SHEET 1 OF 1  
SURFACE ELEV.

PROJECT 23 NAPOLANO SITE - BERTH 63	NAME OF CONTRACTOR CRAIG	BORING NO. BH-NSD	DATE 8/27/99
LOCATION 5' South from BH-NSC		CONTRACT NO. 426-99-007	

DRILLER S. Buens	OPERATOR M. Judch	GROUND WATER LEVEL					
*O.D.	*I.D.	CASING SIZE	HOLE TYPE	Date	Time	Depth	Remarks
# FALL		HAMMER					
# FALL							

DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hard Auger	Full	-	Misc. fill
5				Obstruction found at ±2.6' Relocated Boring
10				
15				
20				
25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 ... of water, surface water, sand heave in casing, etc

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**BORING REPORT**

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SHEET 1 OF 3  
SURFACE ELEV.

PROJECT PN - NAPORANO SITE - BERTH 63	NAME OF CONTRACTOR CRAIG	BORING NO. 3H N5F	SHEET 1 OF 3 SURFACE ELEV.
LOCATION ± 24' NORTH-WEST OF THE ORIGINAL LOCATION	CONTRACT NO. 426-99-007	DATE 9-2-99	

SPOON 3 -0.0. 2 1/8 -1.0. CASING SIZE AUGER. HOLE TYPE HAMMER (SAFETY) 140 # FALL 30 - HAMMER # FALL	GROUND WATER LEVEL Date 9-2-99 Time PM Depth 7.0' Remarks Sample # 4
DRILLER D. OUSCH	
INSPECTOR CARLOS L. PEREZ	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
AUGER	0	ROLLED BY HAND AUGER			ASPHALT
			18"	1	MISC. FILL (TOOK ENVIRONMENTAL SAMPLE) CRUSHED ROCK, SAND, SILT
			24"	2	MISC. FILL - CRUSHED ROCK, SAND, METALS
	5		24"	3A	SAME AS ABOVE
		8-10		3B	FILL - brown c-f SAND, little gravel, tr. silt
		17-16	20"	4	USED 3" SPOON. (TOOK ENVIRONMENTAL SAMPLE) SAME AS ABOVE
	10				BOTTOM OF BORING
	15				
	20				
	25				

NOTE: ALL SAMPLES WERE SCREENED USING THE MINI RAE. SAMPLES 1 & 4 WERE SAVED THE REMAINING SAMPLES WERE DISCARDED.

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Loss of depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc





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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - NAPORANO SITE - BERTH 63	
LOCATION: ± 24' NORTH. WEST OF THE ORIGINAL LOCATION	DATE: 9-2-99
BORING No: BH NSF	TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING

*Capt. J. Perez*

RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	RECEIVED BY LAB

REMARKS:

2 - 16oz JAR OF SOIL SAMPLE.

METH. BOTTLE:

SAMPLE # 1 → E271

SAMPLE # 4 → E267

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Materials Engineering Section  
**BORING REPORT**

A 547  
0-00

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: **PN - NAPORANO SITE - BERTH 63** NAME OF CONTRACTOR: **CRAIG Drilling** BORING NO.: **BH-N1**

LOCATION: **hard out in the field as per drawing** CONTRACT NO.: **426-99-007** DATE: **8/25/99**

SPoon	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
AMMER (SAFETY)	HAMMER	# FALL	Date	Time	Depth	Remarks
3" O.D.	2 3/8" I.D.	1 1/2" Augers	8/25	AM	5.0'	found in S#3
140 # FALL	30"	# FALL				

DRILLER: **S. Burns**  
INSPECTOR: **M. Oudeh**

CASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				ASPHALT Pavement 0.3'
Hand Auger		Hand Auger	Full	1 A	Misc. Fill Sand, Metal, Gravel, Wood, Rubber, ETC. 19'
				2	Fill gray m-f Sand, fr. gravel, fr. silt
	5			3 A	Same
1 1/2" AUGER		1-0	22"	B	gray br silty clay, fr. fine sand 5.8'
		1-1		4	Same
		1-1	24"	5 A	Same
	10	3-3		B	PEAT 9.4'
					Bottom of Boring 10.0'
					All samples were screened for VOC's with a PID the following samples were saved: 0.5' - 1.5' SAVED 4' - 4.5' SAVED AND THE REMAINING WERE DISCARDED.
	15				
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



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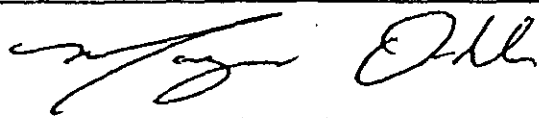
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CHAIN OF CUSTODY RECORD

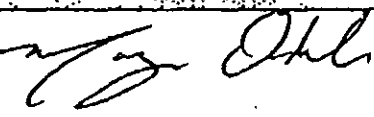
Sheet 3 of 3

PROJECT: PN NAPORANO SITE - BERTH 63

LOCATION: Laid out in the field as per drawing DATE: 8/25/99

BORING No: BH-N 1 TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING  


RELINQUISHED	DATE	RECEIVED
	<u>8/25/99</u>	
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS: 2 Samples taken in 2 one pt. JARS, ~~2~~ 2 WAS, AND  
0.5' - 1.5' Bottle # E146  
4.0' - 4.5' Bottle # E147

1. 547  
6-00

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## BORING REPORT

SHEET 1 OF 4  
SURFACE ELEV.

PROJECT: PN - NAPORANOSITE - BERTH 63  
NAME OF CONTRACTOR: CRAIG  
BORING NO.: MW-N2

LOCATION: Laid out in the field as per drawing  
CONTRACT NO.: 426-99-007  
DATE: 8/27/99

SPOON: 3" O.D. 2 3/8" I.D.  
HAMMER (Safety): 30"  
# FALL: 40"  
CASING SIZE: 4 1/2" Aug.  
HOLE TYPE: Type "A" HD  
HAMMER: # FALL

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
8/27	12:44 pm	5.5'	Found in S#3

DRILLER: S. BURNS  
SPECTOR: M. Oudeh

CASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand	0	Hand	full	1	Asphalt pavement 0.3'
Auger		Auger		2A	Misc. fill sand, wood, metal, etc
				2B	same
	5			3	fill grey m.f. sand & gravel, tr. silt 3.5'
				3	same
Auger		11-16	20"	4	fill grey-br. ct sand, little gravel, tr. silt
		14-16			
		6-8	20"	5A	fill br. grey ct sand, little gravel, little silt 9.8'
		8-8		5B	red-br. clayey silt, little fine sand
	10	2-2	18"	6A	same 11.2'
		2-2		6B	PERT 12.0'
					Bottom of Boring
	15				
	20				
	25				

NOTE: All samples were screened for VOC'S WITH A PID. S#1 (0.5'-1.5') AND #3 (4.5'-5.0') WERE SAVED AND THE REMAINING WERE DISCARDED.

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: PN - NAPORANO SITE - Berth 63	
LOCATION: laid out in the field as per drawing	DATE: 8/27/99
BORING No: MW-22	TOTAL No. OF SAMPLES: 2

SIGNATURE OF ALL PRESENT AT SAMPLING

*[Signature]* OHL

RELINQUISHED <i>[Signature]</i> OHL	DATE 8/27/99	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)

RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS: 2 Samples taken in 2 one pt. JARS

and 2 VOA's Also:

Bottle # E205 0.5' - 1.5'

Bottle # E203 4.5' - 5.0'

# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT <b>PN - Former Metro Metals</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>PA-C6-E-1</b>	SURFACE ELEV.
LOCATION <b>1' east of PA-C6</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>12/3/01</b>	

METHOD	"O.D."	"I.D."	CASING SIZE	HOLE TYPE <b>Hand Auger</b>	GROUND WATER LEVEL			
					Date	Time	Depth	Remarks
DRILLER <b>Alan Sidas</b>					<b>12/3/01</b>	<b>1:32 P</b>		<b>No water</b>
DIRECTOR <b>T. Ryan</b>								

BORING NO./FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS
					LINE LOCATES CHANGE OF PROFILE
with lead ↓	0				Asphalt
					2.0'
	2.5	Hand Auger	Full Rec.	1	Mix Fill - Sand, Cinders, Wood, Gravel
		↓	↓	2	Same
				3	Same
				4	Same
	5				Bottom of Boring
					4.0' ↑

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PW - Former Metro Metals

LOCATION: ± 1' east of PA-C6

DATE: 12/3/01

DRILLING No: PA-C6-E1

TOTAL No. OF SAMPLES: 4 + 1 Dup

SIGNATURE OF ALL

1. PRESENT AT SAMPLING

*T. Ryan*

2. UNOBTAINED

DATE 12/3/01 RECEIVED

BY (SIGN)

*T. Ryan*

TIME BY (SIGN)

3. UNOBTAINED

DATE RECEIVED

BY (SIGN)

TIME BY (SIGN)

4. UNOBTAINED

DATE RECEIVED

BY (SIGN)

TIME BY LAB

REMARKS:

4 samples in 4-16oz jars & 1-~~to~~ Duplicate in 1. 10oz jar

(S-2 Dup)

# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

PROJECT <b>PN - Former Metro Metals</b>		NAME OF CONTRACTOR <b>Craig</b>		BORING NO. <b>PAC6-E2</b>		SHEET <b>1</b> OF <b>3</b>	
LOCATION <b>± S' East of PAC6</b>				CONTRACT NO. <b>426-99-006</b>		SURFACE ELEV.	
OPERATOR <b>A. Kidas</b>		SUPERVISOR <b>T. Ryan</b>		DATE <b>12/5/01</b>			
Casing Size "O.D.      "I.D.		Hole Type <b>H. Auger</b>		GROUND WATER LEVEL			
HAMMER # FALL		# FALL		Date	Time	Depth	Remarks
				<b>12/5/01</b>			<b>No water</b>
SING. WS/FT.		DEPTH		*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE			
SPOON BLOWS/6"		RE-COV'D					
SAMP. NO.				<b>Asphalt</b>  <b>Mix Fill - Cinders, Gr, Wood, Sand, Metal</b>  <b>Sand</b> <b>Sand</b> <b>Sand</b> <b>Sand</b>			
0							
Hand Auger		Full					
2.5							
5.0							
				<b>Bottom of Boring</b> ↑ <b>4.0'</b>			

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN - Former Metro Metals

LOCATION: ± 5' East of PAC 6

DATE: 12/5/01

DRIING No: PACG-EZ

TOTAL No. OF SAMPLES: 4

SIGNATURE OF ALL

SENT AT SAMPLING

T. Rya

ACQUIRED

DATE

RECEIVED

(SIGN)

T. Rya

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4 16oz jars

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

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SHEET 1 OF 3

PROJECT <i>PN - Former Metro Metal</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>PAC6-E3</i>	SURFACE ELEV.
LOCATION <i>+ 10' East of PAC6</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>12/7/01</i>	

HOLE NO.	CASING SIZE	HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL			
	"O.D."	"I.D."	Date <i>12/7/01</i>	Time	Depth	Remarks <i>No water</i>
DRILLER <i>Al. Dolar</i>	HAMMER					
INSPECTOR <i>T. Ryan</i>						

CASING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<i>0</i>					<i>Misc Fill - Cinders, Iron, Metal etc</i>
					<i>ASPHALT</i>
	<i>2.5</i>	<i>Hard Auger Full</i>	<i>Full</i>	<i>1</i>	<i>Misc Fill - Cinders, Gravel, Metal, Wood</i>
		↓	↓	<i>2</i>	<i>Same</i>
				<i>3</i>	<i>Same</i>
				<i>4</i>	<i>Same</i>
	<i>5.0'</i>				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

JECT: PN - Former Metro Metals  
TION: ± 10' east of PA-C6 | DATE: 12/7/01  
ING No: PA-C6-E3 | TOTAL No. OF SAMPLES: 4

NATURE OF ALL

3 NT AT SAMPLING

*T. Ryan*

1. QUISHED | DATE 12/7/01 | RECEIVED  
SIGN) | *T. Ryan* | TIME | BY (SIGN)

2. QUISHED | DATE | RECEIVED  
SIGN) | TIME | BY (SIGN)

3. QUISHED | DATE | RECEIVED  
SIGN) | TIME | BY LAB

MARKS: 4 samples in 4-16oz jars



# THE PORT AUTHORITY OF NY & NJ

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Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT <b>PN - Former Metro Metals</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>PAC6-E3A</b>	SURFACE ELEV.
LOCATION <b>10' East of PAC6 (Same location as PAC6-E3)</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>12/11/01</b>

DIAMETER <b>3" O.D.</b>	CASING SIZE <b>2 3/8" I.D.</b>	CASING <b>Augers</b>	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL			
				Date <b>12/11/01</b>	Time	Depth	Remarks <b>No water encountered</b>
DRILLER <b>M. McElean</b>				DIRECTOR <b>T. Ryan</b>			

CASING WS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<b>augers</b>	0				
	2.5				
	5.0	<b>Hand Auger</b>	<b>Full Rn.</b>		
	8-10		<b>6'</b>	<b>1</b>	<b>Misc Fill - Sand, Gravel, Metal, Wood. (Sheen's odor)</b>
<b>augers</b>	7.5				
		<b>32-19</b>	<b>5"</b>	<b>2</b>	<b>fill - B.C.-F Sand. (fuel odor)</b>
					<b>Bottom of Boring</b> <span style="font-size: 2em;">↗</span>

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: *PN - Former Metro Metals*  
LOCATION: *10' east of PAC6 / same location as PAC6-E3* DATE: *12/11/01*  
SAMPLING No: *PAC6-E3A* TOTAL No. OF SAMPLES: *2*

SIGNATURE OF ALL PRESENT AT SAMPLING *T. Gao*

ACQUIRED DATE *12/11/01* RECEIVED  
(SIGN) *T. Gao* TIME BY (SIGN)

ACQUIRED DATE RECEIVED  
(SIGN) TIME BY (SIGN)

ACQUIRED DATE RECEIVED  
(SIGN) TIME BY LAB

MARKS: *2 samples in 2-16oz jars*

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Engineering Department  
Construction Division  
Materials Engineering Section.

## BORING REPORT

SHEET 1 OF 3

PROJECT <b>PN - Former Metro Metals</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>PAC6-5.4</b>	SURFACE ELEV.
LOCATION <b>20' East of PAC6</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>12/11/01</b>	

POOR	CASING SIZE	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL			
"O.D.	"I.D.	HAMMER	Date	Time	Depth	Remarks
# FALL	# FALL		<b>12/11/01</b>			<b>No water</b>
OPERATOR <b>M. McElean</b>						
DIRECTOR <b>T. Ryan</b>						

SING	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Enter Head ↓	0				<b>Asphalt</b>
					<b>1.0'</b>
		<b>Hand Auger</b>	<b>Full Rec</b>		<b>Fill - Brk - Sand &amp; Gravel</b>
	2.5	↓	↓	1	<b>Same</b>
				2	<b>Same</b>
				3	<b>Same</b>
				4	<b>Same</b>
	5.0				<b>4.0'</b>
					<b>Bottom of Boring</b> ↗

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

JECT: *PN - Former Metro Metals*

LOCATION: *± 20' east of PAC6*

DATE: *12/11/01*

WING No: *PAC6-E.4*

TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACCOMPLISHED

DATE *12/11/01*

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACCOMPLISHED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACCOMPLISHED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

MARKS:

*4 samples in 4 16oz jars*

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## Engineering Department Construction Division Materials Engineering Section BORING REPORT

PROJECT <b>PN - Metro Metals</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-PA-C6 E5</b>	SHEET <b>1</b> OF <b>2</b>
LOCATION <b>40 East of BH-PA-C6</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>4/29/02</b>	SURFACE ELEV.

SPOON <b>3</b>	O.D. <b>2 3/8</b>	I.D. <b>2 1/8</b>	CASING SIZE <b>Auger</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
MEASUREMENT <b>140 # FALL 30</b>	HAMMER <b>AUTO</b>		# FALL		Date	Time	Depth	Remarks
<b>A Kites</b>					<b>4/29/02</b>	<b>2<sup>PM</sup></b>	<b>0.5</b>	<b>in Asphalt Millings</b>
					<b>4/29/02</b>	<b>2<sup>55</sup></b>	<b>9.5</b>	<b>Groundwater s<sup>ts</sup></b>
INSPECTOR <b>D Howe</b>								

SPOONING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand	0	Hand Auger	Ful		Asphalt Millings
per ↓		↓	↓		
Hollow		tapped spoon	10'	1	Mix Fill - Gravelly Sand, Gravel, Asphalt, etc
↓		↓	↓	2	Mix Fill - Sand, Gravel, Gravelly Metal, etc
↓		↓	↓	3 <sup>A</sup>	Same
↓	5	↓	↓	3 <sup>B</sup>	Fill - M-F Gray Brown Sand, Tr Gravel, Tr Silt
↓		10-14			
↓		21-30	15"	4	Same
↓		8-9			
↓	10	14-14	16"	5	Same
					Bottom of Boring
	15				All Samples checked with PID Meter S <sup>ts</sup> 1, 2 & 5 (9.0-9.5) Sand Testing & checked for TOHC in field Remainng Samples Discarded
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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## Engineering Department Construction Division Materials Engineering Section BORING REPORT

PROJECT N- Metro Metals	NAME OF CONTRACTOR Craig Drillers	BORING NO. BH-PAC6 56	SHEET 1 OF 2
LOCATION 30' East of BH PAC6		CONTRACT NO. Y2G-99-006	SURFACE ELEV. DATE 4/30/02
BOON 3" O.D. 2 3/8" I.D. Drills	CASING SIZE HOLE TYPE 1	GROUND WATER LEVEL	
MEASUREMENT 14" # FALL 30	HAMMER # FALL		
OPERATOR D Cooke	INSPECTOR D Howe	Date	Time
		4/30	8
		4/30	9:15
			9.5
			Remarks in depth of Millage Ground water 3' 5"

SING BWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS	
					LINE LOCATES CHANGE OF PROFILE	
1' 2"	0	Hand Auger	1'		Asphalt Millage	cid
1' 8"		↓	↓			2.0
Mellow		Tipped spoon	12"	1	Misc Fill - Sand, Asphalt, Brick, wood, etc.	
Top		↓	10'	2	Misc Fill - Gravel, Sand, Gravel, Metal, etc.	
Auger	5	↓	12"	3	Same	
		↓		3	Fill M-F Gray Brown Sand, Gravel, Tr. Silt	5.5 6.0
		18-51		4		
		69-64	13'		Misc Fill - Sand, Gravel, Metal, Silt, ER	
		24-29		5		
	10	32-40	14"		Same	10.0
					Bottom of Boring ↗	
	15				All Samples checked with PID Meter S# 1, 2 & 5 (9-9T) saved for testing & checked for TP HC in field by Chem Lab Remaining Samps Discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF NY & NJ

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## Engineering Department Construction Division Materials Engineering Section BORING REPORT

A-57  
6-00

SHEET 1 OF 2

PROJECT <b>PN - Metro Metals</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BN PAC 67</b>	SURFACE ELEV.
LOCATION <b>10 East of BN PAC 65 50' East of PAC 6</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>4/30/02</b>

SPOON <b>3</b>	CASING SIZE <b>4.5" I.D. Augers</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
DRILLER <b>D Cooke</b>	HAMMER <b>A80</b>	# FALL <b>30</b>	Date	Time	Depth	Remarks
			<b>4/30</b>	<b>9:45</b>	<b>1.0</b>	<b>in Asphalt Millings</b>
			<b>4/30</b>	<b>10:30</b>	<b>9.0</b>	<b>Groundwater 5'±</b>

ASING DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Head	0	Head Auger	Full		Asphalt Millings, Little M-F Brown Sand <span style="float: right;">20</span>
↓		↓	↓		
↓		Tapped Spoon	10'	1	Misc. fill - Sand, Gravel, Cinders, wire, Metal, ETC
↓		↓	12'	2	Same
↓		↓	18'	3	Same <span style="float: right;">50</span>
↓	5	↓	16-19	4	Fill - M-F Gray Brown Sand, Tr Gravel, Tr Silt
↓		↓	25-23	4	Same
↓		↓	14-16	5	Same
↓	10	↓	16-18	5	Same <span style="float: right;">Low</span>
					Bottom of Boring <span style="font-size: 2em;">↗</span>
	15				All Samples checked with PID Meter S# 1, 2 & 5 (8.5-9') saved for testing checked for TP etc by chem lab in field Remains very dry & stable
	20				
	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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Engineering Department  
Construction Division  
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**BORING REPORT**

- Pdc Parts Fac		NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BK-N7</i>	SHEET <u>1</u> OF <u>3</u>
aid out by PA Survey			CONTRACT NO. <i>426-99-006</i>	DATE <i>10/2/00</i>
W.D. Auger - I.D.	CASING SIZE	HOLE TYPE <i>L</i>	GROUND WATER LEVEL	
# FALL	HAMMER	# FALL	Date	Time
			<i>10/2</i>	<i>9<sup>15</sup> AM</i>
			Depth	Remarks
			<i>Dry</i>	
P. Parnell				
D. Howe				
DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	<i>Hand Auger</i>	<i>Full</i>	1	<i>Misc Fill - Gravel, Sand, Wood, Cement, S.G. etc 1/2"</i>
5				<i>Bottom of Boring</i> ↗
10				<i>HI Soil checked with PID Meter, 5<sup>#</sup> 1 Sample for Testing Remaining Soil Discarded</i>
15				
20				
25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - 1 on depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

JECT: PN- Pdc Ports Fac

ATION: As laid out by PA Survey | DATE: 10/2/00

ING No: BK-N-7 | TOTAL No. OF SAMPLES: 1 Soil

ATURE OF ALL  
ENT AT SAMPLING

ACQUISHED [Signature] DATE 10/2/00 RECEIVED  
SIGN) TIME BY (SIGN)

ACQUISHED DATE RECEIVED  
SIGN) TIME BY (SIGN)

ACQUISHED DATE RECEIVED  
SIGN) TIME BY LAB

MARKS:  
1 Soil Sample in 1600g jar

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT NAPORANO SITE - BERTH 63	NAME OF CONTRACTOR CRAIG	BORING NO. BH NSB	SHEET / OF / SURFACE ELEV.
LOCATION 11' East from BH NSA		CONTRACT NO. 426-99-007	DATE 8/27/99

Casing Size "O.D." "I.D."	Hole Type HAMMER	GROUND WATER LEVEL			
		Date	Time	Depth	Remarks
# FALL	# FALL				
SUPERVISOR S. Burns					
DIRECTOR M. Oudeh					

DEPTH IN FT.	SPoon BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hand Auger ↓	Full ↓		Misc. fill grey sand, crushed rock, metal, etc
				Bottom of Boring → 3.0'
5				NOTE: Obstruction found at ±3.0', Relocated Boring Hole.
10				
15				
20				
25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used



**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT NAPORANO SITE - BERTH 63		NAME OF CONTRACTOR CRAIG	BORING NO. BH 15C	SHEET 1 OF 1
LOCATION 15' south from BH-15B		CONTRACT NO. 426-99-007	DATE 8/27/99	SURFACE ELEV.

HAMMER # FALL	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
INSPECTOR M. OUDEH						

BORING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		Hand Auger	Well		Misc. fill gray-br Sand, crushed Rock, Metal, etc.
			↓		
5					Bottom of BORING → 3.5'
					Note: Obstruction found at ± 3.5' Relocated boring hole.
10					
15					
20					
25					

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
 Construction Division  
 Materials Engineering Section  
**BORING REPORT**

PROJECT <b>N - NAPORANO SITE - BERTH 63</b>		NAME OF CONTRACTOR <b>CRAIG</b>	BORING NO. <b>BH 15A</b>	SHEET / OF / <b>1 / 1</b>
LOCATION <b>LAI'D OUT IN THE FIELD AS PER DWG.</b>		CONTRACT NO. <b>426-99-007</b>	DATE <b>8/25/99</b>	SURFACE ELEV.
DEPTH	*O.D.	*I.D.	CASING SIZE	HOLE TYPE
DRILLER <b>S. Burns</b>	HAMMER		GROUND WATER LEVEL	
# FALL	# FALL	Date	Time	Depth
SUPERVISOR <b>M. Oudeh</b>		Remarks		

DEPTH D.B./FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0		Hand Auger	Full		Asphalt pavement
		↓	↓		Misc. fill Sand, Metal, chis block, wood
					3.1'
5					Bottom of boring
10					
15					
20					
25					

NOTE: Obstruction found at ± 3.1'  
 Relocated boring hole.

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Engineering Department  
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**BORING REPORT**

SHEET 1 OF 2

PROJECT <b>PN - Metro Data</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>52PDC6E6</b>	SURFACE ELEV. <b></b>
LOCATION <b>25' West of B4PAC6-E6</b>		CONTRACT NO. <b>42699-006</b>	DATE <b>4/30/02</b>

SPOON <b>3</b>	C.O.D. <b>2 3/4</b>	I.O. <b>1.0</b>	CASING SIZE <b>AUGER</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
HAMMER <b>140</b>	# FALL <b>30</b>	HAMMER <b></b>	# FALL <b></b>	Date	Time	Depth	Remarks	
INSPECTOR <b>D Cooke</b>				<b>4/30/02</b>	<b>11<sup>40</sup></b>	<b>1.0</b>	<b>10 Asphalt Millings</b>	
<b>D Hone</b>				<b>4/30</b>	<b>12<sup>05</sup></b>	<b>9.0</b>	<b>ground water 5#5</b>	

USING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
Hand	0	Hand Auger	F(1)		Asphalt Millings <span style="float: right;">0.1</span>
↓		↓	↓		<span style="float: right;">2.0</span>
Hollow		Tepped Spoon	11'	1	Misc Fill Asphalt, Gravel, Sand, wood, ETC
Tom			10"	2	Same
Auger	5		14'	3	Same <span style="float: right;">6.0</span>
↓		16-31			oil color
↓		31-36	18'	4	Fill M-F Gray Brown Sand, IV Gravel, IV Silt
↓		8-10			
↓	10	14-16	18'	5	Same <span style="float: right;">10.0</span>
					Bottom of Boring ↗
	15				All Samples checked with PID Meter 5# 1, 2, 4 & 5 (8.5-9) Sand for Test & checked for TPH w/ field by chem lab Remainder Samp Discarded
	20				
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

<b>PROJECT</b> Former Metro Metals <b>CATION</b> S. of PA-C7	<b>NAME OF CONTRACTOR</b> Craig	<b>BORING NO.</b> PA-C7-S-1	<b>SHEET</b> 1 <b>OF</b> 3 <b>SURFACE ELEV.</b>			
		<b>CONTRACT NO.</b> 426-99-006	<b>DATE</b> 12/4/01			
<b>IN</b> "O.D."      "I.D."      CASING SIZE <b>OPER</b> # FALL      # FALL <b>HAMMER</b> <b>ELLER</b> 9 Kicks <b>ECTOR</b> T. Ryan	<b>HOLE TYPE</b> H. Auger	<b>GROUND WATER LEVEL</b>				
		<b>Date</b> 12/4/01	<b>Time</b> 11:45A			
		<b>Depth</b> 	<b>Remarks</b> No water			
<b>ASING</b>	<b>VS/FT.</b>	<b>DEPTH</b>	<b>SPOON BLOWS/6"</b>	<b>RE-COV'D</b>	<b>SAMP. NO.</b>	<b>*SAMPLE DESCRIPTION AND REMARKS</b>
utter		0				Misc - Curd, Sand, Metal, Conc.      0.3'
red						asphalt      1.0'
			Hand Auger	Full Rec.		Misc Fill - Sand, Curd, Gravel, Metal, Wood
		2.5	↓	↓	1	Same
					2	Same
					3	Fill - B. M. - Sand, to silt, to G.
					4	Same
		5.0				Bottom of Boring ↑      4.0'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: *PA - Former Metro Metals*  
LOCATION: *± 1' S of PA-C7* DATE: *12/4/01*  
DRIVING No: *PA-C7* TOTAL No. OF SAMPLES: *4*

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Ryan*

RELINQUISHED

DATE *12/4/01* RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

RELINQUISHED

DATE RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4 16 oz jars*

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Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3

PROJECT A1 - Former Metro Metals	NAME OF CONTRACTOR Craig	BORING NO. PA-C7-E-1	SURFACE ELEV.
LOCATION - 1' W. of PA-C7	CONTRACT NO. 426-99-006	DATE 12/4/01	

Casing Size "O.D." "I.D."	Hole Type H Auger	GROUND WATER LEVEL			
		Date	Time	Depth	Remarks
Hammer # FALL	Hammer # FALL	12/4/01	8:05 A		No water encountered
Inspector Alan Kiden					
Director T. Ryan					

DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				MISC. FILL - Br Silt, Sand, METAL, WOOD 0.3'
				ASPHALT 1.0'
	Hand Auger	Full Rec.		Min Fill - Sand, Gravel, Wood, Metal, Debris
2.5			1	Same
			2	Same
			3	Fill - Br M - F Sand to Silt, to Gr.
			4	Same
5.0				Bottom of Boring 4.0'

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: PN - Metro Metals (Former)

LOCATION: ± 1' ~~to~~ of PA-C7

DATE: 12/4/01

TESTING No: PA-C7 - ~~PA~~ E1

TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUIRED

DATE 12/4/01

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4 1lb oz jars

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BORING REPORT

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SHEET 1 OF 3

PROJECT U - Former Metro Metals	NAME OF CONTRACTOR Crang	BORING NO. PA-C7-W-1	SURFACE ELEV.
LOCATION 1' W. of PA-C7	CONTRACT NO. 426-99-006	DATE 12/4/01	

IN	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
"O.D.	"I.D.		Date	Time	Depth	Remarks
HAMMER	HAMMER		12/4/01	9:15A		No water encountered
# FALL	# FALL					
OPERATOR A. Kidas						
INSPECTOR T. Ryan						

BORING DEPTH (DWS/FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0				Misc Fill - Silt, Gr, Metal, Wood, Cone, Curbs 0.3'
					Asphalt 1.0'
		Hand Auger			Misc Fill - Silt, Sand, Gr, Curbs, Cone
2.5	2.5	Hand Auger	Full Rec.	1	Same
				2	Same
				3	Fill - Br M-F Sand, to Silt, to Gr.
				4	Same
5.0	5.0				Bottom of Boring 4.0'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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**BORING REPORT**

SHEET 1 OF 3

PROJECT <b>50 - Former Metro Metals</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>BH-MW N1-N1</b>	SURFACE ELEV.
LOCATION <b>± 1' No. of MW-N1</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>12/4/01</b>

BOON	CASING SIZE	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL			
"O.D."	"I.D."		Date	Time	Depth	Remarks
MER	HAMMER		<b>12/4/01</b>	<b>1:55 P</b>	<b>1.0'</b>	<b>Perched, seeping under pavement.</b>
# FALL	# FALL					
ILLER <b>G. Kidas</b>						
ECTOR <b>T. Ryan</b>						

BING NO./FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<i>Hand</i>	0				<b>ASPHALT</b> 0.9'
		<i>Hand Auger</i>	<i>Full Rec</i>		<i>Fill - Br M - F Sand, lit Gravel.</i>
					<i>Same</i>
	2.5			1	<i>Fill - Br M - F Sand, to Silt</i>
				2	<i>Same</i>
				3	<i>Same</i>
				4	<i>Same</i>
	5.0				<b>Bottom of Boring</b> 4.0'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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**SUBJECT:** PN - Former Metro Metals

**LOCATION:** ± 1' North of MW-N1

**DATE:** 12/4/01

**SPRING No:** BH-MW-N1-N1

**TOTAL No. OF SAMPLES:** 4

**NATURE OF ALL**

**EVENT AT SAMPLING**

*T. Ryan*

**ACQUIRED**

**DATE** 12/4/01 **RECEIVED**

**SIGN**

*T. Ryan*

**TIME** **BY (SIGN)**

**ACQUIRED**

**DATE** **RECEIVED**

**SIGN**

**TIME** **BY (SIGN)**

**ACQUIRED**

**DATE** **RECEIVED**

**SIGN**

**TIME** **BY LAB**

**REMARKS:**

4 samples in 4-16oz jars



**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.  
DATE 12/4/01

PROJECT: Former Metro Metals  
LOCATION: 1' W of MW-N1

NAME OF CONTRACTOR: *Craig*

BORING NO. BH-MW-N1-W1  
CONTRACT NO. 426-99-006

OPERATOR: *G. Kidas*  
SUPERVISOR: *T. Ryan*

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
12/4/01	12:15 P.	1.0'	Perched water seeping in under pavement.

DEPTH (S/FT.)	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				ASPHALT 0.9'
	Hard Auger	Full Rec		Fill - Br M - F Sand, lit G.
				Fill - Br M - F Sand, to Silt
2.5			1	Same
			2	Same
			3	Same
			4	Same
5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: *PN - Former Metro Metals*

LOCATION: *± 1' West of MW-N1*

DATE: *12/4/01*

RING No: *BH MW-N1-W1*

TOTAL No. OF SAMPLES: *4*

### NATURE OF ALL

#### EVENT AT SAMPLING

*T. Ryan*

ACQUIRED

DATE *12/4/01*

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS: *4 samples in 4-16oz jars*

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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT: *A1 - Former Metro Metals*  
LOCATION: *± 1' South of MW-N1*

NAME OF CONTRACTOR: *Craig*

BORING NO.: *BH-MW-N1-S-1*  
CONTRACT NO.: *426-99-006*

DATE: *12/4/01*

OWNER: *A. Kideo*  
ENGINEER: *T. Ryan*

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
<i>12/4/01</i>	<i>2:35 P</i>	<i>1.0'</i>	<i>Perched, seeping under pavement</i>

DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				<i>Asphalt</i> - 0.9'
	<i>Hand Auger</i>	<i>Full Rec</i>		<i>Fill - Br M-F Sand, lit Gravel</i>
				<i>Same</i>
2.5			1	<i>Full - Br M-F Sand</i>
			2	<i>Same</i>
			3	<i>Same</i>
			4	<i>Same</i>
5.0				<i>Bottom of Boring</i> - 4.0'

NOTES: 1 -- Length recovered; 0" -- Loss of Sample, T -- Trap used  
2 -- U = undisturbed; A = auger; OER = open end rod; V = vane  
3 -- Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 3 of 3

**OBJECT:** PN - Former Metro Metals

**LOCATION:** ± 1' South of MW-N1      **DATE:** 12/4/01

**RING No:** BH-MW N1-S1      **TOTAL No. OF SAMPLES:** 4

**NATURE OF ALL**

**EVENT AT SAMPLING** T. Ryan

<b>ACQUIRED</b>	<b>DATE</b> <u>12/4/01</u>	<b>RECEIVED</b>
<b>(SIGN)</b> <u>T. Ryan</u>	<b>TIME</b>	<b>BY (SIGN)</b>

<b>ACQUIRED</b>	<b>DATE</b>	<b>RECEIVED</b>
<b>(SIGN)</b>	<b>TIME</b>	<b>BY (SIGN)</b>

<b>ACQUIRED</b>	<b>DATE</b>	<b>RECEIVED</b>
<b>(SIGN)</b>	<b>TIME</b>	<b>BY LAB</b>

**REMARKS:** 4 samples in 4-16oz jars

\_\_\_\_\_  
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# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT <b>N- Former Metro Metrol</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. B. H. - <b>MWNI-E1</b>	SURFACE ELEV.
LOCATION <b>E of MWNI</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>12/4/01</b>

BOON	"O.D.	"I.D.	CASING SIZE	HOLE TYPE <b>H Auger</b>	GROUND WATER LEVEL			
DRILLER <b>A. Kida</b>	HAMMER		# FALL	# FALL	Date	Time	Depth	Remarks
OPERATOR <b>T. Ryan</b>					<b>12/4/01</b>	<b>1:25P</b>	<b>1.0'</b>	<b>Perched water under pavement</b>

SNG #/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
					<b>ASPHALT</b> 0.9'
		Hand Auger	Full Rec.		Fill - Br M-F Sand, lit Gr.
					Same
	2.5			1	Fill - Br M-F Sand, to Silt
				2	Same
				3	Same
				4	Same
	5.0				Bottom of Boring ↗ 4.0'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: *PAU - Former Metro Metals*

LOCATION: *± 1' E. of MWNI-*

DATE: *12/4/01*

RING No: *BH-MWNI-E1*

TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

AGENT AT SAMPLING *T. Ryan*

ACQUIRED DATE *12/4/01* RECEIVED

SIGN *T. Ryan* TIME BY (SIGN)

ACQUIRED DATE RECEIVED

SIGN TIME BY (SIGN)

ACQUIRED DATE RECEIVED

SIGN TIME BY LAB

REMARKS: *4 samples in 4-16 oz jars*

# THE PORT AUTHORITY OF NY & NJ

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Materials Engineering Section  
**BORING REPORT**

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SHEET 1 OF 3

BOTTLE LOCATION N - Former Metro Metals 1 North of MWC5	NAME OF CONTRACTOR Craig	BORING NO. BH-MWC5-N1	SURFACE ELEV. _____
		CONTRACT NO. 426-99-006	DATE 12/5/01

OPERATOR A. Kidas T. Ryan	CASING SIZE _____	HOLE TYPE H. Auger	GROUND WATER LEVEL			
O.D. _____	I.D. _____	HAMMER _____	Date 12/5/01	Time _____	Depth _____	Remarks No water
# FALL _____		# FALL _____				

BOTTLE NO.	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
min head	0				Misc fill - Anders, Sand
					Asphalt
		Hard Auger	Full Rec.		Misc fill - Anders, Sand, Gravel, Glass, Wood
	2.5			1	Same
				2	Same
				3	Fill - Br M-F Sand, lit Gravel, to silt
				4	Same
	5.0				Bottom of Boring → 4.0'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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Construction Division  
Materials Engineering Section

## BORING REPORT

PROJECT <b>PA - Former Metro Metals</b>		NAME OF CONTRACTOR <b>Craig</b>		BORING NO. <b>BH-MWCS-W1</b>	SHEET <b>1</b> OF <b>3</b>										
LOCATION <b>± 1' West of MW-C5</b>		CONTRACT NO. <b>426-99-006</b>		SURFACE ELEV. <b>12/5/01</b>											
SPOON "O.D." "I.D." CASING SIZE HOLE TYPE <b>H. Auger</b>		GROUND WATER LEVEL													
HAMMER # FALL <b>A. Kidas</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Date</th> <th>Time</th> <th>Depth</th> <th colspan="2">Remarks</th> </tr> <tr> <td>12/5/01</td> <td></td> <td></td> <td colspan="2">No water</td> </tr> </table>				Date	Time	Depth	Remarks		12/5/01			No water	
Date	Time	Depth	Remarks												
12/5/01			No water												
DRILLER <b>T. Ryan</b>															
SPECTOR															

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0					Misc fill - Sand, Gravel, Cobles, Wood, Concrete 0.4'
					ASPHALT 1.1'
		H. Auger	Full		Misc fill - Cobles, Sand, Gravel, Wood etc
		↓	↓		
	2.5	Hand Auger	Full	1	Same
		↓	↓	2	Full - Rd Br M-F Sand, lil Gravel, to Silt
		↓	↓	3	Full - Rd Br M-F Sand, to Silt, to Gr
		↓	↓	4	Same
					4.0' ↑
	5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: *PN - Former Metro Metals*

LOCATION: *± 1' West of MWCS - ~~W1~~*

DATE: *12/5/01*

WELLING No: *BH-MWCS-W1*

TOTAL No. OF SAMPLES: *4*

### NATURE OF ALL

#### POINT AT SAMPLING

*T. Ryan*

#### ACCOMPLISHED

DATE *12/5/01*

RECEIVED

#### SIGNATURE

*T. Ryan*

TIME

BY (SIGN)

#### ACCOMPLISHED

DATE

RECEIVED

#### SIGNATURE

TIME

BY (SIGN)

#### ACCOMPLISHED

DATE

RECEIVED

#### SIGNATURE

TIME

BY LAB

#### REMARKS:

*4 samples in 4 16oz jars.*

# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT <i>PN - Former Metro Metals</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>BH-MWCS-51</i>	SURFACE ELEV.
LOCATION <i>± 1' South of MWCS</i>		CONTRACT NO. <i>426-99-006</i>	DATE <i>12/5/01</i>
ION "O.D." "I.D."	CASING SIZE "H Auger"	GROUND WATER LEVEL	
HAMMER # FALL	HAMMER # FALL	Date <i>12/5/01</i>	Time
OPERATOR <i>A. Kidas</i>		Depth	Remarks <i>No water</i>
DIRECTOR <i>T. Ryan</i>			

CASING "WS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<del>Min fill - Gravel, Sand, Metal</del> 0.4'
					ASPHALT 1.2'
		<i>Hand Auger</i>	<i>Full Rec</i>		<i>Min fill - Cinders, Gr, Sand, Glass, Metal etc</i>
	2.5			1	<i>Sample</i>
				2	<i>Sample</i>
				3	<i>Fill - Br M - F Sand, silt</i>
				4	
	5.0				<i>Bottom of Boring</i> ↗ 4.0'

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: *PN - Former Metro Metals*

LOCATION: *± 1' South of MWCS*

DATE: *12/5/01*

TESTING No: *BH-MWCS-S1*

TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUIRED

DATE *12/5/01* RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4-16oz jars*

# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

EST <b>PW - Former Metro Metals</b> CATTON + 1' East of MW-C5	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>BH-MWCS-E1</b>	SURFACE ELEV. _____
		CONTRACT NO. <b>426-99-006</b>	DATE <b>12/5/01</b>

NO	"O.D."	"I.D."	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
					Date	Time	Depth	Remarks
				<b>H. Auger</b>				
			HAMMER					
	# FALL		# FALL					<b>1/2 water</b>
OPERATOR <b>G. Kidas</b>								
RECORDER <b>T. Ryan</b>								

CASING NO./FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS
					LINE LOCATES CHANGE OF PROFILE
	0				<del>Misc Fill - Sand, Cinders, Wood, Metal</del> 0.5'
					Asphalt 1.0'
		Hand Auger	Full Rec.		Misc Fill - Sand, Cinders, Metal, Wood
	2.5			1	Same
				2	Same
				3	Full - Rd Br M-F Sand, to Silt
				4	Same
	5.0				
					Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN - Former Metro Metals

LOCATION: ± 1' East of MWCS

DATE: 12/5/01

BORING No: BH-MWCS-E1

TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUIRED

DATE: 12/5/01

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4-16oz jars

# THE PORT AUTHORITY OF NY & NJ

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## Engineering Department Construction Division Materials Engineering Section BORING REPORT

<b>PROJECT</b> Newark Metro Metals Site 600' E of BHPAGE 7	<b>NAME OF CONTRACTOR</b> Cray	<b>BORING NO.</b> BH-PAC 6 E-89	SHEET 1 OF 3 <b>SURFACE ELEV.</b>
		<b>CONTRACT NO.</b> 426-99-006	<b>DATE</b> 5/16/02

<b>NO. OF FALLS</b> 30	<b>CASING SIZE</b> 2 3/8" O.D. / Auger 2" I.D. / HAMMER	<b>HOLE TYPE</b> I	<b>GROUND WATER LEVEL</b>			
			<b>Date</b> 5/16/02	<b>Time</b> AM	<b>Depth</b> ± 9.0'	<b>Remarks</b> In S-4
<b>OPERATOR</b> D. Cooke			<b>RECTOR</b> H. Koss			

R. NO.	NO. OF FEET	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
						FILL: Crushed Asphalt
			Hand Auger	Full		
					1	Crushed Gravel, various metal scrap FILL
		5			2	Brown c-f SAND, little of Gravel, f.c. Silt
			24.20	24	3	SAME + shell frags
			22.22			
			7.10	22	4	Brown c-f SAND, little Silt, little c-f Gravel
		10	12.12			(± 8.5' - 9.0' Saved)
						100' Bottom of boring
All Samples Checked w/ PID Meter Samples 2 & 3 NOT Saved In S-4, ± 8.5' - 9.0' Saved						

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used  
 2 — U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: Port Newark Metro Metals Site

LOCATION: ± 60.0' E of BH-PA-C-6 E-7

DATE: 5/16/02

TRING No: BH-PA-C-6 E-09

TOTAL No. OF SAMPLES: 2 soil

SIGNATURE OF ALL

PRESENT AT SAMPLING




RECEIVED

DATE 5/16/02

RECEIVED

BY (SIGN)



TIME 3 PM

BY (SIGN)

RECEIVED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RECEIVED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

2 Soil samples in 1 bag for each



# THE PORT AUTHORITY OF NY & NJ

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## Engineering Department Construction Division Materials Engineering Section BORING REPORT

PROJECT Newark Metro Metals Site FROM 140.0' E. of BH PA-6 E-B OPERATOR D. Cooke DIRECTOR H. Koss	NAME OF CONTRACTOR Croy	BORING NO. BH PA-6 E-10 CONTRACT NO. 426-99-006	SHEET 1 OF 2 SURFACE ELEV. DATE 5/16/02
--	----------------------------	--	--

DEPTH SFT.	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	GROUND WATER LEVEL			
				Date	Time		
0	Hand Auger	Full		5/16/02	AM	± 9.0'	Tr S-5
1			1				FILL - Cracked Asphalt
2			2				Cracked Asphalt, metal pieces & frags FILL
3			3				SAME FILL 4.0'
4	34-36	24	4				Light Brown, c-f SAND, little c-f Gravel tr. Silt
5	26-29						
6	8-10	24	5				SAME
10	11-11						10.0' Bottom of boring

All Samples Checked w/ PID Meter  
 Samples 3 & 4 NOT Saved  
 Ground Water in S-5 @ ± 9.0'  
 (± 8.5' - 9.0' Saved in S-5)

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: Port Newark Metro Metals Site

LOCATION: ± 40.0' E of BH-PA-C-6 E-8

DATE: 5/16/02

BORING No: BH-PA-C-6 E-80

TOTAL No. OF SAMPLES: 3 soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

FINISHED

DATE 5/16/02

RECEIVED

BY (SIGN)

TIME 3<sup>pm</sup>

BY (SIGN)

FINISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

FINISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

3 soil samples, each in one 16oz. jar





# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: Port Newark Metro Metals Site

LOCATION: ± 40.0' E of BH-PA C-6 E-9

DATE: 5/16/02

DRILLING No: BH-PA C-6 E-10

TOTAL No. OF SAMPLES: 3 soil

SIGNATURE OF ALL

SENT AT SAMPLING

*Howard P. K...*

INQUIRED

DATE 5/16/02

RECEIVED

BY (SIGN)

*Howard P. K...*

TIME 3 PM

BY (SIGN)

INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

3 Soil samples for 1 kg per each







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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN - Former Metro Metals

LOCATION: ± 1' North of PA-C60

DATE: 12/3/01

DRILLING No: PA-C6-N-1

TOTAL No. OF SAMPLES: 4 + 1 Dup

SIGNATURE OF ALL

PRESENT AT SAMPLING

T. Ryan

1. ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

2. ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

3. ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4-16oz jars + 1 Dup in 1 voa jar (S-1)

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**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

Former Metro Metals ± 5' No. of PA-C6	NAME OF CONTRACTOR Craig	BORING NO. PA-C6-N-2	SURFACE ELEV.
		CONTRACT NO. 426-99-006	DATE 12/5/01

"O.D." "I.D."	CASING SIZE H. Auger	HOLE TYPE H. Auger	GROUND WATER LEVEL			
HAMMER		Date 12/5/01		Time 8:00 A	Depth No water	Remarks
# FALL		# FALL				

DEPTH	SPoon BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				Asphalt
1.0	Hard Auger	Full		Misc Fill - Bl. Clnds, Sand, Gravel, etc.
2.5			1	Same
5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: *PN - Former Metro Metals*

LOCATION: *± 5' North of PA-C6*

DATE: *12/5/01*

TESTING No: *PA-C6-N2*

TOTAL No. OF SAMPLES: ~~2~~ *1*

NATURE OF ALL

TEST AT SAMPLING

1. DISMISSED

(SIGN)

*T. Ryan*

DATE *12/5/01*

TIME

RECEIVED

BY (SIGN)

2. DISMISSED

(SIGN)

DATE

TIME

RECEIVED

BY (SIGN)

3. DISMISSED

(SIGN)

DATE

TIME

RECEIVED

BY LAB

REMARKS: *1 sample in 1-16oz jar.*





# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

JECT: *PN - Former Metro Metals*

LOCATION: *± 10' North of PAC6*

DATE: *12/7/01*

ING No: *PAC6-N3*

TOTAL No. OF SAMPLES: *1*

NATURE OF ALL

ACT AT SAMPLING

*T. Ryan*

1 QUISHED

DATE *12/7/01*

RECEIVED

SIGN

*T. Ryan*

TIME

BY (SIGN)

2 QUISHED

DATE

RECEIVED

SIGN

TIME

BY (SIGN)

3 QUISHED

DATE

RECEIVED

SIGN

TIME

BY LAB

REMARKS:

*1 sample in 1-16 oz jar*

# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

PROJECT <b>PN - Former Metro Met. Site</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>PA-C6-W1</b>	SHEET / OF <b>1 / 3</b>
LOCATION <b>1' West of PA-C6</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>12/3/01</b>	

JOB NO.	CASING SIZE	HOLE TYPE <b>H. Auger</b>	GROUND WATER LEVEL			
"O.D."	"I.D."	HAMMER	Date	Time	Depth	Remarks
# FALL	# FALL		<b>12/3/01</b>	<b>11:45A</b>		<b>No water</b>
DRILLER <b>Al Kidas</b>						
DIRECTOR <b>T. Ryan</b>						

CASING NO. / WS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
<b>cutting head</b>	0				<b>cutting head</b>
					<b>Asphalt</b>
					<b>2.0'</b>
	<b>2.5</b>	<b>Hand Auger</b>	<b>Full ker</b>	<b>1</b>	<b>Min. Fill - Sand, Cinders, Wood, Gravel</b>
		↓	↓	<b>2</b>	<b>Same</b>
				<b>3</b>	<b>Same</b>
				<b>4</b>	<b>Same</b>
					<b>4.0'</b>
	<b>5</b>				<b>Bottom of Boring</b> ↗

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN - Former Metro Metals

LOCATION: ± 1' West of PA-C6

DATE: 12/3/01

RING No: PA-C6-W-1

TOTAL No. OF SAMPLES: 4 + 1 Dup

SIGNATURE OF ALL

PRESENT AT SAMPLING

T.B. —

1. INQUIRED

DATE 12/3/01 RECEIVED

(SIGN)

T.B. —

TIME BY (SIGN)

2. INQUIRED

DATE RECEIVED

(SIGN)

TIME BY (SIGN)

3. INQUIRED

DATE RECEIVED

(SIGN)

TIME BY LAB

REMARKS:

4 samples in 4-16oz jars + 1 duplicate sample of  
S-3 in 10oz jar

**THE PORT AUTHORITY OF NY & NJ**

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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <i>W- Turner Metro Metals</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>PA-C6-W.2</i>	SURFACE ELEV.
LOCATION <i>5' West of PA-C6</i>		CONTRACT NO. <i>426-99-006</i>	DATE <i>12/5/01</i>

BOON	"O.D.	"I.D.	CASING SIZE	HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL			
	HAMMER		# FALL	# FALL	Date	Time	Depth	Remarks
OPERATOR <i>Alan Kidas</i>					<i>12/5/01</i>	<i>9:05A</i>		<i>No water</i>
DIRECTOR <i>T. Ryan</i>								

C	SING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	<i>Ben Head</i>	0				<i>Asphalt</i>
			<i>Hand Auger</i>	<i>Full Rec</i>		<i>Misc Fill - Cinders, Sand, Gravel, Metal</i>
		2.5			1	<i>Same</i>
					2	<i>Same</i>
					3	<i>Same</i>
					4	<i>Same</i>
		5.0				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

SUBJECT: PN-Former Metro Metals

LOCATION: ± 5' West of PA-C6

DATE: 12/5/01

DRIING No: PAC6-W2

TOTAL No. OF SAMPLES: 4

### SIGNATURE OF ALL

SENT AT SAMPLING

*T. Ryan*

INQUIRED

DATE 12/5/01

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

INQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

REMARKS:

4 samples in 4 16 oz jars.

# THE PORT AUTHORITY OF NY & NJ

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Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

LT U - Former Metro Metals ± 10' West of PA-C6	NAME OF CONTRACTOR Craig	BORING NO. PAC6-W3	SHEET / OF <b>3</b> SURFACE ELEV.  CONTRACT NO. 426-99-006 DATE 12/7/01
--	-----------------------------	-----------------------	---

"O.D."	"I.D."	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
		HAMMER	H. Auger	Date	Time	Depth	Remarks
# FALL		# FALL		12/7/01			No water
OPERATOR Rob Dollar							
SUPERVISOR T. Ryan							

DEPTH FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0					ASPHALT
					2.0'
2.5	Hand Auger	Full Rec		1	Misc Fill - Cinders, Sand, Gravel
				2	Same
				3	Same
				4	Same
					4.0'
5.0					Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 2 of 3

1. CT: PP- Former Metro Metals  
2. LOCATION: ± 10' West of PAC6 DATE: 12/7/01  
3. TAG No: PAC6-W3 TOTAL No. OF SAMPLES: 4

4. NATURE OF ALL

5. METHOD OF SAMPLING

*T. Gen*

6. RECEIVED DATE 12/7/01 RECEIVED  
7. BY (SIGN) *T. Gen* TIME

8. RECEIVED DATE RECEIVED  
9. BY (SIGN) TIME

10. RECEIVED DATE RECEIVED  
11. BY (SIGN) TIME

12. REMARKS: 4 samples in 4 16oz jars



**THE PORT AUTHORITY OF NY & NJ**

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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <i>PN - Former Metro Metrol</i>	NAME OF CONTRACTOR <i>Craig</i>	BORING NO. <i>PA-C6-S-1</i>	SURFACE ELEV.
LOCATION <i>1' South of PA-C6</i>		CONTRACT NO. <i>426-99-006</i>	DATE <i>12/3/01</i>

CASSING SIZE "O.D." "I.D."	HOLE TYPE <i>H. Auger</i>	GROUND WATER LEVEL			
		HAMMER # FALL	# FALL	Date <i>12/3/01</i>	Time <i>2:50 PM</i>
OPERATOR <i>A. Kedes</i>		SUPERVISOR <i>T. Ryan</i>			

CASSING U.S. VS. FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				<i>Asphalt</i>
					<i>2.0'</i>
	2.5'	<i>Hand Auger</i>	<i>Full Rec</i>	1	<i>Misc Fill - Sand, Cinders, Gravel, Wood.</i>
				2	<i>Same as above</i>
				3	<i>Same</i>
				4	<i>Same</i>
					<i>4.0'</i>
	5.0'				<i>Bottom of Boring</i>

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

OBJECT: PN - former Metro Metals

LOCATION: ± 1' South of PA-C6 DATE: 12/3/01

DRILLING No: PA-C6-S1 TOTAL No. OF SAMPLES: 4

SIGNATURE OF ALL

SENT AT SAMPLING

T. Rye

1. REQUESTED

DATE 12/3/01 RECEIVED

(SIGN)

T. Rye

TIME BY (SIGN)

2. REQUESTED

DATE RECEIVED

(SIGN)

TIME BY (SIGN)

3. REQUESTED

DATE RECEIVED

(SIGN)

TIME BY LAB

REMARKS:

4 samples in 4-16oz jars.

THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

BORING REPORT

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SHEET 1 OF 3

PROJECT PN - Former Metro Metals	NAME OF CONTRACTOR Craig	BORING NO. PA-C6-S12	SURFACE ELEV.
LOCATION ± 5' South of PAC6	CONTRACT NO. 426-99-006	DATE 12/5/01	

OPERATOR A. Kidas	DRILLER T. Ryan	GROUND WATER LEVEL			
DATE 12/5/01	TIME	DEPTH	REMARKS No water		

CASING NO.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
1	0	Hand Auger	Full R.C.		Asphalt
	2.5			1	Same
				2	Same
				3	Same
				4	Same
	5.0				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: *PN - Former Metro Metals*  
LOCATION: *± 5' South of PAC6* DATE: *12/5/01*  
DRING No: *PA-C6-S20* TOTAL No. OF SAMPLES: *4*

SIGNATURE OF ALL

SENT AT SAMPLING

*T. Ryan*

1. INQUIRED

DATE *12/5/01*

RECEIVED

BY (SIGN)

*T. Ryan*

TIME

BY (SIGN)

2. INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

3. INQUIRED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*4 samples in 4 16oz jars*

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Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

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SHEET 1 OF 3

PROJECT PA - Former Metro Metal	NAME OF CONTRACTOR Craig	BORING NO. PAC6-S'3	SURFACE ELEV.
LOCATION ± 10' South of PAC6	CONTRACT NO. 426-99-006	DATE 12/7/01	

HOLE NO.	CASING SIZE	HOLE TYPE H. Auger	GROUND WATER LEVEL			
			Date	Time	Depth	Remarks
# FALL	# FALL	# FALL	12/7/01			No water
DRILLER Rob Dallas						
DIRECTOR T. Ryan						

CASING #	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0				Misc fill - cinders, sand, gravel, metal etc.
					ASPHALT
					Misc fill - cinders, sand, gravel, metal etc.
	2.5	Hand auger	Full rec	1	Same
				2	Same
				3	Same
				4	Same
	5.0'				Bottom of Boring

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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CHAIN OF CUSTODY RECORD

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Sheet 3 of 3

PROJECT: PN-Former Metro Metals

LOCATION: ± 10' South of PA-CL DATE: 12/7/01

TESTING No: PAC6-S3 TOTAL No. OF SAMPLES: 4

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACQUIRED

DATE 12/7/01

RECEIVED

(SIGN)

*T. Ryan*

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY (SIGN)

ACQUIRED

DATE

RECEIVED

(SIGN)

TIME

BY LAB

MARKS: 4 samples in 4 16 oz jars.

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Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT DN - Former Metro Metals	NAME OF CONTRACTOR Craig	BORING NO. PAC6-5.4	SURFACE ELEV.
LOCATION + 20' South of PAC6		CONTRACT NO. 426-99-006	DATE 12/11/01

FOON	CASING SIZE	HOLE TYPE H. Auger	GROUND WATER LEVEL			
"O.D."	"I.D."	HAMMER	Date	Time	Depth	Remarks
# FALL	# FALL		12/11/01			No water
OPERATOR M. McElean						
SUPERVISOR T. Ryan						

DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				ASPHALT
	Hand Auger	Full Rec		Misc. Fill - Cinders, Sand, Gravel, Metal
2.5'			1	Same
			2	Same
			3	Same
			4	Same
5.0'				Bottom of Boring

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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Sheet 3 of 3

PROJECT: PN - Former Metro Metals

LOCATION: ± 20' South of PA-C6 DATE: 12/11/01

PIPING No: PAC6-54 TOTAL No. OF SAMPLES: 4

NATURE OF ALL

POINT AT SAMPLING

UNOBTAINED

(SIGN)

DATE

RECEIVED

TIME

BY (SIGN)

UNOBTAINED

(SIGN)

DATE

RECEIVED

TIME

BY (SIGN)

UNOBTAINED

(SIGN)

DATE

RECEIVED

TIME

BY LAB

REMARKS:

4 samples in 4 16oz jars

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**BORING REPORT**

PROJECT PA - Metro Metals		NAME OF CONTRACTOR Craig Drilling		BORING NO. 84-PA-6655		SHEET 1 OF 2	
LOCATION 40' South of PA-C6		CONTRACT NO. 476-99-006		DATE 4/29/02		SURFACE ELEV.	
Casing Size O.D. 2 3/4" I.D.		HOLE TYPE 1		GROUND WATER LEVEL			
HAMMER BUJO		# FALL		Date	Time	Depth	Remarks
140				4/29	7 <sup>30</sup>	.5'	Water in Asphalt Millings
SUPERVISOR A. Kras							
OPERATOR D. Howe							

DEPTH (L./FT.)	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0	Hand Auger	Fall		Asphalt Millings
1	1	Topped Spoon	12	1	Misc Fill - Graders, Crush Asphalt, Sand, Brch EP
5	5				Bottom of Pier with Tubstrucion Possible Concrete slab Moved 4' NW to PA-C6-55A Resumed Sampling at 3'
10	10				All samples checked for TPAD Metals S# 1 2-3 Test for TPHC in field Sample sent by Chem Lab for Lab Test
15	15				
20	20				
25	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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**BORING REPORT**

PROJECT <b>Y-Metro Metals</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-PA-C6-55A</b>	SHEET <b>1</b> OF <b>2</b>
LOCATION <b>4' NW of PA C6-55</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>4/29/02</b>	SURFACE ELEV.

CASING SIZE <b>2 3/8"</b>	HOLE TYPE <b>Auger</b>	GROUND WATER LEVEL			
WATER <b>W</b>	HAMMER <b>H</b>	Date	Time	Depth	Remarks
<b>W</b>	<b>H</b>	<b>4/29</b>	<b>9:30</b>	<b>1.5</b>	<b>1x Asphalt Millings</b>
		<b>4/29</b>	<b>10:00</b>	<b>9.5</b>	<b>Ground water, 5' y</b>

DEPTH FEET	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	Hand Auger	Full		Asphalt Millings
1	↓	↓		Misc Fill - Cinders, Sand, Gravel, Brick, etc
1.5	Tapped Spoon	6"	1	Same
5	↓	14"	2	Misc Fill, Metal, Crushed Stone, Sand, etc
14-29			3	Fill M-F Brown Sand, Tr Gravel, Tr silt
38-52		20"		
4-8			4	Same
13-19		16"		
10				Bottom of Boring
				All samples checked with PID Meter
				S# 1, 2 & 5# 4 (9'-9.5') saved for testing
				& checked for TPH infill by chem lab
				Remaining samples discarded
15				
20				
25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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## Engineering Department Construction Division Materials Engineering Section BORING REPORT

PROJECT <b>N- Metro Mats</b>	NAME OF CONTRACTOR <b>Craig Drillers</b>	BORING NO. <b>BH-PA-66-56</b>	SHEET 1 OF 2
LOCATION <b>30' South of BH-PA-66</b>		CONTRACT NO. <b>42699-006</b>	SURFACE ELEV.
			DATE <b>4/29/02</b>

CASING SIZE <b>4" O.D. 2 3/8"</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
HAMMER		Date	Time	Depth	Remarks
# FALL	# FALL	4/29	11:5	15	w Asphalt Millings
		4/29	12:5	9.5	groundwater @ 5

ENG. S/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	O.D.
0	0	Hard Auger	Full		Asphalt Millings	1.0
1	1	↓	↓		Fill - M-F Brown Sand, Tr Silt, Tr Gravel	2.0
2	2	Topped Spoon	12"	1	Misc Fill - Asphalt, Curbing, Gravel, Silt, ETC	3.0
3	3	↓	7"	2	Misc Fill - Sand, Gravel, Bricks, Metal, ETC	
4	4	↓	15"	3	Misc Fill - Sand, Metal, Silt, Gravel, ETC	6.0
5	5	11-14		4		
6	6	17-27	16'	4	Fill - M-F Gray Brown Sand, Tr Gravel, Tr Silt	
7	7	8-11		5		
8	8	15-19	18'	5	Same	10.1
9	9					
10	10					
11	11					
12	12					
13	13					
14	14					
15	15					
16	16					
17	17					
18	18					
19	19					
20	20					
21	21					
22	22					
23	23					
24	24					
25	25					

Bottom of Boring

All samples checked with P.D. Meter  
 5' 1, 2 & 3 (9-11) Saved for Testing  
 & checked w field for JTKS  
 Remaining Sample Documented

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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## BORING REPORT

SHEET 1 OF 2

PROJECT <b>PN- Metro Mats</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BHPBC6-57</b>	SURFACE ELEV. 
LOCATION <b>E 5' South of BHPBC654</b>	CONTRACT NO. <b>Y2699-006</b>	DATE <b>4/30/02</b>	

POON <b>3</b>	O.D. <b>2 3/4</b>	I.D. <b>Auger</b>	CASING SIZE	HOLE TYPE <b>1</b>	GROUND WATER LEVEL			
HAMMER <b>140</b>	FALL <b>30</b>	HAMMER	FALL	Date	Time	Depth	Remarks	
DRILLER <b>D Cooke</b>				<b>4/30</b>	<b>1 PM</b>	<b>1.0</b>	<b>in Asphalt Milling</b>	
SPECTOR <b>P Howe</b>				<b>4/30</b>	<b>1:45</b>	<b>9.5</b>	<b>groundwater 5'5"</b>	

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	O.D.
land	0	Hard Auger	Ful		Asphalt Milling	
Auger ↓		↓	↓			2.0
Yellow		Tapped Spore	12'	1	Misc Fill Asphalt, Sand, Bricks, ETC	
STEM		↓	10'	2	Misc Fill Cinders, Bricks, Sand, Asphalt, ETC	
Auger	5	↓	18'	3	Same	6.0
↓		15-16		4		
		19-22	19'		Fill M-P Gray Brown Sand, Gravel, TRS	
		11-15		5		
	10	16-18	19'		Same	10.0
					Bottom of Borehole	↗
	15				All Samples checked with PID Meter 5' 1, 2 & 5 (9-95) Sawdust for Testing checked for TPH in field by Chem Lab Remaining Sample discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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**BORING REPORT**

SHEET 1 OF 3

PROJECT PA - Former Metro Metals	NAME OF CONTRACTOR Craze	BORING NO. PA-C7-N-1	SURFACE ELEV.
LOCATION E 1 N. of PA-C7		CONTRACT NO. 426-99-006	DATE 12/4/01

CASING SIZE "O.D." "I.D."	HOLE TYPE H. Auger	GROUND WATER LEVEL			
		Date	Time	Depth	Remarks
HAMMER # FALL	# FALL	12/4/01	10:30 A		1/2 water encountered
OPERATOR A. Kidas					
SUPERVISOR T. Ryan					

DEPTH (FT.)	SPoon BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0				Misc fill - brick, sand, concrete, metal, concrete blocks 0.3'
				Asphalt 1.1'
	Hand Auger			Misc fill - silt, cinders, Gr, wood, metal
2.5		Full Rec.	1	Same
			2	Same
			3	Fill - Bym-f Sand, to Silt, to Gr
			4	Same
5.0				Bottom of Boring 4.0'

NOTES: 1 - Length recovered; 0' - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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SUBJECT: *PN - Former Metro Metals*

LOCATION: *± 1' N of PA-C7*

DATE: *12/4/01*

TESTING No: *PA-C7-N1*

TOTAL No. OF SAMPLES: *4*

NATURE OF ALL

EVENT AT SAMPLING

*T. Ryan*

ACCOMPLISHED

DATE *12/4/01* RECEIVED

(SIGN)

*T. Ryan*

TIME BY (SIGN)

ACCOMPLISHED

DATE RECEIVED

(SIGN)

TIME BY (SIGN)

ACCOMPLISHED

DATE RECEIVED

(SIGN)

TIME BY LAB

REMARKS: *4 samples in 4 16 oz jars*

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**BORING REPORT**

PROJECT <b>NAPORANO SITE - BERTH 63</b>	NAME OF CONTRACTOR <b>CRAIG</b>	BORING NO. <b>BH-NSD</b>	SHEET / OF <b>1 / 1</b>
LOCATION <b>5' South from BH-NSC</b>	CONTRACT NO. <b>426-99-007</b>	DATE <b>8/27/99</b>	SURFACE ELEV.

BOH "O.D." "I.D."	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
MEAS # FALL	HAMMER	# FALL	Date	Time	Depth	Remarks
OPERATOR <b>S. Burns</b>						
INSPECTOR <b>m. Judah</b>						

BORING NO./FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hard Auger	Full	-	Misc. fill
	5				Obstruction found at ±2.6' Relocated Boring
	10				
	15				
	20				
	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane



**APPENDIX B**

**TABLES**

**TABLE 2-1  
PORT NEWARK CONTAINER TERMINAL, LLC  
SOIL AND GROUNDWATER ANALYTICAL PROTOCOLS**

<b>Parameter Name</b>	<b>Matrix</b>	<b>Container</b>	<b>Analytical Method</b>	<b>Preservatives</b>	<b>Maximum Holding Time</b>
Metals	Water	(1) 500 ml Polyethylene bottle	USEPA 200.7	HNO <sub>3</sub> to pH<2; Cool to 4°C	6 months (Hg - 28 days)
Polynuclear Aromatic Hydrocarbons	Soil	(1) 16 oz. Glass jar	SW846 8270C	Cool to 4°C	7 days extract 40 days analyze
PCBs	Soil		SW846 8082		7 days extract 40 days analyze
Metals	Soil		SW846 6010B/7000		6 months (Hg - 28 days)
Total Solids	Soil		SM 2540G		28 days

Note:  
All holding times listed are from time of sample collection.

**TABLE 3-1**  
**FORMER MAERSK-UNIVERSAL TERMINAL SITE**  
**SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES**  
**PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000**

Contaminant	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	Sample ID: Lab ID: Sampling Depth (Ft bgs): Analysis Method	Unit	PO-BH02A-	PO-BH02B-	PO-BH02C-	PO-BH02D-	PO-BH02E-	PO-BH13A-	PO-BH13B-	PO-BH13C-	PO-BH13D-
						090800 AB14581 11-11.5 09/08/00	090800 AB14582 11-11.5 09/08/00	090800 AB14583 11-11.5 09/08/00	100200 AB16057 11-11.5 10/02/00	100200 AB16058 11-11.5 10/02/00	090700 AB14489 6.5-7 09/07/00	090700 AB14490 6.5-7 09/07/00	090700 AB14491 6.5-7 09/07/00	100300 AB16059 6.5-7 10/03/00
<b>Metals</b>														
Chromium <sup>1</sup>	120,000	NC	NC	EPA 6010	MG/KG	46	500	390	380	570	600	380	610	240
Copper	600	600	NC	EPA 6010	MG/KG									
Lead	400	600	NC	EPA 6010	MG/KG									
Mercury	14	270	NC	EPA 7471A	MG/KG									
Thallium	2	2	NC	EPA 6010	MG/KG									
Zinc	1,500	1,500	NC	EPA 6010	MG/KG	120	1,500	150	740	420				
<b>Polychlorinated Biphenyls (PCB)</b>														
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG									
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG									
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG									
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG									
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG									
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG									
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG									
<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b>														
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG									
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG									
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG									
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG									
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG									
% Solids				SM 2540G	%	75	61	64	64	55	66	66	65	73

**Note:**

<sup>1</sup> Chromium -trivalent (III) Concentrations and Values

Exceedance of Most Stringent Criteria

NC or "--" No Criteria Exists

U Not Detected above Method Detection Limit Shown in Result Column

J Estimated Concentrations

B Below Sample Quantitation Limit

BLANK Indicate Not Analyzed

ft bgs feet below ground surface

\* - Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1, identified as BH-MW-02A, BH-MW-02B, etc...

Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with

Borings in Figure 1 identified as BH-MW-13 and BH-MW-14

**TABLE 3-1  
FORMER MAERSK-UNIVERSAL TERMINAL SITE  
SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES  
PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000**

Contaminant	Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	Impact to Groundwater Soil Cleanup	Sample ID: Lab ID: Sampling Depth (Ft bgs): Analysis Method	Sample Date: Unit	PO-BH13E-100300 AB16060 6.5-7 10/03/00		PO-BH14A-090700 AB14492 1.5-2 09/07/00		PO-BH14B-090800 AB14584 1.5-2 09/08/00		PO-BH14C-090800 AB14585 1.5-2 09/08/00		PO-BH14D-090800 AB14586 1.5-2 09/08/00		PO-BH14E-100300 AB16061 1.5-2 10/03/00		PO-BH14F-100300 AB16062 1.5-2 10/03/00		PO-BH14G-100300 AB16063 1.5-2 10/03/00	
						Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual
<b>Metals</b>																					
Chromium <sup>1</sup>	120,000	NC	NC	EPA 6010	MG/KG	270															
Copper	600	600	NC	EPA 6010	MG/KG		480	3,500		510	1,200		720		580		230				
Lead	400	600	NC	EPA 6010	MG/KG		8,000	2,800		1,700	2,500		35,000		2,900		810				
Mercury	14	270	NC	EPA 7471A	MG/KG		9.2	38		18	12		19		4.3		8.1				
Thallium	2	2	NC	EPA 6010	MG/KG																
Zinc	1,500	1,500	NC	EPA 6010	MG/KG		1,100	3,300		1,200	2,100		1,300		1,800		860				
<b>Polychlorinated Biphenyls (PCB)</b>																					
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG		2.3	8.2		4	6.1		2.2		1.7		0.96				
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG																
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG		2	6.2		3.3	4.9		1.1		4.4		6.4				
<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b>																					
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG		2	3.7		14	4.4		2		0.69	J	0.91				
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG		1.9	3		11	3.8		1.3		0.43	J	0.81			J	
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG		2.9	4		0.92	U		1.8		0.68	J	1.1				
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG																
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG		1.5	3.1		30	3.6		1.1		0.37	J	0.58			J	
% Solids				SM 2540G	%	71	88	90		91	90		94		88		95				

**Note:**

<sup>1</sup> Chromium -trivalent (III) Concentrations and Values

Exceedance of Most Stringent Criteria

- NC or "-" No Criteria Exists
- U Not Detected above Method Detection Limit Shown in Result Column
- J Estimated Concentrations
- B Below Sample Quantitation Limit
- BLANK Indicate Not Analyzed
- ft bgs feet below ground surface

\* - Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1, identified as BH-MW-02A, BH-MW-02B, etc...

Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with Borings in Figure 1 identified as BH-MW-13 and BH-MW- 14

**TABLE 3-1  
FORMER MAERSK-UNIVERSAL TERMINAL SITE  
SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN SOIL SAMPLES  
PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER, 2000**

Contaminant	Residential	Non-Residential	Impact to	Sample ID:		PO-BH14H-	
	Direct Contact Soil Cleanup	Direct Contact Soil Cleanup	Groundwater Soil Cleanup	Lab ID:	Sample Date:	100300	AB16064
				Sampling Depth (Ft bgs):	Analysis Method	Unit	Rslt Qual
<b>Metals</b>							
Chromium <sup>1</sup>	120,000	NC	NC	EPA 6010	MG/KG		
Copper	600	600	NC	EPA 6010	MG/KG	520	
Lead	400	600	NC	EPA 6010	MG/KG	<del>2,500</del>	
Mercury	14	270	NC	EPA 7471A	MG/KG	13	
Thallium	2	2	NC	EPA 6010	MG/KG		
Zinc	1,500	1,500	NC	EPA 6010	MG/KG	<del>10,000</del>	
<b>Polychlorinated Biphenyls (PCB)</b>							
Aroclor-1016	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1221	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1232	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1242	0.49	2	50	EPA 8082	MG/KG	<del>5.9</del>	
Aroclor-1248	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1254	0.49	2	50	EPA 8082	MG/KG		
Aroclor-1260	0.49	2	50	EPA 8082	MG/KG	<del>6.5</del>	
<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b>							
Benzo[a]anthracene	0.9	4	500	EPA 8270	MG/KG	<del>2.4</del>	
Benzo[a]pyrene	0.66	0.66	100	EPA 8270	MG/KG	<del>1.7</del>	
Benzo[b]fluoranthene	0.9	4	50	EPA 8270	MG/KG	<del>3</del>	
Benzo[g,h,i]perylene	NC	NC	NC	EPA 8270	MG/KG		
Benzo[k]fluoranthene	0.9	4	500	EPA 8270	MG/KG	<del>1.4</del>	
% Solids				SM 2540G	%	88	

**Note:**

<sup>1</sup> Chromium -trivalent (III) Concentrations and Values

~~Exceedance of Most Stringent Criteria~~

- NC or "-" No Criteria Exists
- U Not Detected above Method Detection Limit Shown in Result Column
- J Estimated Concentrations
- B Below Sample Quantitation Limit
- BLANK Indicate Not Analyzed
- ft bgs feet below ground surface

\* - Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.

Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."

Samples with identifications beginning with PO-BH02 are associated with borings in Figure 1,

identified as BH-MW-02A, BH-MW-02B, etc...


Similarly, samples identified beginning with PO-BH13 and PO-BH14 are associated with

Borings in Figure 1 identified as BH-MW-13 and BH-MW- 14

**TABLE 3-2  
FORMER MAERSK-UNIVERSAL TERMINAL SITE  
SUMMARY OF ALL DETECTIONS AND EXCEEDANCES FOUND IN GROUNDWATER SAMPLES  
PORT AUTHORITY SAMPLING IN SEPTEMBER AND OCTOBER 2000 and APRIL AND MAY 2002**

Contaminant	New Jersey Groundwater Quality Standards	Sample ID: Lab ID: Sample Date: Unit	PNO-MW-14A-		PNO-MW-12SB13-		PO-MW05-		PO-MW11-		PO-MW14-		PNCT-MW11-	
			Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual	Rslt	Qual
Metals														
Antimony	20	UG/L			3.3	U								
Arsenic	8	UG/L	3.6	U	3.6	U	4	U	17				3.4	B
Lead	10	UG/L	5.1								5.0	U		
Thallium	10	UG/L			3.1	U								

**Note:**

-  Exceedance of Most Stringent Criteria
  - B Below contract required detection limit/above instrument detection limit
  - U Not Detected above Method Detection Limit Shown in Result Column
  - BLANK Indicate Not Analyzed
- Taken from NJDEP's "Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D."

**APPENDIX A**



# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3  
SURFACE ELEV. 3

PROJECT <b>PN - Pda Ports Fic</b>	NAME OF CONTRACTOR <b>Craig Pilling</b>	BORING NO. <b>BH-MU-2A</b>	DATE <b>9/8/00</b>
LOCATION <b>15' NW of MU-2</b>		CONTRACT NO. <b>426-99-006</b>	

SPOON <b>3</b>	O.D. <b>2 3/8</b>	I.D.	CASING SIZE <b>Auger</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL				
HAMMER <b>140 # FALL 30</b>		SAFETY		# FALL		Date <b>9/8/00</b>	Time <b>12:25 P</b>	Depth	Remarks <b>W. Dr. encountered Bottom 6' 11'</b>
DRILLER <b>P. Pennell</b>									
SPECTOR <b>D. Howe</b>									

CASING SIZES/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	C.O.D.
	0				<del>Asphalt</del> <del>Crushed Stone</del>	0.0
		Hand Auger	Full	1	Fill - M-F Reddish Brown Sand, Tr Silty, Tr Gravel	0.5
				2	Same	2.0
	5			3	Fill Dk Gray organic silty clay, Little M-F Sand, Tr Gravel	
					Same	
					No Sampling 6-11'	
	10	2	18"	4	2 Attempts to Recover Sample	10.0
					Fill - RB Brown silty clay & Dk Gray organic silty clay	11.5
					Bottom not Boring	
	15				All Samples checked with PID Meter	
					Sample #4 11-11.5 Saved for Justice	
					Remaining Samples Discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN-020 Ports Frc

LOCATION: 75' Nw of MW-2

DATE: 9/8/00

BORING No: BH-MW-2A

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/8/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in 1-16 oz jar

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

PROJECT <b>PN - Pdo Ports Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-MW-2B</b>	SHEET <b>1</b> OF <b>3</b>
LOCATION <b>15' NE of MW-2</b>	CONTRACT NO. <b>426-99-006</b>	DATE <b>9/8/00</b>	SURFACE ELEV.

SPOON <b>3</b>	CASING SIZE <b>3 3/8" O.D.</b>	HOLE TYPE <b>Augers</b>	GROUND WATER LEVEL			
HAMMER <b>140</b>	HAMMER <b>SLOT</b>	# FALL <b>30</b>	Date <b>9/8/00</b>	Time	Depth	Remarks <b>No water encountered</b>
DRILLER <b>P Pennell</b>						
SPECTOR <b>D Howe</b>						

CASING FLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	O.D. C.T. I.D.
	0				<b>Asphalt crushed Stone</b>	
<b>land Auger</b>		<b>Hand Auger</b>	<b>Full</b>	<b>1</b>	<b>Fill - M-F Reddish Brown Sand, Tr Silt, Tr Gravel</b>	
				<b>2</b>	<b>Fill - M-F Brown Sand, Tr Silt, Tr Gravel</b>	
	<b>5</b>			<b>3</b>	<b>Same</b>	
<b>ollow Stem Augers</b>					<b>No Sampling 6'-11'</b>	
	<b>10</b>					
		<b>1</b>	<b>6"</b>	<b>4</b>	<b>Black &amp; Gray, organic silt clay, Tr Black Peat</b>	<b>11.0</b> <b>11.5</b>
					<b>Bottom of Borehole</b>	
	<b>15</b>				<b>All samples checked with PID Meter</b>	
					<b>5<sup>th</sup> 4' - 11' - 11.5' saved for testing</b>	
					<b>Remaining samples discarded</b>	
	<b>20</b>					
	<b>25</b>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- PJO Ports Fac  
LOCATION: 25' NE of MW-2 DATE: 9/8/00  
BORING No: BH-MW-2B TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/8/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in 1-16oz jar

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT <i>PN - PJO Ports Fac</i>		NAME OF CONTRACTOR <i>Craig Drilling</i>		BORING NO. <i>B21-MU-2C</i>	SHEET <i>1</i> OF <i>3</i>	
LOCATION <i>25' South of MU-2</i>		CONTRACT NO. <i>426-99-006</i>		DATE <i>9/8/00</i>		
SPOON <i>3</i>	*O.D. <i>2 3/4</i> *I.D.	CASING SIZE <i>Augers</i>	HOLE TYPE <i>1</i>	GROUND WATER LEVEL		
HAMMER <i>1 1/2 # FALL 30</i>	HAMMER <i># FALL</i>		Date Time Depth Remarks			
DRILLER <i>P Penwell</i>			<i>9/8/00</i>	<i>1:40</i>	<i>Dry</i>	<i>No water encountered</i>
SUPERVISOR <i>D Howe</i>						

CASING FWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	<i>0</i>				<i>Highly crushed stone</i>	<i>0.0</i>
<i>Land Auger</i>		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Fill - M-F Brown Sand, Tr Silty, Tr Gravel</i>	<i>1.5</i>
				<i>2</i>	<i>Fill - M-F Dk Brown Sand, Little Gray organic silty clay</i>	
	<i>5</i>			<i>3</i>	<i>Same</i>	
<i>Yellow Stem Auger</i>					<i>2 Attempts to Recover Sample</i>	<i>10.0</i>
	<i>10</i>	<i>1-1</i>	<i>Full</i>	<i>4</i>	<i>Black &amp; Gray organic silty clay, Tr Veg</i>	<i>11.5</i>
					<i>Bottom of Boring</i>	<i>11</i>
	<i>15</i>				<i>All samples checked with PIR Meter, S# 4 11-11.5 Saved for Testing Remaining Samples discarded</i>	
	<i>20</i>					
	<i>25</i>					

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - Pdc Ports Fac

LOCATION: #5' South of MW-2

DATE: 9/1/00

BORING No: BM-MW-2C

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in 1-16oz jar

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT PN- Pto Ports Fee	NAME OF CONTRACTOR Craig Drilling	BORING NO. BH-MU-2D	SHEET 1 OF 3
LOCATION 275' South of MU-2C	CONTRACT NO. 486-99-006	DATE 10/2/00	SURFACE ELEV.

SPOON 3	"O.D. 8 3/8"	"I.D. Augers"	CASING SIZE Augers	HOLE TYPE 1	GROUND WATER LEVEL			
HAMMER 140 # FALL 30	HAMMER		# FALL	Date	Time	Depth	Remarks	
DRILLER P Pennell				10/2	12 <sup>30</sup> p	4.5'	while Hand Augering	
SPECTOR J Howe								

CASING FLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				Asphalt crushed stone
land DUGER		Hand Auger	Full		Fill - M-F Brown Sand, Tr. Silt, Tr. Gravel
	5				Fill - PE Gray clayey silt & F Sand, Tr. Concrete, Tr. Gravel
ollow Stem Augers					
	10	2-2 -2	18"	1	Black & Brown clayey silt, Little Gray organic silt, ch. Tr. Black Part
	15				Bottom of Boring
	20				All Soil checked with PID Meter, s#1 11'-11.5' sand for testing, Remaining Soil discarded
	25				

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN-Port Ports Fee

LOCATION: ~~1025'~~ South of BH-MW-2C

DATE: 10/2/00

BORING No: BH-MW-2D

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 10/2/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample to 1-1603 jar

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

PROJECT <b>PN- Pto Ports Fac</b>		NAME OF CONTRACTOR <b>Chary Drilling</b>		BORING NO. <b>BH-MW-2E</b>	SHEET <b>1</b> OF <b>3</b>																
LOCATION <b>E 25' NE of BH-MW-2B</b>				CONTRACT NO. <b>476-99-006</b>	SURFACE ELEV. <b></b>																
SPOON <b>3</b>	"O.D. <b>2 3/8</b> "	"I.D. <b></b> "	CASING SIZE <b>Bugys</b>	HOLE TYPE <b>1</b>	GROUND WATER LEVEL																
HAMMER <b>14C # FALL</b>		HAMMER <b>Safety 30 # FALL</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td><b>10/2/00</b></td> <td><b>2:30</b></td> <td><b>6.5</b></td> <td><b>open hole at Dr Finish of Boring</b></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Date	Time	Depth	Remarks	<b>10/2/00</b>	<b>2:30</b>	<b>6.5</b>	<b>open hole at Dr Finish of Boring</b>								
Date	Time	Depth	Remarks																		
<b>10/2/00</b>	<b>2:30</b>	<b>6.5</b>	<b>open hole at Dr Finish of Boring</b>																		
DRILLER <b>P Pannoff</b>																					
INSPECTOR <b>D Howe</b>																					

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	CID O.V ID
	0				<b>Top of Crushed Stone</b>	
		<b>Hand Auger</b>	<b>FV</b>			
					<b>Fill - M-F Brown Sand, Tr Silt, Tr Gravel</b>	
	5					
					<b>Fill - Dk Brown Silt &amp; M-F Sandy Tr-Gravel (Auger cuttings)</b>	
	10					<b>10.0</b>
		<b>1-2-2</b>	<b>18"</b>	<b>1</b>	<b>Black &amp; Gray organic silt/clay, F F Sand</b>	<b>18.5</b>
					<b>Bottom of Boring</b>	
	15					
					<b>All Soil checked with PID Meter S# 1 11-11.5' saved for Testing Remaining Soil Discarded</b>	
	20					
	25					

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- P20 Potts Fr

LOCATION: #25 1 NE of BH-MW-2B

DATE: 10/2/00

BORING No: BH-MW-2E

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 10/2/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample Fr 1-160g Jan

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT PN - Pto Port's Fc		NAME OF CONTRACTOR Craig Drilling		BORING NO. BH-MU-13A	SURFACE ELEV.
LOCATION 25' NW of MU-13				CONTRACT NO. 426-99-00	DATE 9/7/00
SPERM Hand Auger	CASING SIZE "I.D.	HOLE TYPE 1	GROUND WATER LEVEL		
HAMMER # FALL	HAMMER # FALL		Date 9/7/00	Time 11:30	Depth Dry
DRILLER P Pennell					
SPECTOR D Howe					

CASING DEPTHS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Asphalt Crushed Stone	0.0 0.5 1.0
Hand Auger		Hand Auger	Full	1	Fill-M-P Sand, Tr Silty, Tr Gravel	3.0
	5			2	Fill-M-P DK Gray Sand, Little Organic Silty clay	5.0
				3	Fill-DK Gray, organic silty clay & some F Sand	7.0
	10				Bottom of Boring	
	15				All Samples checked with P10 Meter S# 3 6.5'-7' Saved for Testing Remaining Samples Discarded	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PH-PJO Ports Fac

LOCATION: #5 NW of MW-B

DATE: 9/7/00

BORING No: BH-MW-13A

TOTAL No. OF SAMPLES:

1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/7/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample for 1-kg for

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV. \_\_\_\_\_

PROJECT: *PN- Pto Ports Fac* NAME OF CONTRACTOR: *Craig Drilling* BORING NO.: *MU-13B*

LOCATION: *5' NE of MU-13* CONTRACT NO.: *426-99-006* DATE: *9/7/00*

SPRIG	CASING SIZE	HOLE TYPE	GROUND WATER LEVEL			
<i>Hand D. Auger - I.D.</i>		<i>A</i>	Date	Time	Depth	Remarks
DRUMMER	HAMMER		<i>9/7</i>	<i>15 P</i>	<i>Dry</i>	
# FALL	# FALL					
DRILLER	<i>P Parnell</i>					
INSPECTOR	<i>D Howe</i>					

ASING DEPTH (SWS/FT.)	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				<i>Asphalt</i>	<i>0.0</i>
					<i>CRUSHED STONE</i>	<i>0.5</i>
<i>Hand Auger</i>		<i>Hand Auger</i>	<i>Full</i>	1	<i>Fill - M-F Brown Sand, T.S.I.T, Tr Gravel</i>	<i>3.0</i>
	5			2	<i>Misc Fill - Sand, organic silty clay, Gravel, wood, Metal, ETC</i>	<i>3.0</i>
				3	<i>Fill - Dk Gray organic silty clay, Little F Sand</i>	<i>7.0</i>
					<i>Bottom of Boring</i>	
	10					
	15				<i>All Samples checked with PIR Meter</i>	
					<i>ST 3 6.5 - 7 Saved for Testing,</i>	
					<i>Remaining Samples Discarded</i>	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - Pto Ports Fee

LOCATION: ±5' NE of MW-13

DATE: 9/7/00

BORING No: BH-MW-13B

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample to 1-1603 Jan

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <i>PN- Pto Ports Fac</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BM-MW-13C</i>	SURFACE ELEV.
LOCATION <i>± 5' South of MU-13</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>9/7/00</i>	

SPOON <i>Hand Auger</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
IMMER	HAMMER		Date	Time	Depth	Remarks
# FALL	# FALL		<i>9/7</i>	<i>2:15 P</i>	<i>0.7</i>	
DRILLER <i>P Pennell</i>						
INSPECTOR <i>D Howe</i>						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				<i>Asphalt crushed Stone</i>	<i>0.0 0.5 1.0</i>
<i>Hand Auger</i>		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Fill - M-F Brown Sand, Tr Silty, Tr Gravel</i>	<i>3.0</i>
	5			<i>2</i>	<i>Misc Fill - Sand, organic silty clay, Gravel, Wood, ETC</i>	<i>5.0</i>
				<i>3</i>	<i>Fill - DE Gray organic silty clay, Tr RB clay, Silty, Tr FG sand</i>	<i>7.0</i>
	10				<i>Bottom of Boring</i>	
	15				<i>All Samples checked with PID Meter, S# 3. 6' - 7' Spud for Testing All Remaining Samples Discarded</i>	
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- Pto Ports Fac

LOCATION: ± 5' South of MW-13

DATE: 9/7/00

BORING No: BH-MW-13c

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/7/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in 1-16 oz jar



# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

PROJECT <b>PN- Pto Ports Fac</b>		NAME OF CONTRACTOR <b>Craig Drilling</b>		BORING NO. <b>BH-MU-13D</b>	SHEET <b>1</b> OF <b>3</b>
LOCATION <b>±25' South of BH-MU-13C</b>				CONTRACT NO. <b>426-99-006</b>	SURFACE ELEV. <b>10/3/00</b>
SPRIG <b>3</b>	"O.D. <b>2 3/8</b> "	"I.D.	CASING SIZE	HOLE TYPE <b>1</b>	GROUND WATER LEVEL Date Time Depth Remarks
NUMBER <b>140</b>	<b>Safety</b>	HAMMER	# FALL	# FALL	
OPERATOR <b>P Pennell</b>	INSPECTOR <b>V Howe</b>				

DEPTH DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0				Asphalt Crushed Stone
	2nd Auger	Hard Auger	Fell		Fill - M-F Brown Sand, Tr Silt, Tr Gravel Misc Fill - Rip Rap, Silt, Sand, Gravel, ETC
	5	11-13	6"	1	Tr F Black Sand 6.0 Fill - Red Brown clayey Silt, Some Black & Gray organic silt/clay (C)
	10				Bottom of Boring
	15				All Soil checked with P.D. Meter, Sample #1 6.5-7' Saved for Testing Remaining Soil Discarded
	20				
	25				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN Pto Ports Fac*

LOCATION: *#25 South of BH-MW-13C*

DATE: *10/3/00*

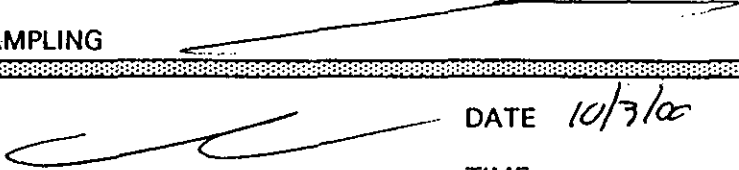
BORING No: *BH-MW-13D*

TOTAL No. OF SAMPLES: *1 Soil*

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED



DATE *10/3/00*

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*1 Soil Sample In A 1-16oz jar*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.  
DATE 10/13/00

PROJECT: *PN- P&O Parts Fac*  
NAME OF CONTRACTOR: *Craig Drilling*  
BORING NO.: *BH-MU-13E*  
LOCATION: *E 25' NW of BH-MU-13A*  
CONTRACT NO.: *426-99-006*

BOON: *3* \*O.D. *2 3/8* \*I.D.  
CASING SIZE: *4*  
HOLE TYPE: *4*  
HAMMER: *Safety*  
# FALL: *30*  
# FALL: *30*  
OPERATOR: *P Pennell*  
INSPECTOR: *D Howe*

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
<i>10/13/00</i>		<i>Dry</i>	

CASING DEWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	C.O.
					<i>Asphalt Crushed Stone</i>	<i>0.0 0.3 1.0</i>
		<i>Hand Auger</i>	<i>Full</i>		<i>Fill - M-F Brown Sand, Tr SILT, Tr Gravel</i>	
	<i>5</i>				<i>Misc Fill Rip Rap, Red Brown Clay, SILT, Blk &amp; Gray organic SILT, Clay, F Ok Gray Sand</i>	<i>6.0</i>
		<i>10-10</i>	<i>11"</i>	<i>1</i>	<i>Fill - Black &amp; Gray organic SILT Clay, Some RB clay SILT</i>	<i>7.0</i>
	<i>10</i>				<i>Bottom of Boring</i>	
	<i>15</i>				<i>All Soil checked with R10 Meter Sample #1 6.5-7.0' Sand for Testing, Remaining Soil discarded</i>	
	<i>20</i>					
	<i>25</i>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN- Pto Parts Fac*

LOCATION: *#25 N W of BM BM-MW-13A*

DATE: *10/3/00*

BORING No: *BM-MW-13E*

TOTAL No. OF SAMPLES: *1 Soils*

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE *10/3/00*

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*1 Soil sample in Hdo on fac*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

PROJECT <i>PN- Pto Ports Fac</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BH-MW-14A</i>	SHEET <i>1</i> OF <i>3</i>
LOCATION <i>23' South of MW-14</i>	CONTRACT NO. <i>426-99-006</i>	DATE <i>9/7/00</i>	SURFACE ELEV.

SP. 1 <i>and "O.D. Auger "I.D.</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
SP. 2 HAMMER	HAMMER		Date	Time	Depth	Remarks
# FALL	# FALL		<i>9/7/00</i>	<i>3<sup>00</sup></i>	<i>Dry</i>	
DRILLER <i>P Pennell</i>						
INSPECTOR <i>D Howe</i>						

CASING DEVS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	<i>0</i>				<i>Asphalt crushed stone</i> <span style="float: right;"><i>O.C. 0.5 1.0</i></span>
		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Misc Fill - Cinders, Sand, Gravel, Silt, Brick, Wood, etc</i>
					<i>Bottom of Boring</i>
	<i>5</i>				
	<i>10</i>				<i>All samples checked with PID Meter S#1 1.5-2' Squared for Test Remaining Sample Discarded.</i>
	<i>15</i>				
	<i>20</i>				
	<i>25</i>				

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - PJO Ports Fac

LOCATION: # 23' South of MW 17

DATE: 9/7/00

BORING No: BX-MW-17A

TOTAL No. OF SAMPLES: 1

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE 9/7/00

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in F1603 jar

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT PN- Pto Parts Fac	NAME OF CONTRACTOR Craig Drilling	BORING NO. BH-MW-14B	SURFACE ELEV.
LOCATION E-3 west of MW-14	CONTRACT NO. 486-99-006	DATE 9/8/00	

SPOON Hand O.D. Auger I.D.	CASING SIZE	HOLE TYPE 1	GROUND WATER LEVEL			
HAMMER # FALL	HAMMER # FALL		Date 9/8/00	Time	Depth Dry	Remarks
DRILLER P Pennell						
SPECTOR D Howe						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Asphalt Crushed Stone	0.0 0.5 1.0
		Hand Auger	Full	1	Misc Fill - Cinders, Sand, concrete, silt, metal, etc	2.0
					Bottom of Boring	
	5					
	10				Sample checked with PID Meter 5 <sup>th</sup> 1.5-2' saved for testing Remaining Sample Discarded	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN - PJO Parts Fac

LOCATION: ± 3' west of MXU-14

DATE: 9/8/00

BORING No: BN-MXU-14B

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 Soil Sample in 160g jar

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.  
DATE 9/8/00

PROJECT PN- Pto Ports Fac  
NAME OF CONTRACTOR Craig Drilling  
BORING NO. BM-MW-14C  
LOCATION # 3 EAST of MW-14  
CONTRACT NO. 426-99-006

POON Hand .O.D. Auger .I.D.  
CASING SIZE  
HOLE TYPE 1  
HAMMER  
# FALL  
# FALL  
DRILLER P. Pennell  
INSPECTOR D. Howe

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
9/8/00		Dry	

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Asphalt crushed stone	0.0 0.5 1.0
		Hand Auger	Full	1	Misc Fill - Sand, Gravel, Gravel, Concrete, ETC	2.0
					Bottom of Boring	
	5					
	10				Sample checked with PID Meter Sample # 1 1.5-2' Sand for Testing Remaining Sample Discarded	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- Pto Ports Enc  
LOCATION: #3' East of M4-14 DATE: 9/8/00  
BORING No: BM-M4-14 C TOTAL No. OF SAMPLES: 1 Seal

SIGNATURE OF ALL PRESENT AT SAMPLING

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY (SIGN)

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY (SIGN)

RELINQUISHED BY (SIGN) DATE TIME RECEIVED BY LAB

REMARKS:  
1 Seal Sample In 1-16oz jar

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV. 3

PROJECT <b>PN- Pto Ports Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-MU-14D</b>	DATE <b>9/8/00</b>
LOCATION <b>= 3' North of MU-14</b>		CONTRACT NO. <b>406-99-006</b>	

SPOON <b>Hand D. Auger</b>	CASING SIZE	HOLE TYPE <b>L</b>	GROUND WATER LEVEL			
HAMMER	HAMMER		Date	Time	Depth	Remarks
# FALL	# FALL		<b>9/8</b>		<b>Dry</b>	
DRILLER <b>P Pennell</b>						
SPECTOR <b>D Howe</b>						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	O.C. O.S. I.C.
	0				<b>Asphalt Crushed Stone</b>	
		<b>Hand Auger</b>	<b>Full</b>	<b>1</b>	<b>Misc Fill - Sand, Silt, Gravel, Wood, Metal, etc</b>	<b>2.0</b>
					<b>Bottom of Boring</b>	
	5					
	10				<b>Sample checked with PID Meter, Sample #1 1.5-2' Sand for Test, Remaining Sample Discarded</b>	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0\* - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.





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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 7

PROJECT: *PN - PJC Ports Fac*

LOCATION: *± 3' North of MW-14*

DATE: *9/8/00*

BORING No: *BH-MU-14D*

TOTAL No. OF SAMPLES: *1 Seal*

SIGNATURE OF ALL

PRESENT AT SAMPLING

RELINQUISHED

DATE *9/8/00*

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

*1 Seal Sample in 1-lb bag for*

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 3

PROJECT <i>PN - P&amp;O PORTS FAC</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BH-MW-14E</i>	SURFACE ELEV.
LOCATION <i>25' west of BH-MW-14B</i>		CONTRACT NO. <i>476 99-006</i>	DATE <i>10/3/00</i>

SPOON <i>and "O.D. Auger" I.D.</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
NUMBER <i># FALL</i>	HAMMER	<i># FALL</i>	Date	Time	Depth	Remarks
			<i>10/3</i>	<i>10<sup>30</sup></i>	<i>Dry</i>	
DRILLER <i>P. Parnell</i>						
SUPERVISOR <i>D. Moore</i>						

CASING DEVS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	<i>0</i>				<i>Asphalt Crushed Stone</i>	<i>0.0</i>
						<i>0.9</i>
		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Misc Fill - Gravel, Crushed Stone, Sand, Silt, Mat, etc</i>	<i>1.0</i>
					<i>Bottom of Boring</i>	
	<i>5</i>				<i>S# 1 checked with PIP Meter 1.5' - 2.0' Sound for Testing Remaining Sample Discarded</i>	
	<i>10</i>					
	<i>15</i>					
	<i>20</i>					
	<i>25</i>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.




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ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: <i>PN-020 Potts Fec</i>	
LOCATION: <i>#25' west of BA-MW-14B</i>	DATE: <i>10/3/00</i>
BORING No: <i>BA-MW-13E</i>	TOTAL No. OF SAMPLES: <i>(1 Soil)</i>

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED BY (SIGN)	DATE	TIME	RECEIVED BY (SIGN)
	<i>10/3/00</i>		
RELINQUISHED BY (SIGN)	DATE	TIME	RECEIVED BY (SIGN)
RELINQUISHED BY (SIGN)	DATE	TIME	RECEIVED BY LAB

REMARKS:  
*1 Soil sample in 1-lb bag for*

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

## BORING REPORT

SHEET 1 OF 3

PROJECT <i>PN- Pdo Ports Fac</i>	NAME OF CONTRACTOR <i>Craig Drilling</i>	BORING NO. <i>BH-MW-14F</i>	SURFACE ELEV.
LOCATION <i>E 25' South of BH-MW-14A</i>	CONTRACT NO. <i>426 99-006</i>	DATE <i>10/3/00</i>	

SPOON <i>Hand O.D. Auger</i>	CASING SIZE	HOLE TYPE <i>1</i>	GROUND WATER LEVEL			
WMMER	HAMMER		Date	Time	Depth	Remarks
# FALL	# FALL		<i>10/3</i>	<i>11<sup>2</sup></i>	<i>Dry</i>	
DRILLER <i>P Pennell</i>						
SPECTOR <i>D Moore</i>						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
					<i>Depth of crushed Stone</i>	<i>0.0 0.3 1.0</i>
		<i>Hand Auger</i>	<i>Full</i>	<i>1</i>	<i>Misc Fill - Cinders, Sand, Gravel, Brick, Concrete, ETC</i>	<i>2.0</i>
					<i>Bottom of Boring</i>	<i>9</i>
	<i>5</i>					
	<i>10</i>				<i>S#1 checked with PID Meter 1.5-2.0' saved for testing, Remaining sample discarded</i>	
	<i>15</i>					
	<i>20</i>					
	<i>25</i>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN- PJO Ports Fac

LOCATION: ± 25' South of BJA-NW-14A

DATE: 10/7/00

BORING No: BJA-NW-14F

TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED   
BY (SIGN)

DATE 10/7/00  
TIME

RECEIVED  
BY (SIGN)

RELINQUISHED  
BY (SIGN)

DATE  
TIME

RECEIVED  
BY (SIGN)

RELINQUISHED  
BY (SIGN)

DATE  
TIME

RECEIVED  
BY LAB

REMARKS:  
1 Soil Sample in 1-bag per



# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

PROJECT <b>PN - Pto Ports Fac</b>	NAME OF CONTRACTOR <b>Craig Drilling</b>	BORING NO. <b>BH-MW-14G</b>	SHEET ( OF ) SURFACE ELEV.
LOCATION <b>= 25' North of BH-MW-14 D</b>		CONTRACT NO. <b>426-95-006</b>	DATE <b>10/3/00</b>

SPOON <b>Hand</b> O.D. <b>Buger</b> I.D.	CASING SIZE	HOLE TYPE <b>L</b>	GROUND WATER LEVEL			
HAMMER <b># FALL</b>	HAMMER <b># FALL</b>		Date	Time	Depth	Remarks
			<b>10/3/00</b>	<b>11:23</b>	<b>Dry</b>	
DRILLER <b>P. Pennell</b>						
SPECTOR <b>D. Howe</b>						

CASING FOWS/FT.	DEPTH	SPOON BLOWS/8"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	<b>C</b>				<b>Asphalt crushed stone</b>	<b>0.0</b>
		<b>Hand Buger</b>	<b>Full</b>	<b>1</b>	<b>Fill - IX - F - LT Brown Sand, Tr Silt, Tr Gravel, Tr Shells</b>	<b>0.3</b>
					<b>Bottom of Boring</b>	<b>1.0</b>
	<b>5</b>				<b>Sample #1 checked with PID Meter, 1.5-2.0' saved for Tar Test, Remaining Sample Discarded</b>	
	<b>10</b>					
	<b>15</b>					
	<b>20</b>					
	<b>25</b>					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
 2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.




THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: PN-Pto Parts Pac  
LOCATION: #25' North of BN-MW-14D DATE: 10/3/00  
BORING No: BN-MW-14G TOTAL No. OF SAMPLES: 1 Soil

SIGNATURE OF ALL PRESENT AT SAMPLING 

RELINQUISHED  DATE 10/3/00 RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY LAB

REMARKS:  
1 Soil Sample In 1-kg bag

# THE PORT AUTHORITY OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 3  
SURFACE ELEV.

PROJECT DN - PDC PARTS FAC	NAME OF CONTRACTOR Craig Drilling	BORING NO. BM-MW-14H	DATE 10/3/00
LOCATION 25' E of BM-MW-14C	CONTRACT NO. 426-99-00C	DATE 10/3/00	

SPOON Hand O.D. Auger I.D.	CASING SIZE	HOLE TYPE 1	GROUND WATER LEVEL			
HAMMER # FALL	HAMMER # FALL		Date 10/3	Time 12:15 P	Depth Dry	Remarks
DRILLER P. Pennell						
SPECTOR D. Howe						

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COVD	SAMP. NO.	*SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
	0				Asphalt	0.0
					Crushed Stone	0.5
						1.0
		Hand Auger	Full	1	Misc Fill - Chunks, Mat, Sand Gravel, ETC	2.0
					Bottom of Boring	
	5					
	10				Sample #1 checked with PID Meter 1.5-2.0' Saval for Testing Remaining Sample Discarded	
	15					
	20					
	25					

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.



# THE PORT AUTHORITY OF N.Y. & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 3 of 3

PROJECT: *PN POC Ports Fac*

LOCATION: *#25' West of BH-MW-146* DATE: *10/3/00*

BORING No: *BH-MW-14A* TOTAL No. OF SAMPLES: *1 Soil*

SIGNATURE OF ALL  
PRESENT AT SAMPLING 

RELINQUISHED	DATE	RECEIVED
<i>[Signature]</i> BY (SIGN)	<i>10/3/00</i> TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY (SIGN)
RELINQUISHED	DATE	RECEIVED
BY (SIGN)	TIME	BY LAB

REMARKS:  
*1 Soil sample to 1-1602 feet*

ACKNOWLEDGEMENTS

FOR THE PORT AUTHORITY

STATE OF NEW YORK )  
 )ss.  
COUNTY OF NEW YORK )

On the 5<sup>th</sup> day of October in the year 2004 ~~RICHARD M. LARRABEE~~  
undersigned, a Notary Public in and for said state, personally appeared **DIRECTOR, PORT COMMERCE DEPT.**  
personally known to me or proved to me on the basis of satisfactory evidence to be the individual  
whose name is subscribed to the within instrument and acknowledged to me that he/she executed  
the same in his/her capacity, and that by his/her signature on the instrument, the individual, or  
the person upon behalf of which the individual acted, executed the instrument.

Marie M. Edwards  
(notarial seal and stamp)

FOR THE LESSEE Marie M. Edwards  
Notary Public, State of New York  
No. 01ED4959693  
Qualified in Kings County  
Commission Expires Jan 6, 2006

STATE NEW JERSEY )  
 )ss.  
COUNTY OF ESSEX )

On the 5<sup>th</sup> day of OCTOBER in the year 2004, before me, the undersigned, a  
Notary Public in and for said state, personally appeared DONALD P. HAMM  
personally known to me or proved to me on the basis of satisfactory evidence to be the individual  
whose name is subscribed to the within instrument and acknowledged to me that he/she executed the  
same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person  
upon behalf of which the individual acted, executed the instrument.

Andrea Goc  
(notarial seal and stamp)

**ANDREA GOC**  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 2/27/07

**ADDITIONAL SAMPLING REPORT**

**ADDENDUM NO. 3**

**to**

**EXHIBIT I**

**to Lease No. L-PN-264**

**between**


**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

  
\_\_\_\_\_  
**For the Port Authority**

**Initialed:**

  
\_\_\_\_\_  
**For the Lessee**



**ADDITIONAL SAMPLING REPORT**

**ADDENDUM NO. 3**

**to**

**EXHIBIT I**

**to**

**Lease No. L-PN-264**

**between**

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

**and**

**PORT NEWARK CONTAINER TERMINAL LLC**

**June 2002**

**PORT NEWARK CONTAINER TERMINAL, LLC  
ADDITIONAL SAMPLING REPORT**

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## **1.0 INTRODUCTION**

In September and October 2000 and April and May 2002, the Port Authority of New York and New Jersey (the "Port Authority") conducted supplemental soil and groundwater sampling at the premises under Port Authority Lease No. L-PN-264 between the Port Authority and Port Newark Container Terminal LLC ("PNCT"). The soil sampling was performed to further delineate soil exceedances detected during a baseline investigation conducted by PNCT and the supplemental groundwater sampling was performed to respond to comments received from the New Jersey Department of Environmental Protection ("NJDEP").

## **2.0 FIELD ACTIVITIES**

The purpose of the supplemental soil investigation was to provide additional soil delineation to further establish current environmental conditions of subsurface soils. The purpose of the supplemental groundwater investigation was to provide additional water quality data for the area located upland of Berths 51 to 61 at Port Newark. Sampling locations were designated by the Port Authority. The area encompassing the terminal is approximately 154 acres. Figure 1 presents the Site Plan as provided by GEOD Corporation, a NJ licensed land surveyor.

The supplemental investigation activities included the drilling of 20 soil borings and the collection of 5 groundwater samples at locations shown in Figure 1. Table 2-1 provides a summary of the analytical methods performed. All investigative work conducted for the supplemental investigation program was performed in accordance with the NJDEP Field Sampling Procedures Manual, May 1992. Information collected during the investigation was recorded in a bound fieldbook and in conformance with the Port Authority's "Environmental Baseline Field Program, Port Newark, June 1999".

## **2.1 SOIL SAMPLING PROGRAM**

The supplemental soil sampling program was conducted at the site on September 7 and 8, and October 2 and 3, 2000. Soil borings were advanced using a combination of hand auger and hollow stem auger ("HSA") drilling techniques. Hand augering was performed to advance the first 6 feet of each boring advanced deeper than 2 feet below ground surface ("bgs"). The HSA techniques were used to advance the remainder of the soil borings that were drilled to a final depth of 11.5 feet bgs. The soil borings that were completed at depths less than 11.5 bgs were completed exclusively by hand augering. Continuous samples were collected from borings advanced via HSA techniques by using 2 3/8-inch inside diameter carbon steel split-spoons with all samples collected from beneath the asphalt cover and subbase. A total of 20 soil samples were collected for laboratory analysis. Soil boring logs are included in Appendix A.

The following summarizes the soil samples collected from the borings:

<u>Sample ID</u>	<u>Boring</u>	<u>Sampling Depth</u>	<u>Sampling Date</u>
PO-BH02A-090800	BH-MW-2A <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02B-090800	BH-MW-2B <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02C-090800	BH-MW-2C <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02D-090800	BH-MW-2D <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH02E-090800	BH-MW-2E <sup>(1)</sup>	11-11.5 feet	09/08/00
PO-BH13A-090700	BH-MW-13A <sup>(2)</sup>	6.5-7 feet	09/07/00
PO-BH13B-090700	BH-MW-13B <sup>(2)</sup>	6.5-7 feet	09/07/00
PO-BH13C-090700	BH-MW-13C <sup>(2)</sup>	6.5-7 feet	09/07/00
PO-BH13D-100300	BH-MW-13D <sup>(2)</sup>	6.5-7 feet	10/03/00
PO-BH13E-100300	BH-MW-13E <sup>(2)</sup>	6.5-7 feet	10/03/00
PO-BH14A-090700	BH-MW-14A <sup>(2)</sup>	1.5-2 feet	09/07/00
PO-BH14B-090800	BH-MW-14B <sup>(2)</sup>	1.5-2 feet	09/08/00
PO-BH14C-090800	BH-MW-14C <sup>(2)</sup>	1.5-2 feet	09/08/00
PO-BH14D-090800	BH-MW-14D <sup>(2)</sup>	1.5-2 feet	09/08/00
PO-BH14E-100300	BH-MW-14E <sup>(2)</sup>	1.5-2 feet	10/03/00
PO-BH14F-100300	BH-MW-14F <sup>(2)</sup>	1.5-2 feet	10/03/00
PO-BH14G-100300	BH-MW-14G <sup>(2)</sup>	1.5-2 feet	10/03/00
PO-BH14H-100300	BH-MW-14H <sup>(2)</sup>	1.5-2 feet	10/03/00

<sup>(1)</sup> Indicates that the boring was advanced using a hand auger to 6 feet bgs and completed using HSA drilling techniques to final depth.

<sup>(2)</sup> Indicates that the boring was advanced using a hand auger to final depth.

Sample intervals for laboratory analysis in each boring were selected based on the delineation information needed at each area (i.e., horizontal or vertical). Actual sample depth intervals varied depending on several factors, as follows:

- The soil recovered for each sample needed to be sufficient to fill the required sample jars. At times, it was necessary to collect soil from more than a six-inch interval to fulfill this requirement.
- In instances where a confining layer was encountered before reaching the water table, a sample was collected directly above the confining layer thereby not compromising the layer by drilling through it.
- When elevated photoionization detector ("PID") readings or an odor not associated with natural organic material was detected while field screening split-spoon samples, these samples were also sent for analysis.

Soil sampling was conducted in accordance with the following procedure:

1. Extract the split-spoon from the borehole, open it and lay it on plastic. In the case of borings completed using a hand auger, extract the auger and transfer the auger contents to a decontaminated stainless-steel bowl.
2. Log the sample and perform headspace screening analysis using a PID.
3. Transfer the soil to a decontaminated stainless-steel bowl, if necessary, and homogenize using a decontaminated stainless-steel spoon.

4. Transfer homogenized soil to the laboratory supplied sample containers.
5. Label the sample and record sample information in the field book.
6. Place labeled sample in a cooler with ice.
7. Complete the chain of custody form and ship samples to the laboratory for analysis.

Sampling equipment was decontaminated according to the following procedure before use at each discrete sample location:

1. Wash the equipment with non-phosphate detergent and potable water.
2. Rinse with potable water.
3. Rinse with deionized water.
4. Allow equipment to air dry.
5. Wrap equipment in aluminum foil.

Soil samples were analyzed for the following parameters:

- Polynuclear Aromatic Hydrocarbons (PAHs);
- Polychlorinated Biphenyls (PCBs);
- Select Target Analyte List (TAL) Metals, specifically chromium, copper, lead, mercury, thallium and zinc; and,
- Percent Solids.

## 2.2 GROUNDWATER SAMPLING PROGRAM

The groundwater investigation program involved the collection of 5 groundwater samples from select existing monitoring wells at the terminal as follows:

<u>Sample ID</u>	<u>Monitoring Well</u>	<u>Sampling Date</u>
PNO-MW-14A-091900WG1	MW-14	09/19/00
PNO-MW-12SB13-091900WG1	MW-12	09/19/00
PO-MW05-042002WG01	MW-05	04/20/02
PO-MW11-042002WG01	MW-11	04/20/02
PO-MW14-042302WG01	MW-14	04/23/02
PNCT-MW11-053102	MW-11	05/31/02

Groundwater samples were collected via low-flow sampling techniques according to the following procedure:

1. Wearing the appropriate PPE, open the monitoring well and screen the headspace of the well using a PID to determine if VOCs are present.
2. Measure the static water level in the monitoring well from top of inner casing using an electronic water level meter. Minimize the disturbance to the water column.
3. Check for free product or sheen floating on water surface in the well.

4. Carefully lower the low-flow pump into the water column until the intake of the pump is in the middle of the saturated section of the screen. Minimize disturbance to the water column.
5. Purge the well using a low flow rate (<0.5 l/min) until indicator parameters (i.e., pH, conductivity, dissolved oxygen, etc.) have stabilized. Drawdown in the well should not exceed 0.3 foot.
6. Without stopping the pump, collect groundwater samples using same flow rates as established during purging.
7. Fill sample bottles directly from the pump discharge tubing. VOC sample vials will be filled first, then remaining sample bottles.
8. Label the samples and record sampling information in the field book.
9. Place labeled samples in a cooler with ice. A trip blank will be maintained in the cooler during each sampling day.
10. Complete the chain of custody form and ship samples to the laboratory for analysis.

The submersible pump used for groundwater sampling was decontaminated prior to use on each well according to the following procedure:

1. Manually wash the outside of the pump using non-phosphate detergent and potable water.
2. Rinse the outside of the pump using potable water.
3. Flush the pump with 20 gallons of potable water by pumping the water through the housing and tubing.
4. Rinse the exterior housing with distilled/deionized water.
5. Repeat this procedure between each use of the pump.
6. Collect the rinsate from the pump decontamination in drums for disposal.

Dedicated teflon-lined tubing was used for sampling each well.

MW-14 was purged and sampled using a polypropylene bailer since the pump control box malfunctioned. MW-14 was purged by carefully lowering the bailer into the well, and removing groundwater from the well. Water quality parameters including pH, turbidity, conductivity, temperature, dissolved oxygen and oxidation-reduction potential were measured during this process. Groundwater samples were collected for MW-14 after parameter stabilization by transferring water directly from the bailer into the sample bottles. This sampling technique is considered to yield accurate analytical results, similar to what might be obtained by sampling directly from a pump discharge. Groundwater samples were analyzed for metals, including antimony, arsenic, lead and thallium, by EPA Method 200.7.

### 3.0 RESULTS

#### 3.1 SOIL SAMPLING RESULTS

The analytical results for soil samples were compared to NJDEP's "Soil Cleanup Criteria (mg/kg)", dated 5/12/99 and available through the NJDEP's website (<http://www.state.nj.us/dep/srp/regs/guidance.htm>). The criteria on the list include the following:

- Residential Direct Contact;
- Non-Residential Direct Contact; and,
- Impact to Groundwater.

Twenty soil samples, plus appropriate QA/QC samples, were collected from twenty soil borings. Samples were submitted to Hampton-Clarke, Inc., Veritech Laboratories of Fairfield, New Jersey for analysis. The soil samples were analyzed for the following parameters:

- Polynuclear Aromatic Hydrocarbons (PAHs);
- Polychlorinated Biphenyls (PCBs);
- Select Target Analyte List (TAL) Metals, specifically chromium, copper, lead, mercury, thallium and zinc; and,
- Percent Solids.

A posting map depicting sample locations where sample concentrations exceed criteria is provided as Figure 1.

##### 3.1.1 Polynuclear Aromatic Hydrocarbons (PAHs)

The following soil samples were analyzed for selected polynuclear aromatic hydrocarbons (PAHs) by EPA SW-846 Method 8270:

PO-BH14A (1.5-2)  
PO-BH14B (1.5-2)  
PO-BH14C (1.5-2)  
PO-BH14D (1.5-2)  
PO-BH14E (1.5-2)  
PO-BH14F (1.5-2)  
PO-BH14G (1.5-2)  
PO-BH14H (1.5-2)

A summary of the PAHs detected in the soil samples is presented in Table 3-1.

The concentration of benzo(a)anthracene detected in the following samples exceeded the residential direct contact soil cleanup criterion (RDCSCC) of 0.9 mg/kg, the most stringent criterion for benzo(a)anthracene:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2
PO-BH14B (1.5-2)	3.7
PO-BH14C (1.5-2)	14
PO-BH14D (1.5-2)	4.4
PO-BH14E (1.5-2)	2
PO-BH14G (1.5-2)	0.91
PO-BH14H (1.5-2)	2.4

The concentration of benzo(b)fluoranthene detected in the following samples exceeded the RDCSCC of 0.9 mg/kg, the most stringent criterion for benzo(b)fluoranthene :

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2.9
PO-BH14B (1.5-2)	4
PO-BH14D (1.5-2)	5.7
PO-BH14E (1.5-2)	1.8
PO-BH14G (1.5-2)	1.1
PO-BH14H (1.5-2)	3

The concentration of benzo(k)fluoranthene detected in the following samples exceeded the RDCSCC of 0.9 mg/kg, the most stringent criterion for benzo(k)fluoranthene:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	1.5
PO-BH14B (1.5-2)	3.1
PO-BH14C (1.5-2)	30
PO-BH14D (1.5-2)	3.6
PO-BH14E (1.5-2)	1.1
PO-BH14H (1.5-2)	1.4

The concentration of benzo(a)pyrene detected in the following samples exceeded the RDCSCC and non-residential direct contact soil cleanup criterion (NRDCSCC), both 0.66 mg/kg and the most stringent criteria for benzo(a)pyrene:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	1.9
PO-BH14B (1.5-2)	3
PO-BH14C (1.5-2)	11



PO-BH14D (1.5-2)	3.8
PO-BH14E (1.5-2)	1.3
PO-BH14G (1.5-2)	0.81 J
PO-BH14H (1.5-2)	1.7

J indicates the concentration of the compound is estimated

### 3.1.2 Polychlorinated Biphenyls

The following soil samples were analyzed for polychlorinated biphenyls (PCBs) by EPA SW-846 Method 8082:

- PO-BH14A (1.5-2)
- PO-BH14B (1.5-2)
- PO-BH14C (1.5-2)
- PO-BH14D (1.5-2)
- PO-BH14E (1.5-2)
- PO-BH14F (1.5-2)
- PO-BH14G (1.5-2)
- PO-BH14H (1.5-2)

PCB Aroclors, including Aroclor 1242 and 1260, were detected in soil samples above the Soil Cleanup Criteria. Each of the individual aroclors was compared to the criteria for total PCBs.

The concentration of Aroclor 1242 detected in the following samples exceeded the RDCSCC of 0.49 mg/kg, the most stringent criterion for total PCBs:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2.3
PO-BH14B (1.5-2)	8.2
PO-BH14C (1.5-2)	4
PO-BH14D (1.5-2)	6.1
PO-BH14E (1.5-2)	2.2
PO-BH14F (1.5-2)	1.7
PO-BH14G (1.5-2)	0.96
PO-BH14H (1.5-2)	5.9

The concentration of Aroclor 1260 detected in the following samples exceeded the RDCSCC of 0.49 mg/kg, the most stringent criterion for total PCBs:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	2
PO-BH14B (1.5-2)	6.2
PO-BH14C (1.5-2)	3.3

PO-BH14D (1.5-2)	4.9
PO-BH14E (1.5-2)	11
PO-BH14F (1.5-2)	4.4
PO-BH14G (1.5-2)	6.4
PO-BH14H (1.5-2)	6.5

### 3.1.3 TAL Metals

The following soil samples were analyzed for select metals including chromium, copper, lead, thallium and zinc by EPA SW-846 Method 6010 and Mercury by EPA SW-846 Method 7471A, as indicated:

<u>Sample ID</u>	<u>Analytes</u>
PO-BH02A-090800	Chromium, Thallium, Zinc
PO-BH02B-090800	Chromium, Thallium, Zinc
PO-BH02C-090800	Chromium, Thallium, Zinc
PO-BH02D-090800	Chromium, Thallium, Zinc
PO-BH02E-090800	Chromium, Thallium, Zinc
PO-BH13A-090700	Chromium
PO-BH13B-090700	Chromium
PO-BH13C-090700	Chromium
PO-BH13D-100300	Chromium
PO-BH13E-100300	Chromium
PO-BH14A (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14B (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14C (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14D (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14E (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14F (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14G (1.5-2)	Copper, Lead, Mercury, Zinc
PO-BH14H (1.5-2)	Copper, Lead, Mercury, Zinc

The concentrations of chromium detected in soil were compared to the soil cleanup criteria for the trivalent form of chromium. The only criterion for trivalent chromium is the RDCSCC of 120,000 mg/kg. No soil samples exceeded the RDCSCC for chromium.

The concentration of copper detected in the following samples exceeded the residential RDCSCC and NRDCSCC, both 600 mg/kg and the most stringent criteria for copper:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14B (1.5-2)	3,500
PO-BH14D (1.5-2)	1,200
PO-BH14E (1.5-2)	720

The concentration of lead detected in the following samples exceeded the RDCSCC of 400 mg/kg, the most stringent criterion for lead:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14A (1.5-2)	8,000
PO-BH14B (1.5-2)	2,800
PO-BH14C (1.5-2)	1,700
PO-BH14D (1.5-2)	2,500
PO-BH14E (1.5-2)	35,000
PO-BH14F (1.5-2)	2,900
PO-BH14G (1.5-2)	810
PO-BH14H (1.5-2)	2,500

The concentration of mercury detected in the following samples exceeded the RDCSCC of 14 mg/kg, the most stringent criterion for mercury:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14B (1.5-2)	38
PO-BH14C (1.5-2)	18
PO-BH14E (1.5-2)	19

The concentration of zinc detected in the following samples exceeded the RDCSCC and NRDCSCC, both 1,500 mg/kg and the most stringent criteria for zinc:

<u>Sample</u>	<u>Concentration Detected (mg/kg)</u>
PO-BH14B (1.5-2)	3,300
PO-BH14D (1.5-2)	2,100
PO-BH14F (1.5-2)	1,800
PO-BH14H (1.5-2)	10,000

### **3.2 GROUNDWATER SAMPLING RESULTS**

The analytical results for groundwater samples were compared to NJDEP's "Groundwater Quality Standards N.J.A.C 7:9-6, Table 1 – Specific Ground Water Quality Criteria – IIA and Practical Quantitation Levels" (GWQS), available through the NJDEP website (<http://www.state.nj.us/dep/srp/regs/guidance.htm>). Detected concentrations of analytes in the groundwater were compared to the criteria provided in the GWQS Table 1 column entitled "Higher of PQLs and Ground Water Quality Criteria"

Six groundwater samples, including one duplicate, were collected from four monitoring wells including MW-05, MW-11, MW-12 and MW-14. MW-12 and MW-14 were sampled on September 19, 2000. MW-5 and MW-11 were sampled on April 20, 2002 and MW-14 was resampled on April 23, 2002. MW-11 was also sampled again on May

31, 2002. The groundwater samples were analyzed for metals, including antimony, arsenic, lead and thallium, by EPA Method 200.7.

Table 3-2 presents the analytical results for groundwater samples collected during September 2000, April 2002 and May 2002. At the completion of the groundwater sampling, no parameter exceeded the applicable NJDEP GWQS.

**FIGURES**

**Table B-1**  
**Survey Data**  
**Boring and Monitoring Well Location and Elevations**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
PA-C6-S1	673493.03368	590899.38016		
PA-C6-S2	673489.03368	590899.38016		
PA-C6-S3	673484.03368	590899.38016		
PA-C6-S4	673474.03368	590899.38016		
PA-C6-S5	673454.03368	590899.38016		
PA-C6-S5A	673454.03368	590899.38016		
PA-C6-S6	673464.03368	590899.38016		
PA-C6-S7	673469.03368	590899.38016		
PA-C7	673132.08006	590627.12031	307.70	-
PA-C7-W1	673132.08006	590626.12031		
PA-C7-E1	673132.08006	590628.12031		
PA-C7-N1	673133.08006	590627.12031		
PA-C7-S1	673131.08006	590627.12031		

Note: Horizontal survey data of borehole/well locations drilled by Port Authority personnel are presented in NAD 83 datum.  
Vertical survey data of borehole/well locations drilled by Port Authority personnel are presented in Port Authority datum which is 297.65 above mean sea level based on NGVD 29 datum.

**Table B-1**  
**Survey Data**  
**Boring and Monitoring Well Location and Elevations**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
BH-N1	673883.79667	590073.72762	306.68	-
BH-N1-W1	673883.79667	590072.72762		
BH-N1-E1	673883.79667	590074.72762		
BH-N1-N1	673884.79667	590073.72762		
BH-N1-S1	673882.79667	590073.72762		
MW-N2	674086.01241	590257.21356	307.69 307.39 307.69	RIM P.V.C. ASPHALT
MW-N5	673099.41927	590592.00169	307.21 306.94 307.10	RIM P.V.C. G.L.
BH-N5	673214.02411	590546.88200	307.10	-
BH-N6	673456.70000	590392.00000	307.80	-
BH-N7	673354.90000	590519.30000	308.30	-
MW-C1	673963.24423	590537.61748	305.53 305.37 305.50	RIM P.V.C. G.L.
MW-C2	673676.53592	590910.69377	307.17 306.80 307.20	RIM P.V.C. G.L.
MW-C3	673652.64794	590635.23255	308.35 308.12 308.30	RIM P.V.C. G.L.
MW-C4	673695.72387	590380.99591	307.11 306.72 307.10	RIM P.V.C. G.L.
MW-C5	673310.77792	590927.06172	307.51 307.42 307.5	RIM P.V.C. G.L.
MW-C5-W1	673310.77792	590926.06172		
MW-C5-E1	673310.77792	590928.06172		
MW-C5-N1	673311.77792	590927.06172		
MW-C5-S1	673309.77792	590927.06172		
PA-C6	673494.03368	590899.38016	307.30	-
PA-C6-W1	673494.03368	590898.38016		
PA-C6-W2	673494.03368	590894.38016		
PA-C6-W3	673494.03368	590889.38016		
PA-C6-E1	673494.03368	590900.38016		
PA-C6-E2	673494.03368	590904.38016		
PA-C6-E3	673494.03368	590909.38016		
PA-C6-E4	673494.03368	590919.38016		
PA-C6-E5	673494.03368	590939.38016		
PA-C6-E6	673494.03368	590929.38016		
PA-C6-E7	673494.03368	590949.38016		
PA-C6-E8	673494.03368	590924.38016		
PA-C6-E9	673494.03368	591009.38016		
PA-C6-E10	673494.03368	591049.38016		
PA-C6-E11	673494.03368	591089.38016		
PA-C6-N1	673495.03368	590899.38016		
PA-C6-N2	673495.03368	590899.38016		
PA-C6-N3	673495.03368	590899.38016		

**Table B-2**  
**Coordinate Data - Soil Boring Locations**  
**Naporano and Hugo Neu Facilities**  
**Port Newark**  
**Newark, New Jersey**

ITEM	NORTH	EAST	ELEVATION	DESCRIPTION
SB-1	673301.28	589787.87	NA	*
SB-2	673314.09	589864.68	NA	*
SB-3	673241.51	589824.85	NA	*
SB-4	673400.89	589886.01	NA	*
SB-5A	673208.79	589893.13	NA	*
SB-5B	673548.46	589935.80	NA	*
SB-5C	673864.8	590026.84	NA	*
SB-5D	673847.72	590220.29	NA	*
SB-5E	673346.82	590117.87	NA	*
SB-5F	673184.6	590318.44	NA	*

Notes: \* Survey data of borehole locations drilled by Excel Environmental Resources, Inc. are presented in NAD 83 datum and are of proposed and not as built boring locations.

NA - Not Available



SUPPLEMENTAL AGREEMENT

**THIS AGREEMENT**, made as of the 15th day of February, 2003, by and between **THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY** (hereinafter called the "Port Authority") and **PORT NEWARK CONTAINER TERMINAL LLC** (hereinafter called the "Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (the said agreement of lease, as it has heretofore been amended, modified and supplemented, being hereinafter called the "Lease") covering certain premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, in connection with the issuance of bonds by the NEW JERSEY ECONOMIC DEVELOPMENT AUTHORITY (hereinafter called the "EDA") for the financing of certain improvements to the premises under the Lease, the Lessee proposes to enter into a sublease agreement with the Lessee as sub-lessor and the EDA as sub-lessee dated as of February 15, 2003 (hereinafter called the "EDA Sublease"), pursuant to which the Lessee would sublease such premises to the EDA, and further in the same agreement proposes to enter into a sub-sublease agreement with the EDA as sub-sub-lessor and the Lessee as sub-sub-lessee, dated as of February 15, 2003 (hereinafter referred to as the "Financing Sublease"; the EDA Sublease and the Financing Sublease, being hereinafter collectively called the "Subleases") pursuant to which the EDA simultaneously with the execution of the EDA Sublease would sub-sublease the said premises back to the Lessee;

NOW, THEREFORE, for and in consideration of the foregoing and the agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. Notwithstanding anything to the contrary set forth in the Lease, including without limitation thereto the provisions of subparagraph (6) of paragraph (a) of Section 8 thereof, of paragraphs (a) and (b) of Section 18 thereof, and of subparagraph (4) of paragraph (a) of Section 25 thereof, the Lessee may enter into the Subleases, subject to the prior written consent of the Port Authority.

2. Except as hereby amended, all the terms, provisions, covenants and conditions of the Lease shall be and remain in full force and effect.



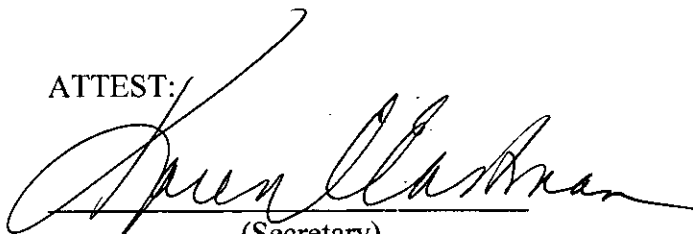
3. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

4. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

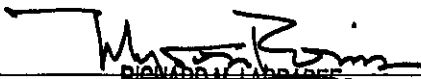
5. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

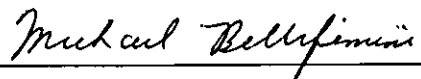
ATTEST:

  
\_\_\_\_\_  
(Secretary)

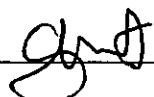
THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY


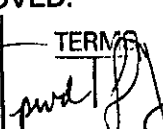
By   
\_\_\_\_\_  
MURKIN POM'S  
(Title) ~~DEP.~~ **DIRECTOR, PORT COMMERCE DEPT.**  
(Seal)

WITNESS:

  
\_\_\_\_\_

PORT NEWARK CONTAINER  
TERMINAL LLC

By   
\_\_\_\_\_  
(Title) Manager

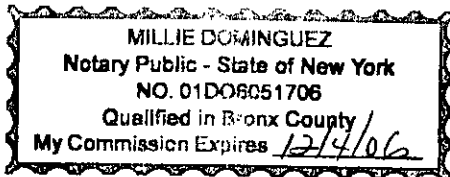
APPROVED:  
FORM  TERMS 

ACKNOWLEDGEMENT

FOR THE PORT AUTHORITY

STATE OF NEW YORK )  
 )ss.  
COUNTY OF NEW YORK )

On the 21<sup>ST</sup> day of FEBRUARY in the year 2003, before me, MURON RONIS  
undersigned, a Notary Public in and for said state, personally appeared RICHARD H. LARRABEE  
personally known to me or proved to me on the basis of satisfactory evidence to be the individual  
whose name is subscribed to the within instrument and acknowledged to me that he/she executed  
the same in his/her capacity, and that by his/her signature on the instrument, the individual, or  
the person upon behalf of which the individual acted, executed the instrument. **DEPT. DIRECTOR, PORT COMMERCE DEPT.**



Millie Dominguez  
(notarial seal and stamp)

FOR THE LESSEE

STATE New Jersey )  
 )ss.  
COUNTY OF Middlesex )

On the 19<sup>TH</sup> day of February in the year 2003, before me, the undersigned, a  
Notary Public in and for said state, personally appeared Gary Willmot  
personally known to me or proved to me on the basis of satisfactory evidence to be the individual  
whose name is subscribed to the within instrument and acknowledged to me that he/she executed the  
same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person  
upon behalf of which the individual acted, executed the instrument.

Michael Bellifemini  
**MICHAEL BELLIFEMINI**  
**NOTARY PUBLIC OF NEW JERSEY**  
**My Commission Expires April 24, 2007**  
(notarial seal and stamp)

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**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, as amended, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, the Company, as lessee, and The Port Authority of New York and New Jersey (the "Port Authority"), as lessor, are parties to a certain Lease Agreement dated December 1, 2000 (No. L-PN-264) (as amended, the "Lease") covering a certain marine terminal facility located in Port Newark, New Jersey (the "Terminal");

WHEREAS, the Company has undertaken extensive demolition, construction and improvements at the Terminal (the "Project"), as required or otherwise allowed or contemplated under the Lease, which Project is more particularly described on Exhibit A to these Resolutions;

WHEREAS, the Company has made application to The New Jersey Economic Development Authority ("NJEDA") to obtain financial assistance for the Project and, by preliminary resolution adopted on August 8, 2000, NJEDA has accepted the application of the Company;

WHEREAS, by further resolution dated November 12, 2002 (the "Bond Resolution"), NJEDA has authorized the issuance of its Special Facility Revenue Bonds (Port Newark Container Terminal LLC Project) Series 2003 (the "Bonds"), in an amount not to exceed \$125,000,000, to provide funds to finance the Project, including the payment of issuance costs incurred by the Company for the Bonds;

WHEREAS, in connection with the issuance of the Bonds, and the transactions contemplated thereby (collectively, the "Bond Transactions"), there has been presented to the managers for their consideration a substantially final draft of the bond documents listed on Schedule A hereto (the "Bond Documents"), the Port Authority documents listed on Schedule B hereto (the "Port Authority Documents"), the bank documents listed on Schedule C hereto (the "Bank Documents") (the Bank Documents and the Bond Documents shall be collectively referred to herein as the "Transaction Documents"), and the Preliminary Official Statement (the "Preliminary Official Statement").

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Transaction Documents be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that the Bond Transactions be, and hereby are, authorized and approved, and that the form of the Preliminary Official Statement (and any final Official Statement derived therefrom) be, and hereby is, approved and deemed final, and that such Preliminary Official Statement (and any final Official Statement derived therefrom) be delivered in accordance with the Bond Transactions; and it is further

RESOLVED, that all actions taken by the managers of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and officers of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents, certificates and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further


RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Transaction Documents, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or officer executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers; and it is further


RESOLVED, that the managers and officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Transaction Documents, or any other instrument or documents executed pursuant to or in connection with the Transaction Documents; all such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

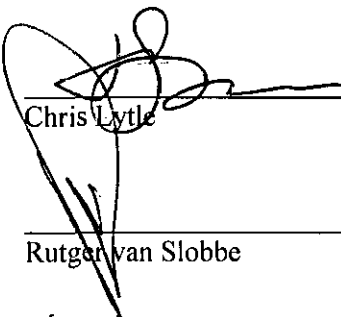
The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this \_\_\_\_\_ day of January, 2003.

  
\_\_\_\_\_  
Rob Scavone

  
\_\_\_\_\_  
Gary Willmot

  
\_\_\_\_\_  
Chris Lytle

  
\_\_\_\_\_  
Rutger van Slobbe

  
\_\_\_\_\_  
Pieter Bas Brodius

  
\_\_\_\_\_  
Michael White

## EXHIBIT A

### Project Description

The Project will include one or more of the following: (a) the upgrading of the waterside crane beam, extension of the landside crane beam, and installation of new crane rails; (b) the removal, repair and/or upgrading of the existing pavement, where necessary, and the construction of new heavy duty pavement; (c) the construction of a new entry complex, including gatehouse, weigh houses and pre-check facilities, together with outfitting thereof; (d) the construction or renovation of administration buildings, maintenance and repair facilities and other ancillary buildings, together with outfitting thereof; (e) the removal or demolition of buildings and other structures not required by PNCT; (f) the strengthening of adjacent berths to permit dredging to fifty feet; (g) the dredging of two berths to accommodate vessels having fifty foot alongside drafts; (h) the upgrading of the container yard, including the installation of high mast lighting towers, water mains, underground high voltage electrical systems, storm drains, utility pipes, reefer racks and conduits; (i) the installation of a closed circuit TV system and security fencing for the entire terminal; (j) the purchase and installation of additional piling, including pile coating, pile extensions and stiffeners to permit strengthening of the wharf to accommodate increased alongside drafts; (k) the construction of new substations for the new high voltage system; (l) the excavation and disposal of materials; (m) the installation of rail switches and removal and replacement of railroad tracks and ties, where necessary; (n) the installation of traffic improvements; and (o) improvements to the PNCT rail yard.

Schedule A

Bond Documents

- Lease Agreement between NJEDA and the Company (Draft No. 11 dated January 6, 2003)
- Guaranty Agreement from the Company to Deutsche Bank Trust Company Americas (Draft No. 8 dated January 6, 2003)
- Administration Expense Guaranty Agreement from the Company to NJEDA (Draft No. 8 dated January 6, 2003)
- Letter of Representation from the Company to Solomon Smith Barney Inc. and NJEDA (Draft dated January \_\_, 2003)
- Bond Purchase Agreement between NJEDA and Solomon Smith Barney Inc., as approved and accepted by the Company (Draft dated January \_\_, 2003)
- Remarketing Agreement between the Company and Solomon Smith Barney Inc. (Draft dated January \_\_, 2003)
- Tax Certificate and Agreement (Draft dated January \_\_, 2003)

Schedule B

Port Authority Documents

- Lease Supplement No. 6 between the Port Authority and the Company (Draft transmitted for review by Neil Reid of the Port Authority under cover of his e-mail dated November 19, 2002)
- Consent to Subleases Agreement by and among the Port Authority, the Company, NJEDA and Deutsch Bank (Draft No. 9 dated January 6, 2003)



Schedule C

Bank Documents

- Reimbursement Agreement by and among Citibank, N.A., as Issuing Lender and as Administrative Agent, the Lenders (as defined in the Reimbursement Agreement) other than Citibank N.A., and the Company (MTHM Draft 1/10/03)

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of May 31, 2005, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the mutual agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. In addition to the premises heretofore let to the Lessee under the Lease, the letting as to which shall continue in full force and effect, subject to and in accordance with all the terms, provisions, covenants and conditions of the Lease as amended by this Agreement, the Port Authority hereby lets to the Lessee and the Lessee hires and takes from the Port Authority, at Port Newark aforesaid, the open area shown in diagonal crosshatching on the sketch attached hereto, hereby made a part hereof and marked "Exhibit A-3", together with the structures, fixtures, improvements and other property, if any, of the Port Authority located or to be located therein or thereon, the said open area, and the said structures, fixtures, improvements and other property (all of which is sometimes hereinafter in this Agreement called "the Additional Premises") to be and become a part of the premises under the Lease at 12:01 o'clock A.M. on June 1, 2005 let to the Lessee, subject to and in accordance with all of the terms, covenants and conditions of the Lease as herein amended, for a term expiring at 11:59 o'clock P.M. on August 31, 2015, unless sooner terminated. The parties hereby acknowledge that the Additional Premises constitute non-residential property.

2. The Lessee shall use the Additional Premises solely for the storage of chassis and such other equipment as shall have the prior consent of the Port Authority and used in connection with its container terminal operations under the Lease, and for no other purpose or purposes whatsoever.

3. The Port Authority shall deliver the Additional Premises to the Lessee in its presently existing "as is" condition. The Lessee acknowledges that prior to the execution of this Agreement, it has thoroughly examined and inspected the Additional Premises and has found it in good order and repair and has determined it to be suitable for the Lessee's operations therein under the Lease as herein amended. The Lessee agrees to and shall take the Additional Premises in its "as is" condition and the Port Authority shall have no obligations under the Lease as herein amended for finishing work or preparation of any portion of the Additional Premises for the Lessee's use.

4. The Lessee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the suitability of the Additional Premises for the operations permitted thereon by the Lease as herein amended. Without limiting any obligation of the Lessee to commence operations under the Lease as herein amended at the time and in the manner stated elsewhere in this Agreement, the Lessee agrees that no portion of the Additional Premises will be used initially or at any time during the letting thereof under the Lease as herein amended which is in a condition unsafe or improper for the conduct of the Lessee's operations therein under the Lease as herein amended so that there is possibility of injury or damage to life or property.

5. The Port Authority shall have no obligation to supply to the Lessee any services or utilities in the Additional Premises.

6. In addition to all other rentals payable under the Lease as herein amended, the Lessee shall pay a basic rental for the Additional Premises at the annual rate of Two Hundred Eighty-eight Thousand Six Hundred Seventy-one Dollars and Seven Cents (\$288,671.07) payable in advance in equal monthly installments of Twenty-four Thousand Fifty-five Dollars and Ninety-two Cents (\$24,055.92) on June 1, 2005 and on the first day of each calendar month thereafter during the term of the letting of the Additional Premises. The basic rental set forth in this paragraph shall be adjusted during the term of the letting of the Additional Premises in accordance with the provisions of subparagraph (b) of paragraph 7 of this Agreement.

7. (a) As used in subparagraph (b) of this paragraph:

(1) "Index" shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(2) "Base Period" shall mean, as the context requires, the calendar month of May 2005 and the calendar month of May (excluding May 2015) in each calendar year which thereafter occurs during the term of the letting of the Additional Premises under the Lease as herein amended.

(3) "Adjustment Period" shall mean, as the context requires, the calendar month of May 2006 and the calendar month of May in each calendar year which thereafter occurs during the term of the letting of the Additional Premises under the Lease as herein amended.

(4) "Anniversary Date" shall mean, as the context requires, June 1, 2006 and each anniversary of such date which thereafter occurs during the term of the letting of the Additional Premises under the Lease as herein amended.

(5) "Percentage Increase" shall mean the percentage of increase in the Index on each Anniversary Date equal to a fraction the numerator of which shall be the Index for the Adjustment Period immediately preceding such Anniversary Date less the Index for the Base Period preceding such Adjustment Period by one year and the denominator of which shall be the Index for the Base Period preceding such Adjustment Period by one year.

(b) Commencing on each Anniversary Date and for the period commencing with such Anniversary Date and continuing through to the day preceding the next Anniversary Date, or the expiration date of the term of the letting of the Additional Premises under the Lease as herein amended, as the case may be, both dates inclusive, in lieu of the basic rental set forth in paragraph 6 hereof the Lessee shall pay a basic rental for the Additional Premises at a rate per annum equal to the greater of:

(1) the sum obtained by adding to the basic rental payable for the Additional Premises immediately prior to such Anniversary Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this subparagraph) the product obtained by

multiplying such basic rental by one hundred percent (100%) of the Percentage Increase for such Anniversary Date; or

(2) the product obtained by multiplying the basic rental payable for the Additional Premises immediately prior to such Anniversary Date (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this subparagraph) by one hundred two and five one-hundredths percent (102.5%).

Notwithstanding any other provision of the Lease as herein amended, the basic annual rental that shall be payable pursuant to paragraph 6 hereof and this paragraph for the Additional Premises commencing with each Anniversary Date and continuing through to the day preceding the following Anniversary Date, or the expiration date of the term of the letting of the Additional Premises under the Lease as herein amended, as the case may be, both dates inclusive, shall in no event exceed the product obtained by multiplying the basic rental payable for the Additional Premises immediately prior to such Anniversary (including all amounts included therein as a result of prior adjustments thereof pursuant to the provisions of this subparagraph) by one hundred four percent (104%). For example, if the Percentage Increase for the calendar month of May 2006 is shown to be three percent (3%) then the basic annual rental payable under paragraph 6 hereof and this paragraph for the one-year period commencing June 1, 2006 shall be \$288,671.07 plus three percent (3%) thereof or \$297,331.20, but if (1) said increase is shown to be two percent (2%) then the basic annual rental for that one-year period shall be \$295,887.85, and if (2) said increase is shown to be five percent (5%) then the basic annual rental for that one-year period shall be \$300,217.91.

(c) In the event the Index to be used in computing any adjustment referred to in subparagraph (b) of this paragraph is not available on the effective date of such adjustment, the Lessee shall continue to pay the basic rental at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-

84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

If after an adjustment in basic rental shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in the basic rental due for such period as recomputed over amounts theretofore actually paid on account of the basic rental for such period. If such change or adjustment results in a reduction in the basic rental due for any period prior to notification, the Port Authority will credit the Lessee with the difference between the basic rental as recomputed for that period and amounts of basic rental actually paid.

If any adjustment of basic rental referred to in subparagraph (b) of this paragraph is effective on a day other than the first day of a calendar month, there shall be payable in advance on the effective date of rental adjustment an installment of basic rental equal to 1/12th of the increment of annual basic rental as adjusted multiplied by a fraction, the numerator of which shall be the number of days from the effective date of the rental adjustment to the end of the calendar month in which the rental adjustment was effective and the denominator of which shall be the number of days in that calendar month.

8. Abatement of basic rental, if any, to which the Lessee may be entitled with respect to the Additional Premises shall be computed in accordance with the provisions of Standard Endorsement No. L27.4 attached hereto and hereby made a part hereof.

9. (a) As used in this Agreement, the following terms shall have the meanings set forth below:

(1) "Environmental Damage" and "Environmental Damages" shall mean any one or more of the following: (i) the presence on, about or under the Additional Premises of any Hazardous Substance whose presence occurred during the term of the letting of the Additional Premises under the Lease as herein amended or resulted from any act or omission of the Lessee or others during the term of the letting of the Additional Premises under the Lease as herein amended, and/or (ii) the disposal,

release or threatened release of any Hazardous Substance from the Additional Premises during the term of the letting of the Additional Premises under the Lease as herein amended or thereafter if the Hazardous Substance came to be present on, about or under the Additional Premises during said term of the letting, and/or (iii) the presence of any Hazardous Substance on, about or under other property at the Facility or elsewhere as a result of the Lessee's use and occupancy of the Additional Premises or a migration of a Hazardous Substance from the Additional Premises during the term of the letting of the Additional Premises under the Lease as herein amended or thereafter if the Hazardous Substance came to be present on, about or under the Additional Premises during said term of the letting, and/or (iv) any personal injury, including wrongful death, property damage and/or natural resource damage arising out of or related to any such Hazardous Substance, and/or (v) the violation of any Environmental Requirements pertaining to any such Hazardous Substance, the Additional Premises and/or the activities thereon.

(2) "Environmental Requirement" and "Environmental Requirements" shall mean all applicable (as applicability is set forth and defined in paragraph (b) of Section 11 of the Lease) present and future laws, statutes, enactments, resolutions, regulations, rules, ordinances, codes, licenses, permits, orders, approvals, plans, authorizations, concessions, franchises, requirements and similar items of all Governmental Authorities and all applicable (as applicability is set forth and defined in paragraph (b) of Section 11 of the Lease) judicial, administrative and regulatory decrees, judgments and orders relating to the protection of human health or the environment, the foregoing to include, without limitation:

(i) All requirements pertaining to reporting, licensing, permitting, investigation, remediation and mitigation of the emissions, discharges, releases or threatened releases of Hazardous Substances into the air, surface water, groundwater or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Substances; and

(ii) All requirements pertaining to the protection of the health and safety of employees or the public.

(3) "Hazardous Substance" and "Hazardous Substances" shall mean and include, without limitation, any pollutant, contaminant, toxic or hazardous waste, dangerous

substance, potentially dangerous substance, noxious substance, toxic substance, flammable, explosive or radioactive material, urea formaldehyde foam insulation, asbestos, polychlorinated byphenyls ("PCBs"), chemicals known to cause cancer or reproductive toxicity, petroleum and petroleum products and other substances which have been or in the future shall be declared to be hazardous or toxic, or the regulation or removal of which have been or in the future shall be required, or the manufacture, preparation, production, generation, use, maintenance, treatment, storage, transfer, handling or ownership of which have been or in the future shall be restricted, prohibited, regulated or penalized by any Environmental Requirement.

(4) "Governmental Authority" and "Governmental Authorities" shall mean all governmental agencies, authorities, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, except that it shall not be construed to include The Port Authority of New York and New Jersey, the lessor under the Lease as herein amended.

(b) Without limiting the generality of any of the other terms and provisions of the Lease as herein amended, the Lessee hereby expressly agrees to assume all responsibility for, and any and all risks of any kind whatsoever caused by, arising out of or in connection with, the conditions of the Additional Premises from and after the date of the letting of the Additional Premises under the Lease as herein amended, including without limitation all Environmental Requirements and all Environmental Damages and, except for Environmental Damages arising from the sole negligent acts of the Port Authority, the Lessee shall indemnify, hold harmless and reimburse the Port Authority, its Commissioners, officers, agents and employees from and against all such risks and responsibilities and all Environmental Damages and Environmental Requirements (including, without limitation, all fines, penalties, payments in lieu of penalties, and legal expenses incurred by the Port Authority in connection therewith). If so directed, the Lessee shall at its own expense defend any suit based upon the foregoing, and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.

(c) In addition to and without limiting the generality of the obligations of the Lessee set forth above and elsewhere in



the Lease as herein amended, the Lessee shall at its sole cost and expense and in accordance with and subject to the provisions of Section 20 of the Lease, upon notice from the Port Authority, promptly take all actions to completely remove and remediate: (1) any Hazardous Substance present on, about or under the Additional Premises whose presence occurred during the term of the letting of the Additional Premises under the Lease as herein amended or resulted from any act or omission of the Lessee or others during the term of the letting of the Additional Premises under the Lease as herein amended, (2) any Hazardous Substance disposed of or released from the Additional Premises during the term of the letting of the Additional Premises under the Lease as herein amended or thereafter if the Hazardous Substance came to be present on, about or under the Additional Premises during said term of the letting, and (3) any Hazardous Substance present on, about or under other property at the Facility or elsewhere whose presence resulted from the Lessee's use and occupancy of the Additional Premises or which migrated from the Additional Premises to such other property during the term of the letting of the Additional Premises under the Lease as herein amended or thereafter if the Hazardous Substance came to be present on, about or under the Additional Premises during said term of the letting, which any Governmental Authority or any Environmental Requirements or any violation thereof require to be removed and/or remediated, or which in the sole opinion of the Port Authority are necessary to mitigate Environmental Damages, including, but not limited to, the investigation of the environmental condition of the area to be remediated, the preparation of feasibility studies, reports and remedial plans, and the performance of any cleanup, remediation, mitigation, containment, operation, maintenance, monitoring or restoration work; the standard for any of the foregoing shall be that which requires the lowest level or presence of a particular Hazardous Substance under the laws of the United States or the State of New Jersey, with the strictest to be applied, and which does not require any restriction on the possible use of the Additional Premises or such other property. The Lessee agrees that with respect to any of its obligations set forth above in this paragraph it will not make any claim against the Port Authority and/or the City of Newark for contribution under any Environmental Requirement. Any actions required under this paragraph shall be performed in a good, safe and workmanlike manner and shall minimize any impact on activities off the Additional Premises. The Lessee shall promptly provide to the Port Authority all copies of test results and reports generated in connection with such actions. Promptly upon completion of such investigation and remediation, the Lessee shall seal or cap all monitoring wells and test holes, remove all associated equipment and restore the remediated property.

(d) Without limiting any other of the Lessee's obligations under the Lease as herein amended, the Lessee shall provide the Manager of the Facility at the cost and expense of the Lessee with such information, documentation, records, correspondence, notices, reports, test results, and certifications and any other information as the Port Authority shall request in connection with any Environmental Requirements or Environmental Damages, and as may be necessary for the preparation of any application, registration, statement, certification, notice, non-applicability affidavit, communication, negative declaration, clean-up plan or other information, documentation or communication required by the Environmental Requirements and the Lessee shall promptly swear to, sign or otherwise fully execute the same. The Lessee agrees that any of the foregoing may be filed by the Port Authority with the appropriate Governmental Authority on behalf of the Lessee and at the Lessee's cost and expense. Further, the Lessee agrees unless directed otherwise by the Port Authority, to provide the Manager of the Facility with copies of all information, documentation, records, correspondence, notices, certifications, reports, test results and all other submissions provided by the Lessee to a Governmental Authority at the same time such are provided to a Governmental Authority and by a Governmental Authority to the Lessee at the time the same are provided to the Lessee with respect to any Environmental Requirements.

(e) Notwithstanding any other provision of this paragraph, all of the Lessee's obligations, undertakings and responsibilities under this paragraph shall apply to any Environmental Damage involving any Hazardous Substance whose presence on, about or under the Additional Premises occurred prior to the commencement of the term of the letting of the Additional Premises under the Lease as herein amended if any clean-up, remediation or other response action, or indemnification or other action under this paragraph is required with respect to such Environmental Damage as a result of (1) any violation by the Lessee or the Lessee's Representative, as hereinafter defined, of any Environmental Requirements pertaining to such Hazardous Substance, the Additional Premises and/or the activities thereon, or any failure by the Lessee or the Lessee's Representative to observe and comply with any Port Authority requirements, directives and procedures regarding any Hazardous Substance on, about or under the Additional Premises, including without limitation those set forth in any design guidelines, best management practices, agreements (including voluntary agreements) with Governmental Authorities, or construction guidelines which have been or may be established by the Port Authority for the Facility and submitted to the Lessee, and/or (2) any negligent act or omission by the Lessee or the Lessee's Representative with

respect to such Hazardous Substance. For purposes of this paragraph, "Lessee's Representative" shall mean its officers, employees, agents, representatives, contractors, customers, guests, invitees, or other persons who are doing business with the Lessee or are on the Additional Premises with the Lessee's consent.

(f) Without limiting the Port Authority's remedies that it may have under the Lease as herein amended or at law or in equity, the Port Authority shall have the right during the term of the letting of the Additional Premises under the Lease as herein amended and subsequent to the termination or expiration thereof to such equitable relief, including restraining injunctions and declaratory judgments, as may be required to enforce compliance by the Lessee with its environmental obligations under this paragraph. In the event the Lessee fails to comply with or perform any of its obligations hereunder, the Port Authority at any time during the term of the letting of the Additional Premises under the Lease as herein amended and subsequent to the termination or expiration thereof may elect (but shall not be required) to perform such obligations and the Lessee shall pay to the Port Authority upon demand its costs thereof, including all overhead costs as determined by the Port Authority.

(g) Notwithstanding any other provision of this paragraph, and without limiting the generality of subparagraph (e) of this paragraph, the Lessee's obligations, undertakings and responsibilities under this paragraph shall not apply to any Environmental Damage involving any Hazardous Substance which migrated or shall migrate onto the Additional Premises during the term of the letting of the Additional Premises under the Lease as herein amended (hereinafter called the "Migrated Hazardous Substance"), except that such obligations, undertakings and responsibilities under this paragraph shall apply to any Environmental Damage involving any Migrated Hazardous Substance if any clean-up, remediation or other response action, or indemnification or other action under this paragraph is required with respect to such Environmental Damage as a result of (1) any violation by the Lessee or the Lessee's Representative of any Environmental Requirements pertaining to such Migrated Hazardous Substance, the Additional Premises and/or the activities thereon, or any failure by the Lessee or the Lessee's Representative to observe and comply with any Port Authority requirements, directives and procedures regarding any Hazardous Substance on, about or under the Additional Premises, including without limitation those set forth in any design guidelines, best management practices, agreements (including voluntary agreements) with Governmental Authorities, or construction guidelines which

have been or may be established by the Port Authority for the Facility and submitted to the Lessee, and/or (2) any act or omission of the Lessee or the Lessee's Representative with respect to such Migrated Hazardous Substance.

(h) The Lessee agrees that in any legal action or proceeding in which the Port Authority and the Lessee are opposing parties the Lessee shall have the burden of proof, as hereinafter defined, as to any and all issues of fact with respect to: (1) whether the presence of any Hazardous Substance on, about or under the Additional Premises occurred prior or subsequent to the commencement of the term of the letting of the Additional Premises under the Lease as herein amended; (2) whether any Hazardous Substance disposed of or released from the Additional Premises or which migrated from the Additional Premises came to be present on, about or under the Additional Premises prior or subsequent to the commencement of the term of the letting of the Additional Premises under the Lease as herein amended; and (3) whether the Lessee exacerbated any pre-existing environmental condition so as to cause a Hazardous Substance to first become regulated during the term of the letting of the Additional Premises under the Lease as herein amended. For purposes of this paragraph, "burden of proof" shall mean both the legal burden of going forward with the evidence and the legal burden of establishing the truth of any fact by a preponderance of the evidence.

(i) Without limiting the generality of any other term or provision of the Lease as herein amended, the obligations of the Lessee under this paragraph shall survive the expiration or termination of the letting of the Additional Premises under the Lease as herein amended.

10. The Lessee acknowledges that it has been informed of the presence of the monitor well designated as "MW-30" on Exhibit A-3 hereto and maintained in connection with the New Jersey Department of Environmental Protection Remedial Investigation Case No. 95-10-11-1156-27 (hereinafter respectively called "the Monitor Well", "the NJDEP", and "the Investigation"). The Port Authority, for the benefit of itself, its employees, agents, representatives, contractors, subcontractors and designees, shall have the right to enter upon the Additional Premises for the purpose of access to the Monitor Well exercisable seven (7) days a week and twenty-four (24) hours a day. The right of entry and access provided for in this paragraph with respect to the Monitor Well shall be sufficient at all times for the Port Authority to comply fully with any Environmental Requirements concerning the Investigation or related matters including, without limitation, the right to

maintain, repair, and effect closure of the Monitor Well. Notwithstanding any provision set forth in the Lease as herein amended, the Lessee shall have no obligations with respect to the maintenance or repair or the closure of the Monitor Well except as shall apply under paragraph (b) of Section 16 of the Lease.

11. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect.

12. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

13. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

14. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and

the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

*Karen E. Lashman*  
**SECRETARY**

By *[Signature]*  
**RICHARD M. LARRABEE**  
**DIRECTOR, PORT COMMERCE DEPT.**  
(Title) \_\_\_\_\_  
(Seal)

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

*Mark Fearon*

By *[Signature]*  
**DONALD P. HAMM**  
(Title) *President*

<b>APPROVED:</b>	
<b>FORM</b>	<b>TERMS</b>
<i>[Signature]</i>	<i>[Signature]</i>

(a) If at any time the Lessee shall become entitled to an abatement of basic rental under the provisions of the Lease as herein amended or otherwise, such abatement shall be computed as follows:

(1) For each square foot of usable open area the use of which is denied to the Lessee, at the annual rate of \$1.55\*

(2) For each square foot of usable covered area the use of which is denied to the Lessee, at the annual rate of Not Applicable

(b) If no rates are filled in above then the abatement of basic rental shall be made on an equitable basis, giving effect to the amount and character of the area the use of which is denied the Lessee, as compared with the entire area of such character included in the premises.

(c) If an exemption amount is fixed in the Lease as herein amended, it shall be reduced in the same proportion as the total basic rental is abated.

(d) For the purposes of this Endorsement, the number of square feet of covered area shall be computed as follows: by measuring from the inside surface of outer building walls to the surface of the public area side, or of the non-exclusive area side, as the case may require, of all partitions separating the area measured from adjoining areas designated for the use of the public or for use by the Lessee in common with others, and to the center of partitions separating the area measured from adjoining area exclusively used by others; no deduction will be made for columns, partitions, pilasters or projections necessary to the building and contained within the area measured. Permanent partitions enclosing elevators shafts, stairs, fire towers, vents, pipe shafts, meter closets, flues, stacks and any vertical shafts have the same relation to the area measured as do outer building walls.

(e) In the event that during the term of the letting under the Lease as herein amended the Lessee shall be partially evicted (actually or constructively) and shall remain in possession of the premises or the balance thereof, the Lessee agrees that notwithstanding it might have the right to suspend payment of the rent in the absence of this provision, it will pay at the times and in the manner herein provided, the full basic rental less only an abatement thereof computed in accordance with the above.

\* during the period from June 1, 2005 through May 31, 2006; the rate thereafter to be adjusted during the term of the letting proportionately to the adjustment in basic rental in accordance with the provisions of paragraph 7 hereof.

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the *25<sup>th</sup>* day of *May* in the year 200*6*,  
before me, the undersigned, a Notary Public in and for said state,  
personally appeared *RICHARD M. LARABEE*, personally  
known to me or proved to me on the basis of satisfactory evidence to be  
the individual(s) whose name(s) is (are) subscribed to the within  
instrument and acknowledged to me that he/she/they executed the same in  
his/her/their capacity(ies), and that by his/her/their signature(s) on  
the instrument, the individual(s), or the person upon behalf of which  
the individual(s) acted, executed the instrument.

*Lucy Ambrosino*  
\_\_\_\_\_  
(notarial seal and stamp)  
**LUCY AMBROSINO**  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01AM6101070  
QUALIFIED IN NEW YORK COUNTY  
MY COMMISSION EXPIRES NOV. 3, 2007

STATE OF *New Jersey* )  
 ) ss.  
COUNTY OF *Essex* )

On the *6<sup>th</sup>* day of *December* in the year 2005,  
before me, the undersigned, a Notary Public in and for said state,  
personally appeared *DONALD P. HAMM*, personally  
known to me or proved to me on the basis of satisfactory evidence to be  
the individual(s) whose name(s) is (are) subscribed to the within  
instrument and acknowledged to me that he/she/they executed the same in  
his/her/their capacity(ies), and that by his/her/their signature(s) on  
the instrument, the individual(s), or the person upon behalf of which  
the individual(s) acted, executed the instrument.

*Andrea Goc*  
\_\_\_\_\_  
(notarial seal and stamp)  
**ANDREA GOC**  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 2/27/07



**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 7 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a four acre area to the Lease (the "Additional Premises"), as such Additional Premises are more fully depicted on Exhibit A-3 attached to the Lease Supplement.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all

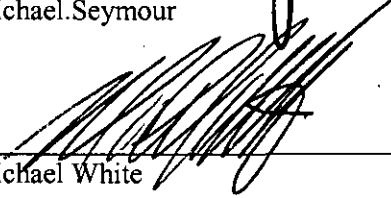
such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.


IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this 16 day of November, 2005.



Michael Seymour



Michael White

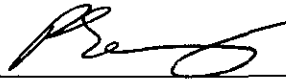


Eta O'Brien

Emile Hoogsteden



Stephen Edwards



Philip Sourry

**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., P&O Nedlloyd B.V., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 7 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to the addition of a four acre area to the Lease (the "Additional Premises"), as such Additional Premises are more fully depicted on Exhibit A-3 attached to the Lease Supplement.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all

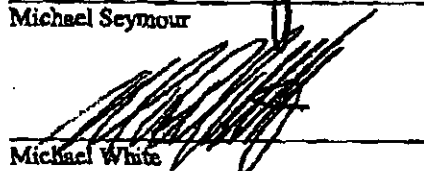
such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this 16 day of November, 2005.



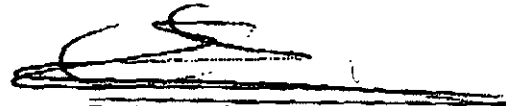
Michael Seymour



Michael White



Etna O'Brien



Emile Hoogsteden



Stephen Edwards



Philip Sourry

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of August 31, 2005, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the mutual agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. The term of the letting under the Lease of the premises shown on Exhibit A-2 annexed to Supplement No. 1 to the Lease (hereinafter called "the Exhibit A-2 Premises") is hereby extended for the period ending at 11:59 o'clock P.M. on December 31, 2006, unless sooner terminated, at the annual rate of Sixty-eight Thousand Six Hundred Forty-five Dollars and Eighty-five Cents (\$68,645.85) payable in advance in equal monthly installments of Five Thousand Seven Hundred Twenty Dollars and Forty-nine Cents (\$5,720.49) on September 1, 2005 and on the first day of each calendar month thereafter during the extension of the term of the letting of the Exhibit A-2 Premises.

2. Abatement of basic rental, if any, to which the Lessee may be entitled with respect to the Exhibit A-2 Premises shall be computed in accordance with the provisions of Standard Endorsement No. L27.4 attached hereto and hereby made a part hereof.

3. The Rail Facility Container Lift Fee for each Rail Container Lift, as such terms are defined in paragraph 8(a) of Supplement No. 1 to the Lease, shall be Twenty-eight Dollars and Four Cents (\$28.04) during the extended term of the letting of the Exhibit A-2 Premises and shall be adjusted during such period

in accordance with the provisions of subparagraph (b) of paragraph 4 of this Agreement.

4. (a) As used in subparagraph (b) of this paragraph:

(1) "Index" shall mean the Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(2) "Base Period" shall mean the calendar month of December 2004.

(3) "Adjustment Period" shall mean the calendar month of December 2005.

(4) "Anniversary Date" shall mean January 1, 2006.

(5) "Percentage Increase" shall mean the percentage of increase in the Index on the Anniversary Date equal to a fraction the numerator of which shall be the Index for the Adjustment Period less the Index for the Base Period and the denominator of which shall be the Index for the Base Period.

(b) Commencing on the Anniversary Date and continuing through to the expiration date of the term of the letting of the Exhibit A-2 Premises, in lieu of the Rail Facility Container Lift Fee set forth in paragraph 3 hereof the Lessee shall pay a Rail Facility Container Lift Fee at a rate per annum equal to the greater of:

(1) the sum obtained by adding to the Rail Facility Container Lift Fee payable immediately prior to the Anniversary Date the product obtained by multiplying such Rail Facility Container Lift Fee by one hundred percent (100%) of the Percentage Increase for the Anniversary Date; or

(2) the product obtained by multiplying the Rail Facility Container Lift Fee payable immediately prior to the Anniversary Date by one hundred two and five one-hundredths percent (102.5%).

Notwithstanding any other provision of the Lease as herein amended, the Rail Facility Container Lift Fee payable pursuant to

paragraph 3 hereof and this paragraph for the Exhibit A-2 Premises commencing with the Anniversary Date and continuing through to the expiration date of the term of the letting of the Exhibit A-2 Premises under the Lease as herein amended shall in no event exceed the product obtained by multiplying the Rail Facility Container Lift Fee payable immediately prior to the Anniversary Date by one hundred four percent (104%). For example, if the Percentage Increase for the calendar month of December 2005 is shown to be three percent (3%) then the Rail Facility Container Lift Fee payable under paragraph 3 hereof and this paragraph for the one-year period commencing January 1, 2006 shall be Twenty-eight Dollars and Four Cents (\$28.04) plus three percent (3%) thereof or Twenty-eight Dollars and Eighty-eight Cents (\$28.88), but if (1) said increase is shown to be two percent (2%) then the Rail Facility Container Lift Fee for that one-year period shall be \$28.74, and if (2) said increase is shown to be five percent (5%) then the Rail Facility Container Lift Fee for that one-year period shall be \$29.16.

(c) In the event the Index to be used in computing any adjustment referred to in subparagraph (b) of this paragraph is not available on the effective date of such adjustment, the Lessee shall continue to pay the Rail Facility Container Lift Fee at the annual rate then in effect subject to retroactive adjustment at such time as the specified Index becomes available, provided, however, that the Port Authority may at its option substitute for such Index the Index for the latest preceding month then published to constitute the specified Index. In the event the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) shall hereafter be converted to a different standard reference base or otherwise revised or the United States Department of Labor shall cease to publish the United States Consumer Price Index for All Urban Consumers - New York-Northern New Jersey-Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100), then for the purposes hereof there shall be substituted for the Index such other appropriate index or indices properly reflecting changes in the value of current United States money in a manner similar to that established in the Index used in the latest adjustment as the Port Authority may in its discretion determine.

If after an adjustment in the Rail Facility Container Lift Fee shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the adjustment to the Rail Facility Container Lift Fee for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon

the recomputed the Rail Facility Container Lift Fee and upon demand shall pay any excess in the Rail Facility Container Lift Fee due for such period as recomputed over amounts theretofore actually paid on account of the Rail Facility Container Lift Fee for such period. If such change or adjustment results in a reduction in the Rail Facility Container Lift Fee due for any period prior to notification, the Port Authority will credit the Lessee with the difference between the Rail Facility Container Lift Fee as recomputed for that period and amounts of the Rail Facility Container Lift Fee actually paid.

5. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect, including without limitation the termination rights of the parties set forth in paragraph 10 of Supplement No. 1 to the Lease.

6. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

7. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

8. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and

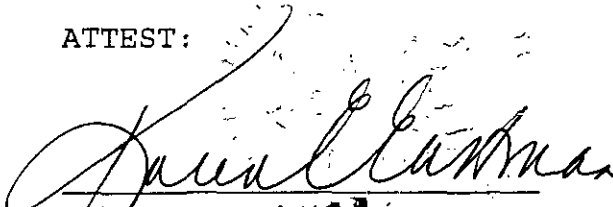


the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

  
\_\_\_\_\_  
**SECRETARY**

By



**RICHARD M. LARRABEE**

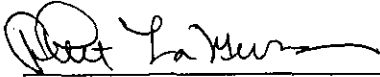
(Title)

**DIRECTOR, PORT COMMERCE DEPT.**

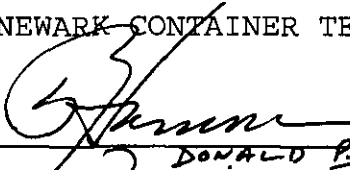
(Seal)

WITNESS:

PORT NEWARK CONTAINER TERMINAL LLC

  
\_\_\_\_\_

By



**DONALD P. HAMM**

(Title)

**PRESIDENT**

<b>APPROVED:</b>	
<b>FORM</b>	<b>TERMS</b>
	

(a) If at any time the Lessee shall become entitled to an abatement of basic rental under the provisions of the Lease as herein amended or otherwise, such abatement shall be computed as follows:

(1) For each square foot of usable open area the use of which is denied to the Lessee, at the annual rate of \$0.22

(2) For each square foot of usable covered area the use of which is denied to the Lessee, at the annual rate of N/A

(b) If no rates are filled in above then the abatement of basic rental shall be made on an equitable basis, giving effect to the amount and character of the area the use of which is denied the Lessee, as compared with the entire area of such character included in the premises.

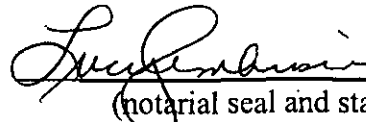
(c) If an exemption amount is fixed in the Lease as herein amended, it shall be reduced in the same proportion as the total basic rental is abated.

(d) For the purposes of this Endorsement, the number of square feet of covered area shall be computed as follows: by measuring from the inside surface of outer building walls to the surface of the public area side, or of the non-exclusive area side, as the case may require, of all partitions separating the area measured from adjoining areas designated for the use of the public or for use by the Lessee in common with others, and to the center of partitions separating the area measured from adjoining area exclusively used by others; no deduction will be made for columns, partitions, pilasters or projections necessary to the building and contained within the area measured. Permanent partitions enclosing elevators shafts, stairs, fire towers, vents, pipe shafts, meter closets, flues, stacks and any vertical shafts have the same relation to the area measured as do outer building walls.

(e) In the event that during the term of the letting under the Lease as herein amended the Lessee shall be partially evicted (actually or constructively) and shall remain in possession of the premises or the balance thereof, the Lessee agrees that notwithstanding it might have the right to suspend payment of the rent in the absence of this provision, it will pay at the times and in the manner herein provided, the full basic rental less only an abatement thereof computed in accordance with the above.

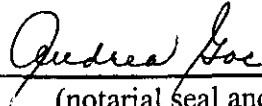
STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the 27<sup>th</sup> day of in the year 2006, before me, the undersigned, a Notary Public in and for said state, personally appeared RICHARD M. LARIVELLE, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.  
DIRECTOR, PORT COMMERCE DEPT.

  
(notarial seal and stamp)  
**LUCY AMBROSINO**  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01AMB101070  
QUALIFIED IN NEW YORK COUNTY  
MY COMMISSION EXPIRES NOV. 3, 2007

STATE OF New Jersey )  
 ) ss.  
COUNTY OF Essex )

On the 7<sup>th</sup> day of July in the year 2006, before me, the undersigned, a Notary Public in and for said state, personally appeared Donald P. Humm, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
(notarial seal and stamp)  
**ANDREA GOC**  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 2/27/07

**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.8 of that certain Limited Liability Agreement dated as of August 1, 2000, as amended, by and among P&O Ports North America Inc., Farrell Lines Inc., and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 8 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to an extension of the term of letting of the Exhibit A-2 Premises, as such Exhibit A-2 Premises are more fully depicted on Exhibit A-2 attached to Supplement No. 1 to the Lease.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

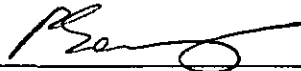
RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all

such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

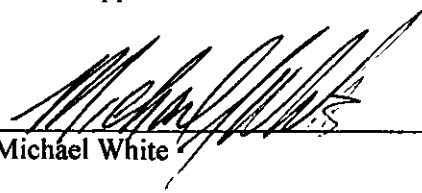
IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this \_\_\_\_\_ day of May, 2006.


  
\_\_\_\_\_  
Philip Sourry

  
\_\_\_\_\_  
Michael Seymour

  
\_\_\_\_\_  
Nicholas P. Taro

\_\_\_\_\_  
John Loepprich

  
\_\_\_\_\_  
Michael White

  
\_\_\_\_\_  
Stephen Edwards

such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this \_\_\_\_ day of May, 2006.




Philip Sourry



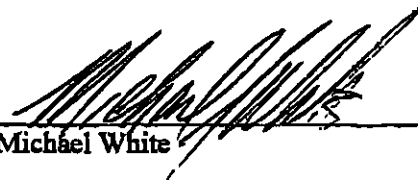
Michael Seymour



Nicholas P. Taro



John Loepprich



Michael White



Stephen Edwards

**SUPPLEMENTAL AGREEMENT**

**THIS AGREEMENT**, made as of March 13, 2007, by and between **THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY** (hereinafter called "the Port Authority") and **PORT NEWARK CONTAINER TERMINAL LLC** (hereinafter called "the Lessee"),

**WITNESSETH**, That:

**WHEREAS**, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

**WHEREAS**, the Port Authority and the Lessee desire to amend the Lease;

**NOW, THEREFORE**, for and in consideration of the foregoing and the agreements hereinafter contained, the Port Authority and the Lessee hereby agree as follows:

1. Section 48 of the Lease requires approval by the Port Authority of certain changes in the ownership or control of the Lessee and of certain entities having direct or indirect beneficial ownership of the Lessee. The Lessee has requested on a without prejudice basis that the Port Authority grant its approval to the following transfers and acquisitions: (a) the acquisition in August 2005 of Nedlloyd Holding B.V. (formerly known as Royal P&O Nedlloyd N.V.) by A.P. Moller-Maersk AS (hereinafter called "the Nedlloyd Acquisition"); (b) the acquisition in March 2006 of the stock of The Peninsular and Oriental Steam Navigation Company (hereinafter called "P&O") by Thunder FZE, a wholly-owned subsidiary of Dubai Ports World (hereinafter called "DPW"), pursuant to court sanctioned schemes of arrangement under section 425 of the Companies Act 1985, England and Wales (hereinafter called "the P&O Acquisition"); (c) the acquisition on a date and time subsequent to the date first above written (which subsequent date and time are hereinafter collectively called "the Closing Date") by P&O Ports North America, Inc. (hereinafter called "POPNA") of the 50% membership interest (constituting 500 membership units) in the Lessee owned by Farrell Lines Incorporated (hereinafter called "Farrell") pursuant to a Sale and Purchase Agreement dated November 20, 2006 by and among Farrell, POPNA, P&O and the Lessee (hereinafter called "the Farrell Acquisition"); and (d) the acquisition on the Closing Date by Ports America, Inc. (hereinafter called "Ports America"), a wholly-owned subsidiary of AIG Global Asset Management Holdings Corp. (hereinafter called "AIGGIG"), of all of the outstanding stock of POPNA from P&O Holdings, Inc., an indirect subsidiary of P&O and DPW (hereinafter called "Holdings"), pursuant to that certain Stock Purchase Agreement dated December 10, 2006, by and among P&O, Holdings, Ports America and AIGGIG (hereinafter called "the POPNA Acquisition" and, together with the Nedlloyd Acquisition, the P&O Acquisition and the Farrell Acquisition, hereinafter collectively called "the Acquisitions"). The Lessee hereby represents, knowing that the Port Authority is relying on the accuracy of such representation, that, immediately following

the Closing Date, the Lessee's ownership and control shall be as set forth in Section 48 of the Lease, as such provision is restated, amended and set forth in the paragraph 3 of this Agreement.

2. The Port Authority hereby grants its approval to the transfers of and changes in ownership and control of the Lessee represented by the Acquisitions, with such approval to be granted *nunc pro tunc* to the date of each Acquisition under Section 48 of the Lease; *provided, however*, that such approval shall be effective as to any of the Acquisitions only if all of the Acquisitions are completed.

3. Immediately following the completion of the Farrell Acquisition and the POPNA Acquisition, Section 48 of the Lease, as amended by Supplement No. 2 to the Lease, shall be deleted and terminated in its entirety and replaced with a new Section 48, which reads as follows:

“Section 48. Right of Termination - Ownership and Control

(a) (1) The Lessee hereby represents, knowing that the Port Authority is relying on the accuracy of such representation, that it is a limited liability company organized and existing under the laws of the State of Delaware, that one thousand (1,000) membership interests constitute all of its existing membership interests, and that the owner of all of the membership interests is P&O Ports North America Inc. (hereinafter called “POPNA”), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 99 Wood Avenue South, 8<sup>th</sup> Floor, Iselin, New Jersey 08830, that there are no other membership interests in the Lessee, and that there are no other individuals or corporations and no partnerships or other entities, except as later set forth in this Section, having any direct or indirect beneficial ownership of the Lessee.

(2) The Lessee hereby represents, knowing that the Port Authority is relying on the accuracy of such representation, that:

(i) On the date hereof: (A) one hundred percent (100%) of the outstanding capital stock of POPNA is owned by Ports America, Inc. (hereinafter called “PAI”), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 70 Pine Street, New York, New York 10270; and no person other than PAI controls POPNA; (B) one hundred percent (100%) of the outstanding voting securities of PAI is owned by AIG Ports America, Inc. (hereinafter called “AIGPA”), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 70 Pine Street, New York, New York 10270; and no person other than AIGPA controls PAI; and (C) one hundred percent (100%) of the outstanding capital stock of AIGPA is owned by AIG Global Asset Management Holdings Corp. (hereinafter called “AIGGIG”), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 70 Pine Street, New York, New York 10270, and no person other than AIGGIG controls AIGPA.



(ii) On the date hereof, American International Group, Inc. ("AIG Parent"), a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 70 Pine Street, New York, New York 10270, owns directly or indirectly, a majority of the outstanding voting securities of AIGGIG and AIG Parent controls AIGGIG.

(iii) It is expressly agreed by the Port Authority that at any time after the date hereof, AIGGIG and AIGPA may create a class of non-voting securities in PAI and transfer any of such non-voting securities in PAI to one or more Affiliates (including AIG Highstar Capital III, L.P.), provided that (A) AIGGIG shall give the Port Authority written notice of any such transfer, and (B) the representations in clauses (a)(2)(i) and (a)(2)(ii) above continue to be true in all respects as of such date.

(3) The Lessee recognizes the fact that a transfer of securities in the Lessee or of a substantial part thereof, or any other act or transaction involving or resulting in a change in the ownership or distribution of such securities or with respect to the identity of the parties in control of the Lessee or the degree thereof, is for practical purposes a transfer or disposition of the rights obtained by the Lessee through this Agreement. The Lessee further recognizes that because of the nature of the obligations of the Lessee hereunder, the qualifications and identity of the Lessee and its security holders are of particular concern to the Port Authority. The Lessee also recognizes that it is because of such qualifications and identity that the Port Authority is entering into this Agreement and, in doing so, is willing to accept and rely on the Lessee for the faithful performance of all obligations and covenants hereunder. Therefore, the Lessee represents and agrees for itself and POPNA, and any successor in interest thereof, respectively, that without the prior written approval of the Port Authority, there shall be no transfer of any securities in the Lessee by POPNA to any other person; nor shall POPNA suffer any transfer to be made; nor shall there be or be suffered to be made by the Lessee or by any owner of securities therein, any other change in the ownership of such securities or in the relative distribution thereof, or with respect to the identity of the parties in control of the Lessee or the degree thereof, by any other method or means, whether by increased capitalization, merger with another entity, amendments to the operating agreement or otherwise, issuance of additional new securities or classification of securities or otherwise; and the Lessee further represents and agrees for itself and POPNA, and any successor in interest thereof, respectively, that the direct ownership and control of the Lessee shall be as set forth in paragraph (a)(1) of this Section except as shall be otherwise approved by the Port Authority pursuant to the provisions of this paragraph (a)(3).

(4) The Lessee represents and agrees that AIG Parent shall maintain its ownership of a majority of the voting securities of AIGGIG and that AIG Parent shall control AIGGIG. The Lessee further represents and agrees that without the prior written approval of the Port Authority: (A) AIGGIG shall maintain one hundred percent (100%) of the outstanding capital stock of AIGPA and no person other than AIGGIG shall control AIGPA, (B) AIGGIG shall maintain one hundred percent (100%) of the voting control, either through AIGPA or through another wholly owned Affiliate of

AIGGIG, of PAI, and (C) PAI shall maintain one hundred percent (100%) of the outstanding securities of POPNA.

(5)(i) In the event that AIG Parent enters into a binding agreement to transfer, transfers or sells, or otherwise agrees to transfer or sell, directly or indirectly, (A) a majority of the voting securities of AIGGIG or (B) control of AIGGIG, Lessee agrees to give the Port Authority written notice of such proposed transfer or sale within three (3) business days of public announcement of such transfer or sale or its learning of such proposed transfer or sale; following receipt by the Port Authority of such written notice, the Port Authority shall have sixty (60) days to notify Lessee and AIGGIG as to whether or not it will consent to such transfer of ownership or control of AIGGIG and the terms of such consent; provided, however, that if the transfer or sale referenced above to the party as detailed in the notice is not consummated, then the Port Authority shall have no right under this clause (a)(5) to terminate this Agreement pursuant to Section 25 hereof.

(ii) In the event that the Port Authority does not consent to such proposed transfer or sale of AIGGIG as provided above, Lessee and/or POPNA, PAI, AIGPA and AIGGIG shall have one (1) year from the consummation of such transfer or sale of AIGGIG during which time period Lessee, POPNA, PAI, AIGPA and AIGGIG shall use commercially reasonable efforts to consummate a sale or other transaction, the result of which is that Lessee will then be owned and controlled by an entity or person which has been consented to by Port Authority as provided in this Section 48(a)(5). During such time period, Lessee agrees on behalf of POPNA, PAI, AIGPA and AIGGIG to (A) provide the Port Authority with transaction updates from time to time, but no less frequently than monthly, (B) “ringfence” the management of PNCT such that none of PAI, POPNA, AIGPA or AIGGIG shall have any management or decision making authority over Lessee with respect to the management of the business or operations of Lessee during the period it takes to effect a transaction, (C) use commercially reasonable efforts to conduct the sale or transfer of Lessee in such a way as to minimize any adverse impact on the business and operations of the Lessee (the Port Authority and Lessee acknowledge and agree that this sub clause (C) is limited to the conduct of the relevant parties, and that the required sale or transfer and the determination of the actual entity to be sold or transferred to comply with this Section 48(a)(5) alone shall not constitute a breach of Lessee’s obligations under this sub clause (C)), and (D) upon the execution of binding documents to effect such transaction, seek the required consent of the Port Authority to such transaction. For the limited purpose of this Section 48(a)(5), the standard for any required consent of the Port Authority shall be in accordance with the criteria established under that portion of the Official Minutes of the Port Authority adopted February 22, 2007, entitled “*Port Facilities – Consent to Transfers of Leases and Changes of Ownership Interests*” (the “Consent Criteria”); provided however, that the parties hereto agree that: (I) any commitment to maintain the existing management structure at the Lessee, including a management continuity plan instituted at the Lessee, POPNA, PAI, AIGPA, AIGGIG, as applicable, will be taken into account by the Port Authority when applying the Consent Criteria and its determination of Lessee’s satisfaction of such Consent Criteria; (II) a demonstrated commitment to maintain the existing business plan (including budgeted capital expenditure amounts

previously included in the Lessee's business plan provided to the Port Authority and as publicly announced by Lessee and its affiliates on February 16, 2007) will be taken into account by the Port Authority when applying the Consent Criteria and its determination of Lessee's satisfaction of such Consent Criteria; and (III) the consideration contemplated in such Consent Criteria to be paid by Lessee to the Port Authority in connection with the Port Authority's grant of any required consent under this Section 48 (a)(5) shall be up to \$10,000,000, which amount shall be used by the Port Authority to fund or offset, as the case may be, past, existing or future capital investment projects undertaken by the Port Authority that were intended, or will be intended, as the case may be, to have a direct or indirect benefit to the port terminal leased by Lessee from the Port Authority pursuant to this Agreement.

(iii) In the event that Lessee, POPNA, PAI, AIGPA and AIGGIG, as applicable, have used commercially reasonable efforts to consummate a transaction as required by Section 48(a)(5) above, in the event that such transaction would otherwise have been consummated but for the granting by the Port Authority of its required consent, Lessee and the Port Authority shall negotiate in good faith an extension to the time period granted above to complete such a sale or other transaction to an alternative transferee, such extension period not to exceed two (2) months, and the Port Authority shall retain its right to consent hereunder, subject to the Consent Criteria.

(6) The Lessee acknowledges that it is contemplated that POPNA may become a publicly owned entity (as defined in paragraph (f) of this Section), or that a parent corporation of POPNA owning one hundred percent (100%) of the voting securities of and controlling POPNA (which parent corporation(s) are hereinafter individually and collectively called the "Parent Company") and include PAI, AIGPA or AIGGIG) may become a publicly owned entity. Notwithstanding any other provision of this Section 48, in the event that POPNA or the Parent Company shall become a publicly owned entity and, as a result of such transaction, the required ownership of POPNA set forth above in this Section 48 shall cease to be in effect, such failure to so maintain said ownership interests shall not be an event of default under this Section 48 granting the Port Authority the right to terminate this Agreement under Section 25 hereof; provided that POPNA or the Parent Company, as a publicly owned entity, shall be listed on a major stock exchange (as hereinafter defined); and provided further that, no individual, corporation, partnership or other entity (other than PAI, AIGPA, AIGGIG or a publicly owned entity listed on a major stock exchange in the event and so long as no individual, corporation, partnership or other entity shall have control of any class of outstanding voting securities of such publicly owned entity) shall control any class of the outstanding voting securities of POPNA or of the Parent Company unless the Port Authority shall have given its prior written consent thereto, and if any such event shall occur and be continuing then the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of Section 25 hereof. For the purposes of this Section 48, a "major stock exchange" shall be the London Stock Exchange, the Amsterdam Stock Exchange, the American Stock Exchange, the New York Stock Exchange, the NASDAQ Stock Market, the Singapore Stock Exchange or the Tokyo Stock Exchange.

(b) The Lessee acknowledges that the Lessee's assurance of faithful performance of these provisions is a special inducement for the Port Authority to enter into this Agreement. Noncompliance on the part of the Lessee with the provisions contained in this Section 48 (taking into account any time periods provided in Section 48(a)(5) hereof) shall constitute an event of default under Section 25 of this Agreement, and the Port Authority shall have the right to terminate this Agreement and the letting hereunder pursuant to the provisions of said Section 25 hereof.

(c) The foregoing right of termination shall be in addition to all other rights of termination the Port Authority has under this Agreement and the failure of the Port Authority to exercise its right of termination under this Section at any time in which it may have such right shall not affect, waive or limit its right to exercise said right of termination at any subsequent time.

(d) The term "control" as used herein shall mean the direct or indirect power through contract, arrangement, understanding, relationship, ownership of other business entities or otherwise to dispose of or to direct the disposal of, or to vote or to direct the voting of, any voting security of an entity.

(e) The term "security" shall include any membership interest, stock, any bond which carries voting rights, or rights or options to subscribe to, purchase, convert or transfer into or otherwise acquire equity securities, or any other obligation of a limited liability company or a corporation the holder of which has any voting rights including but not limited to the right to vote for the election of members of the governing body or board of directors of said limited liability company or corporation and shall include any security convertible into a voting security and any right, option or warrant to purchase a voting security.

(f) A "publicly owned entity" shall be and mean one that has any class of securities subject to the registration and reporting requirements of the Securities Exchange Act of 1934, or any successor or substitute therefore, and any entity that has met any equivalent legal registration or listing requirement of Great Britain, the Netherlands, Singapore or Japan, as the circumstances require.

(g) The term "Affiliate" shall mean any person that is directly or indirectly controls, is controlled by or is under common control with such person.

(h) The Lessee shall promptly advise the Port Authority of any change in the representations made in paragraph (a)(1), (a)(2), (a)(3) or (a)(4) of this Section 48."

4. Section 40 of the Lease and Schedule "C" of the Lease are hereby deleted and terminated in their entirety and shall have no further force and effect from and after the date of this Agreement.

5. The Lessee agrees with the Port Authority that during the term of the Lease as herein amended:

(a) Compliance Certificates. The Lessee shall, subject to the confidentiality restrictions in clause (c) below, provide to the Port Authority, its designated agents and advisors at the same time, and in any event as soon as practicable after providing the same to the lenders under the Credit Agreement (as defined below), a copy of the certificates required to be provided by any of the independent public accountants, the chief financial officer of Ports America, Inc. (“PAI”) or the chief executive officer of PAI under the credit agreement (the “Credit Agreement”) dated as of March \_\_, 2007 among PAI and the lenders named therein relating to the financing of the purchase by PAI of P&O North America, Inc. (“POPNA”) with respect to (A) in the case of the independent public accountants, compliance with the financial covenants thereunder and (B) in the case of the chief financial officer or chief executive officer of PAI, the absence of any default or event of default thereunder; provided, that any such certificate(s) from the independent public accountants shall only be provided to the Port Authority hereunder to the extent the same is required to be delivered to the lenders pursuant to the Credit Agreement.

(b) Financial Reports. In the event that (i) Lessee fails to provide any of the compliance certificates to be delivered to the Port Authority pursuant to clause (a) above within five (5) business days of a request from the Port Authority to Lessee to provide such certificate(s) that have been delivered to the lenders as contemplated in clause (a) above, or (ii) any of the compliance certificates provided pursuant to clause (a) above indicates noncompliance with the financial covenants or a default or event of default under the Credit Agreement, then for the period covered by such certificate or so long as such noncompliance or default or event of default shall be continuing, as applicable, the Lessee shall make available to the Port Authority, during normal business hours upon the Port Authority’s reasonable prior notice to Lessee, at the office of the Lessee or one of its agents or advisors solely for review by the Port Authority and its agents at such location and without taking any copies, each of the following:

(i) Quarterly Reports. As soon as available, and in any event within 60 days after the end of each of the first three quarters of each fiscal year, the unaudited balance sheet of Lessee as of the close of such quarter and related statements of income and cash flow for such quarter and that portion of the fiscal year ending as of the close of such quarter, setting forth in comparative form the figures for the corresponding period in the prior fiscal year certified by the chief executive officer of the Lessee as fairly presenting in all material respects the financial position, results of operations and cash flow of Lessee as at the dates indicated and for the periods indicated in accordance with GAAP (subject to the absence of footnote disclosure and normal year-end audit adjustments).

(ii) Annual Reports. As soon as available, and in any event within 120 days after the end of each fiscal year, the balance sheet of Lessee as of the end of such year and related statements of income, stockholders’ equity and cash flow for such fiscal year, each prepared in accordance with GAAP, together with a certification by independent certified public accountants for the Lessee that such financial statements fairly present in all material respects the financial position, results of operations and cash flow of Lessee as at the dates indicated and for the periods indicated therein in accordance with GAAP without qualification as to the scope of the audit or as to going concern and without any other similar qualification.

(c) Labor Matters. The Lessee shall give the Port Authority notice (which notice may be made by telephone if promptly confirmed in writing), promptly after, and in any event within ten (10) days after the chief executive officer of the Lessee knows or has reason to know of, the commencement of any Labor Activity (as defined below) at the premises which has materially interfered, or could reasonably be expected to materially interfere, with the operation of the premises. As used in this clause (c), "Labor Activity" shall mean and include strikes, boycotts, picketing, work-stoppages, slowdowns or labor disputes.

(d) Maintenance of PNCT Books and Records. The Lessee shall: (i) maintain books, records and accounts with respect to the business and operations of Lessee on a separate stand-alone basis from the overall operations of PAI, POPNA and any other direct or indirect subsidiaries thereof, in accordance with good business practice and applicable law; and (ii) make available to the Port Authority, during normal business hours upon the Port Authority's reasonable prior notice to Lessee, at the office of the Lessee or one of its agents or advisors solely for review by the Port Authority and its agents at such location and without taking any copies, that portion of such books, records and accounts relating to security matters at the premises or as may reasonably be required for the Port Authority to verify calculations relating to container throughput rentals and reimbursement requests made from time to time.

(e) Confidentiality. The Port Authority agrees that all information delivered pursuant to this paragraph, including, without limitation, the certificates delivered pursuant to clause (a) above, and (ii) all notes, reports and analyses prepared by the Port Authority, its representatives or its advisors in connection with their review of materials provided or made available pursuant to this paragraph, including, without limitation, the books and records and other materials provided or made available pursuant to clauses (a), (b) or (d) above, shall, to the fullest extent permitted by applicable law, be treated confidentially and protected from disclosure by the Port Authority, including, without limitation, pursuant to any available exceptions or exemptions under the Port Authority's "Freedom of Information Act – Port Authority Policy and Procedure". If the Port Authority receives any request to disclose any of the information provided hereunder, the Port Authority agrees to provide the Lessee with prior written notice of such requirement so that the Lessee may seek a protective order or other appropriate remedy, and/or waive compliance with the terms of this provision. If such protective order or other remedy is not obtained, or if the Lessee waives compliance with the provisions hereof, the Port Authority agrees to disclose only that portion of the information that it is advised by counsel is legally required and it shall exercise its commercially reasonable efforts to obtain assurance that confidential treatment will be accorded to such information.

6. Effective as of January 1, 2007, (1) paragraphs (b), (c) and (d) of Section 41 of the Lease entitled "*Terminal Guarantee*", as such provision was amended by Supplement No. 5 to the Lease, shall be deemed deleted and Addendum A attached to this Agreement and incorporated by reference herein shall be deemed inserted in lieu thereof (which Addendum A attached to this Agreement is a photocopy of Addendum A attached to said Supplement No. 5 with written changes noted thereon); (2) paragraphs (f) and (g) of said Section 41, as such provision was amended by Supplement No. 5 to the Lease, shall be deemed deleted and Addendum B attached to this Agreement and incorporated by reference herein shall be deemed inserted in lieu thereof (which Addendum B attached to this Agreement is a photocopy of Addendum B attached to said Supplement No. 5 with written changes noted thereon); and

(3) Schedule D and Schedule E attached to the Lease, as such schedules were amended by Supplement No. 5 to the Lease, shall be deemed deleted and Schedule D and Schedule E attached to this Agreement and incorporated by reference herein shall be deemed substituted therefor. From and after January 1, 2007, the Lessee shall pay the Guaranteed Rental, as defined in the Lease as amended hereby, in accordance with the provisions of said Section 41 as so amended.

7. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect.

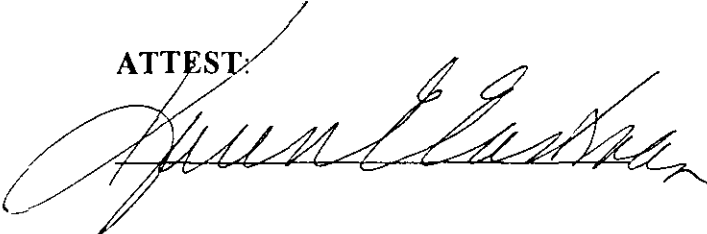
8. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

9. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.


*Signature page follows*

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:



THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY


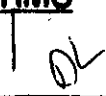
By:   
Name: Richard M. Larrabee  
Title: Director, Port Commerce

WITNESS:

\_\_\_\_\_

PORT NEWARK CONTAINER TERMINAL  
LLC

By: \_\_\_\_\_  
Name:  
Title:

<b>APPROVED:</b>	
<b>FORM</b>	<b>TERMS</b>
	



IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

\_\_\_\_\_

By: \_\_\_\_\_  
Name:  
Title:

WITNESS:

PORT NEWARK CONTAINER TERMINAL  
LLC

\_\_\_\_\_

By: Donald P. Hann  
Name: DONALD P. HANN  
Title: PRESIDENT

## ADDENDUM A

(b) The Lessee shall be subject to the payment of a guaranteed rental (hereinafter called the "Guaranteed Rental") for the Terminal Throughput Year commencing on January 1, 2004, and ending on December 31, 2004, and in each subsequent Terminal Throughput Year to occur thereafter during the term of the letting under this Agreement as follows: in the event that the number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during any such Terminal Throughput Year shall not exceed the Rent Guarantee Number for that Terminal Throughput Year, the Lessee shall pay to the Port Authority a Guaranteed Rental equal to the product obtained by multiplying

(1) the excess of the Rent Guarantee Number for that Terminal Throughput Year over the greater of (i) the actual number of Qualified Containers loaded onto or discharged from vessels berthing at the premises during that Terminal Throughput Year, or (ii) the Exemption Number (as defined in subparagraph (5) of paragraph (a) of Section 5 hereof); by

(2) the Throughput Rental Rate in effect on the last day of that Terminal Throughput Year pursuant to the provisions of Sections 5 and 6 hereof.

Any Guaranteed Rental owed under this Section shall be paid by the Lessee to the Port Authority within ten (10) days after notification by the Port Authority to the Lessee stating the amount thereof.

(c) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of three hundred fifty thousand (350,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at three hundred fifty thousand (350,000) for purposes of the calculation of the Guaranteed Rental in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of three hundred fifty thousand (350,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of three hundred fifty thousand (350,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Rent Guarantee Number of three hundred fifty-five thousand (355,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be three hundred fifty-five thousand (355,000). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee

DH  
twenty-six

DH  
426,000

Number of four hundred ~~one~~ thousand (~~401,000~~), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2009 Rent Guarantee Number"), shall not be increased and shall remain at the 2009 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Guaranteed Rental shall be made based on the 2009 Rent Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the Rent Guarantee Number next succeeding the 2009 Rent Guarantee Number. Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D.

(d) Notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of three hundred fifty-five thousand (355,000), as set forth in Schedule D hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at three hundred fifty-five thousand (355,000) for purposes of the calculation of the Guaranteed Rental in the event that the Dredging, as defined in Section 8 (a) (3) hereof, shall not have been completed by December 31, 2005, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Guaranteed Rental shall be made based on the Rent Guarantee Number of three hundred fifty-five thousand (355,000) until such time as the Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the Rent Guarantee Number of three hundred fifty-five thousand (355,000) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Rent Guarantee Number of three hundred sixty thousand (360,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be three hundred sixty thousand (360,000). Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. In addition, and notwithstanding any provision to the contrary contained in this Section, the Rent Guarantee Number of four hundred ~~six~~ thousand (~~406,000~~), as set forth in Schedule D hereto for the Terminal Throughput

thirty-one  
DH

431,000  
DH

Year ending on December 31, 2010, or such lower Rent Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Rent Guarantee Number is hereinafter called "the 2010 Rent Guarantee Number"), shall not be increased and shall remain at the 2010 Rent Guarantee Number for purposes of the calculation of the Guaranteed Rental in the event that the Fifty-two Foot Dredging, as defined in Section 8(a)(5) hereof, shall not have been completed by December 31, 2010, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform Fifty-two Foot Dredging. The calculation of the Guaranteed Rental shall be made based on the 2010 Rent Guarantee Number until such time as the fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the next payable Guaranteed Rental shall reflect the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Rent Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Rent Guarantee Number next succeeding the 2010 Rent Guarantee Number. Thereafter the Rent Guarantee Number shall increase in the succession set forth in Schedule D hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule D. The postponement of the respective increase in the Rent Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

DA  
Fifty-five

ADDENDUM B

DA  
255,600

(f) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred ten thousand (210,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2004, shall not be increased and shall remain at two hundred ten thousand (210,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Forty-five Foot Deepening shall not have been completed by December 31, 2004. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of two hundred ten thousand (210,000) until such time as the Forty-five Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of two hundred ten thousand (210,000) for any portion of the Terminal Throughput Year preceding the completion of the Forty-five Foot Deepening and shall reflect the Terminal Guarantee Number of two hundred thirteen thousand (213,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Forty-five Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Forty-five Foot Deepening shall be completed shall be two hundred thirteen thousand (213,000). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred ~~forty~~ thousand six hundred (~~240,000~~), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2009, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2009 Terminal Guarantee Number"), shall not be increased and shall remain at the 2009 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty Foot Deepening shall not have been completed by December 31, 2009. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2009 Terminal Guarantee Number until such time as the Fifty Foot Deepening is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year preceding the completion of the Fifty Foot Deepening and shall reflect the Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty Foot Deepening shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty Foot Deepening shall be completed shall be the

DA

Fifty-eight

DH

258,600

Terminal Guarantee Number next succeeding the 2009 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E.

(g) Notwithstanding any provision to the contrary contained in this Section, the Terminal Guarantee Number of two hundred thirteen thousand (213,000), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2005, shall not be increased and shall remain at two hundred thirteen thousand (213,000) for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Dredging, as defined in Section 8 (a) (3) hereof, shall not have been completed by December 31, 2005, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the Terminal Guarantee Number of two hundred thirteen thousand (213,000) until such time as the Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the Terminal Guarantee Number of two hundred thirteen thousand (213,000) for any portion of the Terminal Throughput Year preceding the completion of the Dredging and shall reflect the Terminal Guarantee Number of two hundred sixteen thousand (216,000) for any portion of the Terminal Throughput Year following the completion thereof, unless the Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Dredging shall be completed shall be two hundred sixteen thousand (216,000). Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. In addition, and notwithstanding any provision to the contrary contained in this Section, the

Terminal Guarantee Number of two hundred ~~forty three~~ thousand six hundred (243,600), as set forth in Schedule E hereto for the Terminal Throughput Year ending on December 31, 2010, or such lower Terminal Guarantee Number as shall then be in effect pursuant to the provisions set forth above in this paragraph (which applicable Terminal Guarantee Number is hereinafter called "the 2010 Terminal Guarantee Number"), shall not be increased and shall remain at the 2010 Terminal Guarantee Number for purposes of the termination right set forth in paragraph (d) of this Section in the event that the Fifty-two Foot Dredging, as defined in Section 8 (a) (5) hereof, shall not have been completed by December 31, 2010, because of the inability of the Lessee to obtain all necessary permits and governmental authorizations to perform the Fifty-two Foot Dredging. The calculation of the Terminal Guarantee Number for each of any three consecutive Terminal Throughput Years shall be made based on the 2010 Terminal Guarantee Number until such time as the Fifty-two Foot Dredging is completed, and upon the completion thereof the calculation of the Terminal Guarantee Number for the Terminal Throughput Year in which such completion shall occur shall reflect the 2010 Terminal Guarantee Number for any portion of the

Terminal Throughput Year preceding the completion of the Fifty-two Foot Dredging and shall reflect the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number for any portion of the Terminal Throughput Year following the completion thereof, unless the Fifty-two Foot Dredging shall be completed on the last day of the Terminal Throughput Year, in which event the Terminal Guarantee Number for the entire Terminal Throughput Year next following the Terminal Throughput Year in which the Fifty-two Foot Dredging shall be completed shall be the Terminal Guarantee Number next succeeding the 2010 Terminal Guarantee Number. Thereafter the Terminal Guarantee Number shall increase in the succession set forth in Schedule E hereto for the succeeding Terminal Throughput Years without regard to the actual calendar year of the Terminal Throughput Year set forth in said Schedule E. The postponement of the respective increase in the Terminal Guarantee Number as set forth above in this paragraph shall be conditioned upon the Lessee's having made timely, diligent and continuous efforts to obtain any permits and governmental authorizations necessary respectively for the Dredging and the Fifty-two Foot Dredging and, upon obtaining them, having proceeded to the completion of the respective dredging as expeditiously as possible.

**PNCT LLC TERMINAL GUARANTEE**  
**Schedules D and E**  
**(Effective January 1, 2007)**

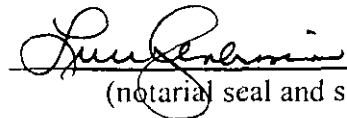
**Annual Containers Handled**

<b><u>Year Commencing</u></b>	<b><u># of Containers (Schedule D)</u></b>	<b><u>60% (Schedule E)</u></b>
1/1/2004	350,000	210,000
1/1/2005	355,000	213,000
1/1/2006	360,000	216,000
1/1/2007	390,000	234,000
1/1/2008	421,000	252,600
1/1/2009	426,000	255,600
1/1/2010	431,000	258,600
1/1/2011	436,000	261,600
1/1/2012	441,000	264,600
1/1/2013	446,000	267,600
1/1/2014	451,000	270,600
1/1/2015	456,000	273,600
1/1/2016	461,000	276,600
1/1/2017	466,000	279,600
1/1/2018	471,000	282,600
1/1/2019	476,000	285,600
1/1/2020	481,000	288,600
1/1/2021	486,000	291,600
1/1/2022	491,000	294,600
1/1/2023	496,000	297,600
1/1/2024	501,000	300,600
1/1/2025	501,000	300,600
1/1/2026	501,000	300,600
1/1/2027	501,000	300,600
1/1/2028	501,000	300,600
1/1/2029	501,000	300,600
1/1/2030	501,000	300,600



STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the 14<sup>th</sup> day of March in the year 2007, before me, the undersigned, a Notary Public in and for said state, personally appeared Richard M. Larrabee, Director Port Commerce, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
(notarial seal and stamp)

LUCY AMBROSINO  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01AM6101070  
QUALIFIED IN NEW YORK COUNTY  
MY COMMISSION EXPIRES NOV. 3, 2007

STATE OF )  
 ) ss.  
COUNTY OF )

On the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2007, before me, the undersigned, a Notary Public in and for said state, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

\_\_\_\_\_  
(notarial seal and stamp)

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2007, before me, the undersigned, a Notary Public in and for said state, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

\_\_\_\_\_  
(notarial seal and stamp)

STATE OF *New Jersey* )  
 ) ss.  
COUNTY OF *Essex* )

On the *14<sup>th</sup>* day of *March* in the year 2007, before me, the undersigned, a Notary Public in and for said state, personally appeared *Ronald P. Hamon*, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

*Andrea Goc*  
\_\_\_\_\_  
(notarial seal and stamp)

**ANDREA GOC**  
**NOTARY PUBLIC OF NEW JERSEY**  
**Commission Expires 2/27/2012**

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of December 31, 2006, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority") and PORT NEWARK CONTAINER TERMINAL LLC (hereinafter called "the Lessee"),

WITNESSETH, That:

WHEREAS, heretofore and as of December 1, 2000, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called "the Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the mutual agreements hereinafter contained the Port Authority and the Lessee hereby agree as follows:

1. The term of the letting under the Lease of the premises shown on Exhibit A-2 annexed to Supplement No. 1 to the Lease (hereinafter called "the Exhibit A-2 Premises") is hereby extended for the period ending at 11:59 o'clock P.M. on December 31, 2007, unless sooner terminated, at the annual rate of Sixty-eight Thousand Six Hundred Forty-five Dollars and Eighty-five Cents (\$68,645.85) payable in advance in equal monthly installments of Five Thousand Seven Hundred Twenty Dollars and Forty-nine Cents (\$5,720.49) on January 1, 2007 and on the first day of each calendar month thereafter during the extension of the term of the letting of the Exhibit A-2 Premises.

2. Abatement of basic rental, if any, to which the Lessee may be entitled with respect to the Exhibit A-2 Premises shall be computed in accordance with the provisions of Standard Endorsement No. L27.4 attached hereto and hereby made a part hereof.

3. The Rail Facility Container Lift Fee for each Rail Container Lift, as such terms are defined in paragraph 8(a) of Supplement No. 1 to the Lease, shall be Thirty-four Dollars and Four Cents (\$34.04) during the extended term of the letting of the Exhibit A-2 Premises.

4. The amount "\$5,000,000.00" set forth in the eighth line of subparagraph (1) of paragraph (c) of Section 15 of the Lease shall be and be deemed deleted therefrom and the amount "\$10,000,000.00" shall be and be deemed substituted in lieu thereof.

5. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect, including without limitation the termination rights of the parties set forth in paragraph 10 of Supplement No. 1 to the Lease.

6. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

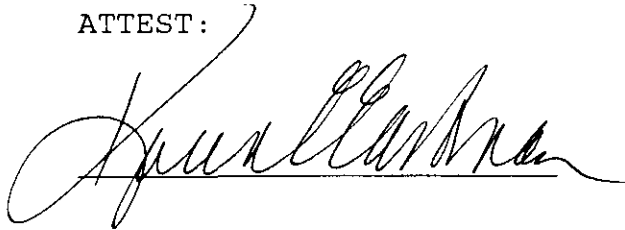
7. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

8. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and

the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

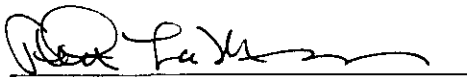
ATTEST:



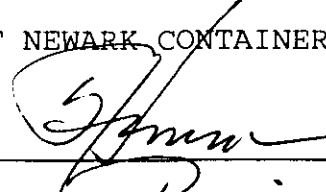
THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

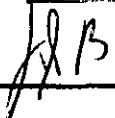

By   
RICHARD M. LARRABEE  
(Title) DIRECTOR, PORT COMMERCE DEPT.  
(Seal)

WITNESS:



PORT NEWARK CONTAINER TERMINAL LLC

By   
(Title) President

<b>APPROVED:</b>	
<b>FORM</b>	<b>TERMS</b>
	

(a) If at any time the Lessee shall become entitled to an abatement of basic rental under the provisions of the Lease as herein amended or otherwise, such abatement shall be computed as follows:

(1) For each square foot of usable open area the use of which is denied to the Lessee, at the annual rate of \$0.22

(2) For each square foot of usable covered area the use of which is denied to the Lessee, at the annual rate of N/A

(b) If no rates are filled in above then the abatement of basic rental shall be made on an equitable basis, giving effect to the amount and character of the area the use of which is denied the Lessee, as compared with the entire area of such character included in the premises.

(c) If an exemption amount is fixed in the Lease as herein amended, it shall be reduced in the same proportion as the total basic rental is abated.

(d) For the purposes of this Endorsement, the number of square feet of covered area shall be computed as follows: by measuring from the inside surface of outer building walls to the surface of the public area side, or of the non-exclusive area side, as the case may require, of all partitions separating the area measured from adjoining areas designated for the use of the public or for use by the Lessee in common with others, and to the center of partitions separating the area measured from adjoining area exclusively used by others; no deduction will be made for columns, partitions, pilasters or projections necessary to the building and contained within the area measured. Permanent partitions enclosing elevators shafts, stairs, fire towers, vents, pipe shafts, meter closets, flues, stacks and any vertical shafts have the same relation to the area measured as do outer building walls.

(e) In the event that during the term of the letting under the Lease as herein amended the Lessee shall be partially evicted (actually or constructively) and shall remain in possession of the premises or the balance thereof, the Lessee agrees that notwithstanding it might have the right to suspend payment of the rent in the absence of this provision, it will pay at the times and in the manner herein provided, the full basic rental less only an abatement thereof computed in accordance with the above.

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

On the *15<sup>th</sup>* day of *June* in the year 2007, before me, the undersigned, a Notary Public in and for said state, personally appeared **RICHARD M. LARRABEE**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.  
**DIRECTOR, PORT COMMERCE DEPT**

*Lucy Ambrosino*  
\_\_\_\_\_  
(notarial seal and stamp)

**LUCY AMBROSINO**  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01AMB101070  
QUALIFIED IN NEW YORK COUNTY  
MY COMMISSION EXPIRES NOV. 3, 2007

STATE OF *New Jersey* )  
 ) ss.  
COUNTY OF *Essex* )

On the *30<sup>th</sup>* day of *May* in the year 2007, before me, the undersigned, a Notary Public in and for said state, personally appeared *Ronald Haman*, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

*Andrea Goc*  
\_\_\_\_\_  
(notarial seal and stamp)

**ANDREA GOC**  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 2/27/2012

**UNANIMOUS WRITTEN CONSENT  
OF MANAGERS OF  
PORT NEWARK CONTAINER TERMINAL L.L.C.**

The undersigned, being all of the managers of Port Newark Container Terminal L.L.C., a Delaware limited liability company (the "Company"), acting in lieu of a meeting pursuant to Article 9.7 of that certain Amended and Restated Limited Liability Company Operating Agreement entered into as of March 16, 2007 by and between Ports America, Inc. and the Company, hereby consent to the adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

WHEREAS, there has been presented to the managers for their consideration a substantially final draft of a certain supplement no. 10 (the "Lease Supplement") to the Lease Agreement dated December 1, 2000 (No. L-PN-264) (the "Lease") between the Port Authority of New York and New Jersey (the "Port Authority") and the Company, relating to an extension of the term of letting of the Exhibit A-2 Premises, as such Exhibit A-2 Premises are more fully depicted on Exhibit A-2 attached to Supplement No. 1 to the Lease.

NOW, THEREFORE, it is

RESOLVED, that the form, terms and provisions of the Lease Supplement be, and hereby are, authorized, adopted and approved, in such form and containing such terms and conditions, with such changes, additions, deletions, amendments or modifications, as the manager or President executing the same deems necessary, proper or advisable; and it is further

RESOLVED, that all actions taken by the managers or President of the Company prior to the date of this Unanimous Written Consent which are within the authority conferred hereby are ratified and approved; and it is further

RESOLVED, that the managers and President of the Company be, and they hereby are, authorized and directed to take such action and execute and deliver on behalf of the Company such documents and/or instruments as may be necessary to accomplish the intent of the resolutions herein; and it is further

RESOLVED, that the managers and President of the Company be, and each of them acting alone hereby is, authorized, empowered and directed to execute, deliver and cause the performance of the Lease Supplement, in the name and on behalf of the Company, with such changes therein, deletions therefrom or additions thereto as the manager or President executing the same shall approve, the execution and delivery thereof to be conclusive evidence of the approval and ratification thereof by such manager or President and by the Board of Managers; and it is further

RESOLVED, that the managers and President and other officers of the Company be, and each of them acting alone hereby is, authorized and empowered to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including amendments thereto, as may be required from time to time or as such manager or officer may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under the Lease Supplement, or any other instrument or documents executed pursuant to or in connection with the Lease Supplement; all



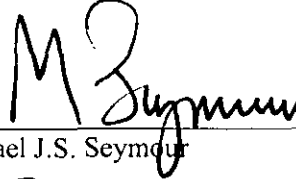
such certificates, instruments, notices and documents to be executed and delivered in such form as the manager executing the same shall approve, the execution and delivery thereof by such manager to be conclusive evidence of the approval and ratification thereof by such manager or officer and by the Board of Managers of the Company.

The actions taken by the execution of this Unanimous Written Consent shall have the same force and effect as if taken at a meeting of the Board of Managers of the Company duly called and constituted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the undersigned have executed this Unanimous Written Consent as of this \_\_\_\_ day of April, 2007.



\_\_\_\_\_  
Stephen A. Edwards



\_\_\_\_\_  
Michael J.S. Seymour



\_\_\_\_\_  
Donald P. Hamm



\_\_\_\_\_  
Mark Ferrucci

**UNANIMOUS WRITTEN CONSENT**

**OF MANAGERS OF**

**PORT NEWARK CONTAINER TERMINAL, LLC**

The undersigned, being all of the managers of Port Newark Container Terminal, L.L.C., a Delaware limited liability Company (the "Company"), acting in lieu of a meeting pursuant to Article 9.7 of that certain Amended and Restated Limited Liability Company Operating Agreement entered into as of March 16, 2007, by and between Ports America, Inc. f/k/a P&O Ports North America, Inc. and the Company, hereby consent to the Adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

BE IT RESOLVED, that the person's listed below is elected to hold the office so stated effective immediately until their successor is duly elected or until their earlier resignation or removal.

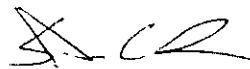
Joseph Colella Vice President and Chief Financial Officer

Maureen Walsh Secretary

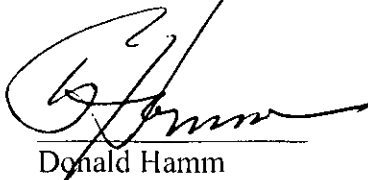
In Witness Where of, the undersigned have executed this Unanimous Written Consent as of the \_\_\_\_\_ day of April 2007.



Michael J. Seymour



Stephen A. Edwards



Donald Hamm



Mark Ferrucci

**UNANIMOUS WRITTEN CONSENT**

**OF MANAGERS OF**

**PORT NEWARK MAINTENANCE & REPAIR, LLC**


The undersigned, being all of the managers of Port Newark Maintenance & Repair, L.L.C., a Delaware limited liability Company (the "Company"), acting in lieu of a meeting pursuant to Article 9.7 of the Limited Liability Company Operating Agreement entered into as of November 22, 2004, by Port Newark Container Terminal, L.L.C., A Delaware limited liability company (the "Member"), as the sole member of the Company hereby consent to the Adoption of the following resolutions and actions set forth herein as of the date and year set forth below:

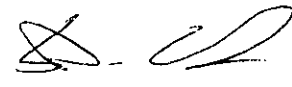
BE IT RESOLVED, that the person's listed below is elected to hold the office so stated effective immediately until their successor is duly elected or until their earlier resignation or removal.

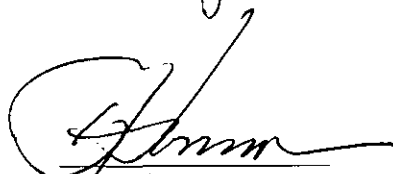
Joseph Colella Vice President and Chief Financial Officer

Maureen Walsh Secretary

In Witness Where of, the undersigned have executed this Unanimous Written Consent as of the                    day of April 2007.

  
Michael J. Seymour

  
Stephen A. Edwards

  
Donald Hamm

  
Mark Ferrucci