THE PORT AUTHORITY OF NY & NJ

PROCUREMENT DEPARTMENT
4 WORLD TRADE CENTER
150 GREENWICH STREET, 21ST FLOOR
NEW YORK, NY 10007

BID INFORMATION

ISSUED DATE: 5/17/2016

TITLE: INSPECTION, MAINTENANCE, TESTING REPAIR, AND CENTRAL STATION MONITORING SERVICES FOR THE FIRE ALARM AND SUPPRESSION SYSTEMS AT GEORGE WASHINGTON BRIDGE FACILITIES- THREE YEAR CONTRACT

BID NO.: 46058

BID DUE DATE: 6/9/16 **TIME: 11:00 AM**

BUYER NAME: STEVEN JOSEPH **PHONE NO.: (212) 435-4658**
FAX NO.: (212) 435-4697

QUESTIONS DUE BY 6/2/16 VIA EMAIL TO STJOSEPH@PANYNJ.GOV BY 3 P.M.

BIDDER INFORMATION
(TO BE COMPLETED BY THE BIDDER)
(PLEASE PRINT)

_____
(NAME OF BIDDING ENTITY)

_____
(ADDRESS)

_____
(CITY, STATE AND ZIP CODE)

_____
(REPRESENTATIVE TO CONTACT-NAME & TITLE **(TELEPHONE)**

_____
(FEDERAL TAX I.D. NO.) **(FAX NO.)**

_____ BUSINESS CORPORATION _____PARTNERSHIP _____INDIVIDUAL

_____ OTHER (SPECIFY): _____

INVITATION FOR BID

- COVER PAGE: BID AND BIDDER INFORMATION
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- PART II – CONTRACT SPECIFIC INFORMATION FOR BIDDERS
- PART III – CONTRACT SPECIFIC TERMS AND CONDITIONS
- PART IV – SIGNATURE SHEET, NAME AND RESIDENCE OF PRINCIPALS AND PRICING SHEET(S)
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PART I - STANDARD INFORMATION FOR BIDDERS

1. General Information: The Port Authority of New York and New Jersey

The Port Authority of New York and New Jersey (the "Port Authority" or the "Authority") is an agency of the States of New York and New Jersey, created and existing by virtue of the Compact of April 30, 1921, made by and between the two States, and thereafter consented to by the Congress of the United States. It is charged with providing transportation, terminals and other facilities of trade and commerce within the Port District. The Port District comprises and area of about 1,500 square miles in both States, centering about New York Harbor. The Port District includes the Cities of New York and Yonkers in New York State, and the cities of Newark, Jersey City, Bayonne, Hoboken and Elizabeth in the State of New Jersey, and over 200 other municipalities, including all or part of seventeen counties, in the two States. The Port Authority manages and/or operates all of the region's major commercial airports (Newark Liberty International, John F. Kennedy International, Teterboro, LaGuardia, Atlantic City International, and Stewart International Airports), marine terminals in both New Jersey and New York (Port Newark and Elizabeth, Howland Hook and Brooklyn Piers); and its interstate tunnels and bridges (the Lincoln and Holland Tunnels; the George Washington, Bayonne, and Goethals Bridges; and the Outerbridge Crossing), which are vital "Gateways to the Nation."

In addition, the Port Authority operates the Port Authority Bus Terminal in Manhattan, the largest facility of its kind in the world, and the George Washington Bridge and Journal Square Transportation Center bus stations. A key link in interstate commuter travel, the Port Authority also operates the Port Authority Trans-Hudson Corporation (PATH), a rapid rail transit system linking Newark, and the Jersey City and Hoboken waterfronts, with midtown and downtown Manhattan. A number of other key properties are managed by the agency including but not limited to a large satellite communications facility (the Teleport) in Staten Island, and a resource recovery co-generation plant in Newark. Prior to September 11, 2001, the Port Authority's headquarters were located in the World Trade Center, and that complex is still owned and being partially redeveloped by the Authority.

2. Form and Submission of Bid

The Bidder shall review carefully every provision of this document, provide all the information required, and sign and return one entire copy to the Port Authority in accordance with the instructions on the Cover Sheet and Part II – Contract Specific Information for Bidders. The Bidder should retain one complete duplicate copy for its own use. The "Signature Sheet" contained herein must be completed and signed by the Bidder. The Pricing Sheet(s) contained herein must also be completed. The Bid shall be sealed in the enclosed self-addressed envelope conspicuously marked with the Bidder's name, address, and Vendor Number, if available. In addition, the outside of the package must clearly state the Bid Title, the Bid Collective Number and the Bid Due Date. Failure to properly label submissions may cause a delay in identification, misdirection or disqualification of the submissions. In submitting this bid, the Bidder offers to assume the

obligations and liabilities imposed upon it herein and expressly makes the representations and warranties required in this document.

All Bids must be received by the bid custodian on or before the due date and time specified on the cover page, at which time they will be publicly opened and read. Bids are only accepted Monday through Friday, excluding Port Authority holidays, between the hours of 8:00 a.m. and 5:00 p.m., via (1) regular mail, (2) express delivery service (e.g. UPS), or (3) hand delivery.

Express carrier deliveries by commercial vehicles can be made via vendors approved by Silverstein Properties, the 4 World Trade Center (4WTC) Property Manager, through the Vehicle Security Center (VSC). Presently, UPS is the only delivery vendor with approved recurring delivery times.

There is extensive security at the World Trade Center Site. Individuals must present a valid government-issued photo ID to enter 4 WTC. If a Bid is to be hand-delivered or if an individual is planning to attend the formal bid opening, please note that only individuals with valid photo identification will be permitted access to the Port Authority's offices. Individuals without valid identification shall be turned away and their packages not accepted. Individuals without packages or carrying small packages or boxes that can be conveyed by hand or on a hand truck may enter through the lobby. All envelopes, packages and boxes may be subject to additional security screening.

There is no parking available at 4 WTC/150 Greenwich Street, and parking in the surrounding area is extremely limited.

Bids that are not received by the bid custodian by the scheduled bid opening date will be considered late.

3. Vendor Profile

To ensure maximum opportunities, it is vitally important that Bidders keep their vendor profiles up to date with an appropriate e-mail address, as this will enable their firm to receive timely notice of advertisements, reminders, solicitations and addenda. Bidders may update their vendor profile or register as a Port Authority Vendor by accessing the online registration system at https://panynjprocure.com/VenLogon.asp.

4. Acknowledgment of Addenda

If any Addenda are posted or sent as part of this Bid, the Bidder shall complete, sign and include with its Bid the addenda form(s). In the event any Bidder fails to conform to these instructions, its Bid will nevertheless be construed as though the Addenda had been acknowledged.

If the Bidder downloaded this solicitation document, it is the responsibility of the Bidder to periodically check the Port Authority website at http://www.panynj.gov/business-opportunities/bid-proposal-advertisements.html and download any addenda that might have been issued in connection with this solicitation.

5. Firm Offer

The Bidder offers to provide the Port Authority of New York and New Jersey the services and to perform all Work in connection therewith required under this Contract, all as specified by the terms and conditions of the Contract, based on the Pricing Sheets provided herein.

EXCEPTIONS TAKEN OR CONDITIONS IMPOSED BY A BIDDER TO ANY PORTION OF THE CONTRACT DOCUMENTS WILL RESULT IN REJECTION OF THE BID.

6. Acceptance or Rejection of Bids

The acceptance of a Bid will be by a written notice signed by an authorized representative on behalf of the Authority. No other act of the Port Authority, its Commissioners, officers, agents or employees shall constitute acceptance of a Bid. The Port Authority reserves the unqualified right, in its sole and absolute discretion, to reject any or all Bids or to accept any Bid, which in its judgment will best serve the public interest and to waive defects in any Bid. No rights accrue to any Bidder unless and until its Bid is accepted.

7. Bidder's Questions

Any questions by prospective Bidders concerning the Work to be performed or the terms and conditions of the Contract may be addressed to the Contracts Specialist listed on the Cover Sheet of this document. The Contracts Specialist is only authorized to direct the attention of prospective Bidders to the portions of the Contract. No employee of the Port Authority is authorized to interpret any portion of the Contract or to give information in addition to that contained in the Contract. When Contract interpretation or additional information as to the Contract requirements is deemed necessary by the Port Authority, it will be communicated to all Bidders by written addenda issued under the name of the Assistant Director, Commodities & Services Division, Procurement Department of the Port Authority and may be posted on the Port Authority website. Addenda shall be considered part of the Contract.

8. Additional Information To and From Bidders

Should the Authority require additional information from the Bidder in connection with its bid, such information shall be submitted within the time frame specified by the Port Authority.

If the Bidder is a corporation, a statement of the names and residences of its officers should be submitted on the Name and Residence of Principals Sheet, directly following the Signature Sheet.

9. Union Jurisdiction

All prospective Bidders are advised to ascertain whether any union now represented or not represented at the Facility will claim jurisdiction over any aspect of the operations to

be performed hereunder and their attention is directed to the paragraph entitled "Harmony" in the Standard Contract Terms and Conditions.

10. Assessment of Bid Requirements

The Bidder should carefully examine and study the entire contents of these bid documents and shall make its own determinations as to the services and materials to be supplied and all other things required to be done by the Contractor.

11. Bidder's Prerequisites

Only Bids from Bidders that can satisfactorily demonstrate meeting the prerequisites specified within Part II hereof at the time of bid submission will be considered. By furnishing this document to the Bidder, the Port Authority has not made a determination that the Bidder has met the prerequisites or has otherwise been deemed qualified to perform the services. A determination that a Bidder has met the prerequisites is no assurance that it will be deemed qualified in connection with other bid requirements included herein.

12. Qualification Information

The Port Authority may give oral or written notice to the Bidder to furnish the Port Authority with information and to meet with designated representatives of the Port Authority relating to the Bidder's qualifications and ability to fulfill the Contractor's obligations hereunder. The requested information shall be submitted no later than three (3) days after said notice unless otherwise indicated. Matters upon which the Port Authority may inquire may include, but may not be limited to, the following:

a. The Bidder may be required to demonstrate that it is financially capable of performing this Contract, and the determination of the Bidder's financial qualifications will be made by the Port Authority in its sole discretion. The Bidder shall submit such financial and other relevant information as may be required by the Port Authority from time to time including, but not limited to, the following:

1. (i) Certified financial statements, including applicable notes, reflecting the Bidder's assets, liabilities, net worth, revenues, expenses, profit or loss and cash flow for the most recent calendar year or the Bidder's most recent fiscal year.

   (ii) Where the certified financial statements set forth in (i) above are not available, then either reviewed or compiled statements from an independent accountant setting forth the aforementioned information shall be provided.

   (iii) Where neither certified financial statements nor financial statements from an independent accountant are available, as set forth in (i) and (ii) above, then financial statements containing such information prepared directly by the Bidder may be submitted; such financial statements, however, must be accompanied by a signed copy of the Bidder's most recent Federal income tax return and a statement in writing from the Bidder, signed by an executive officer or their authorized designee, that

such statements accurately reflect the present financial condition of the Bidder.

Where the statements submitted pursuant to subparagraphs (i), (ii) or (iii) are dated prior to forty-five (45) days before the bid opening, then the Bidder shall submit a statement in writing, signed by an executive officer of the Bidder or their designee, that the present financial condition of the Bidder is at least as good as that shown on the statements submitted.

2. Bidder's statement of work on hand, including any work on which a bid has been submitted, and containing a description of the work, the annual dollar value, the location by city and state, the current percentage of completion, the expected date for completion, and the name of an individual most familiar with the Bidder's work on these jobs.

3. The name and address of the Bidder's banking institution, chief banking representative handling the Bidder's account, the Bidder's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes), the Bidder's Dun and Bradstreet number, if any, the name of any other credit service to which the Bidder has furnished information, and the number, if any, assigned by such service to the Bidder's account.

b. Information relating to the Bidder's Prerequisites, if any, as set forth in this document.

c. If the Bidder is a corporation: (1) a copy of its Certificate of Incorporation and, if applicable, all Amendments thereto with a written declaration signed by the Secretary of the Corporation with the corporate seal affixed thereto, stating that the copy furnished is a true copy of the Certificate of Incorporation and any such Amendments as of the date of the opening of the bid and (2) if the Bidder is not incorporated under the laws of the state in which the service is to be performed, a certificate from the Secretary of State of said state evidencing the Bidder's legal qualification to do business in that state.

d. A statement setting forth the names of those personnel to be in overall charge of the service and those who would be exclusively assigned to supervise the service and their specific roles therein, setting forth as to each the number of years of experience and in which functions and capacities each would serve.

e. Information to supplement any statement submitted in accordance with the Standard Contract Terms and Conditions entitled "Contractor's Integrity Provisions."

f. In the event that the Bidder's performance on a current or past Port Authority or Port Authority Trans-Hudson Corporation (PATH) contract or contracts has been rated less than satisfactory, the Manager, Purchasing Services Division, may give oral or written notice to the Bidder to furnish information demonstrating to the satisfaction of such Manager that, notwithstanding such rating, such performance was in fact satisfactory or that the circumstances which gave rise to such unsatisfactory rating have changed or will not apply to performance of this Contract, and that such performance will be satisfactory.

g. The Bidder recognizes that it may be required to demonstrate to the satisfaction of the Port Authority that it in fact can perform the services as called for in this Contract and

that it may be required to substantiate the warranties and representations set forth herein and the statements and assurances it may be required to give.

Neither the giving of any of the aforesaid notices to a Bidder, the submission of materials by a Bidder, any meeting which the Bidder may have with the Port Authority, nor anything stated by the Port Authority in any such meeting shall be construed or alleged to be construed as an acceptance of said Bidder's Bid. Nothing stated in any such meeting shall be deemed to release any Bidder from its offer as contained in the bid documents.

13. Contractor's Integrity Provisions

By submitting a Bid, Bidders shall be deemed to have made the certifications contained in the clauses entitled "Certification of No Investigation (criminal or civil anti-trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure of Other Information," and "Non-Collusive Bidding, and Code of Ethics Certification, Certification of No Solicitation Based On Commission, Percentage, Brokerage, Contingent or Other Fees" contained within the Standard Terms and Conditions within these bid documents. If the Bidder is unable to make the certifications contained therein the Bidder shall submit a statement with its Bid explaining why any such certification(s) cannot be made. Such a submission shall be submitted in a separate envelope along with your Bid, clearly marked "CERTIFICATION STATEMENT."

14. Facility Inspection

Details regarding the Facility inspection for all parties interested in submitting a bid are stipulated in Part II hereof. All Bidders must present company identification and photo identification for access to the Facility.

15. Available Documents - General

Certain documents, listed in Part II hereof, will be made available for reference and examination by Bidders either at the Facility Inspection, or during regular business hours. Arrangements to review these documents at a time other than the Facility Inspection may be made by contacting the person listed in Part II as the contact for the Facility Inspection.

These documents were not prepared for the purpose of providing information for Bidders upon this Contract but they were prepared for other purposes, such as for other contracts or for design purposes for this or other contracts, and they do not form a part of this Contract. The Port Authority makes no representation or guarantee as to, and shall not be responsible for, their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the inferences or conclusions to be drawn there from.

16. Pre-award Meeting

The lowest qualified Bidder may be called for a pre-award meeting prior to award of the Contract.

17. Price Preference

A price preference may be available for Minority/Women Business Enterprises (M/WBEs) or Small Business Enterprises (SBEs) as set forth in the Standard Contract Terms and Conditions.

18. M/WBE Subcontracting Provisions

The Port Authority has a long-standing practice of making its business opportunities available to Minority Business Enterprises (MBEs) and Women-Owned Businesses (WBEs) and has taken affirmative steps to encourage such firms to seek business opportunities with the Port Authority. The successful Bidder will use good faith efforts to provide for meaningful participation by the Port Authority certified M/WBEs as defined in this document, in the purchasing and subcontracting opportunities associated with this contract, including purchase of equipment, supplies and labor services.

Minority Business Enterprise (MBE) - means a business entity which is at least fifty one percent (51%) owned and controlled by one or more members of one or more minority groups, or, in the case of a publicly held corporation, at least fifty one percent (51%) of the stock of which is owned by one or more minority groups, and whose management and daily business operations are controlled by one or more such individuals who are citizens or permanent resident aliens.

"Minority Group" means any of the following racial or ethnic groups:

(a) Black persons having origins in any of the Black African racial groups not of Hispanic origin;

(b) Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race;

(c) Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands;

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

Women-Owned Business Enterprise (WBE) - means a business enterprise which is at least fifty one percent (51%) owned by one or more women, or, in the case of a publicly held corporation, at least fifty one percent (51%) of the stock of which is owned by one or more women and whose management and daily business operations are controlled by one or more women who are citizens or permanent or resident aliens.

Good faith efforts to include participation by M/WBEs shall include, but not be limited to the following:

1) Dividing the services and materials to be procured into small portions where feasible;

2) Giving reasonable advance notice of specific subcontracting and purchasing opportunities to such firms as may be appropriate;

3) Soliciting services and materials from M/WBEs, which are certified by the Port Authority;

4) Ensuring that provision is made for timely progress payments to the M/WBEs and;

5) Observance of reasonable commercial standards of fair dealing in the respective trade or business.

Bidders are directed to use form PA3749B as the recording mechanism for the M/WBE participation Plan, which may be downloaded at http://www.panynj.gov/business-opportunities/become-vendor.html

The M/WBE Plan submitted by the Contractor to the Port Authority shall contain, at a minimum, the following:

- Identification of M/WBE's: Provide the names and addresses of all M/WBEs included in the Plan. If none are identified, describe the process for selecting participant firms in order to achieve the good faith goals under this Contract.
- Level of Participation: Indicate the percentage of M/WBE participation expected to be achieved with the arrangement described in the Plan.
- Scope of Work: Describe the specific scope of work the M/WBE's will perform.
- Previous M/WBE Participation: Describe any previous or current M/WBE participation, which the Bidder has utilized in the performance of its contracts.

All M/WBE subcontractors listed on the M/WBE Participation Plan must be certified by the Port Authority in order for the Contractor to receive credit toward the M/WBE goals set forth in this Contract. Please go to www.panynj.gov/supplierdiversity to search for M/WBEs by a particular commodity or service. The Port Authority makes no representation as to the financial responsibility of such firms or their ability to perform Work under this Contract.

Bidders shall include their M/WBE Participation Plan with their Bids, to be reviewed and approved by the Authority's Office of Business Diversity and Civil Rights (OBDCR).

If the Contractor wishes to subcontract a portion of the Work through a firm not listed in the Directory, but which the Contractor believes should be eligible because it is (1) an M/WBE, as defined above and (2) competent to perform portions of the Work, the Contractor shall submit an M/WBE Uniform Certification Application to the Port Authority of New York and New Jersey, Office of Business Diversity and Civil Rights (OBDCR), 233 Park Avenue South, 4th Floor, New York, NY 10003. The application is available online at www.panynj.gov/supplierdiversity. In addition, to update your certification file and to advise OBDCR of changes to any information, please email these changes to certhelp@panynj.gov . Credit toward applicable goals will be granted only to Port Authority certified vendors. For more information about M/WBE Programs, call (212) 435-7888.

19. Certification of Recycled Materials

Bidders are requested to submit, with their bid, a written certification entitled "Certified Environmentally Preferable Products / Practices" attached hereto as "Attachment I-A",

attesting that the products or items offered by the Bidder contain the minimum percentage of post-consumer recovered material in accordance with the most recent guidelines issued by the United States Environmental Protection Agency (EPA), or, for commodities not so covered, the minimum percentage of post-consumer recovered materials established by other applicable regulatory agencies. The data submitted by the Bidder in Attachment I-A is being solicited for informational purposes only.

Recycling Definitions:

For purposes of this numbered section, the following definitions shall apply:

a Recovered Material" means any waste material or by-product that has been recovered or diverted from solid waste, excluding those materials and by-products generated from, and commonly reused within, an original manufacturing process.

b "Post-consumer Material" means any material or finished product that has served its intended use and has been discarded for disposal or recovery having completed its life as a consumer item. "Post-consumer material" is included in the broader category of "Recovered Material".

c. "Pre-consumer Material" means any material or by-product generated after the manufacture of a product but before the product reaches the consumer, such as damaged or obsolete products. Pre-consumer Material does not include mill and manufacturing trim, scrap, or broken material that is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process.

d. "Recycled Product" means a product that contains the highest amount of post-consumer material practicable, or when post-consumer material is impracticable for a specific type of product, contains substantial amounts of Pre-consumer Material.

e. "Recyclable Product" means the ability of a product and its packaging to be reused, reconditioned for use, or recycled through existing recycling collection programs.

f. "Waste Reducing Product" means any product that will result in less waste generated due to its use rather than another product designed to serve the same function with an greater waste generation rate. This shall include, but not be limited to, those products that can be reused, refilled or have a longer life expectancy and contain a lesser amount of toxic constituents.

20. City Payroll Tax

Bidders should be aware of the payroll tax imposed by the:

a. City of Newark, New Jersey for services performed in Newark, New Jersey;

b. City of New York, New York for services performed in New York, New York; and

c. City of Yonkers, New York for services performed in Yonkers, New York.

These taxes, if applicable, are the sole responsibility of the Contractor. Bidders should consult their tax advisors as to the effect, if any, of these taxes. The Port Authority provides this notice for informational purposes only and is not responsible for either the imposition or administration of such taxes. The Port Authority exemption set forth in the Paragraph headed "Sales or Compensating Use Taxes", in the Standard Contract Terms and Conditions included herein, does not apply to these taxes.

21. Additional Bidder Information

Prospective Bidders are advised that additional vendor information, including but not limited to, forms, documents and other information, including protest procedures, may be found on the Port Authority website at: http://www.panynj.gov/business-opportunities/become-vendor.html

ATTACHMENT I A - Certified Environmentally Preferable Products/Practices

Bidder Name: _____Date: _____

In line with the Port Authority's efforts to promote products and practices which reduce our impact on the environment and human health, Bidders are encouraged to provide information regarding their environmentally preferable/sustainable business practices as they relate to this contract wherever possible. Bidders are requested to complete this form and submit it with their response, if appropriate. Bidders are requested to submit appropriate documentation to support the items for which the Bidder indicates a "Yes" and present this documentation, in the proper sequence of this Attachment.

1. Packaging

Has the Bidder implemented any of the following environmental initiatives? (A checkmark indicates "Yes")

____ Use of corrugated materials that exceed the required minimum EPA recommended post-consumer recycled content

____ Use of other packaging materials that contain recycled content and are recyclable in most local programs

____ Promotes waste prevention and source reduction by reducing the extent of the packaging and/or offering packaging take-back services, or shipping carton return

____ Reduces or eliminates materials which have been bleached with chlorine or chlorine derivatives

____ Eliminates any packaging that may contain polyvinyl chloride (PVC), or polystyrene or heavy metals.

If yes, a description of the practices being followed should be include with the submission.

2. Business Practices / Operations / Manufacturing

Does the Bidder engage in practices that serve to reduce or minimize an impact to the environment, including, but not necessarily limited to, the following items? (A checkmark indicates "Yes")

____ Recycles materials in the warehouse or other operations

____ Use of alternative fuel vehicles or vehicles equipped with diesel emission control devices for delivery or transportation purposes

____ Use of energy efficient office equipment or signage or the incorporation of green building design elements

____ Use of recycled paper (that meets federal specifications) in their marketing and/or resource materials

____ Other sustainable initiative

If yes, a description of the practices being followed should be included with the submission.

3. Training and Education

Does the Bidder conduct/offer a program to train or inform customers and employees of the environmental benefits of the products to be offered under this contract, and/or does the Bidder conduct environmental training of its own staff?

☐ Yes ☐ No If yes, Bidder shall attach a description of the training offered and the specific criteria targeted by the training.

4. Certifications

Has the Bidder or any of its manufacturers and/or subcontractors obtained any of the following product / industry certifications? (A checkmark indicates "Yes")

____ ISO 14000 or adopted some other equivalent environmental management system

____ Other industry environmental standards (where applicable), such as the CERES principles, LEED Certification, C2C Protocol, Responsible Care Codes of Practice or other similar standards

____ Third Party product certifications such as Green Seal, Scientific Certification Systems, Smartwood, etc.

If yes, Bidders should attach copies of the certificates obtained.

I hereby certify under penalty of law, the above statements are true and correct.

_____Name _____Date

PART II – CONTRACT SPECIFIC INFORMATION FOR BIDDERS,

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PART II - CONTRACT SPECIFIC INFORMATION FOR BIDDERS

The following information may be referred to in other parts hereof, or further detailed in other parts hereof, if applicable.

1. Service(s) Required

Inspection, maintenance, testing, repair and Central Station monitoring services for the Fire Alarm and Suppression Systems.

2. Location(s) Services Required

The George Washington Bridge (GWB) Administration Building and George Washington Bridge Bus Station (GWBBS) in the states of New York (NY) and New Jersey (NJ), respectively, as more fully described in the definition of "Facility" in the Specifications.

3. Expected Date of Commencement of Contract

On or about July 1, 2016.

4. Contract Type

Unit Price Service Contract.

5. Duration of Contract

Three (3) years, expiring on or about June 30, 2019.

6. Option Period(s)

There shall be up to three (3), one (1) year Option Periods.

7. Price Adjustment during Option Period(s) (Index Based)

Price adjustment during the Option Period(s) shall be pursuant to the clause entitled "Price Adjustment" in Part III hereof.

8. Extension Period

120-day extension applicable.

9. Facility Inspection

Date and Time: May 26, 2016 at 10 a.m.

Please contact Mr. Andrew Scarcella at (201) 346-4033 or via email at ascarcella@panynj.gov to confirm attendance and/or receive travel directions. The meeting location is the George Washington Bridge Administration Building, 220 Bruce Reynolds Boulevard, Fort Lee, New Jersey 07024. Parking is available in the Fort Lee Municipal Lot approximately one block south of the meeting location. A valid photo ID is required.

10. Specific Bidder's Prerequisites

a. The Bidder shall have had at least three (3) years of continuous experience immediately prior to the date of submission of its Bid in the management and operation of a fire alarm and suppression system inspection, maintenance, testing, repair and monitoring business and during that time shall have actually engaged in providing said or such services to commercial or industrial accounts under contract. The Bidder may fulfill this prerequisite if the Bidder can demonstrate to the satisfaction of the Port Authority that the persons or entities owning and controlling the Bidder have had a cumulative total of at least three (3) years of experience immediately prior to the date of the submission of its Bid in the management and operation of a business actually engaged in providing these services to commercial or industrial accounts under contract during that time, or have owned and controlled other entities which have actually engaged in providing the above described services during that time period.

b. During the time period stated in (a) above, the Bidder, or persons or entities owning and controlling the Bidder, shall have satisfactorily performed or shall be performing under at least two (2) Contracts requiring similar services of similar scope to those required under this Contract.

c. The Bidder shall have had in its last fiscal year, or the last complete calendar year immediately preceding the opening of its Bid, a minimum of $200,000 annual gross income.

d. The Bidder must own or utilize a NFPA (National Fire Protection Association) UL listed (United Laboratories) Central Station monitoring facility approved in New Jersey for New Jersey facilities and a New York City Fire Department approved Central Station monitoring facility for New York facilities.

Proof that the above prerequisites are met should be submitted with the Bid.

11. Available Documents

The following documents will be made available for reference and examination at the Facility Inspection:

a. Inspection, Maintenance, Testing, Repair, and Central Station Monitoring for the Fire Alarm Systems at the George Washington Bridge Administration Building and Bus Station – Contract #4600008389 – Purchase Order #4500061864 with Rapid Fire & Security Systems, Inc.

b. Contract Drawings for the Fire Alarm System at the George Washington Bridge and Bus Station.

c. Fire Suppression Systems Maintenance, George Washington Bridge Contract # 4600008253; Purchase Order # 4500061536 with Rapid Fire & Security Systems, Inc.

d. Photos of the GWB Fire Suppression Systems.

These documents were not prepared for the purpose of providing information for Bidders upon the present Contract but they were prepared for other purposes, such as for other contracts or for design purposes for this or other contracts, and they do not form a part of this Contract. The Port Authority makes no representation or guarantee as to, and shall not be responsible for their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the conclusions to be drawn therefrom. They are made available to the Bidders merely for the purpose of providing them with such information as is in the possession of the Port Authority, whether or not such information may be accurate, complete or pertinent or of any value to the bidders.

12. Contractor Staff Background Screening

The Contractor awarded this contract may be required to have its staff, and any subcontractor's staff working under this Contract, authorize the Authority or its designee to perform background checks. Such authorization shall be in a form acceptable to the Authority. The Contractor (and any subcontractors) may also be required to use an organization designated by the Authority to perform the background checks. The cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Contractor (and its subcontractors) as an out-of-pocket expense. Costs for staff that are rejected for a credential for any reason are not reimbursable.

As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority approved provider to be used to conduct background screening, except as otherwise required by federal law and/or regulation. Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at http://www.secureworker.com, or S.W.A.C. may be contacted directly at (877)522-7922.

PART III – CONTRACT SPECIFIC TERMS AND CONDITIONS, TABLE OF CONTENTS

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1. General Agreement

Subject to all of the terms and conditions of this Contract, the undersigned (hereinafter called the "Contractor") hereby offers and agrees to provide all the necessary supervision, personnel, equipment, materials and all other things necessary to perform the Work required by this Contract as specified in Part II, and fully set forth in the Part V, (the "Specifications,") at the location(s) listed in Part II and as more fully set forth in the Specifications, and to do all other things necessary or proper therefore or incidental thereto, all in strict accordance with the provisions of the Contract Documents and any future changes therein; and the Contractor further agrees to assume and perform all other duties and obligations imposed upon it by this Contract.

In addition, all things not expressly mentioned in the Specifications but involved in the carrying out of their intent and in the complete and proper execution of the matters referred to in and required by this Contract are required by the Specifications, and the Contractor shall perform the same as though they were specifically delineated, described and mentioned therein.

2. Duration

a) The initial term of this Contract (hereinafter called the "Base Term") shall commence on or about the date specified in Part II hereof, on the specific date set forth in the Port Authority's written notice of bid acceptance (hereinafter called the "Commencement Date"), and unless otherwise terminated, revoked or extended in accordance with the provisions hereof, shall expire as specified in Part II hereof (hereinafter called the "Expiration Date").

b) If specified as applicable to this Contract and set forth in Part II hereof, the Port Authority shall have the right to extend this Contract for additional period(s), either through an extension or an option (hereinafter collectively referred to as the "Option Period(s)") following the Expiration Date, upon the same terms and conditions subject only to adjustments of charges, if applicable to this Contract, as may be hereinafter provided in the paragraph entitled "Price Adjustments". If the Port Authority shall elect to exercise the Option(s) to extend this Contract, then, no later than thirty (30) days prior to the Expiration Date, the Port Authority shall send a notice that it is extending the Base Term of this Contract, and this Contract shall thereupon be extended for the applicable Option Period. If the Contract provides for more than one Option Period, the same procedure shall apply with regard to extending the term of this Contract for succeeding Option Periods.

c) Unless specified as not applicable to this Contract in Part II hereof, the Port Authority shall have the absolute right to extend the Base Term for an additional period of up to one hundred and twenty (120) days subsequent to the Expiration Date of the Base Term, or the Expiration Date of the final exercised Option

Period (hereinafter called the "Extension Period"), subject to the same terms and conditions as the previous contract period. The prices quoted by the Contractor for the previous contract period shall remain in effect during this Extension Period without adjustment. If it so elects to extend the term of Contract, the Port Authority will advise the Contractor, in writing, that the term is so extended, and will stipulate the length of the extended term, at least thirty (30) days prior to the expiration date of the previous contract period.

3. Payment

Subject to the provisions of this Contract, the Port Authority agrees to pay to the Contractor and the Contractor agrees to accept from the Port Authority as full and complete consideration for the performance of all its obligations under this Contract and as sole compensation for the Work performed by the Contractor hereunder, a compensation calculated from the actual quantities of services performed and the respective prices inserted by the Contractor in the Pricing Sheets, forming a part of this Contract, exclusive of compensation under the clause hereof entitled "Extra Work." The manner of submission of all bills for payment to the Contractor by the Port Authority for Services rendered under this Contract shall be subject to the approval of the Manager in all respects, including, but not limited to, format, breakdown of items presented and verifying records. All computations made by the Contractor and all billing and billing procedures shall be done in conformance with the following procedures:

a) Payment shall be made in accordance with the prices for the applicable service (during the applicable Contract year) as they appear on the Pricing Sheets, as the same may be adjusted from time to time as specified herein, minus any deductions for services not performed and/or any liquidated damages to which the invoice may be subject and/or any adjustments as may be required pursuant to increases and decreases in areas or frequencies, if applicable. All Work must be completed within the time frames specified, or as designated by the Manager.

b) The Contractor shall submit to the Manager within thirty (30) days of each month following the month of commencement of this Contract and within thirty (30) days of each month thereafter (including the month following the termination, revocation or expiration of this Contract) a complete and correct invoice for the Work performed during the preceding month accompanied by such information as may be required by the Manager for verification. The invoice must show the Contractor's Federal Tax Identification Number. Payment will be made within thirty (30) days of Port Authority verification of the invoice.

c) No certificate, payment, acceptance of any Work or any other act or omission of any representative of the Port Authority shall operate to (1) release the Contractor from any obligation under or upon this Contract, or to (2) estop the Port Authority from showing at any time that such certificate, payment, acceptance, act or omission was incorrect or to (3) preclude the Port Authority from recovering any monies (a) paid in excess of those lawfully due or (b) to which the Port Authority may be entitled on account of and any damage sustained by the Port Authority.

d) In the event an audit of received invoices should indicate that the correct sum due the Contractor for the relevant billing period is less than the amount actually paid by the Port Authority, the Contractor shall pay to the Port Authority the difference promptly upon receipt of the Port Authority's statement thereof. The Port Authority may, however, in its discretion elect to deduct said sum or sums from any subsequent monthly payments payable to the Contractor hereunder.

"Final Payment", as the term is used throughout this Contract, means the final payment made for services rendered in the last month of the Base Term or any extended term. However should this Contract be terminated for any reason prior to the last month of the Base Term or any extended term, then Final Payment shall be the payment made for services rendered in the month during which such termination becomes effective. The Contractor's acceptance of Final Payment shall act as a full and complete release to the Port Authority of all claims of and of all liability to the Contractor for all things done or furnished in connection with this Contract and for every act and neglect of the Port Authority and others relating to or arising out of this Contract, including claims arising out of breach of contract and claims based on claims of third persons. No payment, however, final or otherwise shall operate to release the Contractor from any obligations in connection with this Contract.

4. Price Adjustment

All Contract prices submitted by the Contractor and agreed to by The Port Authority, shall be applicable to the three (3) years of the Base Term. For the Option Periods that are applicable to this Contract and are exercised hereunder, (excluding the 120 day Extension Period as described in the paragraph entitled "Duration/Escalation" or "Duration" in Part III, section 2, hereof) The Port Authority shall adjust the compensation due to the Contractor utilizing the Consumer Price Index for all Urban Consumers; Series Id: CUURA101SA0L2; Not Seasonally Adjusted; New York-Northern New Jersey-Long Island, NY-NJ_CT-PA area; all items less shelter; 1982-1984=100, published by the Bureau of Labor Statistics of the United States Department of Labor (hereinafter called the "Price Index").

For the first one (1) year Option Period of the Contract, the Price Index shall be determined for the months of January 2018 and January 2019. The amounts payable to the Contractor in the final year of the Base Term shall be multiplied by a fraction the numerator of which is the Price Index for January 2019 and the denominator of which is the Price Index for January 2018. The resulting product shall be the amounts payable to the Contractor in the first Option Period.

For the second one (1) year Option Period of the Contract, the Price Index shall be determined for the months of January 2019 and January 2020. The amounts payable to the Contractor in the first Option Period shall be multiplied by a fraction the numerator of which is the Price Index for January 2020 and the denominator of which is the Price Index for January 2019. The resulting product shall be the amounts payable to the Contractor in the second Option Period.

For the third one (1) year Option Period of the Contract, the Price Index shall be determined for the months of January 2020 and January 2021. The amounts payable to the Contractor in the second Option Period shall be multiplied by a fraction the numerator of which is the Price Index for January 2021 and the denominator of which is the Price Index for January 2020. The resulting product shall be the amounts payable to the Contractor in the third Option Period.

In the event of a change in the basis for the computation of the said Index or the discontinuance of its publication, such other appropriate index shall be substituted as may be agreed upon by the Authority and the Contractor as properly reflecting changes in the value of the current United States money in a manner similar to that established in the said Price Index. In the event of the failure of the parties to so agree, the Port Authority may select and use such index, as it seems appropriate. Notwithstanding the provisions of this section, in no event shall any adjustment hereunder be greater than three (3%) per annum.

The amounts payable to the Contractor during the 120-day Extension Period shall not be subject to adjustment.

If, after an adjustment referred to in this section, the Index used for computing such adjustment shall be changed or adjusted, then the amounts payable to the Contractor for that period shall be recomputed. If such recomputation results in a smaller increase in the amount payable to such period, then after notification of the change or adjustment, the recomputed amounts shall be in effect and upon demand by the Port Authority, the Contractor shall refund to the Port Authority excess amounts paid by the Port Authority for such period.

5. Liquidated Damages

a) The Contractor's obligations for the performance and completion of the Work within the time or times provided for in this Contract are of the essence of this Contract. In the event that the Contractor fails to satisfactorily perform all or any part of the Work required hereunder in accordance with the requirements set forth in the Specifications (as the same may be modified in accordance with provisions set forth elsewhere herein) then, inasmuch as the damage and loss to the Port Authority for such failure to perform includes items of loss whose amount will be incapable or very difficult of accurate estimation, the damages for such failure to perform shall be liquidated as follows:

i. <u>Failure to Perform Any or All of the Work in the Specification</u>

If the Contractor fails to satisfactorily perform any or all of the Work, as determined by the Manager, as set forth in the Specifications at the frequencies therein stated, then the compensation payable by the Port Authority to the Contractor shall be reduced by an amount equal to two

hundred percent (200%) of the applicable price inserted by the Contractor in the Contractor's Pricing Sheets.

ii. Failure to Respond to and/or Perform Emergency Services

If the Contractor fails to respond to and/or perform emergency services within four (4) hours as required in the Specifications, then the amount payable to the Contractor under this Contract shall be reduced by four hundred dollars ($400) per hour for each hour, or part thereof, past the time that the Contractor fails to provide the required service.

iii. Failure to Respond to and/or Perform Call-back Services

If the Contractor fails to respond to and/or perform call-back services within twenty four (24) hours as provided in the Specifications, then the amount payable to the Contractor under this Contract shall be reduced by two hundred dollars ($200) per hour for each hour, or part thereof, past the time that the Contractor fails to provide the required Service.

iv. Failure to Provide Required or Requested Information

In the event that, for any reason, the Contractor fails to maintain or provide or have available when required or requested by the Port Authority or fails to submit any documentation, reports or records as required, the amount payable to the Contractor hereunder shall be reduced by an amount equal to fifty dollars ($50) per day multiplied by the number of days or fractions of days thereof the Contractor fails to maintain or provide any documentation, reports or records, as the Port Authority shall determine from time to time in its sole discretion.

v. Failure to Renew Certificate of Insurance

If the Contractor fails to provide the Manager with the approved certificates of insurance no less than fifteen (15) days prior to the expiration of each policy as required hereunder, then the amount payable hereunder shall be reduced by one hundred dollars ($100) for each day such certificates are past due.

vi. Failure to wear uniform/ID

In the event that the Contractor's employee(s) fail(s) to comply with the uniform and identification (ID) requirements as set forth herein, then the amount payable hereunder shall be reduced by an amount equal to fifty dollars ($50) per violation, multiplied by the number of days or major fractions thereof that the Contractor's employees fail to comply with the uniform and/or identification requirements.

b) The Manager shall determine whether the Contractor has performed in a satisfactory manner and their determination shall be final, binding and conclusive upon the Contractor.

c) Failure of the Manager or the Port Authority to impose liquidated damages shall not be deemed Port Authority acceptance of unsatisfactory performance or a failure to perform on the part of the Contractor or a waiver of its remedies hereunder.

6. Insurance Procured by the Contractor

The Contractor shall take out, maintain, and pay the premiums on Commercial General Liability Insurance, including but not limited to premises-operations, products-completed operations, and independent contractors coverage, with contractual liability language covering the obligations assumed by the Contractor under this Contract and, if vehicles are to be used to carry out the performance of this Contract, then the Contractor shall also take out, maintain, and pay the premiums on Automobile Liability Insurance covering owned, non-owned, and hired autos in the following minimum limits:

Commercial General Liability Insurance - $ 5 million combined single limit per occurrence for bodily injury and property damage liability.

Automobile Liability Insurance - $ 5 million combined single limit per accident for bodily injury and property damage liability.

In addition, the liability policy (ies) shall name "The Port Authority of New York and New Jersey and its related entities, their commissioners, directors, officers, partners, employees, agents, GWBBS Development Venture, SJM Partners, Stayton Ventures their affiliates, successors or assigns as additional insureds", including but not limited to premise-operations, products-completed operations on the Commercial General Liability Policy. In the event the Contractor maintains insurance in greater limits than the stated minimum, the Port Authority of New York and New Jersey, its related entities, commissioners, directors, officers, partners, employees and agents shall be included as additional insured to the full extent of all such insurance. Moreover, the Commercial General Liability Policy shall not contain any provisions for exclusions from liability other than provisions for exclusion from liability forming part of the most up to date ISO form or its equivalent unendorsed Commercial General Liability Policy. The liability policy (ies) and certificate of insurance shall contain separation of insured condition and severability of interests clause for all policies so that coverage will respond as if separate policies were in force for each insured. An act or omission of one of the insureds shall not reduce or void coverage to the other insureds. Any and all excess and umbrella policies shall 'follow form' by conforming to the underlying policies. Furthermore, the Contractor's insurance shall be primary insurance as respects to the above additional insureds. Any insurance or self-insurance maintained by the above additional insureds shall not contribute to any loss

or claim. In the event the Contractor maintains insurance in greater limits than the stated minimum, the additional insureds and its related entities shall be covered by the full extent of all such insurance;
The insurance in this Section shall include a waiver of subrogation, as allowed by law, on all insurance policies in favor of the additional insureds.
These insurance requirements shall be in effect for the duration of the contract to include any maintenance/warrantee/guarantee period.

The certificate of insurance and liability policy (ies) must contain the following endorsement for the above liability coverages:

"The insurer(s) shall not, without obtaining the express advance written 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 Contractor shall also take out, maintain, and pay premiums on Workers' Compensation Insurance in accordance with the requirements of law in the state(s) where work will take place, and Employer's Liability Insurance with limits of not less than $1 million each accident.

Each policy above shall contain an endorsement that the policy may not be canceled, terminated, or modified without thirty (30) days' prior written notice to the Port Authority of NY and NJ, Att: Facility Contract Administrator, at the location where the work will take place and to the General Manager, Risk Management.

The Port Authority may at any time during the term of this agreement change or modify the limits and coverages of insurance. Should the modification or change results in an additional premium, The General Manager, Risk Management for the Port Authority may consider such cost as an out-of-pocket expense.

Within five (5) days after the award of this agreement or contract and prior to the start of work, the Contractor must submit an original certificate of insurance, to the Port Authority of NY and NJ, Facility Contract Administrator, at the location where the work will take place. This certificate of insurance MUST show evidence of the above insurance policy (ies), including but not limited to the cancellation notice endorsement and stating the agreement/contract number prior to the start of work. The General Manager, Risk Management must approve the certificate(s) of insurance before any work can begin. Upon request by the Port Authority, the Contractor shall

furnish to the General Manager, Risk Management, a certified copy of each policy, including the premiums.

If at any time the above liability insurance should be canceled, terminated, or modified so that the insurance is not in effect as above required, then, if the Manager shall so direct, the Contractor shall suspend performance of the contract at the premises. If the contract is so suspended, no extension of time shall be due on account thereof. If the contract is not suspended (whether or not because of omission of the Manager to order suspension), then the Authority may, at its option, obtain insurance affording coverage equal to the above required, the cost of such insurance to be payable by the Contractor to the Port Authority.

Renewal certificates of insurance or policies shall be delivered to the Facility Contractor Administrator, Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy. The General Manager, Risk Management must approve the renewal certificate(s) of insurance before work can resume on the facility. If at any time any of the certificates or policies shall become unsatisfactory to the Port Authority, the Contractor shall promptly obtain a new and satisfactory certificate and policy.

The requirements for insurance procured by the Contractor shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Contractor under this contract. The insurance requirements are not a representation by the Authority as to the adequacy of the insurance to protect the Contractor against the obligations imposed on them by law or by this or any other Contract. **CITS#4979N**

7. Increase and Decrease in Areas or Frequencies

The Manager shall have the right, at any time and from time to time in their sole discretion, to increase or decrease the frequencies of all or any part of the services required hereunder and/or to add areas not described herein in the Specifications or to remove areas or parts of areas which are hereunder so described. In the event the Manager decides to change any frequencies or areas such change shall be by written notice given to the Contractor not less than seventy-two (72) hours prior to the effective date of said changes, said changes to be effective upon the date specified in said notice.

In the event of an increase or decrease in areas or frequencies, the Contractor's compensation will be adjusted to reflect such change in areas or frequencies utilizing the applicable Unit Price for such services (for the applicable Contract year) as set forth on the Pricing Sheet(s).

Where no specific Unit Price has been quoted for the type of services to be increased or decreased, the Manager shall have the right to negotiate the compensation to reflect such change, whether an increase or decrease in areas or frequencies, which, in the

opinion of the Manager, are necessary to complete the work, by multiplying the increased or decreased amount by the negotiated rate.

In the event of a decrease, the Contractor shall not be entitled to compensation for Work not performed.

No such change in areas or frequency will be implemented which results in a total increase or decrease in compensation that is greater than fifty percent (50%) of the Total Estimated Contract Price for the Base Term or, if changes are to be implemented during an Option Period, fifty percent (50%) for that Option Period.

Any increases in frequencies or areas shall not constitute Extra Work and, as such, shall not be limited by the Extra Work provisions of this Contract.

8. Extra Work

The Contractor is required to provide separate materials, supplies, equipment and personnel for Extra Work when such is deemed necessary by the Manager. "Extra Work" as used herein shall be defined as work which differs from that expressly or impliedly required by the Specifications in their present form. Total Extra Work performed by the Contractor shall not exceed six percent (6%) of the Total Estimated Contract Price of this Contract for the entire Term of this Contract including extensions thereof, or six percent (6%) of the Total Estimated Contract Price of each Section if this Contract is awarded by separate Sections.

An increase in area or frequency does not constitute Extra Work, but shall be compensable based on the prices in the Pricing Sheet(s) and the paragraph herein titled "Increase or Decrease in Areas or Frequencies".

The Contractor is required to perform Extra Work pursuant to a written order of the Manager expressly recognizing such work as Extra Work. If Lump Sum or Unit Price compensation cannot be agreed upon by the parties in writing prior to the start of Work, the Contractor shall perform such Extra Work and the Contractor's compensation shall be increased by the sum of the following amounts and such amounts only: (1) the actual net cost, in money, of the labor, and material, required for such Extra Work; (2) six percent (6%) of the amount under (1) above; (3) such rental as the Manager deems reasonable for plant and equipment (other than small tools) required for such Extra Work; (4) if the Extra Work is performed by a subcontractor, an additional three percent (3%) of the sum of the amounts under (1) through (3) above.

As used in this numbered clause (and in this clause only):

"Labor" means laborers, mechanics, and other employees below the rank of supervisor, directly employed at the Site of the Work subject to the Manager or their designee's authority to determine what employees of any category are "required for Extra Work" and as to the portion of their time allotted to Extra Work; and "cost of labor" means the wages actually paid to and received by such employees plus a proper proportion of (a) vacation allowances and union dues and assessments which the employer actually pays pursuant to contractual obligation upon the basis of such

wages, and (b) taxes actually paid by the employer pursuant to law upon the basis of such wages and workers' compensation premiums paid pursuant to law. "Employees" as used above means only the employees of one employer.

"Net Cost" means the Contractor's actual cost after deducting all permitted cash and trade discounts, rebates, allowances, credits, sales taxes, commissions, and refunds (whether or not any or all of the same shall have been taken by the Contractor) of all parts and materials purchased by the Contractor solely for the use in performing its obligation hereunder provided, where such purchase has received the prior written approval of the Manager as required herein. The Contractor shall promptly furnish to the Manager such bills of sale and other instruments as the Manger may require,, executed, acknowledged and delivered, assuring to the Manager title to such materials, supplies, equipment, parts, and tools free of encumbrances.

"Materials" means temporarily-installed and consumable materials as well as permanently-installed materials; and "cost of materials" means the price (including taxes actually paid by the Contractor pursuant to law upon the basis of such materials) for which such materials are sold for cash by the manufacturers or producers thereof, or by regular dealers therein, whether or not such materials are purchased directly from the manufacturer, producer or dealer (or if the Contractor is the manufacturer or producer thereof, the reasonable cost to the Contractor of the manufacture and production), plus the reasonable cost of delivering such materials to the Site of the Work in the event that the price paid to the manufacturer, producer or dealer does not include delivery and in case of temporarily-installed materials, less their salvage value, if any.

The Manager shall have the authority to decide all questions in connection with Extra Work. The exercise by the Manager of the powers and authorities vested in him/her by this section shall be binding and final upon the Port Authority and the Contractor.

The Contractor shall submit all reports, records and receipts as are requested by the Manager so as to enable him/her to ascertain the time expended in the performance of the Extra Work, the quantity of labor and materials used therein and the cost of said labor and materials to the Contractor.

The provisions of this Contract relating generally to Work and its performance shall apply without exception to any Extra Work required and to the performance thereof. Moreover, the provisions of the Specifications relating generally to the Work and its performance shall also apply to any Extra Work required and to the performance thereof, except to the extent that a written order in connection with any particular item of Extra Work may expressly provide otherwise.

If the Contractor deems work to be Extra Work, the Contractor shall give written notice to the Manager within twenty-four (24) hours of performing the work that it so considers as Extra Work, and failure of the Contractor to provide said notice shall constitute a waiver of any claim to an increase in compensation for such work and a conclusive and binding determination that it is not Extra Work.

The Contractor shall supply the amount of materials, supplies, equipment and personnel required by the Manager within twenty-four (24) hours following the

receipt of written or verbal notice from the Manager, or in the case of an emergency as determined by the Manager, within four (4) hours following the receipt by the Contractor of the Manager's written or oral notification. Where oral notification is provided hereunder, the Manager will thereafter confirm the same in writing.

All Extra Work shall be billed to the Port Authority on a separate invoice on a monthly basis.

9. MBE/WBE Subcontracting Provisions

The Contractor shall use every good-faith effort to provide for participation by Port Authority certified Minority Business Enterprises (MBEs) and Port Authority certified Woman-owned Business Enterprises (WBEs).

PART IV – SIGNATURE SHEET, NAME AND RESIDENCE OF PRINCIPALS SHEET AND PRICING SHEET(S), TABLE OF CONTENTS

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PART IV – SIGNATURE SHEET, NAME AND RESIDENCE OF PRINCIPALS SHEET AND PRICING SHEET(S)

1. SIGNATURE SHEET

OFFER: The undersigned offers and agrees to furnish to the Port Authority of New York and New Jersey the services and/or materials in compliance with all terms, conditions, specifications and addenda of the Contract. Signature also certifies understanding and compliance with the certification requirements of the standard terms and conditions as contained in the Standard Contract Terms and Conditions. This offer shall be irrevocable for one hundred twenty (120) days after the date on which the Port Authority opens this bid.

ONLY THE COMPANY NAMED AS THE BIDDING ENTITY BELOW WILL RECEIVE PAYMENT. THIS MUST BE THE SAME NAMED COMPANY AS INDICATED ON THE COVER SHEET

Bidding Entity_____
Bidder's Address_____

City, State, Zip_____

Telephone No._____ FAX_____

Email_____ EIN# _____

SIGNATURE_____ Date_____

Print Name and Title_____

ACKNOWLEDGEMENT:
STATE OF: _____
COUNTY OF: _____

On this ___day of_____, 20 , personally came before me, _____,who duly sworn by me, did depose that (s)he has knowledge of the matters herein stated, that they are in all respects true and that (s)he has been authorized to execute the foregoing offer and statement of irrevocability on behalf of said corporation, partnership or firm.

_____
Notary Public

NOTE: If a joint venture is bidding , duplicate this Signature Sheet and have each party to the joint venture sign separately and affix to the back of this Signature Sheet.

Bidder attention is called to the certification requirements contained in the Standard Contract Terms and Conditions, Part III. Indicate below if a signed, explanatory statement in connection with this section is attached hereto. ☐

If certified by the Port Authority as an SBE or MWBE: _____ (indicate which one and date).

2. NAME AND RESIDENCE OF PRINCIPALS SHEET

Names and Residence of Principals of Bidder. If general or limited partner, or individual, so indicate.

NAME	TITLE	ADDRESS OF RESIDENCE (Do not give business address)

3. PRICING SHEET(S)

Entry of Prices

a. The prices quoted shall be written in figures, in ink, preferably in black ink where required in the spaces provided on the Pricing Sheet(s) attached hereto and made a part hereof. Prices must be quoted in United States Dollars. All figures inserted will be interpreted as being quoted in United States Dollars.

b. All Bidders are asked to ensure that all charges quoted for similar operations in the Contract are consistent.

c. Prices must be submitted for each Item required on the Pricing Sheet(s). Bidders are advised that the Items on the Pricing Sheet(s) correspond to the required services set forth in the Specifications hereunder.

d. Bidders must insert all figures as required and verify all computations for accuracy. The Port Authority in its sole judgment reserves the right to: (1) reject Bids without checking them for mathematical errors or omissions, (2) reject Bids that contain or appear to contain errors or omissions, and (3) supply corrections to Bids that contain or appear to contain mathematical errors and omissions, and in this case the Port Authority reserves the right to recompute the Total Estimated Contract Price based upon the Unit Prices inserted by the Bidder, which amount shall govern in all cases.

e. In the event that a Bidder quotes an amount in the Total Estimated column but omits to quote a Unit Price for that amount in the space provided, the Port Authority reserves the right to compute and insert the appropriate Unit Price.

f. The Total Estimated Contract Price is solely for the purpose of facilitating the comparisons of Bids. Compensation shall be in accordance with the section of this Contract entitled "Payment".

g. The Total Estimated Contract Price shall be obtained by adding the Estimated Annual Contract Price for the first year of the Contract to the Estimated Annual Contract Price for each subsequent year.

CONTRACTOR'S PRICING SHEET
EXHIBIT "A"
(FIRST YEAR)

***Quarterly* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Quarterly Price***	**Frequency per Year**	**Total Estimated First Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	2	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	2	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	2	$_____(3)
D	Bridge Painter's Shop	$_____	2	$_____(4)
E	GWB Bus Station	$_____	2	$_____(5)

*Total quarterly price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated First Year Price for Quarterly Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (1) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "A"
(SECOND YEAR)

***Quarterly* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Quarterly Price***	**Frequency per Year**	**Total Estimated Second Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	2	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	2	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	2	$_____(3)
D	Bridge Painter's Shop	$_____	2	$_____(4)
E	GWB Bus Station	$_____	2	$_____(5)

*Total quarterly price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Second Year Price for Quarterly Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (2) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "A"
(THIRD YEAR)

***Quarterly* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Quarterly Price***	**Frequency per Year**	**Total Estimated Third Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	2	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	2	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	2	$_____(3)
D	Bridge Painter's Shop	$_____	2	$_____(4)
E	GWB Bus Station	$_____	2	$_____(5)

*Total quarterly price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Third Year Price for Quarterly Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (3) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "B"
(FIRST YEAR)

***Semi-Annual* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Semi-Annual Price***	**Frequency per Year**	**Total Estimated First Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	1	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	1	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	1	$_____(3)
D	Bridge Painter's Shop	$_____	1	$_____(4)
E	GWB Bus Station	$_____	1	$_____(5)

*Total semi-annual price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated First Year Price for
Semi-Annual Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (4) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "B"
(SECOND YEAR)

***Semi-Annual* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Semi-Annual Price***	**Frequency per Year**	**Total Estimated Second Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	1	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	1	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	1	$_____(3)
D	Bridge Painter's Shop	$_____	1	$_____(4)
E	GWB Bus Station	$_____	1	$_____(5)

*Total semi-annual price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Second Year Price for
Semi-Annual Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (5) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "B"
(THIRD YEAR)

***Semi-Annual* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Semi-Annual Price***	**Frequency per Year**	**Total Estimated Third Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	1	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	1	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	1	$_____(3)
D	Bridge Painter's Shop	$_____	1	$_____(4)
E	GWB Bus Station	$_____	1	$_____(5)

*Total semi-annual price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Third Year Price for
Semi-Annual Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (6) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "C"
(FIRST YEAR)

***Annual* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Annual Price***	**Frequency per Year**	**Total Estimated First Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	1	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	1	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	1	$_____(3)
D	Bridge Painter's Shop	$_____	1	$_____(4)
E	GWB Bus Station	$_____	1	$_____(5)

*Total annual price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated First Year Price for
Annual Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (7) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "C"
(SECOND YEAR)

***Annual* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Annual Price***	**Frequency per Year**	**Total Estimated Second Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	1	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	1	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	1	$_____(3)
D	Bridge Painter's Shop	$_____	1	$_____(4)
E	GWB Bus Station	$_____	1	$_____(5)

*Total annual price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Second Year Price for Annual Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (8) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "C"
(THIRD YEAR)

***Annual* Maintenance of Fire Alarm Systems (See PART V, Attachment "A" for Device List & Quantities)**

	(1)	(2)	(3)	(4)
	Location	**Annual Price***	**Frequency per Year**	**Total Estimated Third Year Price (2)x(3) = (4)**
A	GWB Administration Building and Toll Plaza Tunnel	$_____	1	$_____(1)
B	Hudson Terrace Switch Gear Room and Storage Room	$_____	1	$_____(2)
C	Hudson Terrace Paint Storage Building	$_____	1	$_____(3)
D	Bridge Painter's Shop	$_____	1	$_____(4)
E	GWB Bus Station	$_____	1	$_____(5)

*Total annual price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement (if repair/replacement of device is required and upon approval of the Manager) services. Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Third Year Price for
Annual Maintenance of Fire Alarm Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (9) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "D"
(FIRST YEAR)

***Semi-Annual* Maintenance of Fire Suppression Systems**

	(1)	(2)	(3)	(4)
	Location and Description	**Semi-Annual Price***	**Frequency per Year**	**Total Estimated First Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	1	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	1	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	1	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	1	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	1	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	1	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	1	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	1	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement services (if repair/replacement of device is required and upon approval of the Manager). Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated First Year Price for Maintenance of Fire Suppression Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (10) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "D"
(SECOND YEAR)

Semi-Annual Maintenance of Fire Suppression Systems

	(1)	(2)	(3)	(4)
	Location and Description	**Semi-Annual Price***	**Frequency per Year**	**Total Estimated Second Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	1	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	1	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	1	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	1	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	1	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	1	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	1	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	1	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement services (if repair/replacement of device is required and upon approval of the Manager). Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Second Year Price for Maintenance of Fire Suppression Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (11) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "D"
(THIRD YEAR)

Semi-Annual Maintenance of Fire Suppression Systems

	(1)	(2)	(3)	(4)
	Location and Description	**Semi-Annual Price***	**Frequency per Year**	**Total Estimated Third Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	1	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	1	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	1	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	1	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	1	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	1	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	1	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	1	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement services (if repair/replacement of device is required and upon approval of the Manager). Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Third Year Price for Maintenance of Fire Suppression Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (12) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "E"
(FIRST YEAR)

Annual Maintenance of Fire Suppression Systems

	(1)	(2)	(3)	(4)
	Location and Description	**Annual Price***	**Frequency per Year**	**Total Estimated First Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	1	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	1	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	1	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	1	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	1	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	1	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	1	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	1	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement services (if repair/replacement of device is required and upon approval of the Manager). Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated First Year Price for Maintenance of Fire Suppression Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (13) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "E"
(SECOND YEAR)

Annual Maintenance of Fire Suppression Systems

	(1)	(2)	(3)	(4)
	Location and Description	**Annual Price***	**Frequency per Year**	**Total Estimated Second Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	1	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	1	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	1	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	1	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	1	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	1	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	1	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	1	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement services (if repair/replacement of device is required and upon approval of the Manager). Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Second Year Price for Maintenance of Fire Suppression Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (14) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "E"
(THIRD YEAR)

Annual Maintenance of Fire Suppression Systems

	(1)	(2)	(3)	(4)
	Location and Description	**Annual Price***	**Frequency per Year**	**Total Estimated Third Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	1	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	1	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	1	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	1	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	1	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	1	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	1	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	1	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for inspection, maintenance, testing, and repair/replacement services (if repair/replacement of device is required and upon approval of the Manager). Equipment replaced must be the same make and model or approved equal (as determined by the Manager) to equipment currently installed at the Facility.

Total Estimated Third Year Price for Maintenance of Fire Suppression Systems **$_____**
(Sum of column (4) above) **INCLUDE ON LINE (15) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "F"
(FIRST YEAR)

Testing, Refilling, and Resetting Services of Discharged Hazard Modules

	(1)	(2)	(3)	(4)
	Location and Description	**Unit Price for Testing, Resetting and Refilling***	**Number of Hazard Modules to be Tested, Reset and Refilled**	**Total Estimated First Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	2	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	2	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	2	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	2	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	2	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	2	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	2	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	2	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for testing, refilling, and resetting services of discharged hazard modules.

Total Estimated First Year Price for Testing, Refilling, and Resetting Services of Discharged Hazard Modules **$_____**

(Sum of column (4) above) **INCLUDE ON LINE (16) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "F"
(SECOND YEAR)

Testing, Refilling, and Resetting Services of Discharged Hazard Modules

	(1)	(2)	(3)	(4)
	Location and Description	**Unit Price for Testing, Resetting and Refilling***	**Number of Hazard Modules to be Tested, Reset and Refilled**	**Total Estimated Second Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	2	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	2	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	2	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	2	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	2	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	2	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	2	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	2	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for testing, refilling, and resetting services of discharged hazard modules.

Total Estimated Second Year Price for Testing, Refilling, and Resetting Services of Discharged Hazard Modules **$_____**

(Sum of column (4) above) **INCLUDE ON LINE (17) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "F"
(THIRD YEAR)

Testing, Refilling, and Resetting Services of Discharged Hazard Modules

	(1)	(2)	(3)	(4)
	Location and Description	**Unit Price for Testing, Resetting and Refilling***	**Number of Hazard Modules to be Tested, Reset and Refilled**	**Total Estimated Third Year Price (2)x(3) = (4)**
A	GWB Administration Building Cafeteria – Wet Chemical System	$_____	2	$_____(1)
B	GWB Administration Building Computer Room – Halon System	$_____	2	$_____(2)
C	GWB Administration Building Communication Desk Equipment Room – FM 200 System	$_____	2	$_____(3)
D	GWB Hazardous Material Trailer 1, New Jersey – Dry Chemical System	$_____	2	$_____(4)
E	GWB Hazardous Material Trailer 2, New Jersey – Dry Chemical System	$_____	2	$_____(5)
F	GWB Hazardous Material Trailer, New York – Dry Chemical System	$_____	2	$_____(6)
G	Hudson Terrace Paint Storage Building – Dry Chemical System	$_____	2	$_____(7)
H	New York Tower 800 MHz Room – Dry Chemical System	$_____	2	$_____(8)

*Total unit price shall be all-inclusive of labor and materials for testing, refilling, and resetting services of discharged hazard modules.

Total Estimated Third Year Price for Testing, Refilling, and Resetting Services of Discharged Hazard Modules **$_____**

(Sum of column (4) above) **INCLUDE ON LINE (18) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET
EXHIBIT "G"
EMERGENCY SERVICE

FIRST YEAR

(1)	(2)	(3)	(4)
	All Inclusive Hourly Rate	**Estimated Labor-Hours Per Year**	**Total Estimated First Year Price (2)x(3) = (4)**
(A) Regular Working Hours	$_____	20	$_____(1)
(B) Overtime Working Hours	$_____	10	$_____(2)
(C) Premium Working Hours	$_____	5	$_____(3)

SECOND YEAR

(1)	(2)	(3)	(4)
	All Inclusive Hourly Rate	**Estimated Labor-Hours Per Year**	**Total Estimated Second Year Price (2)x(3) = (4)**
(A) Regular Working Hours	$_____	20	$_____(1)
(B) Overtime Working Hours	$_____	10	$_____(2)
(C) Premium Working Hours	$_____	5	$_____(3)

THIRD YEAR

(1)	(2)	(3)	(4)
	All Inclusive Hourly Rate	**Estimated Labor-Hours Per Year**	**Total Estimated Third Year Price (2)x(3) = (4)**
(A) Regular Working Hours	$_____	20	$_____(1)
(B) Overtime Working Hours	$_____	10	$_____(2)
(C) Premium Working Hours	$_____	5	$_____(3)

Hourly Rate in Column (2) above are all-inclusive wage rates, which shall include but not be limited to the Contractor's overhead, including tolls, travel time, cost of vehicle use, and profit.

Total Estimated Three-Year
Price for Emergency Services **$_____**
(Sum of column (4) above for all three years) **INCLUDE ON LINE (19) EXHIBIT "H"**

CONTRACTOR'S PRICING SHEET

EXHIBIT "H"
PRICING SUMMARY SHEET

(1) **Total Estimated First Year Price for Quarterly Maintenance of Fire Alarm Systems**
(from Exhibit "A") **$**_____

(2) **Total Estimated Second Year Price for Quarterly Maintenance of Fire Alarm Systems**
(from Exhibit "A") **$**_____

(3) **Total Estimated Third Year Price for Quarterly Maintenance of Fire Alarm Systems**
(from Exhibit "A") **$**_____

(4) **Total Estimated First Year Price for Semi-Annual Maintenance of Fire Alarm Systems**
(from Exhibit "B") **$**_____

(5) **Total Estimated Second Year Price for Semi-Annual Maintenance of Fire Alarm Systems**
(from Exhibit "B") **$**_____

(6) **Total Estimated Third Year Price for Semi-Annual Maintenance of Fire Alarm Systems**
(from Exhibit "B") **$**_____

(7) **Total Estimated First Year Price for Annual Maintenance of Fire Alarm Systems**
(from Exhibit "C") **$**_____

(8) **Total Estimated Second Year Price for Annual Maintenance of Fire Alarm Systems**
(from Exhibit "C") **$**_____

(9) **Total Estimated Third Year Price for Annual Maintenance of Fire Alarm Systems**
(from Exhibit "C") **$**_____

(10) **Total Estimated First Year Price for Semi-Annual Maintenance of Fire Suppression Systems**
(from Exhibit "D") **$**_____

(11) **Total Estimated Second Year Price for Semi-Annual Maintenance of Fire Suppression Systems**
(from Exhibit "D") **$**_____

(12) **Total Estimated Third Year Price for**

	Semi-Annual Maintenance of Fire Suppression Systems (from Exhibit "D")	**$**_____
(13)	**Total Estimated First Year Price for Annual Maintenance of Fire Suppression Systems** (from Exhibit "E")	**$**_____
(14)	**Total Estimated Second Year Price for Annual Maintenance of Fire Suppression Systems** (from Exhibit "E")	**$**_____
(15)	**Total Estimated Third Year Price for Annual Maintenance of Fire Suppression Systems** (from Exhibit "E")	**$**_____
(16)	**Total Estimated First Year Price for Testing, Refilling, and Resetting Services of Discharged Hazard Modules** (from Exhibit "F")	**$**_____
(17)	**Total Estimated Second Year Price for Testing, Refilling, and Resetting Services of Discharged Hazard Modules** (from Exhibit "F")	**$**_____
(18)	**Total Estimated Third Year Price for Testing, Refilling, and Resetting Services of Discharged Hazard Modules** (from Exhibit "F")	**$**_____
(19)	**Total Estimated Three-Year Price for Emergency Services** (from Exhibit "G")	**$**_____
(20)	**SWAC Allowance (See Part V Specifications)**	**$ 2,100.00**
	TOTAL ESTIMATED THREE (3) YEAR CONTRACT PRICE (Total items 1 through 20 above)	**$**_____

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ATTACHMENT "B" MANUAL 29

PART V – SPECIFICATIONS

1. Specific Definitions

To avoid undue repetition, the following terms, as used in this Contract, shall be construed as follows:

"Facility" means the George Washington Bridge (GWB) Administration Building and Toll Plaza Tunnel; Hudson Terrace Switch Gear Room with adjacent Storage Room; Hudson Terrace Paint Storage Building and the Bridge Painter's Shop; the 800MHz communications room, and hazardous material storage trailers; collectively known as GWB, and all located in Fort Lee, NJ; and the George Washington Bridge Bus Station (GWBBS), located at 4211 Broadway between 178th and 179th Streets, and Fort Washington and Wadsworth Avenues, New York, NY.

"Code(s)" means all Codes to which the GWB and GWBBS Fire Alarm and Suppression Systems are subject, including but not limited to the New York and New Jersey City state and local electrical, fire, building, and construction codes, the National Electric Safety Code (NESC), the National Fire Protection Association code (NFPA), the New York City Building Code (NYC Construction Codes), the New York City Electrical and Fire Codes, the New York City Construction Code, the New Jersey Building Code, the New Jersey Uniform Fire Code and all other codes applicable to the GWB/GWBBS Fire Alarm and Suppression Systems.

"Contractor's Personnel" or "Service Technician" means an individual who has formal training and extensive on-the-job experience, and has achieved competence required to operate equipment and/or machinery and vehicles necessary to perform the Work specified herein.

"Normal Wear and Tear" means wear and tear of the parts of the Systems under normal use and does not include signs of misuse, intentional damage or vandalism.

"Maintenance" means the aggregate of the following: inspection and testing of the Systems as specified herein; replacement (labor and material to be paid for by the Contractor, at no additional cost to the Authority) of worn, obsolete, broken, or otherwise unsuitable parts of the Systems due to Normal Wear and Tear; but such Maintenance shall not include furnishing or replacing any parts, items or equipment that may be required as the result of intentional damage, negligence, vandalism, or misuse not attributable to employees of the Contractor.

"Regular Working Hours" and "Normal Working Hours" as used herein means 6:00 a.m. to 2:30 p.m., Monday through Friday, excluding legal Holidays,

"Overtime Working Hours" means hours other than Regular Working Hours and eight (8) hours on Saturday, but not Premium Overtime Working Hours.

"Premium Overtime Working Hours" means hours in excess of eight (8) hours on

Saturday and all day Sunday and Holidays.

"Emergency Service" is work performed at the Manager's request, other than scheduled Maintenance, and Normal Wear and Tear, and may be required twenty-four (24) hours a day, seven (7) days a week including legal Holidays, as determined by the Manager.

"Manual" means the *Inspection, Testing and Maintenance Requirements for Fire Protection and Life Safety Systems*, issued by the Port Authority Engineering Department and Office of the Chief Operating Officer dated January 2012 (revised November 5, 2012), inclusive of any revisions made to the manual (http://www.panynj.gov/about/pdf/ITM-Manual.pdf). See Attachment "B" for applicable chapters for this Contract.

"Materialman" means anyone who furnishes materials, plant or equipment (including temporary or consumable materials) to the Contractor or any Subcontractor for use at or about the Site of the Work in the performance of Work.

"Systems" and "Sub-Systems" means the fire alarm and suppression and Central Station monitoring systems; the Edwards Technology (EST 2), Radionics, Silent Knight, and Siemens Firefinder XLS Fire Alarm Systems; the Halon, FM 200, and Dry and Wet Chemical Systems manufactured by Chemtron Corporation, Fenwal Incorporated, Pyro Chem and Fire Incorporated; and shall collectively include, but not be limited to, all items relating to maintenance, repairs, inspection and testing of the Systems, including smoke detection and all associated wiring, panels, detectors, conduits, computer software, hardware, documentation, peripheral devices, and accessories required for the System installed at the Facility. It shall also include all warning lights and bells (up to the termination in the master console), initiating and notification devices and interface with the System of the GWBBS. It shall not include any panels or devices installed in tenant areas of the GWBBS except for the programming of tenant's fire alarm panels and their connection to the GWB and GWBBS fire alarm panel(s).

"Work" means: Work required by the Specifications, including (a) to inspect, test, maintain, repair or replace under Normal Wear and Tear, all components of the Facility's Systems, and any subsequent upgrades, inclusive of any units added to said Systems for various locations throughout the Facility, whether or not such components are presently in existence, according to the applicable Manual or Code, and as directed by the Manager; (b) to furnish, delete, and/or install additional devices to the Systems as directed in writing by the Manager, including providing technical assistance to others on methods to integrate and program the additional devices on the behalf of the Contractor, Authority, or others doing the installation; (c) to properly and accurately complete the required/applicable maintenance forms (i.e. for general information, inspection and testing) according to the Manual; (d) to provide and maintain complete up to date as-built drawings of the Fire Alarm System initially and continually update as modifications are made.

2. Work Required by the Specifications

These Specifications relate generally to the performance of inspection, maintenance, testing, repair/replacement and monitoring of the Systems installed at the Facility as directed and approved by the Manager according to the Manual, Code, manufacturer's

recommendations, inclusive of any units added to said Systems for various locations throughout the Facility, either existing or to be added in the duration of this Contract.

The Contractor agrees to perform the Work, including: (a) to inspect, test, maintain, repair or replace under Normal Wear and Tear, all components of the Facility's Systems, and any subsequent upgrades, inclusive of any units added to said Systems for various locations throughout the Facility, whether or not such components are presently in existence, according to the applicable Manual and/or Code, and as directed by the Manager; (b) to furnish, delete, and/or install additional devices to the Systems as directed in writing by the Manager, including providing technical assistance to others on methods to integrate and program the additional devices on the behalf of the Contractor, Authority, or others doing the installation; (c) to properly and accurately complete the required/applicable maintenance forms (i.e. for general information, inspection and testing) according to the Manual; (d) to provide and maintain complete up to date as-built drawings of the Fire Alarm System initially and continually update as modifications are made.

This Contract requires the Contractor to become fully responsible for the Maintenance as specified herein of the Systems including the replacement of parts and all labor required to keep the Systems in good operating condition. The Contractor shall be responsible for all aspects of Maintenance of the Systems from the devices(s) up to central monitoring. The Contractor's price shall include but not be limited to the cost of all labor, parts, supervision, insurance, equipment rental, tolls, travel time, vehicle usage, fuel, profit and all other costs associated with the Work.

During the term of this Contract, it is anticipated that a new Siemens fire alarm system will be installed at the GWBBS. This Contract covers Maintenance of the System (approximately 275 devices) on the third (3rd) floor of the West Building of the GWBBS, where PA offices will be located. Once the Siemens System is activated, the Contractor must then perform Maintenance on the System under the terms of this Contract.

The Contractor shall have the ability and approval to work on the Siemens Firefinder XLS Fire Alarm System, manufactured by Siemens Building Technology, installed at the GWBBS and is required to work either directly or through Subcontractors pre-approved by the Manager. Subcontractors shall have all personnel experienced, qualified, and approved to make any necessary factory-authorized repairs, site specific software changes, modifications, and upgrades to System components and graphics deemed necessary for the Systems' operations or as directed by the Manager, including the associated initiation and notification devices.

The enumeration in this Contract of particular things to be furnished or done at the Contractor's expense, or without cost or expense to the Authority, or without additional compensation to the Contractor shall not be deemed to imply that only things of a nature similar to those enumerated shall be so furnished and done; but the Contractor shall perform all Work as required without other compensation than that specifically provided, whatsoever changes may be made in the Specifications, whatsoever Work may be required in addition to that required by the Specifications in their present form, and whatsoever obstacles or unforeseen conditions may arise or be encountered.

The Specifications require the doing of all things necessary, or proper for, or incidental to, the matter referred to in the immediately preceding paragraphs. In addition, all things not expressly mentioned in these Specifications but involved in carrying out their intent and in the complete and proper execution of the matter referred to in the immediately preceding paragraph are required by these Specifications, and the Contractor shall perform the same as though they were specifically delineated, described and mentioned.

A. Technical Specifications and Standards for Fire Alarm and Suppression Systems

This section specifies all Work required; maintaining the Systems at the Facility under this Contract. The Systems specified herein are to be provided with inspections, tests, maintenance, repairs (as necessary and as approved by the Manager), and operation verification. The System shall include all databases, software, hardware and components of the Siemens Cerberus Pyrotronics MXL and Firefinder XLS Network including XL Graphical Terminals, Network System Terminals (NSTs), Network Terminal Cabinets (NTCs) and all field devices such as area and duct smoke detectors, manual pull stations, Input/Output (I/O) devices, audible and visual output devices, water flow alarm devices, tamper/supervisory devices, warden telephones, pressure switches, power supplies, and relays. All parts of the Systems including but not limited to: fire alarm control panels(s), notification and initiating devices, software, hardware and associated Sub-Systems and accessories that fail due to Normal Wear and Tear or lack of Maintenance by the Contractor shall be repaired or replaced by the Contractor at no additional cost to the Authority.

1. Codes and Standards

a. The Systems shall conform to the latest provisions of the National Electric Safety Code (NESC), the National Fire Protection Association (NFPA), the New York City Building Code (NYC Construction Codes), the New York City Electrical and Fire Codes, the New Jersey Building Code, the New Jersey Uniform Fire Code, the Insurance Service Organization (ISO), and local Codes, laws, and amendments.

b. In case of conflict between provisions of Codes, laws, ordinances, etc., the more stringent requirements shall apply.

c. Installations shall comply with the requirements of the applicable editions of the New Jersey Building Codes et al, the New York City Construction Codes et al, and local laws and amendments.

d. Standard Publications – Standard Publications of technical organizations and regulatory agencies are referenced herein, and unless stricter requirements are indicated, materials and equipment so specified shall be manufactured, tested and installed to conform, as a minimum, to the requirements of the applicable Codes and their respective referenced standards or publications. The following list of organizations (with their identifying initials) involved in electrical standards is not intended to be all-inclusive:

i. American National Standards Institute- ANSI
ii. American Society for Testing and Materials- ASTM
iii. Institute of Electrical and Electronics Engineers- IEEE
iv. Insulated Power Cable Engineers Association- IPCEAz
v. International Municipal Signal Association- IMSA
vi. Joint Industrial Council-JIC
vii. National Electrical Manufacturers Association- NEMA
viii. National Fire Protection Association- NFPA
ix. Underwriters Laboratories- UL

e. UL Labels – All materials and equipment for which these are established Underwriters Laboratories (UL) standards shall bear the (UL) label.

2. Coded Indices

Located in an Authority approved type frame near each existing manual alarm under this Contract shall be a list of all coded signals for all fire alarm devices within the areas served. All existing indices shall be corrected to the extent necessary if/when additional units of fire alarm type devices are added. Where coded indices are missing or damaged, they shall be replaced within twenty-four (24) hours, at no cost to the Authority.

3. Fasteners

Provide inserts, expansion shield lugs, anchors, bolts with nuts and washers, shims or any other type of fastening devices required to fasten panels or other equipment to foundations, floors, walls or ceilings. Unless otherwise specified herein, all fasteners shall be hot-dipped galvanized and of sizes and types recommended by the equipment manufacturer and as approved by the Manager.

4. Notice for Testing

The Manager will furnish to the Contractor a list of names and telephone numbers of people who shall be notified prior to commencing a test in any area. It will be the Contractor's responsibility to notify these people or others as directed from time to time prior to commencing any tests. The Contractor shall give forty-eight (48) hours notice to the Manager before planning to commence testing and a Facility representative may be assigned to accompany the Contractor during the tests. The Contractor shall give forty-eight (48) hours notice to the Facility prior to making any repairs. Service Technicians shall be assigned to the Facility to systematically maintain all devices, and have familiarity with the locations of all equipment. Worn, failed and doubtful devices shall be repaired with new or reconditioned, UL approved parts, to prevent system failure.

B. Maintenance of the Fire Alarm Systems

The following are the minimum Maintenance requirements for the Fire Alarm Systems in this Contract to be fulfilled by the Contractor. The Contractor must also perform any other tests that are required by the National Fire Protection Association Standards, local jurisdictions, equipment manufacturer's recommendations, and as directed by the Manager. The Contractor shall notify the Manager prior to the initiation of all inspections and tests. The Contractor shall schedule its Work in such a manner that the interruption of the Fire Alarm Systems shall be minimal, and shall follow all proper safety measures while performing Work under the terms of this Contract.

Maintenance shall be performed quarterly, semi-annually, and annually as a minimum level of service, or more often as required by the manufacturer of the installed equipment or as determined by the Manager. The second quarter maintenance shall be performed during the first semi-annual maintenance; the fourth quarter and second semi-annual maintenance shall be performed during the annual maintenance. The quarterly, semi-annual, and annual Maintenance shall be performed during Normal Working Hours as defined herein, and all Work shall be scheduled in advance with the Manager and such schedule shall be subject to his/her approval. Compensation for any Maintenance required by the equipment manufacturer which is beyond the minimum level of service (but not considered to be Emergency Work, as determined by the Manager) set forth herein shall be considered included within the prices set forth in Exhibits "A," "B" and "C" of the Contractor's Pricing Sheets.

At a minimum, the Contractor shall perform the quarterly services indicated hereunder, not less than 85 days or not more than 95 days apart. At a minimum, the Contractor shall perform the semi-annual services indicated hereunder, not less than 175 days or not more than 185 days apart. At a minimum, the Contractor shall perform the annual services indicated hereunder, not less than 360 days or not more than 370 days apart.

The Contractor shall perform Maintenance in accordance with (but not limited to) NFPA standards, including the latest version of NFPA 13-26 "System Inspection, Testing, and Maintenance" for Sprinkler Systems, NFPA 14-13 "System Testing, Inspection, and Maintenance" for Standpipe and Hose Systems, NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," and NFPA 72-14 "Inspection, Testing, and Maintenance" for Fire Alarm Systems.

The Contractor shall keep all entrance and exits accessible to use at all times, all to the best interest of the Authority and others as directed by the Manager.

1. General Requirements

a. Notify the Manager, Operations Supervisor, and Communications Desk staff before starting inspections and/or tests. This includes making necessary arrangements for sounding of horns, bells, etc.

b. Check condition of conduit, wiring, outside lines, sounding devices, etc.

c. Notify the Manager, Operations Supervisor, and Communications Desk staff of completion of inspections and/or tests, verify proper receipt of signals at the Central Station and Fire Alarm Control Panels, and advise the Manager of any items that need correction.

d. Verify proper visual indication at control panel. Reset control panel.

e. Repair any inoperative devices and clear up any circuit faults before leaving the premises.

f. Note the operation of local alarms.

g. Maintain a supply of spare detectors and other serviceable parts on site.

h. For the Siemens Systems Only (after activation):
Verify that the device being tested is properly landed geographically on each level of zoom on the graphical computers and described in the Facility specific format on all three (3) lines of text of the custom messages. Add subsequent levels of graphics and/or custom messages, if necessary.

i. Provide to the Manager, at the start of the Contract, and at the last month of each calendar year, a schedule of testing that will include a projection in a Calendar format that each individual device will be tested in the following year.

2. Manual Pull Station Requirements

Annual

The annual services shall include, and the Contractor shall, at a minimum:

a. Perform a complete fire signal test on each manual fire alarm station. Allow code to activate horn strobe circuits at least one (1) round to verify coding.

b. Check to make sure the shunt is operating properly if boxes are wired for shunt-type operation.

c. Check manual fire alarm stations for tight terminal connections, cleanliness, and freedom from corrosion or moisture.

d. Repaint manual fire alarm stations and all exposed conduits up to eight (8) feet (vertically) as necessary, and check for free opening of door after repainting.

e. Submit a schedule of testing for the year that will include which month each individual manual station will be tested at the beginning of each calendar year.

3. Air Duct Smoke Detector Requirements

General

Prior to performing regularly scheduled maintenance services on the air duct smoke detectors, remove, vacuum and thoroughly clean all air duct smoke detectors so that they are free of dust, dirt and debris, to the satisfaction of the Manager.

Annual

The annual services shall include, and the Contractor shall, at a minimum:

a. Check sensitivity of all air duct smoke detectors and adjust if necessary.

b. Remove or visually check that sampling tube is properly installed in the duct and air chambers seal are functioning properly.

c. Vacuum each air duct smoke detector chamber and all tubes.

d. Complete a test on each detector program. Allow code to activate local horn strobe circuits at least one (1) round to verify coding.

4. Area Smoke Detector Requirements

General

Prior to performing regularly scheduled maintenance services on the area smoke detectors, remove, vacuum and thoroughly clean all area smoke detectors so that they are free of dust, dirt and debris, to the satisfaction of the Manager.

Annual

The annual services shall include, and the Contractor shall, at a minimum:

a. Complete full fire signal test on all area smoke detectors.

b. Disconnect area smoke detector and verify trouble indicator at control panel.

c. Check and record sensitivity of all area smoke detectors and adjust if necessary.

d. Thoroughly clean and vacuum each area smoke detector chamber and base.

e. Remove or visually check that air chambers are clear and wiring and components are free of corrosion.

f. Complete a test on each area smoke detector program. Allow code to activate local horn strobe circuits at least one (1) round to verify coding.

5. Thermal Detector Requirements

General

Prior to performing regularly scheduled maintenance services on the thermal detectors, remove, vacuum and thoroughly clean all thermal detectors so that they are free of dust, dirt and debris, to the satisfaction of the Manager.

Annual

The annual services shall include, and the Contractor shall, at a minimum:

a. Inspect and test operation of thermal detectors. Assure local indicator LED functions.

b. Disconnect thermal detector and verify trouble indicator at control panel.

c. Inspect and test all devices in a loop circuit as required by the applicable code.

d. Verify proper program sequence and any shut downs or recalls and reset.

e. Check that detector is properly enumerated and proper code is attached to the device and all instructions are legible.

f. Ensure that device has not been painted and instructions and warnings are legible.

6. Sprinkler Supervision and Waterflow and Standpipe Fireline Supervisory Requirements

General

The general services shall include the services stated above (in section B1.), and the following:

a. Check the system ground connection to ensure that it is securely fastened, free of corrosion, and not mechanically damaged.

b. Visually check system air and water pressures and supply water pressure gauges of the sprinkler systems against posted pressure parameters, prior to making any water flow tests.

c. Conduct water flow tests as follows:

   i. Make flow tests from the Inspector's test connection for each wet sprinkler system, first ensuring that the discharge from the valve will not cause property damage or personal injury.

   ii. On dry systems, make waterflow tests from the half-inch test valve located in the piping connected at a point below the dry pipe alarm valve and running to the detection device.

   iii. Open waterflow detection devices and examine for leakage, corrosion, binding action and loose wiring connections.

iv. Ensure that the waterflow devices operate to give an alarm during waterflow tests. Verify visual indication at control panel. Reset control panel.

v. Verify that all transmitted supervisory signals were properly received at the Fire Alarm and Remote Lobby Panel board on both ground and normal circuits.

d. Reset all switches in control panel and close cabinet.

e. Perform a waterflow test to check the sensitivity of the retard on all vane-type waterflow devices once a year.

Quarterly

The quarterly services shall include, and the Contractor shall, at a minimum:

a. Perform operational tests of waterflow devices through the use of a test connection.

b. Perform inspection and tests of all supervisory devices except gate valves.

c. Inspect and test at least one (1) gate valve tamper device on each circuit.

d. Perform open circuit and grounded test circuits to test fire alarm circuit.

e. Perform shunt test on all circuits containing fire alarm, waterflow and supervisory devices. The test comprises the actuation of two (2) different functional devices simultaneously, for example, fire alarm and waterflow, fire alarm and supervisory, or waterflow and supervisory. (The function of this test is to check sequence of preferred operation, which could be disrupted by interchanges of CO-1 and CO-2 lines by telephone company employees.)

f. Perform shunted CO contact test on each circuit to ensure operation of the grounding circuit under conditions involving different circuit parameters.

g. Provide a report from the Central Station to the Manager for alarms received.

h. Open sprinkler, test drain and run in waterflow device before opening or disturbing cabinets, devices, etc. All waterflow testing to be conducted with Facility Watch Engineer and/or Facility Plumber.

Semi-Annual

The semi-annual services shall include, and the Contractor shall, at a minimum:

a. Test all gate valve supervisory devices.

b. Examine and clean restrictions and strainers used with pressure actuated devices on supervisory equipment.

c. Check operational settings of pressure actuated devices.

7. Fire Alarm Control Panel and Digital Communicator Requirements

The Contractor shall perform the following tasks on the Fire Alarm Control Panel(s), CRT Annunciator located in the Communication Desk Area, and all sub-panels and peripherals associated with the Central Station Monitoring at the GWBBS, as well as the GWB Administration Building. The Facility will provide and maintain two (2) plain old telephone service (POTS) lines for connection to the digital communicators (one primary, one backup) at all three (3) panel locations for Central Station Monitoring, and will provide and maintain the telephone lines and/or fiber optic lines for connection to the CRT Annunciator and the Central Station Monitoring. The Contractor will monitor the condition of the lines.

Semi-Annual
The semi-annual services shall include, and the Contractor shall, at a minimum:

Check battery for proper voltage and condition. Replace any battery with terminal voltage less than 85% rating.

Annual
The annual services shall include, and the Contractor shall, at a minimum:

a. Ensure proper operation of fire alarm control panel and digital communicator. Reset control panel.

b. Replace lamp indicators as necessary.

8. Terminal Relay Interface, Terminal Relay Input (TRI), Terminal Relay Output (TRO) and Purge Key Station Requirements

Semi-Annual

The semi-annual services shall include, and the Contractor shall, at a minimum:

a. Perform all tests in conjunction with any device(s) attached to the interface.

b. Inspect and test all devices in a primary loop circuit as required by the applicable code to allow all interfaces to be tested within the code required frequencies.

c. Ensure all devices are properly labeled. Make visual inspection of the condition(s) of other associated equipment, conduit, wiring, etc.

d. Test primary and secondary supervised circuits to ensure trouble indication is received at the Fire Command Stations.

e. Toggle each relay, LED, input or output and check each program, graphic and custom message associated with the interface unit to ensure proper functionality and operation.

f. Check software and program function to ensure proper operation.

g. Lubricate keyway, exercise switch and inspect internal components of purge stations.

9. Audible and Visual Device Requirements

Annual

The annual services shall include, and the Contractor shall, at a minimum:

a. Test horn and strobe circuits for trouble and alarm conditions.

b. Inspect and test a portion of the horn strobe devices on each circuit as per the required code.

c. Inspect boxes and correct any wiring or splice deficiencies.

d. Verify operation of all audible and visual alarm devices.

e. Clean devices as required for maximum required visual and audible output.

f. Ensure all exposed conduit and boxes below eight (8) feet are painted red. Touch up as needed.

10. Graphical Monitor, Master Module Board (MMB), Network System Terminal (NST), Network Terminal Cabinets (NTC), and Digital Communicator Requirements

Semi-Annual

The semi-annual services shall include, and the Contractor shall, at a minimum:

Check power supplies and batteries for proper voltage and condition. Replace any battery with visual signs of corrosion, deformation, leakage or terminal voltage less than 85% rating.

Annual

The annual services shall include, and the Contractor shall, at a minimum:

a. Ensure cabinet wiring diagrams are attached to interior door and are kept current.

b. Check for proper operation of annunciator, modules, network, and central station equipment.

c. Check circuit boards and terminal connections to ensure tightness. Only torque where necessary.

d. Check indicators and re-lamp or replace boards or indicators as necessary.

e. Vacuum clean cabinet interior and lubricate and test locking devices. Inspect conduits, hubs, door seals and wiring for corrosion or overheating.

11. Update of Graphical Database Requirements

Upgrade and maintain the Graphical Software including the database and ensure each device is properly depicted on accurate GWBBS drawings at all

possible levels of zoom, as applicable. Clearly define and continually improve each device descriptor.

12. Sub-Panel Requirements

Ensure all sub panels have operator instructions and a line diagram listing all primary components and devices in the Sub-System clearly visible in or near each panel in a laminated frame.

Semi-Annual

The semi-annual services shall include, and the Contractor shall, at a minimum:

a. Test all sub-panel interface wiring for trouble and alarm receipt at Fire Command Station and Central Station. All primary and secondary interface wiring is to be supervised.

b. Perform test of each device of the Sub-System components as stipulated in sections“2” through “10” above.

c. Perform code compliant Maintenance and testing of all ancillary Fire Suppression Systems in coordination with the Fire Suppression Systems Maintenance Contractor.

13. Requirements for Interfacing the Tenants’ Fire Alarm Panels (GWBBS only)

In order for the Tenants’ Fire Alarm panels to be monitored by the GWBBS Fire Alarm panel(s), the Contractor shall be required to program all present and future Tenants’ Fire Alarm panels as per the sequence of operation of each Tenants’ Fire Alarm and smoke purge system and shall be responsible to perform final connection of the Tenants’ Fire Alarm panel to the GWBBS Fire Alarm panel(s) as directed by the Manager. All installation Work in the Tenants’ space, of the Tenants’ Fire Alarm panels, devices and all wiring including wiring to the GWBBS Fire Alarm panel(s) shall be Tenants’ responsibility.

14. Alarm Procedure

The Facility will provide and maintain telephone lines for connection to the digital communicators for Central Station Monitoring. The Contractor will program the Fire Alarm System to monitor the condition of the lines.
Upon receipt of fire alarm, the Contractor shall immediately notify the Manager and the appropriate Fire Department(s). Upon receipt of supervisory and/or trouble alarm, the Contractor shall immediately notify the Manager

Upon receipt of a false alarm, the Contractor shall immediately investigate and report to the Manager the cause of such false alarm(s). If the false alarms are due to the malfunction of either the Fire Alarm Systems or the Fire Suppression

Systems, the Contractor shall repair, replace or adjust the Systems as required, without additional cost to the Authority.

The Contractor shall submit to the Manager, along with each invoice, a report of all alarms received during the applicable Maintenance period.

15. Device Lists

Currently there are approximately 340 devices at the George Washington Bridge Administration Building and Toll Plaza Tunnel; approximately 275 devices will be installed in the Port Authority space at the George Washington Bridge Bus Station; approximately 30 devices each at the Hudson Terrace Switch Gear Room, Hudson Terrace Paint Storage Building, and the Bridge Painter's Shop (See Attachment A, "Device List"). Actual quantities shall be verified by the Contractor.

C. Maintenance of the Fire Suppression Systems

The Work consists of performing Maintenance services for the existing Fire Suppression Systems located as listed in the Contractor's Pricing Sheets, Exhibits "D," "E" and "F" including, but not limited to, any and all materials and equipment forming a part of the Systems as manufactured by Chemetron Corporation, Fenwal Incorporated, Pyro Chem and Fire Incorporated, including all wiring and conduits required for the Systems.

Maintenance shall include all mechanical and electrical installation, all detection and control equipment, agent storage containers and suppression agents, nozzles, pipes and fittings, manual releases and abort controls, shutdown, alarm interfaces, caution/advisory signs.

The Contractor is responsible for maintaining all control wiring/panels/ detectors/warning lights/warning bells/manual trigger devices with piping to terminate in master console.

The Contractor shall furnish all labor, cleaning materials, ladders, tools, temporary barricades, warning signs, and other safety precautions and all other things necessary or proper for or incidental to such Maintenance. Maintenance shall be deemed to include such removal and replacement of equipment and materials as may be necessary or desirable to afford access to the equipment for inspection and/or Maintenance.

The Contractor shall replace worn, failed or doubtful components requiring replacement under this Contract with new components of the same manufacturer and of current design or Port Authority approved equal. All new components shall be compatible with existing components.

Labor required for recharging discharged cylinders and for pressure testing discharged cylinders is included in the Contractor's Pricing Sheets, Exhibit "F" – "Testing,

Refilling and Resetting of Discharged Hazard Modules." Repairs and cylinder testing necessitated by reason of negligence or misuse of the equipment beyond the control of the Contractor, except labor required as a result of Normal Wear and Tear, shall be considered Extra Work.

The Maintenance services are semi-annual and annual routines. The last scheduled semi-annual maintenance shall be performed during the annual scheduled maintenance, and compensation for the last scheduled semi-annual maintenance shall be included in the annual price. The semi-annual service routines shall be performed during the months of May and November in each year or as otherwise directed by the Manager. The Contractor shall give the Manager forty-eight (48) hours advance notice of the dates he/she plans to perform these services routines. These services routines shall conform to the recommended service routines outlined in the Manual, NFPA Standard 12A, the latest vendor/manufacturer service manuals, and as stated below.

The following are the minimum service requirements for the Fire Suppression Systems to be fulfilled by the Contractor. The semi-annual service routine of the Systems includes, but is not limited to the following:

1. A walk through inspection of all system components, checking for obvious damage.

2. Place system switch in "Battery Test" position, activate one (1) detector and operate for at least fifteen (15) minutes. Reset system and return switch to normal operation. Check high trickle battery charging rate.

3. Check the pressure of all Halon 1301, FM 200 Agent, and Dry or Wet Chemical cylinders and record the pressure on a log to be affixed to the cylinder by the Contractor.

4. Check all alarm signals at associated alarm panels (where applicable)

5. For the Fire Detection Sub-System:

    a) Visually inspect all ionization detector heads and remove loose dust accumulation with manufacturer's approved methods as stated in NFPA-72E.

    b) Activate alarm smoke or high temperature detectors, reset the system after each alarm, and check all proper and correct alarm signals, including signals at associated Central Fire Alarm Panels (where applicable).

    c) Check the supervisory circuit and associated signals by purposely placing the system in a trouble condition.

6. Take voltage reading, check water levels, and clean casings of all system batteries.

7. Inspect the electrical system and other mechanical parts. Test the electrical system for continuity and voltage.

8. Relamp system lamps as necessary.

9. Reset the system immediately following the completion of the inspection.

10. Check the sensitivity of each detector with the type of equipment recommended by the detector manufacturer.

11. Activate every detector without causing Halon 1301, FM 200 agent or dry or wet chemical discharge. Check that all proper Halon single and/or dual indications and alarms are given and all subsequent operations including release mechanisms and interlocks with other systems and equipment functions properly. For the FM-200 system, a complete sequence of operation test of all alarm devices, shutdown functions, remote signaling time delay, and simulated agent discharge for each zone or system shall be performed to verify operation in accordance with Section 3 entitled, "Sequence of Operation for FM 200 System" below.

12. Activate the manual and electric controls and check for proper operations and response.

13. Check expiration date of pyrotechnic triggers and replace at intervals in accordance with manufacturer's recommendations.

14. Operate each pressure switch and check alarms.

15. Inspect all cylinders, cylinder racks, piping and pipe hangers and straps for satisfactory condition and proper support.

16. Check the operation of the pressure switch and related signals.

17. Inspect all discharged nozzles for proper position, alignment and clear unobstructed orifices.

18. Test each circuit for trouble by indicating a trouble condition to the system including simulated depressurizing of the container to test the pressure supervision circuit.

The Contractor shall also notify the Manager, if during the performance of the above maintenance services, the Contractor discovers that additional work is required.

The Contractor shall not cause a discharge of Halon 1301, FM 200 Agent or Dry or Wet Chemical Systems at any time.

The Contractor shall have, as a minimum, all the spare parts, as listed in each of the vendor/manufacturer service manuals, and the spare parts and manuals shall be in the Contractor's possession for every inspection and maintenance service call.

D. Reactivation of Discharged Systems

Systems shall be reactivated as soon as possible, with a maximum of forty-eight (48) hours after notification by the Manager. Where applicable, Pyrotechnic trigger devices shall be provided and installed by the Contractor at no additional cost to the Authority.

1. Refill of Halon 1301, FM 200 and Dry or Wet Chemical Cylinders

Halon 1301, FM 200 or Dry or Wet Chemical cylinders which have discharged shall not be recharged without a test for cylinder strength and a complete visual inspection if more than five (5) years have elapsed since the last test and inspection. Acceptable cylinders shall be remarked before returning to service.

If the containers have been in service without discharge for more than five (5) years, a visual inspection shall be performed by the Contractor and if found to be damaged, a test for strength shall be performed.

The Contractor shall perform a visual inspection and a test for strength if the containers have been subjected to unacceptable corrosion, shock or vibration.

Nondestructive test methods such as hydrostatic testing shall be used. Containers shall be thoroughly dried before filling, especially after hydrostatic testing.

If a Halon or FM 200 cylinder shows a net weight loss of more than 5% or pressure loss of more than 10%, it should be refilled or replaced. If a Dry or Wet Chemical cylinder shows net weight loss of more than 10% it should be refilled or replaced.

The Contractor shall submit in writing to the Manager the results of any tests and inspection performed.

2. <u>Sequence of Operation for FM 200 System</u>

During the semi-annual test, the following sequence shall be verified:

1. Actuation of one detector within the System shall:
    a. Illuminate the alarm indication of the fire panel
    b. Energize an alarm bell
    c. Indicate the address and location of detector in alarm
    d. Operate door holder/closure on access doors
    e. Transmit a signal to existing fire alarm systems
    f. Shutdown HVAC equipment within the protected areas
    g. Light an individual L.E.D. on the graphic enunciator

2. Actuation of a second overhead detector within the system and within a preset time shall:
    a. Illuminate a “Pre-Discharge” indication on the fire alarm panel
    b. Energize all alarm horns or horn/strobe devices
    c. Shutdown the HVAC system and/or close dampers within the protected areas
    d. Start time-delay sequence (not to exceed 30 seconds)
    e. Enable System Abort sequence
    f. Light and activate audible alarm on the graphic enunciator

3. After completion of the time-delay sequence, the pre-action sprinkler system will discharge.
    a. Illuminate a “System Fired” indication on the fire alarm panel
    b. Shutdown of all power high voltage equipment
    c. Energize a visual indicator outside the hazard in which the discharge occurred
    d. Energize a “System Fired” audible device

4. The System shall be capable of being actuated by manual discharge devices located at each hazard exit. Operations of a manual device duplicates the certified detection sequence description above, except that the time delay and abort functions shall be bypassed.

E. Emergency Service

The Contractor shall furnish Emergency Service within four (4) hours after the Manager’s request for Emergency Service. These four (4) hours begin to toll upon the Manager’s good faith implementation of the response plan provided by the Contractor in accordance with this section, even if contact with the Contractor is not actually made. Labor for Emergency Service to be performed as directed and approved by the Manager. Emergency Service shall be available twenty-four (24) hours per day, seven (7) days per week, including Holidays. All malfunctions or inefficient or improper operation of the equipment shall be investigated by the Contractor and the cause thereof forthwith repaired, removed, adjusted or otherwise attended to, so that the equipment is restored to proper operation at the earliest possible time.

To the extent that the Emergency Service is necessitated directly by the negligence, misuse, accident, or abuse which are not the fault of the Contractor as affirmatively demonstrated by the Contractor to the sole satisfaction of the Manager, the Contractor’s hourly compensation shall be as set forth in the Contractor’s Pricing Sheets, Exhibit “G” of the Contractor’s Pricing Sheets. No payment shall be made for repair work that, in the opinion of the Manager, is necessitated by the Contractor’s

improper or incomplete performance of the Maintenance, which is to be performed herein.

The Contractor shall provide the Manager with a response plan consisting of three (3) alternate telephone numbers listed in order of priority to ensure definite contact when Emergency Service is needed. The Contractor shall notify the Manager verbally as well as in writing, of any change in the alternate telephone numbers at least ten (10) days prior to the date such change will take effect.

F. Call-back Service

Call-back Services shall consist of all non-scheduled repairs and maintenance, which are necessary when, in the opinion of the Manager, the Maintenance to be provided hereunder has not been performed in accordance with the requirements of this Contract. No payment shall be made for Work that, in the opinion of the Manager, is necessitated by the Contractor's improper or incomplete performance of the Maintenance, which is to be performed hereunder. In providing Call-back Services, the Contractor shall provide qualified Personnel to perform the Work required. Such services shall be performed within twenty-four (24) hours of the Manager's request.

G. Parts

1. Replacement

All parts that fail under Normal Wear and Tear shall be reflected in the Contractor's Pricing Sheets, and replaced at no additional cost to the Authority. The Contractor shall maintain, for the term of the Contract, and have quick access to, in the New York-New Jersey Metropolitan Area, a sufficient supply of Original Equipment Manufacturer (OEM) spare parts and materials, tools or other equipment as may be necessary to make replacements and repairs immediately, without delay, in order to keep the Systems operational, twenty-four (24) hours a day, seven (7) days a week. The Contractor shall immediately notify the Manager if any component becomes obsolete or requires a significant lead-time for replacement. Delay in obtaining material shall not be a reason for failure to make repairs in a timely manner.

If a part fails, not due to: 1) the negligence of the Contractor or 2) Normal Wear and Tear, the Contractor shall prove such failure to the Manager. The Manager shall deem such repairs/replacements either an increase in area or frequency or Extra Work as defined in PART III of this Contract. Any Systems' part that the Contractor claims is damaged for reasons other than Normal Wear and Tear should be brought to the notice of the Manager for approval before repair or replacement. All items replaced shall become the property of the Authority. When it is necessary for the Contractor to replace/install any item of material or parts during the performance under this Contract, the Contractor shall first submit to the Manager, for his/her approval, the name of the item, the proposed supplier and the proposed purchase or, if supplied by the Contractor, the price that the Authority is to be billed. The Manager shall have the option of a) approving same, or b) supplying said

material to the Contractor itself provided it is of equal quality to that proposed by the Contractor.

2. Exclusion

   Replacement of pressurized dry or wet chemical plumbing and replacement of main line power switches shall be excluded.

H. Breakdown, Malfunction, or Damage

Immediately upon the Contractor's discovery of any software or hardware anomaly, damage or signs of disrepair to, corrosion, mechanical breakdown or malfunction of, or cracks or breaks in any item to be repaired hereunder, the Contractor shall advise the Manager or his/her authorized representative and also take the necessary actions to protect the integrity of the System and shall make all attempts to reduce the potential loss of life or property.

3. Secure Worker Access Consortium (SWAC)

As directed by the Manager, the Contractor is required to have certain of its staff, and any subcontractor's staff, materialmen, visitors or others over whom the Contractor/subcontractor has control, who have access to certain areas or information, authorize the Authority and/or PATH or its designee to perform background checks and a personal identity verification check. As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority approved provider to be used to conduct background screening and personal identity verification, except as otherwise required by federal law and/or regulation (such as the Transportation Worker Identification Credential for personnel performing in secure areas at Maritime facilities). Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at http://www.secureworker.com, or S.W.A.C. may be contacted directly at (877) 522-7922 for more information and the latest pricing. The cost for said background checks for staff that pass and are granted a credential may be reimbursable to the Contractor (and its subcontractors), if approved in advance by the Manager in writing. Staff that are rejected for a credential for any reason are never reimbursable.

4. Scheduling of Work

The Contractor shall, during the term of this Contract, schedule all Maintenance, as defined in the Specifications, to be performed during Regular Working Hours, as defined in the Specifications. The Contractor shall submit to the Manager a written report of all scheduled Work and any changes in the scheduling it contemplates making during the course of any three (3) month period.

The report shall include the Work scheduled by the Contractor to be accomplished during said three (3) month period, the dates and times of day when such Work will be done, the

number of workers to be assigned to each shift, and other such information as the Authority and/or Manager may require, which, the report, shall be subject to the continuing approval of the Manager. The first such report covering the first three (3) months of this Contract shall be submitted by the Contractor within ten (10) days prior to the commencement of Work and each subsequent three (3) month report shall be submitted by the Contractor at least twenty (20) days prior to the commencement of each three (3) month period. No changes shall be made without the prior approval of the Manager.

5. Personnel Requirements

The Contractor (and any Subcontractor) shall furnish competent and adequately trained personnel who shall be qualified to perform the Work required under this Contract and who shall keep the Systems in proper operating condition. The Contractor shall provide to the Manager, upon request, documentation confirming that the Service Technician(s) performing any Work on the Fire Alarm Systems in this Contract satisfy/satisfies all state and local code requirements to perform Work on the Systems including, but not limited to, Certificates of Fitness in New York City and Certification for Fire Protection Equipment Systems and/or Special Hazard Fire Suppression Systems in New Jersey. Additionally, the Contractor shall provide documentation to the Manager, upon request, identifying that the Service Technician(s) performing the Work required in this Contract, has successfully completed training offered by Fire Alarm System manufacturers, as available/applicable. Service Technician(s) shall possess at least three (3) years of previous experience in the Maintenance of Fire Alarm Systems of similar type and complexity to those covered under this Contract.

The Contractor, its Service Technicians and other personnel shall adhere to the Authority's safety and security standards and rules and shall comply with all directives issued in the interest of public safety when so notified by the Manager. The Contractor's personnel shall immediately comply with all directives issued by the Authority's Police officers or Managers. Failure to comply with authorized directives shall cause the Authority to request the removal of Contractor's personnel who have failed to comply with the directive.

All Contractor's employees performing Work required under this Contract shall have the ability to communicate in the English language to the extent necessary to comprehend directions given by either the Contractor's supervisory staff or by the Manager's staff. The successful Contractor shall submit to the Manager the names and home addresses of employees who will perform Maintenance work under this Contract. No employee will be permitted to work under this Contract without approval of the Manager and/or the Authority.

If, in the opinion of the Manager, any employee so assigned is performing his/her functions unsatisfactorily, the Contractor shall take all steps necessary to ensure that the Contract is performed in full accordance with the requirements hereof. Further, if in the determination of the Manager, any such employee has taken any action which constitutes a conflict of interest or which is inconsistent with the highest level of honesty, ethical conduct or public trust or which the Manager determines is adverse to the public interest

or to the best interest of the Port Authority, the Contractor shall remove any such personnel within twenty-four (24) hours, upon notice from the Port Authority.

A. Personnel Uniforms and Identification (ID) Badges

The Contractor shall provide distinctive uniforms and picture identification (ID) badges bearing the employee's name to each employee performing the Work required herein, which shall be subject to the prior and continuing approval of the Manager, and which shall be worn by all employees in a conspicuous and clearly visible position at all times during which such Work is being performed. Employees without proper identification shall not be permitted to work.

The Contractor's personnel must wear the uniforms at all times while working at the facility. The Contractor shall be responsible to ensure that its employees are wearing proper shoes for the Work being performed. The Manager shall have the right to require removal of any employee who shall fail to wear the proper uniform, ID, safety gear, and/or shoes, and the exercise of this right shall not limit the obligation of the Contractor to perform the Work or to furnish any required number of employees at a specific location at the Site of the Work as specified.

B. Transportation for Contractor's Personnel

The Contractor shall provide for the legal (i.e. per the New York State Department of Motor Vehicles and the New Jersey Motor Vehicle Commission) transportation of its personnel, materials and equipment to the Sites of Work at the Facility.
All Contractor's vehicles operated at the Facility in connection with this Contract shall be permanently labeled on both sides of the vehicles with the Contractor's name, address and telephone number in contrasting lettering having a minimum dimension of 3" high with ½" thick lines. Magnetic signs are not acceptable. The Authority will not furnish free Facility use parking passes or ensure on-site parking for the Contractor in connection with this Contract. Parking will be provided only as available at the time. All vehicles must be properly placarded with vehicle security identification when parked or driven in non-public areas of the buildings.

The Contractor shall comply with Authority rules, regulations, and such procedures as are now in force and such reasonable future rules, regulations, and procedures as may hereafter be adopted by the Authority for safe operation of motor vehicles at the Facility.

6. Post Award Inspection

The Contractor shall be afforded an escorted post award inspection of the Systems in order to ascertain its condition and become familiar with the Systems prior to the commencement of Work.

7. Documentation

Required information and documentation as provided in these Specifications is a prerequisite to payment. The Contractor shall initial and date all applicable and completed Manual forms (see Attachment "B") `including general information, maintenance, inspection and testing forms prior to submitting them to the Manager. The Contractor shall submit to the Manager, all proper documentation and information with invoices prior to payment being made.

ATTACHMENT "A"

Fire Alarm Equipment Device List

George Washington Bridge Administration Building and Toll Plaza Tunnel

Item No. & Location	Device Type	Description	Estimated Quantities	Frequency of Service*
1 Sub-Basement	Input Devices	Area Smoke Detector	1	A
		Thermal/Heat Detector	6	A
		Manual Pull Station	1	A
	Output Devices	Strobe/Horn Combination	2	A
2 Basement	Input Devices	Area Smoke Detector	68	A
		Thermal/Heat Detector	24	A
		Manual Pull Station	9	A
		Waterflow/Tamper Module	1	Q & S
		Duct Smoke Detector	7	A
	Output Devices	Strobe	3	A
		Strobe/Horn Combination	16	A
3 First Floor	Input Devices	Area Smoke Detector	45	A
		Thermal/Heat Detector	4	A
		Manual Pull Station	4	A
		Waterflow/Tamper Module	2	Q & S
		Annunciator Panel	1	S & A
		Duct Smoke Detector	2	A
	Output Devices	Strobe/Horn Combination	15	A

		Stand-alone Strobe Light	4	A
	Control Systems – Communication Center	Control Panel	1	S & A
		Remote Annunciator	1	S & A
		Line Digital Communicator	2	S & A
4 Second Floor	Input Devices	Area Smoke Detector	55	A
		Manual Pull Station	2	A
	Output Devices	Strobe/Horn Combination	13	A
				A
5 Roof/ Penthouse	Input Devices	Area Smoke Detector	3	A
		Manual Pull Station	1	A
		Duct Smoke Detector	4	A
	Output Devices	Strobe/Horn Combination	7	A
		Stand-alone Strobe Light	2	A
6 Toll Plaza Tunnel	Input Devices	Area Smoke Detector	22	A
		Manual Pull Station	4	A
	Output Devices	Strobe/Horn Combination	6	A

Hudson Terrace Switch Gear Room and Storage Room

Item No.	Device Type	Description	Estimated Quantities	Frequency of Service
1	Input Devices	Manual Pull Station	2	A
		Area Smoke/Heat Detector	20	A
	Output Devices	Strobe/Horn Combination	1	A
2	Control Systems	Radionics Panel	1	S & A
		Line Digital Communicator	2	S & A
		Keypad	1	S & A

Hudson Terrace Paint Storage Building

Item No.	Device Type	Description	Estimated Quantities	Frequency of Service
1	Input Devices	Manual Pull Station	4	A
		Area Smoke/Heat Detector	21	A
		Duct Smoke Detector	1	A
	Output Devices	Strobe/Horn Combination	4	A
		Outdoor Visual Indicator	2	A
2	Control Systems	Silent Knight Control Panel	1	S & A

Bridge Painter's Shop

Item No.	Device Type	Description	Estimated Quantities	Frequency of Service
1	Input Devices	Manual Pull Station	2	A
		Area Smoke/Heat Detector	23	A
	Output Devices	Strobe/Horn Combination	1	A
2	Control Systems	Radionics Panel	1	S & A
		Line Digital Communicator	2	S & A
		Keypad	1	S & A

Device Specifications:

Strobes – EST Signature Series, Model 405-7A
Strobe/Horn – EST Model 757
Waterflow/Tamper Modules – EST Model SIGA-WTM

Photoelectric Smoke Detectors – EST Model SIGA-PS

Manual Pull Stations – EST Model SIG-278
Heat Detectors – EST Model SIGA-HRS
Remote Annunciator – EST Model LSRA-C

Note: The Frequency of Service is as follows:

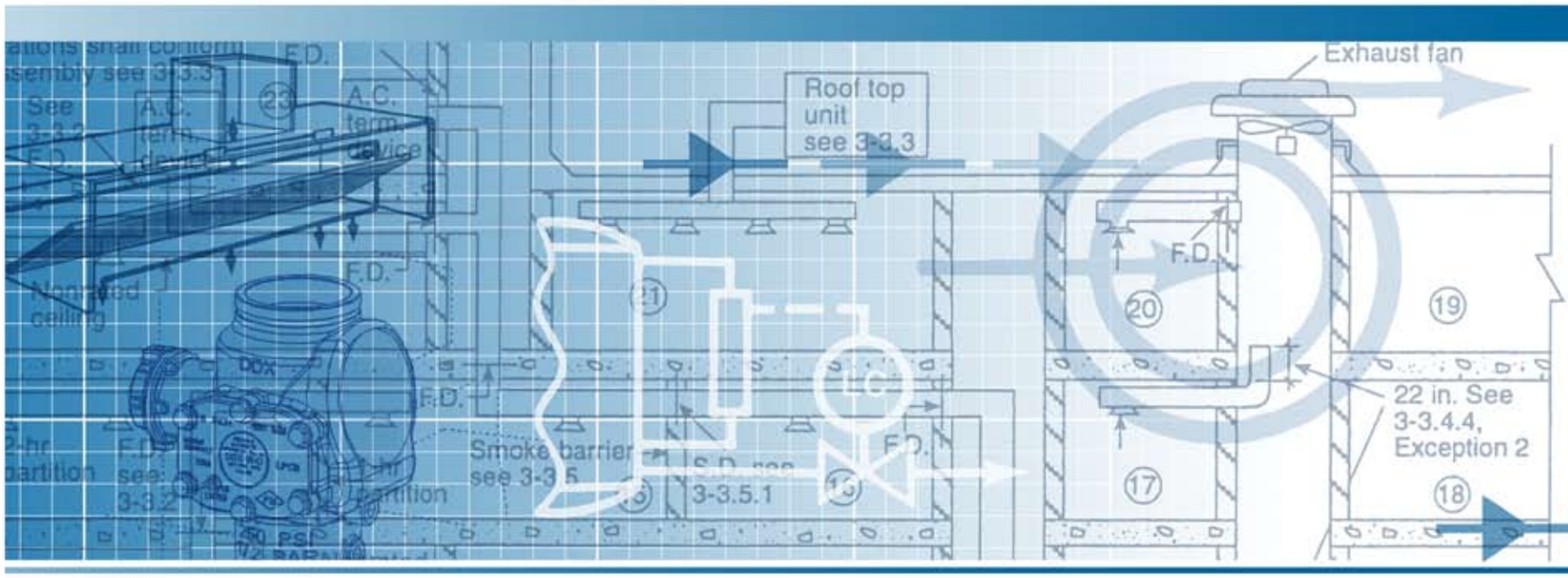
A = Annual

Q = Quarterly

S = Semi-Annual

ATTACHMENT "B"

MANUAL



Inspection, Testing and Maintenance Requirements for Fire Protection and Life Safety Systems

ENGINEERING DEPARTMENT AND OFFICE OF THE CHIEF OPERATING OFFICER

January 2012

REVISED 11-5-12

THE PORT AUTHORITY OF NY & NJ

Fire Protection & Life Safety (FPLS) System
Manual and Inspection, Testing, and Maintenance (ITM) Forms
(11-05-2012)

Manual and Form Update Instructions:

This update replaces the FPLS Manual pages identified below and all ITM Forms initially provided in the Manual with new Forms.
Please replace each ITM Form in your Manual according to its Form number found on the upper right hand corner and dispose of the old Forms.

Please visit the Port Authority Internet webpage to view the updated Manual. (http://www.panynj.gov/about/pdf/ITM-Manual.pdf)

The FPLS Manual and ITM Form updates are as described below.

A. FPLS Manual Updates

1. Section II. Page V of X - Roles and Responsibilities

2. Appendix A – List of Valid Pages

B. FPLS Manual ITM Form Updates

1. Chapter 4 – Forms 4036 and 4037 were combined into Form 4036 - Pages 1 & 2 titled "Fire Pumps-Annual Inspection." Form 4037 will be an unassigned Form number.

2. Chapter 9 – The title of Forms 4080 through 4086 is changed to "Dry and Wet Chemical Fire Extinguishing Systems," to reflect the title of the Chapter.

3. Chapter 11 – Forms 4102 and 4103 were combined into Form 4102 - Pages 1 & 2 titled "Fire Detection and Alarm Systems – Semi-Annual Inspection." Form 4103 will be an unassigned Form number.

4. Chapter 11 – Forms 4106 and 4107 were combined into Form 4106 - Pages 1 & 2 titled "Fire Detection and Alarm Systems – Annual Test." Form 4107 will be an unassigned Form number.

5. Chapter 17 – Form 4144 incorrectly referenced Form 17E in the text below the header. The reference was changed to Form 4145.

6. Chapter 17 – Form 4145 incorrectly referenced Form 17D in the text below the header. The reference was changed to Form 4144.

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Appendix A
- List of Valid Pages

I. INTRODUCTION

This Manual defines the requirements for inspection, testing, and maintenance of Fire Protection and Life Safety (FPLS) systems for all Port Authority of NY and NJ (PANYNJ) facilities. FPLS systems include but are not limited to fire sprinkler systems, fire detection systems, fire alarm systems, smoke management systems, emergency lighting systems, and fire rated doors.

FPLS systems provide protection of life and property for the general public, patrons, and employees throughout PANYNJ facilities. To sustain a fire safe environment, all FPLS systems must be inspected, tested, and maintained to assure proper performance in emergencies.

The tasks identified in this Manual for inspection, testing, and maintenance are designed to conform with national, state, and local Code requirements for FPLS systems. These tasks, as defined herein, shall be completed at all PANYNJ facilities.

III. HOW TO USE THIS MANUAL

This Manual is divided into 17 chapters delineating tasks by systems and components. Tasks are detailed work descriptions for inspection, testing, and maintenance. Each task should be considered as independent, requiring completion and documentation, but tasks can be combined when working on the same or similar systems to achieve efficiency.

Chapters may be further subdivided into sections and usually include a general section applicable to all systems and equipment and then specific requirements that are only applicable to specific systems.

Each task is numbered and includes a subject, an activity, a frequency, and a PANYNJ form number used for documentation.

18.	Hydraulic Nameplate	Inspection	Quarterly	Form PA 4003

5.2.7 *Hydraulic Nameplate - The hydraulic nameplate for hydraulically designed systems shall be inspected quarterly to verify that it is attached securely to the sprinkler riser and is legible.*

Additional information may be provided for each task consisting of the referenced section from the code or standard defining the task.

Maintenance work orders, contract service agreements, or any other method used to complete the required inspection, testing, and maintenance routines must use the information and forms provided in this Manual as the basis for all work.

PROGRAM INITIATION

As an integral part of any inspection, testing, and maintenance program, the quantity of all systems and equipment must be clearly documented. Each chapter provides a “General Information” form that must be used to accumulate information regarding all FPLS systems and equipment. Based on the information gathered, work routines for inspection, testing, and maintenance requirements can be accurately outlined and assigned.

COORDINATION OF INSPECTIONS AND TESTING

Inspection, testing, and maintenance tasks can and should be coordinated to complete work more efficiently by performing tasks with overlapping frequencies or on the same equipment or systems under one work order.

MANUAL UPDATES

This Manual has been prepared in a format that provides for periodic updates. This document was finalized January 2012 and is in effect as of this date. Reviews, amendments and updates will be completed as required to conform with applicable code revisions. Appendix A includes a list of valid pages.

IV. RECORDS AND REPORTS

ITM DOCUMENTATION

Inspection, Testing, and Maintenance (ITM) documentation shall be retained by management staff responsible for FPLS systems. These records shall be kept on site and available for review by authorized inspection personnel at all times. Documentation of ITM will include but is not limited to:

a. Date;
b. Procedure performed;
c. Name and signature of the servicing personnel and the organization's name that performed the work;
d. Test results
e. Equipment and system deficiencies
f. Corrective actions, including parts replaced and settings or programming changes

Documentation indicating completion of inspections, testing, and maintenance signifies compliance with all requirements for the specified task. Deviation from completing required tasks should be clearly identified for future work scheduling and/or corrective actions.

V. DEFINITIONS

Fire Protection Systems:

Approved devices, equipment and systems or combinations of systems used to detect fire, activate an alarm, extinguish or control a fire, control or manage smoke and product of a fire or any combination thereof, including fire extinguishing systems, fire alarm systems, sprinkler systems and standpipe systems.

Inspection:

A visual examination of a system or portion thereof to verify that it appears in an operating condition and is free of physical damages.

Inspection, Testing, and Maintenance Service:

A service program provided by a qualified contractor or qualified owner's representative in which all components unique to the property's systems are inspected and tested at the required times and necessary maintenance is provided. This program includes logging and retention of relevant records.

Life Safety Systems:

Life Safety systems include fire protection devices, occupancy features, and building/floor designs that facilitate occupancy safety from fire emergencies including smoke and heat, and other non-fire related emergencies such as earthquakes and electric power failures. Life Safety systems include fire alarm notification devices, means of egress plans, areas of refuge, emergency lighting, exit signs, and smoke control systems.

Maintenance:

Work performed to keep equipment operable or to make repairs.

Testing:

A procedure used to determine the status of a system as intended by conducting periodic physical checks on water based fire systems such as water flow tests, fire pump tests, alarm tests, and trip tests of dry pipe, deluge or pre-action valves. These tests follow up on the original acceptance test at intervals specified in the appropriate chapter.

VI. REFERENCES

New York City Building Code – 2008 Edition

New York City Fire Code – 2008 Edition

International Building Code – 2006 New Jersey Edition

New Jersey Fire Code – 2006 Edition

NATIONAL FIRE PROTECTION ASSOCIATION

NFPA 10 (2007):	Standard for Portable Fire Extinguishers
NFPA 11 (2002):	Low, Medium and High Expansion Foam
NFPA 12 (2002):	Carbon Dioxide Extinguishing Systems
NFPA 12A (1997):	Standard on Halon 1301 Fire Extinguishing Systems
NFPA 13 (2002):	Standard for the Installation of Sprinkler Systems
NFPA 14 (2003):	Standard for the Installation of Standpipe and Hose Systems
NFPA 16 (2003):	Standard for the Installation of Foam-Water and Foam-Water Spray systems
NFPA 17 (2002):	Dry Chemical Extinguishing Systems
NFPA 17A (2002):	Wet Chemical Extinguishing Systems
NFPA 20 (1999):	Standard for the Installation of Centrifugal Fire Pumps
NFPA 22 (1998):	Water Tanks for Private Fire Protection
NFPA 24 (2007):	Installation of Private Fire Service Mains and Their Appurtenances
NFPA 25 (2002):	Standard for the Inspection, Testing and Maintenance of Water Based Fire Protection Systems
NFPA 33 (2000):	Standard for Spray Application Using Flammable or Combustible Materials
NFPA 70 (2002):	National Electrical Code
NFPA 72 (2002):	National Fire Alarm Code
NFPA 80 (1999):	Standard for Fire Doors and Other Opening Protectives

NFPA 90A (2002):	Standard for the Installation of Air-Conditioning and Ventilating Systems
NFPA 92A (2006):	Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences
NFPA 96 (2004):	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
NFPA 101 (2003):	Life Safety Code
NFPA 110 (2002):	Standard for Emergency and Standby Power Systems
NFPA 111 (2001)	Standard on Stored Electrical Energy Emergency and Standby Power Systems
NFPA 409 (2001):	Standard for Aircraft Hangars
NFPA 1962 (2003):	Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose
NFPA 2001 (2004):	Standard on Clean Agent Fire Extinguishing System

CHAPTER 8 – HALON FIRE EXTINGUISHING SYSTEMS

1.	**Existing Halon Systems** **General Information**	**Update**	**Annually**	**Form PA 4074**

Review General Information Form for all Halon Systems, update as required.

Confirm that the as-built instruction, maintenance manual, and a full set of drawings are provided as required:

3.1.2.5 *An as-built instruction and maintenance manual that includes a full sequence of operation and a full set of drawings and calculations shall be maintained in a clearly identified protective enclosure at or near the system control panel.*

2.	**New or Altered Halon Systems – General Information**	**Update**	**As Required**	**Form PA 4074**

Complete General Information Form for new Halon System or update General Information Form for Halon System that has been altered to include repairs and/or modifications to components.

Confirm that the as-built instruction, maintenance manual, and a full set of drawings are provided as required:

3.1.2.5 *An as-built instruction and maintenance manual that includes a full sequence of operation and a full set of drawings and calculations shall be maintained in a clearly identified protective enclosure at or near the system control panel.*

3.	**Halon System**	**Inspection**	**Monthly**	**Form PA 4075**

904.9.1 *At least once a month, an inspection shall be conducted by a trained and knowledgeable person to assess whether the system is in good working order.*

4.	**Halon System**	**Inspection, Testing**	**Semi-Annually**	**Form PA 4076**

4-1.1 *At least semiannually, all systems shall be thoroughly inspected, tested, and documented for proper operation by trained competent personnel. Tests shall be in accordance with the appropriate NFPA standard.*

4-1.2 *The documented report with recommendations shall be filed with the owner.*

4-1.3 *The agent quantity and pressure of refillable containers shall be checked. If a container shows a loss in net weight of more than 5 percent or a loss in pressure (adjusted for temperature) of more than 10 percent, it shall be refilled or replaced. When the amount of agent in the container is determined by special measuring devices in lieu of weighing, these devices shall be listed.*

4-1.4 *All halon removed from refillable containers during service or maintenance procedures shall be collected for recycling.*

4-1.5 *Factory-charged non-refillable containers that do not have a means of pressure indication shall be weighed at least semiannually. If a container shows a loss in net weight of more than 5 percent, it shall be replaced. All factory-charged non-refillable containers removed from useful service shall be returned for recycling of the agent.*

4-1.6 *The weight and pressure of the container shall be recorded on a tag attached to the container.*

A-4-1 *Some protected area conditions could require inspections more frequent than semiannually. A service contract with an approved fire protection contractor is recommended. The inspection and test is to be conducted in accordance with the manufacturer's recommendations and procedures and appropriate NFPA standards and guide. Inspection criteria include but are not limited to the following:*

a) Detection – All detectors are to be checked for proper alarm, supervision, and trouble functions.

b) Actuation
  1) Remove automatic actuation controls from agent containers. Test detection system to operate the necessary circuit(s) to simulate agent release.
  2) Operate all manual devices to simulate agent release.
  3) After testing, reset and reinstall all actuation controls.

c) Containers
  1) Examine all containers for evidence of corrosion or mechanical damage.
  2) Check container bracketing and supports to determine that their condition is satisfactory.

d) Piping and Nozzles
  1) Examine piping for any evidence of corrosion.
  2) Examine pipe hangers and straps to see that the piping is securely supported.
  3) Check nozzles for proper position and alignment and determine that the orifices are clear and unobstructed.
  4) Check nozzle seals, if applicable, for signs of deterioration and replace if necessary.

5.	**Container**	**Inspection, Testing**	**5 Years**	**Form PA 4078**

4-2.1 *DOT, CTC, or similar design Halon 1301 cylinders shall not be recharged without a retest if more than five years have elapsed since the date of the last test and inspection.*

4-2.2 *Cylinders continuously in service without discharging shall be given a complete external visual inspection every five years, in accordance with Compressed Gas Association pamphlet C-6, Section 3, except that the cylinders need not be emptied or stamped while under pressure.*

Visual inspection defined by the Compressed Gas Association Pamphlet C-6, Section 3:

3.1 *Corrosion or pitting – Loss of wall thickness in a cylinder by corrosive media.*

3.1.1 *Crevice corrosion – Corrosion that occurs in the area of the intersection of the footring or headring with the cylinder.*

3.1.2 *Isolated pitting – Isolated pits of small diameter that do not effectively weaken a cylinder.*

3.1.3 *Line corrosion – Corrosion that results in a continuous patter or when pits are connected to others in a narrow band or line. This condition is more serious than isolated pitting.*

3.1.4 *General corrosion – Corrosion that covers considerable surface areas of the cylinder.*

3.2 *Cuts, gouges, or digs – Deformations in a cylinder caused by contact with a sharp object so as to cut into or upset the metal of the cylinder, decreasing the wall thickness at that point.*

3.3 *Cylinder, high and low pressure – High pressure cylinders are those with a marked service pressure of 900 psi (6210 kPa) or greater; low pressure cylinders are those with a marked service pressure less than 900 psi (6210 kPa).*

3.4 *Cylinder disposition – The following definitions apply to terms for the disposition of cylinders failing visual inspection.*

3.4.1 *Condemned – Scrap, no longer fit for service.*

3.4.2 *Rejected – Not fit for service in present condition.*

Note – Rejected cylinders may be requalified by either additional testing to verify adequacy of cylinder for continued service or by reheat treatment, repair, or rebuilding to correct the defect as specified in 49 CFR 180 Subpart C.

3.5 Dents – Deformations in a cylinder caused by its coming in contact with a blunt object so the thickness of metal is not materially impaired.

3.6 Minimum allowable design thickness – Minimum design thickness required by the specification under which the cylinder was manufactured.

3.7 Weld defects – Cracks or flaws in weld areas that reduce the structural strength of metal, which can cause separation when pressurized.

4-2.3 Where external visual inspection indicates that the container has been damaged, additional strength tests shall be required.

CAUTION: If additional tests used include hydrostatic testing, containers should be thoroughly dried before refilling.

4-2.4 Before recharging a container, a visual inspection of its interior shall be performed.

6. Hose	Inspection	Annually	Form PA 4077

4-3 All system hoses shall be examined annually for damage. If visual examination shows any deficiency, the hose shall be immediately replaced or tested as specified in 4-3.1 as identified in Number 7 below.

7. Hose	Testing	5 Years	Form PA 4078

4-3.1 All hoses shall be tested at 1500 psi (10342 kPa) for 600-psi (4137-kPA) charging pressure systems, and at 900 psi (6205 kPa) for 360-psi (2482-kPa) charging pressure systems. The test shall be performed as follows:

a) Remove the hose from any attachment.
b) The hose assembly is then to be placed in a protective enclosure designed to permit visual observation of the test.
c) The hose must be completely filled with water before testing.
d) Pressure then is applied at a rate-of-pressure rise to reach the test pressure within a minimum of one minute. The test pressure is to be maintained for one full minute. Observations are then made to note any distortion or leakage.
e) If the test pressure has not dropped or if the couplings have not moved, the pressure is released. The hose assembly is then considered to have passed the hydrostatic test if no permanent distortion has taken place.
f) Hose assembly passing the test must be completely dried internally. If heat is sued for drying, the temperature must not exceed 150°F (66°C).
g) Hose assemblies failing a hydrostatic test must be destroyed. They shall be replaced with new assemblies.

h) Each hose assembly passing the hydrostatic test shall be marked to show the date of test.

4-3.2 All hoses shall be tested every 5 years in accordance with 4.3.1.

8.	Room Enclosure	Inspection	Semi-Annually	Form PA 4076

4-4 Enclosure Inspection. At least every 6 months the halon-protected enclosure shall be thoroughly inspected to determine if penetrations or other changes have occurred that could adversely affect halon leakage.

Where the inspection indicates that conditions that could result in inability to maintain the halon concentration, they shall be corrected. If uncertainty still exists, the enclosures shall be retested for integrity.

4-5.3 Any penetrations made through the halon-protected enclosure shall be sealed immediately. The method of sealing shall restore the original fire resistance rating and tightness of the enclosure.

9.	Auxiliary Equipment	Testing	Annually	Form PA 4077

904.9.4 Auxiliary and supplementary components, such as switches, door and window releases, interconnected valves, damper releases and supplementary alarms, shall be manually operated at 12-month intervals to ensure such components are in proper operating condition.

THE PORT AUTHORITY OF NY & NJ

HALON FIRE EXTINGUISHING SYSTEMS - GENERAL INFORMATION

PA 4074 / 02-12

Original Installation Date:	**U.E.I. (Unique Element Identification):**

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

General

Halon System Make/Model/Manufacturer: _____

Control Panel Location/Make/Manufacturer: _____

Halon Design Concentration: _____

Describe Areas Protected - Above Suspended Ceiling and/or Below Raised Floors: _____

Number of Halon Cylinders Installed: _____

Number of Halon Cylinders required for Discharge: _____

Document Weights of all Cylinders with Halon Agent: _____

Halon Agent Pressure: _____

System Initiation

Number and Type of Fire Detection Devices: _____

Location of Manual Release Station: _____

Sequence of Operation: _____

Notes: _____

THE PORT AUTHORITY OF NY & NJ

HALON FIRE EXTINGUISHING SYSTEMS - MONTHLY INSPECTION

PA 4075 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Year: **Date:**												
Inspector												
Halon System is in good working order.												
System is free from physical damage.												
No alterations have been made to the room being protected.												
Halon storage is connected to discharge piping and actuators.												
All manual actuators are in place and tamper seals are intact.												
Nozzles are connected, properly aligned, and free from obstructions and foreign matter.												
Detectors are in place and free from foreign matter and obstructions.												
System control panel is connected and showing “normal-ready” condition.												

Notes: _____

THE PORT AUTHORITY OF NY & NJ

HALON FIRE EXTINGUISHING SYSTEMS - SEMI-ANNUAL INSPECTION AND TEST PA 4076 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Note: Test of system shall be done with automatic actuation controls from agent containers removed.

Year: **Date**		
Inspector		
Halon containers are free from physical damage.		
Container pressure: (Pressure loss greater than 10% requires container refill or replacement.)		
Container weight: (Weight loss greater than 5% requires container refill or replacement.)		
Container pressure and weight are recorded on tag attached to container.		
Test all detectors for proper alarm, supervision, and trouble functions.		
Test detection system to operate the necessary circuit(s) to simulate agent release.		
Operate all manual devices to simulate agent release.		
Examine all containers for evidence of corrosion or mechanical damage.		
Check container bracketing and supports to determine that their condition is satisfactory.		
Examine piping for any evidence of corrosion.		
Examine pipe hangers and straps to see that the piping is securely supported.		
Check nozzles for proper position and alignment and determine that the orifices are clear and unobstructed.		
Check nozzle seals, if applicable, for signs of deterioration.		
Examine protected enclosure to determine if penetrations or other changes have occurred that could adversely affect halon leakage.		

Notes: _____

THE PORT AUTHORITY OF NY & NJ

HALON FIRE EXTINGUISHING SYSTEMS - ANNUAL INSPECTION AND TEST PA 4077 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Year: **Date:**					
Inspector					
Examine all system hoses.					
Operate all auxiliary and supplementary components such as switches, door and window releases, interconnected valves, damper releases, air handling equipment shutdown, and supplementary alarms to ensure that they are in proper operating condition.					

Notes: _____

THE PORT AUTHORITY OF NY & NJ

HALON FIRE EXTINGUISHING SYSTEMS - HOSE AND CONTAINER 5-YEAR INSPECTION

PA 4078 / 02-12

This form covers a 25-year period.

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Note: If more than 5 years have elapsed from the date of the last test, the cylinder shall not be recharged without a hydrostatic test.

Year: **Date:**					
Inspector					
Perform hydrostatic test of system hoses.					
Visual inspection of Halon containers: Corrosion or pitting					
Cuts, gouges or digs					
Proper cylinder pressure					
Dents					
Weld defects					

Notes: _____

CHAPTER 9 – DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS

DEFINITIONS

Automatic Operation.	*Operation without human intervention. This operation includes, but is not limited to, heat, rate of heat rise, smoke, or pressure change. [25:3.3]*
Branch Duct.	*The duct work that contains the exhaust air from a single hood or hazard area.*
Caking.	*A phenomenon that occurs when moisture chemically reacts with a dry chemical fire-extinguishing agent. This reaction results in materials that, being hydrated by moisture, stick together to form a large agglomerate, or what is more commonly referred to as lumps.*
Clearance.	*The air distance between extinguishing system equipment, including piping and nozzles, and unenclosed or uninsulated live electrical components not at ground potential.*
Common Duct.	*The duct work containing the exhaust air from two or more branch ducts.*
Discharge Nozzle.	*Device from which the dry chemical is discharged to provide for suppression of a fire in the designated hazard.*
Dry Chemical.	*A powder composed of very small particles, usually sodium bicarbonate-, potassium bicarbonate-, or ammonium phosphate-based with added particulate material supplemented by special treatment to provide resistance to packing, resistance to moisture absorption (caking), and the proper flow capabilities.*
Dry Chemical System.	*A means of applying dry chemical that can be automatically or manually activated to discharge through a distribution system onto or into the protected hazard. The system includes auxiliary equipment.*
Engineered System.	*Those requiring individual calculation and design to determine the flow rates, nozzle pressures, pipe size, area or volume protected by each nozzle, quantities of dry chemical, number and types of nozzles, and their placement in a specific system.*
Expellant Gas.	*The medium used to discharge dry chemical from its container.*

Hand Hose Line System.	*A hose and nozzle assembly connected by fixed piping or connected directly to a supply of extinguishing agent. [122:1.4]*
Indicator.	*A mechanical or electrical device that shows when an extinguishing system or a critical component of it is ready to operate, or if it has already operated.*
Local Application System.	*A supply of dry chemical permanently connected to fixed piping with nozzles arranged to discharge directly onto the fire.*
Lumps.	*Agglomerations of dry chemical that do not crumble into particles when dropped from a height of 4 in. (101 mm) onto a hard surface.*
Manual Operation.	*Operation of a system or its components through human action.*
Manufacturer's Listed Installation and Maintenance Manual.	*The pamphlet referenced as part of the listing of the wet or dry chemical extinguishing system.*
Multipurpose Dry Chemical.	*Ammonium phosphatebased extinguishing agent that is effective on fires involving both ordinary combustibles, such as wood or paper, and fires involving flammable liquids.*
Owner's Manual.	*A pamphlet containing the manufacturer's recommendations for the proper inspection and operation of the extinguishing system.*
Operating Devices.	*Mechanical, electrical, or pneumatic devices involved in the operation of a system whether "actuating devices" initiating operation (e.g., automatic detection devices or systems and manual actuation devices, such as manual pulls or strike buttons) or "operated devices" responding to the actuation (e.g., release mechanisms, shutoff devices, alarms, and auxiliary equipment).*
Pre-Engineered Systems.	*Those having predetermined flow rates, nozzle pressures, and quantities of extinguishing agent. These systems have the specific pipe size, maximum and minimum pipe lengths, flexible hose specifications, number of fittings, and number and types of nozzles prescribed by a testing laboratory. The maximum and minimum pipe lengths and the number of fittings shall be permitted to be expressed in equivalent feet of pipe. The hazards protected by these systems are specifically limited as to type and size by a testing laboratory, based on actual fire tests. Limitations on hazards that are permitted to be protected by these systems and piping and nozzle configurations are contained in the*

	manufacturer's listed installation and maintenance manual, which is part of the listing of the system.
Selector Valve.	*Adevice used to direct dry chemical to the hazard being protected.*
Shutoff Devices.	*Devices that operate simultaneously with the extinguishing system to shut off fuel and power to appliances protected by the system and other appliances required to be shut off upon operation of the system.*
Total Flooding System.	*A supply of dry chemical permanently connected to fixed piping and nozzles that are arranged to discharge dry chemical into an enclosure surrounding the hazard.*
Wet Chemical.	*Normally an aqueous solution of organic or inorganic salts or a combination thereof that forms an extinguishing agent.*

A. DRY CHEMICAL SYSTEMS

1. Existing Dry Chemical Systems General Information	**Update**	**Annually**	**Form PA 4080**

Review General Information Form for all Dry Chemical Systems, update as required.

2. New or Altered Dry Chemical Systems – General Information	**Update**	**As Required**	**Form PA 4080**

Complete General Information Form for new Dry Chemical System or update General Information Form for Dry Chemical System that has been altered to include repairs and/or modifications to components.

3. Dry Chemical Systems	**Inspection**	**Monthly**	**Form PA 4081**

11.2.1 *On a monthly basis, inspection shall be conducted in accordance with the manufacturer's listed installation and maintenance manual or owner's manual.*

11.2.1.1 *As a minimum, this "quick check" or inspection shall include verification of the following:*

1) The extinguishing system is in its proper location.
2) The manual actuators are unobstructed.
3) The tamper indicators and seals are intact.
4) The maintenance tag or certificate is in place.
5) The system shows no physical damage or condition that might prevent operation.
6) The pressure gauge(s), if provided, is in operable range.
7) The nozzle blowoff caps, where provided, are intact and undamaged.
8) Neither the protected equipment nor the hazard has been replaced, modified, or relocated.

11.2.2 *If any deficiencies are found, appropriate corrective action shall be taken immediately.*

11.2.3 *Personnel making inspections shall keep records for those extinguishing systems that were found to require corrective actions.*

11.2.4 *At least monthly, the date the inspection is performed and the initials of the person performing the inspection shall be recorded. The records shall be retained until the next semi-annual maintenance.*

4.	Dry Chemical Systems	Testing	Semi-Annual	Form PA 4083

11.3.1.4 *All dry chemical systems shall be tested, which shall include the operation of the detection system, signals, and releasing devices, including manual stations and other associated equipment.*

A.11.3.1.4 *A discharge of the dry chemical normally is not part of this test.*

5.	Dry Chemical Systems	Maintenance	Semi-Annual	Form PA 4082

11.3.1 *At least semiannually, maintenance shall be conducted in accordance with the manufacturer's listed installation and maintenance manual.*

11.3.1.1 *As a minimum, such maintenance shall include the following:*

1) A check to see that the hazard has not changed

2) An examination of all detectors, expellant gas container(s), agent container(s), releasing devices, piping, hose assemblies, nozzles, signals, and all auxiliary equipment

3) Verification that the agent distribution piping is not obstructed.

A.11.3.1.1(3) The following methods can be used for verifying that the piping is not obstructed:

a) Disassembly of all piping

b) Purging of piping with nitrogen or dry air

c) Conducting a full or partial discharge test

d) Utilizing methods recommended by the manufacturer

4) Examination of the dry chemical (If there is evidence of caking, the dry chemical shall be discarded and the system shall be recharged in accordance with the manufacturer's instructions.)

11.3.1.3 *Where semiannual maintenance of any dry chemical containers or system components reveals conditions such as, but not limited to, corrosion or pitting in excess of the manufacturer's limits, structural damage or fire damage, or repairs by soldering, welding, or brazing, the affected part(s) shall be replaced or hydrostatically tested in accordance with the recommendations of the manufacturer or the listing agency.*

11.3.1.5 *Where the maintenance of the system(s) reveals defective parts that could cause an impairment or failure of proper operation of the system(s), the affected parts shall be replaced or repaired in accordance with the manufacturer's recommendations.*

11.3.1.6 *The maintenance report, including any recommendations, shall be filed with the owner or with the designated party responsible for the system.*

11.3.1.7 *Each dry chemical system shall have a tag or label indicating the month and year the maintenance is performed and identifying the person performing the service. Only the current tag or label shall remain in place.*

A.11.3.1.7 *Under special circumstance or when local requirements are in effect, additional information can be desirable or required.*

6.	**Dry Chemical**	**Maintenance**	**6 Years**	**Form PA 4082**

11.3.1.2 *Dry chemical in stored pressure systems shall not require semiannual examination but shall be examined at least every 6 years as identified in 5 above [11.3.1.1 4) and 11.3.1.3].*

7.	**Fixed Temperature – Sensing Elements**	**Maintenance**	**Annually**	**Form PA 4084**

11.3.2 *Fixed temperature-sensing elements of the fusible metal alloy type shall be replaced at least annually from the date of installation.*

11.3.2.1 *Upon removal the links shall be destroyed.*

11.3.2.2 *The year of manufacture and the date of installation of the fixed temperature-sensing element shall be marked on the system inspection tag.*

11.3.2.3 *The tag shall be signed or initialed by the installer.*

11.3.3 *Fixed temperature-sensing elements other than the fusible metal alloy type shall be permitted to remain continuously in service, provided they are inspected and cleaned or replaced if necessary in accordance with the manufacturer's instructions every 12 months or more frequently to ensure proper operation of the system.*

8.	**Recharging**	**Maintenance**	**As Needed**	**Form PA 4084**

11.4.1 *All extinguishing systems shall be recharged after use or as indicated by an inspection or a maintenance check.*

11.4.2 *Systems shall be recharged in accordance with the manufacturer's listed installation and maintenance manual.*

9.	**Hydrostatic Testing**	**Testing**	**12 Years**	**Form PA 4085**

11.5 *Hydrostatic Testing. Hydrostatic testing shall be performed by persons trained in pressure-testing procedures and safeguards and having available suitable testing equipment, facilities, and an appropriate service manual(s).*

11.5.1 *The following parts of dry chemical extinguishing systems shall be subjected to a hydrostatic pressure test at intervals not exceeding 12 years:*
1) Dry chemical containers
2) Auxiliary pressure containers
3) Hose assemblies

Exception No. 1: *Dry chemical containers that are part of extinguishing systems having an agent capacity exceeding 150 lb. (68 kg).*

Exception No. 2: *Auxiliary pressure containers not exceeding 2 in. (0.05m) outside diameter and less than 2 ft. (0.6m) in length.*

Exception No. 3: *Auxiliary pressure containers bearing the DOT "3E" marking.*

11.5.2 *Dry chemical containers, auxiliary pressure containers, and hose assemblies shall be subjected to a hydrostatic test pressure equal to the marked factory test pressure or the test pressure specified in the manufacturer's listed installation and maintenance manual.*

11.5.2.1 *No leakage, rupture, or movement of hose couplings shall be permitted.*

11.5.2.2 *The test procedures shall be in accordance with the manufacturer's detailed written hydrostatic test instructions.*

11.5.2.3 *Prior to being refilled or transported, in accordance with DOT or TC requirements, containers bearing DOT or TC markings shall be retested or replaced in accordance with the appropriate DOT or TC requirements.*

11.5.3 *Dry chemical agent removed from the containers prior to hydrostatic testing shall be discarded.*

11.5.4 *Care shall be taken to ensure that all tested equipment is thoroughly dried prior to reuse.*

11.5.5 *To protect the hazard during hydrostatic testing, if there is no connected reserve, alternate protection acceptable to the authority having jurisdiction shall be provided.*

A.11.5.2.3 *DOT or TC marked containers installed in a system that is not under the jurisdiction of DOT or TC are not required to follow DOT or TC requirements as long as they remain in operation.*

B. Wet Chemical Systems

1. Existing Wet Chemical Systems – General Information	**Update**	**Annually**	**Form PA 4086**

Review General Information Form for all Wet Chemical Systems, update as required.

2.	New or Altered Wet Chemical Systems – General Information	Update	As Required	Form PA 4086

Complete General Information Form for new Wet Chemical System or update General Information Form for Wet Chemical System that has been altered to include repairs and/or modifications to components.

3.	Wet Chemical System	Inspection	Monthly	Form PA 4081

7.2.1 *Inspection shall be conducted on a monthly basis in accordance with the manufacturer's listed installation and maintenance manual or the owner's manual.*

7.2.2 *Inspections shall include verification of the following:*

1) The extinguishing system is in its proper location.
2) The manual actuators are unobstructed.
3) The tamper indicators and seals are intact.
4) The maintenance tag or certificate is in place.
5) No obvious physical damage or condition exists that might prevent operation.
6) The pressure gauge(s), if provided, is in operable range.
7) The nozzle blowoff caps are intact and undamaged.
8) The hood, duct, and protected cooking appliances have not been replaced, modified, or relocated.

7.2.3 *If any deficiencies are found, appropriate corrective action shall be taken immediately.*

7.2.4 *Personnel making inspections shall keep records for those extinguishing systems that were found to require corrective actions.*

7.2.5 *At least monthly, the date the inspection is performed and the initials of the person performing the inspection shall be recorded.*

4.	Wet Chemical System	Testing	Semi-Annual	Form PA 4083

7.3.2.3 *All wet chemical systems shall be tested, which shall include the operation of the detection system signals and releasing devices, including manual stations and other associated equipment.*

A.7.3.2.3 *A discharge of the wet chemical normally is not part of this test.*

5. Wet Chemical System	Maintenance	Semi-Annual	Form PA 4082

7.3.1 *A trained person who has undergone the instructions necessary to perform the maintenance and recharge service reliably and has the applicable manufacturer's listed installation and maintenance manual land service bulletins shall service the wet chemical fire-extinguishing system 6 months apart as outlined in 7.3.2.*

7.3.2 *At least semiannually, maintenance shall be conducted in accordance with the manufacturer's listed installation and maintenance manual.*

7.3.2.1 *Maintenance shall include the following:*
1) A check to see that the hazard has not changed.
2) An examination of all detectors, the expellant gas container(s), the agent container(s), releasing devices, piping, hose assemblies, nozzles, signals, all auxiliary equipment, and the liquid level of all non-pressurized wet chemical containers.
3) Verification that the agent distribution piping is not obstructed.

A.7.3.2.1(3) *The following methods can be used to verify that piping is not obstructed:*
1) Disassembly of all piping
2) Conducting a full or partial discharge test
3) Utilizing other methods recommended by the manufacturer

7.3.2.2 *Where semiannual maintenance of any wet chemical containers or system components reveals conditions such as, but not limited to, corrosion or pitting in excess of the manufacturer's limits; structural damage or fire damage; or repairs by soldering, welding, or brazing; the affected part(s) shall be replaced or hydrostatically tested in accordance with the recommendations of the manufacturer or the listing agency.*

7.3.2.4 *Where the maintenance of the system(s) reveals defective parts that could cause an impairment or failure of proper operation of the system(s), the affected parts shall be replaced or repaired in accordance with the manufacturer's recommendations.*

7.3.2.5 *The maintenance report, with recommendations, if any, shall be filed with the owner or with the designated party responsible for the system.*

7.3.2.6 *Each wet chemical system shall have a tag or label securely attached, indicating the month and year the maintenance is performed and identifying the person performing the service. Only the current tag or label shall remain in place.*

7.3.3 *Fixed temperature-sensing elements of the fusible metal alloy type shall be replaced at least annually from the date of installation. They shall be destroyed when removed.*

7.3.3.1 *The year of manufacture and the date of installation of the fixed temperature-sensing element shall be marked on the system inspection tag. The tag shall be signed or initialed by the installer.*

6.	**Fixed Temperature – Sensing Elements**	**Maintenance**	**Annually**	**Form PA 4084**

7.3.4 *Fixed temperature-sensing elements other than the fusible metal alloy type shall be permitted to remain continuously in service, provided they are inspected and cleaned or replaced, if necessary, in accordance with the manufacturer's instructions every 12 months or more frequently to ensure proper operation of the system.*

7.	**Recharging**	**Maintenance**	**As Needed**	**Form PA 4084**

7.4.1 *All extinguishing systems shall be recharged after use or as indicated by an inspection or maintenance procedure.*

7.4.2 *Systems shall be recharged in accordance with the manufacturer's listed installation and maintenance manual.*

8.	**Hydrostatic Testing**	**Testing**	**12 Years**	**Form PA 4085**

7.5.1 *The following parts of wet chemical extinguishing systems shall be subjected to a hydrostatic pressure test at intervals not exceeding 12 years:*
1) Wet chemical containers
2) Auxiliary pressure containers
3) Hose assemblies

Exception No. 1: *Auxiliary pressure containers not exceeding 2-in. (0.05-m) outside diameter and less than 2 ft. (0.6m) in length.*

Exception No. 2: *Auxiliary pressure containers bearing the DOT "3E" marking.*

7.5.2 *Wet chemical containers, auxiliary pressure containers, and hose assemblies shall be subjected to a hydrostatic test pressure equal to the marked factory test pressure or the test pressure specified by the manufacturer.*

7.5.2.1 *No leakage, rupture, or movement of hose couplings shall be permitted.*

7.5.2.2 *The test procedures shall be in accordance with the manufacturer's detailed written hydrostatic test instructions.*

7.5.2.3 *Prior to being refilled or transported, in accordance with DOT or TC requirements, containers bearing DOT or TC markings shall be retested or replaced in accordance with the appropriate DOT or TC requirements.*

7.5.3 *Wet chemical agent removed from the containers prior to hydrostatic testing shall be discarded.*

7.5.4 *To protect the hazard during hydrostatic testing, if there is no connected reserve, alternate protection acceptable to the authority having jurisdiction shall be provided.*

THE PORT AUTHORITY OF NY & NJ

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - GENERAL INFORMATION (FIXED DRY CHEMICAL)

PA 4080 / 02-12

Original Installation Date: **U.E.I. (Unique Element Identification) :**

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

Manufacturer: _____

Date Installed: _____

Service Contractor: _____

Type of extinguishing agent _____

Dry chemical cylinder

Normal pressure _____ psi (bar)

Manufacturer's minimum pressure _____ psi (bar)

Normal weight _____ lbs (kg)

Manufacturer's minimum weight _____ lbs (kg)

Equipment Protected

- ☐ Deep-fat fryer(s)
- ☐ Upright broiler(s)
- ☐ Fuel Island
- ☐ Grill(s)
- ☐ Griddle(s)
- ☐ Other
- ☐ Charbroiler(s)
- ☐ Range top(s)

_____

Expellant gas cartridge - any provided? ☐ Yes ☐ No

If yes, normal weight (if carbon dioxide) _____ lbs (kg)

normal pressure (if nitrogen) _____ psi (bar)

Connected to main base building fire alarm system? ☐ Yes ☐ No

Automatic shutdown of cooking equipment? ☐ Yes ☐ No

If yes, ☐ Gas ☐ Electric

Notes: _____

THE PORT AUTHORITY OF NY & NJ

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - MONTHLY INSPECTION

PA 4081 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Location: _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Date												
Inspector												
Nozzle caps are in place.												
Extinguishing system is in its proper location over the equipment being protected.												
System components have no obvious damage.												
No cooking equipment has been added or existing equipment moved.												
Nozzles aim at cooking surfaces they protect.												
Manual releases are unobstructed.												
Tamper indicators and seals are intact.												
Maintenance tag or certificate is in place.												
Pressure on gauge is in satisfactory range.												

Notes: _____

THE PORT AUTHORITY OF NY & NJ

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - SEMI-ANNUAL OR 6-YEAR MAINTENANCE

PA 4082 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Location: _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Note: Dry chemical in stored pressure system shall only need to be examined every 6 years.

Date		
Inspector		
Record pressure (psi):		
Expellant gas cartridge: Pressure of nitrogen in psi (bar)		
Weight of carbon dioxide in lb (kg)		
Examine dry chemical agent for lumping or caking in cartridge-operated-type systems.		
Check to assure that hazard has not changed.		
Examine detectors for damage or changes.		
Examine expellant gas containers for damage or changes.		
Examine agent containers for damage or changes.		
Examine manual releases for damage or changes.		
Examine piping for damage, changes or obstructions.		
Examine hose assemblies for damage or changes.		
Examine discharge nozzles for damage or changes.		

Notes: _____

THE PORT AUTHORITY OF NY & NJ

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - SEMI-ANNUAL TEST

PA 4083 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

Location: _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Actuating Test Manual Release		
Fusible Link		
Alarm connection to main base building fire alarm system.		
Connection to shut off power to cooking equipment.		
Connection to shut down make-up air to exhaust hood.		
Grease exhaust fan. Indicate if fan continues to run (C) or shuts down (S).		

Notes: _____

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - ANNUAL MAINTENANCE

PA 4084 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

Location: _____

Y = Yes **N** = No

Replace fixed temperature elements	
Destroy replaced links	
Fixed temperature-sensing elements other than the fusible metal alloy may remain in service if inspected and cleaned. Indicate Yes if inspected and cleaned, or No if replaced.	
Recharging Document recharge of extinguishing systems either after use, as indicated by inspection, by maintenance check, or as per manufacturer's instructions. Recharging is not required annually but as needed.	

Notes: _____

THE PORT AUTHORITY OF NY & NJ

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - 12-YEAR HYDROSTATIC TEST

PA 4085 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

Location: _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Hydrostatic test performed on:	
Agent containers	
Auxiliary pressure containers	
Hose assemblies	

Notes: _____

THE PORT AUTHORITY OF NY & NJ

DRY AND WET CHEMICAL FIRE EXTINGUISHING SYSTEMS - GENERAL INFORMATION (FIXED WET CHEMICAL)

PA 4086 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

Location: _____

Manufacturer: _____

Date Installed: _____

Service Contractor: _____

Type of extinguishing agent: _____

Wet chemical cylinder

Normal pressure _____ psi (bar)

Manufacturer's minimum pressure _____ psi (bar)

Normal weight _____ lbs (kg)

Manufacturer's minimum weight _____ lbs (kg)

Equipment Protected

- ☐ Deep-fat fryer(s)
- ☐ Grill(s)
- ☐ Charbroiler(s)
- ☐ Upright broiler(s)
- ☐ Griddle(s)
- ☐ Range top(s)
- ☐ Other _____
- _____

Expellant gas cartridge - any provided? ☐ Yes ☐ No

If yes, normal weight (if carbon dioxide) _____ lbs (kg)

normal pressure (if nitrogen) _____ psi (bar)

Connected to main base building fire alarm system? ☐ Yes ☐ No

Automatic shutdown of cooking equipment? ☐ Yes ☐ No

If yes, ☐ Gas ☐ Electric

Notes: _____

CHAPTER 10 – CLEAN AGENT FIRE EXTINGUISHING SYSTEMS

DEFINITIONS

Clean Agent.	*Electrically nonconducting, volatile, or gaseous fire extinguishant that does not leave a residue upon evaporation. The word agent as used in this document means clean agent unless otherwise indicated.*
Clearance.	*The air distance between extinguishing system equipment, including piping and nozzles, and unenclosed or uninsulated live electrical components not at ground potential.*
Design Factor (DF).	*A fraction of the agent minimum design quantity (MDQ) added thereto deemed appropriate due to a specific feature of the protection application or design of the suppression system.*
Electric Control Equipment.	*The control equipment shall supervise the actuating devices and associated wiring and, as required, cause actuation. The control equipment shall be specifically listed for the number and type of actuating devices utilized, and their compatibility shall have been listed.*
Engineered System.	*Asystem requiring individual calculation and design to determine the flow rates, nozzle pressures, pipe size, area or volume protected by each nozzle, quantity of agent, and the number and types of nozzles and their placement in a specific system.*
Halocarbon Agent.	*An agent that contains as primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine, or iodine.*
Inert Gas Agent.	*An agent that contains as primary components one or more of the gases helium, neon, argon, or nitrogen. Inert gas agents that are blends of gases can also contain carbon dioxide as a secondary component.*
Minimum Design Quantity (MDQ).	*The quantity of agent required to achieve the minimum design concentration as calculated using the method in 5.5.1 or 5.5.2, as appropriate.*
Normally Occupied Area.	*One that is intended for occupancy.*

Pneumatic Control Equipment.	*Where pneumatic control equipment is used, the lines shall be protected against crimping and mechanical damage. Where installations could be exposed to conditions that could lead to loss of integrity of the pneumatic lines, special precautions shall be taken to ensure that no loss of integrity will occur. The control equipment shall be specifically listed for the number and type of actuating devices utilized, and their compatibility shall have been listed.*
Pre-Engineered System.	*A system having predetermined flow rates, nozzle pressures, and quantities of agent. These systems have the specific pipe size, maximum and minimum pipe lengths, flexible hose specifications, number of fittings, and number and types of nozzles prescribed by a testing laboratory. The hazards protected by these systems are specifically limited as to type and size by a testing laboratory based upon actual fire tests. Limitations on hazards that can be protected by these systems are contained in the manufacturer's installation manual, which is referenced as part of the listing.*
Primary Agent Supply.	*The amount of agent in the system primary agent supply shall be at least sufficient for the largest single hazard protected or group of hazards to be protected simultaneously.*
Reserve Agent Supply.	*Where required, a reserve agent supply shall consist of as many multiples of the primary agent supply as the authority having jurisdiction considers necessary.*
Safety Factor (SF).	*A multiplier of the agent flame extinguishing or inerting concentration to determine the agent minimum design concentration.*
Storage Containers.	*Agent shall be stored in containers designed to hold that specific agent at ambient temperatures. Containers shall be charged to a fill density or superpressurization level within the range specified in the manufacturer's listed manual.*
Superpressurization.	*The addition of gas to a fire extinguishing agent container to achieve a specified pressure therein.*
Total Flooding.	*The act and manner of discharging an agent for the purpose of achieving a specified minimum agent concentration throughout a hazard volume.*
Total Flooding System.	*A system consisting of an agent supply and distribution network designed to achieve a total flooding condition in a hazard volume.*
Uninterrupted Protection.	*Where uninterrupted protection is required, both the primary and the reserve agent supplies shall be permanently connected to the distribution piping and arranged for easy changeover.*

1.	**Existing Clean Agent Systems – General Information**	**Update**	**Annually**	**Form PA 4091**

Review General Information Form for all Clean Agent Fire Extinguishing Systems, update as required.

Confirm that the as-built instruction, maintenance manual, and a full set of drawings is provided as required:

5.1.2.4 *An as-built instruction and maintenance manual that includes a full sequence of operations and a full set of drawings and calculations shall be maintained on site.*

2.	**New or Altered Clean Agent Systems – General Information**	**Update**	**As Required**	**Form PA 4091**

Complete General Information Form for new Clean Agent Fire Extinguishing System or update General Information Form for Clean Agent Fire Extinguishing System that has been altered to include repairs and/or modifications to components.

Confirm that the as-built instruction, maintenance manual, and full set of drawings is provided as required:

5.1.2.4 *An as-built instruction and maintenance manual that includes a full sequence of operations and a full set of drawings and calculations shall be maintained on site.*

3.	**Clean Agent System**	**Inspection**	**Monthly**	**Form PA 4092**

904.10.1 *At least once a month, an inspection shall be conducted by a trained and knowledgeable person as assess whether the system is in good working order.*

4.	**Clean Agent System**	**Inspection, Testing**	**Annually**	**Form PA 4094**

6.1.1 *At least annually, all systems shall be thoroughly inspected and tested for proper operation by competent personnel. Discharge tests are not required.*

6.1.2 *The inspection report with recommendations shall be filed with the owner.*

5.	**Clean Agent System**	**Inspection, Testing**	**Semi-Annually**	**Form PA 4093**

6.1.3 *At least semiannually, the agent quantity and pressure of refillable containers shall be checked.*

6.1.3.1 *For halocarbon clean agents, if a container shows a loss in agent quantity of more than 5 percent or a loss in pressure (adjusted for temperature) of more than 10 percent, it shall be refilled or replaced.*

6.1.3.2 *For inert gas clean agents that are not liquefied, pressure is an indication of agent quantity. If an inert gas clean agent container shows a loss in pressure (adjusted for temperature) of more than 5 percent, it shall be refilled or replaced. Where container pressure gauges are used for this purpose, they shall be compared to a separate calibrated device at least annually.*

6.1.3.3 *Where the amount of agent in the container is determined by special measuring devices, these devices shall be listed.*

6.1.4 *All halocarbon clean agents removed from refillable containers during service or maintenance procedures shall be collected and recycled or disposed of in an environmentally sound manner and in accordance with existing laws and regulations.*

6.1.5 *Factory-charged, non-refillable containers that do not have a means of pressure indication shall have the agent quantity checked at least semiannually. If a container shows a loss in agent quantity of more than 5 percent, it shall be replaced. All factory-charged, non-refillable containers removed from useful service shall be returned for recycling of the agent or disposed of in and environmentally sound manner and in accordance with existing laws and regulations.*

6.1.6 *For halocarbon clean agents, the date of inspection, gross weight of cylinder plus agent or net weight of agent, type of agent, person performing the inspection, and, where applicable, the pressure at a recorded temperature shall be recorded on a tag attached to the container. For inert gas clean agents, the date of inspection, type of agent, person performing the inspection, and the pressure at a recorded temperature shall be recorded on the tag attached to the container.*

6.	**Container**	**Inspection, Testing**	**5 Years**	**Form PA 4095**

6.2.2 Cylinders continuously in service without discharging shall be given a complete external visual inspection every 5 years or more frequently if required. The visual inspection shall be in accordance with Section 3 of CGA C-6, Standard for Visual Inspection of Steel Compressed Gas Cylinders, except that the cylinders need not be emptied or stamped while under pressure. Inspections shall be made only by competent personnel, and the results recorded on both of the following:

1) A record tag permanently attached to each cylinder

2) A suitable inspection report

The following is the visual inspection defined by the Compressed Gas Association Pamphlet C-6, Section 3:

3.1 Corrosion or pitting – Loss of wall thickness in a cylinder by corrosive media.

3.1.1 Crevice corrosion – Corrosion that occurs in the area of the intersection of the footring or headring with the cylinder.

3.1.2 Isolated pitting – Isolated pits of small diameter that do not effectively weaken a cylinder.

3.1.3 Line corrosion – Corrosion that results in a continuous patter or when pits are connected to others in a narrow band or line. This condition is more serious than isolated pitting.

3.1.4 General corrosion – Corrosion that covers considerable surface areas of the cylinder.

3.2 Cuts, gouges, or digs – Deformations in a cylinder caused by contact with a sharp object so as to cut into or upset the metal of the cylinder, decreasing the wall thickness at that point.

3.3 Cylinder, high and low pressure – High pressure cylinders are those with a marked service pressure of 900 psi (6210 kPa) or greater; low pressure cylinders are those with a marked service pressure less than 900 psi (6210 kPa).

3.4 Cylinder disposition – The following definitions apply to terms for the disposition of cylinders failing visual inspection.

3.4.1 Condemned – Scrap, no longer fit for service.

3.4.2 Rejected – Not fit for service in present condition.

Note – Rejected cylinders may be requalified by either additional testing to verify adequacy of cylinder for continued service or by reheat treatment, repair, or rebuilding to correct the defect as specified in 49 CFR 180 Subpart C.

3.5 Dents – Deformations in a cylinder caused by its coming in contact with a blunt object so the thickness of metal is not materially impaired.

3.6 Minimum allowable design thickness – Minimum design thickness required by the specification under which the cylinder was manufactured.

3.7 Weld defects – Cracks or flaws in weld areas that reduce the structural strength of metal, which can cause separation when pressurized.

6.2.2.1 A completed copy of the inspection report shall be furnished to the owner of the system or an authorized representative. These records shall be retained by the owner for the life of the system.

6.2.3 Where external visual inspection indicates that the container has been damaged, additional strength tests shall be required.

7. Hose	Inspection	Annually	Form PA 4094

6.3.1 General. All system hose shall be examined annually for damage. If visual examination shows any deficiency, the hose shall be immediately replaced or tested as specified in 6.3.2 as identified in Number 8 below.

8. Hose	Testing	5 Years	Form PA 4095

6.3.2.1 All hose shall be tested every 5 years.

6.3.2.2 All hose shall be tested at 1 ½ times the maximum container pressure at 130°F (54.4°C). The testing procedure shall be as follows:

1) The hose is removed from any attachment.
2) The hose assembly is then placed in a protective enclosure designed to permit visual observation of the test.
3) The hose must be completely filled with water before testing.
4) Pressure then is applied at a rate-of-pressure rise to reach the test pressure within a minimum of 1 minute. The test pressure is maintained for 1 full minute. Observations are then made to note nay distortion or leakage.
5) If the test pressure has not dropped or if the couplings have not moved, the pressure is released. The hose assembly is then considered to have passed the hydrostatic test if no permanent distortion has taken place.
6) Hose assembly passing the test must be completely dried internally. If heat is used for drying, the temperature must not exceed the manufacturer's specifications.
7) Hose assemblies failing a hydrostatic test must be marked and destroyed and be replaced with new assemblies.
8) Each hose assembly passing the hydrostatic test is marked to show the date of test.

9.	Room Enclosure	Inspection	Annually	Form PA 4094

6.4 *Enclosure Inspection. Other than as identified in 6.4.1, the enclosure protected by the clean agent shall be thoroughly inspected at least every 12 months to determine if penetrations or other changes have occurred that could adversely affect agent leakage or change volume of hazard, or both. Where the inspection indicated conditions that could result in the inability to maintain the clean agent concentration, the conditions shall be corrected. If uncertainty still exists, the enclosures shall be retested for integrity in accordance with 6.7.2.3.*

6.7.2.3 *Review Enclosure Integrity. All total flooding systems shall have the enclosure examined and tested to locate and then effectively seal any significant air leaks that could result in a failure of the enclosure to hold the specified agent concentration level for the specified holding period. The currently preferred method is using a blower door fan unit and smoke pencil. Quantitative results shall be obtained and recorded to indicate that the specified agent concentration for the specified duration of protection is in compliance with Section 5.6, using an approved blower fan unit or other means as approved by the authority having jurisdiction.*

6.4.1 *An enclosure inspection shall not be required every 12 months if a documented administrative control program exists that addresses barrier integrity.*

6.5.3 *Any penetrations made through the enclosure protected by the clean agent shall be sealed immediately. The method of sealing shall restore the original fire resistance rating of the enclosure.*

THE PORT AUTHORITY OF NY & NJ

CLEAN AGENT FIRE EXTINGUISHING SYSTEMS - GENERAL INFORMATION PA 4091 / 02-12

Original Installation Date: **U.E.I. (Unique Element Identification) :**

Building ID: _____ **System ID / U.E.I.:** _____

Date: _____ **Inspector:** _____

General

Clean Agent System Make/Model/Manufacturer: _____

Control Panel Location/Make/Manufacturer: _____

Clean Agent Design Concentration: _____

Describe Areas Protected - Above Suspended Ceiling and/or Below Raised Floors: _____

Number of Clean Agent Cylinders Installed: _____

Number of Clean Agent Cylinders required for Discharge: _____

Document Weights of all Cylinders with Clean Agent: _____

Clean Agent Pressure: _____

System Initiation

Number and Type of Fire Detection Devices: _____

Location of Manual Release Station: _____

Sequence of Operation: _____

Notes: _____

THE PORT AUTHORITY OF NY & NJ

CLEAN AGENT FIRE EXTINGUISHING SYSTEMS - MONTHLY INSPECTION

PA 4092 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Date												
Inspector												
Inspect to assess whether system is in good working order.												

Notes: _____

THE PORT AUTHORITY OF NY & NJ

CLEAN AGENT FIRE EXTINGUISHING SYSTEMS - SEMI-ANNUAL INSPECTION AND TEST

PA 4093 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Date		
Inspector		
Clean agent containers are free from physical damage.		
Container pressure: _____ psi (bar) (Pressure loss greater than 5% requires container refill or replacement.)		
Container weight: _____ lb (kg) (Weight loss greater than 5% requires container refill or replacement.)		
Container pressure and weight are recorded on tag attached to container.		
Control heads are operational. (Remove heads from containers.)		

Notes: _____

THE PORT AUTHORITY OF NY & NJ

CLEAN AGENT FIRE EXTINGUISHING SYSTEMS - ANNUAL INSPECTION AND TEST

PA 4094 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Date				
Inspector				
Thoroughly inspect and test system for proper operation.				
Examine all hoses for damage.				
Enclosure Inspection Confirm that inspection is conducted and that report of inspection is on file.				

Notes: _____

CLEAN AGENT FIRE EXTINGUISHING SYSTEMS - HOSE AND CONTAINER 5-YEAR INSPECTION AND TEST

PA 4095 / 02-12

Building ID: _____ **System ID / U.E.I.:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below)

Date					
Inspector					
Perform hydrostatic test of system hoses.					
Complete visual inspection of all containers in accordance with Compressed Gas Association (CGA) C-6.					

Notes: _____

CHAPTER 11 – FIRE DETECTION AND ALARM SYSTEMS

DEFINITIONS

Addressable Device	*A fire alarm system component with discrete identification that can have its status individually identified or that is used to individually control other functions.*
Air Sampling–Type Detector	*A detector that consists of a piping or tubing distribution network that runs from the detector to the area(s) to be protected. An aspiration fan in the detector housing draws air from the protected area back to the detector through air sampling ports, piping, or tubing. At the detector, the air is analyzed for fire products.*
Alarm	*A warning of fire danger.*
Alarm Signal	*A signal indicating an emergency that requires immediate action, such as a signal indicative of fire.*
Alarm Verification Feature	*A feature of automatic fire detection and alarm systems to reduce unwanted alarms wherein smoke detectors report alarm conditions for a minimum period of time, or confirm alarm conditions within a given time period after being reset, in order to be accepted as a valid alarm initiation signal.*
Alert Tone	*An attention-getting signal to alert occupants of the pending transmission of a voice message.*
Analog Initiating Device (Sensor)	*An initiating device that transmits a signal indicating varying degrees of condition as contrasted with a conventional initiating device, which can only indicate an on–off condition.*
Annunciator	*A unit containing one or more indicator lamps, alphanumeric displays, or other equivalent means in which each indication provides status information about a circuit, condition, or location.*
Audible Notification Appliance	*A notification appliance that alerts by the sense of hearing.*
Automatic Extinguishing System Supervisory Device	*A device that responds to abnormal conditions that could affect the proper operation of an automatic sprinkler system or other fire extinguishing system(s) or suppression system(s), including, but not limited to, control valves, pressure levels, liquid agent levels and temperatures, pump power and running, engine temperature and overspeed, and room temperature.*

Automatic Fire Detector	*A device designed to detect the presence of a fire signature and to initiate action. For the purpose of this Code, automatic fire detectors are classified as follows: Automatic Fire Extinguishing or Suppression System Operation Detector, Fire–Gas Detector, Heat Detector, Other Fire Detectors, Radiant Energy–Sensing Fire Detector, Smoke Detector.*
Automatic Fire Extinguishing or Suppression System Operation Detector	*A device that automatically detects the operation of a fire extinguishing or suppression system by means appropriate to the system employed.*
Auxiliary Fire Alarm System	*A system connected to a municipal fire alarm system for transmitting an alarm of fire to the public fire service communications center. Fire alarms from an auxiliary fire alarm system are received at the public fire service communications center on the same equipment and by the same methods as alarms transmitted manually from municipal fire alarm boxes located on streets.*
Central Station	*A supervising station that is listed for central station service.*
Central Station Fire Alarm System	*A system or group of systems in which the operations of circuits and devices are transmitted automatically to, recorded in, maintained by, and supervised from a listed central station that has competent and experienced servers and operators who, upon receipt of a signal, take such action as required by this Code. Such service is to be controlled and operated by a person, firm, or corporation whose business is the furnishing, maintaining, or monitoring of supervised fire alarm systems.*
Central Station Service	*The use of a system or a group of systems in which the operations of circuits and devices at a protected property are signaled to, recorded in, and supervised from a listed central station that has competent and experienced operators who, upon receipt of a signal, take such action as required by this Code. Related activities at the protected property, such as equipment installation, inspection, testing, maintenance, and runner service, are the responsibility of the central station or a listed fire alarm service local company. Central station service is controlled and operated by a person, firm, or corporation whose business is the furnishing of such contracted services or whose properties are the protected premises.*
Channel	*A path for voice or signal transmission that uses modulation of light or alternating current within a frequency band.*

Cloud Chamber Smoke Detection	*The principle of using an air sample drawn from the protected area into a high-humidity chamber combined with a lowering of chamber pressure to create an environment in which the resultant moisture in the air condenses on any smoke particles present, forming a cloud. The cloud density is measured by a photoelectric principle. The density signal is processed and used to convey an alarm condition when it meets preset criteria.*
Combination Detector	*A device that either responds to more than one of the fire phenomenon or employs more than one operating principle to sense one of these phenomenon. Typical examples are a combination of a heat detector with a smoke detector or a combination rate-of-rise and fixed-temperature heat detector.*
Communications Channel	*A circuit or path connecting a subsidiary station(s) to a supervising station(s) over which signals are carried.*
Derived Channel	*A signaling line circuit that uses the local leg of the public switched network as an active multiplex channel while simultaneously allowing that leg's use for normal telephone communications.*
Digital Alarm Communicator Receiver (DACR)	*A system component that accepts and displays signals from digital alarm communicator transmitters (DACTs) sent over the public switched telephone network.*
Digital Alarm Communicator System (DACS)	*A system in which signals are transmitted from a digital alarm communicator transmitter (DACT) located at the protected premises through the public switched telephone network to a digital alarm communicator receiver (DACR).*
Digital Alarm Communicator Transmitter (DACT)	*A system component at the protected premises to which initiating devices or groups of devices are connected. The DACT seizes the connected telephone line, dials a preselected number to connect to a DACR, and transmits signals indicating a status change of the initiating device*
Digital Alarm Radio Receiver (DARR)	*A system component composed of two subcomponents: one that receives and decodes radio signals, the other that annunciates the decoded data. These two subcomponents can be coresident at the central station or separated by means of a data transmission channel.*
Digital Alarm Radio System (DARS)	*A system in which signals are transmitted from a digital alarm radio transmitter (DART) located at a protected premises through a radio channel to a digital alarm radio receiver (DARR).*
Digital Alarm Radio Transmitter (DART)	*A system component that is connected to or an integral part of a digital alarm communicator transmitter (DACT) that is used to provide an alternate radio transmission channel.*

Display	*The visual representation of output data, other than printed copy.*
Electrical Conductivity Heat Detector	*A line-type or spot-type sensing element in which resistance varies as a function of temperature.*
Emergency Voice/Alarm Communications	*Dedicated manual or automatic facilities for originating and distributing voice instructions, as well as alert and evacuation signals pertaining to a fire emergency, to the occupants of a building.*
Evacuation	*The withdrawal of occupants from a building.*
Evacuation Signal	*A distinctive signal intended to be recognized by the occupants as requiring evacuation of the building.*
Exit Plan	*A plan for the emergency evacuation of the premises.*
Fire Alarm Control Unit (Panel)	*A system component that receives inputs from automatic and manual fire alarm devices and might supply power to detection devices and to a transponder(s) or off-premises transmitter(s). The control unit might also provide transfer of power to the notification appliances and transfer of condition to relays or devices connected to the control unit. The fire alarm control unit can be a local fire alarm control unit or a master control unit.*
Fire Alarm Signal	*A signal initiated by a fire alarm-initiating device such as a manual fire alarm box, automatic fire detector, waterflow switch, or other device in which activation is indicative of the presence of a fire or fire signature.*
Fire Alarm System	*A system or portion of a combination system that consists of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices and to initiate the appropriate response to those signals.*
Fire Alarm/Evacuation Signal Tone Generator	*A device that produces a fire alarm/evacuation tone upon command.*
Fire Command Center	*The principal attended or unattended location where the status of the detection, alarm communications, and control systems is displayed and from which the system(s) can be manually controlled.*
Fire Safety Function Control Device	*The fire alarm system component that directly interfaces with the control system that controls the fire safety function.*
Fire Safety Functions	*Building and fire control functions that are intended to increase the level of life safety for occupants or to control the spread of the harmful effects of fire.*

Fire Warning Equipment	*Any detector, alarm, device, or material related to single- and multiple-station alarms or household fire alarm systems.*
Fire–Gas Detector	*A device that detects gases produced by a fire.*
Fixed-Temperature Detector	*A device that responds when its operating element becomes heated to a predetermined level.*
Flame Detector	*A radiant energy–sensing fire detector that detects the radiant energy emitted by a flame.*
Flame Detector Sensitivity	*The distance along the optical axis of the detector at which the detector can detect a fire of specified size and fuel within a given time frame*
Heat Detector	*A fire detector that detects either abnormally high temperature or rate of temperature rise, or both.*
Initiating Device	*A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box, or supervisory switch.*
Initiating Device Circuit	*A circuit to which automatic or manual initiating devices are connected where the signal received does not identify the individual device operated.*
Intermediate Fire Alarm or Fire Supervisory Control Unit	*A control unit used to provide area fire alarm or area fire supervisory service that, where connected to the proprietary fire alarm system, becomes a part of that system.*
Ionization Smoke Detection	*The principle of using a small amount of radioactive material to ionize the air between two differentially charged electrodes to sense the presence of smoke particles. Smoke particles entering the ionization volume decrease the conductance of the air by reducing ion mobility. The reduced conductance signal is processed and used to convey an alarm condition when it meets preset criteria.*
Line-Type Detector	*A device in which detection is continuous along a path. Typical examples are rate-of-rise pneumatic tubing detectors, projected beam smoke detectors, and heat-sensitive cable.*
Loss of Power	*The reduction of available voltage at the load below the point at which equipment can function as designed.*
Low-Power Radio Transmitter	*Any device that communicates with associated control/receiving equipment by low-power radio signals.*
Maintenance	*Work, including, but not limited to, repair, replacement, and service, performed to ensure that equipment operates properly.*

Manual Fire Alarm Box	*A manually operated device used to initiate an alarm signal.*
Master Control Unit (Panel)	*A control unit that serves the protected premises or portion of the protected premises as a local control unit and accepts inputs from other fire alarm control units.*
Multiplexing	*A signaling method characterized by simultaneous or sequential transmission, or both, and reception of multiple signals on a signaling line circuit, a transmission channel, or a communications channel, including means for positively identifying each signal.*
Municipal Fire Alarm Box (Street Box)	*An enclosure housing a manually operated transmitter used to send an alarm to the public fire service communications center.*
Municipal Fire Alarm System	*A system of alarm initiating devices, receiving equipment, and connecting circuits (other than a public telephone network) used to transmit alarms from street locations to the public fire service communications center.*
Nonrequired (Voluntary) System	*A fire alarm system component or group of components that is installed at the option of the owner, and is not installed due to a building or fire code requirement.*
Nonrestorable Initiating Device	*A device in which the sensing element is designed to be destroyed in the process of operation.*
Notification Appliance	*A fire alarm system component such as a bell, horn, speaker, light, or text display that provides audible, tactile, or visible outputs, or any combination thereof.*
Nuisance Alarm	*Any alarm caused by mechanical failure, malfunction, improper installation, or lack of proper maintenance, or any alarm activated by a cause that cannot be determined.*
Other Fire Detectors	*Devices that detect a phenomenon other than heat, smoke, flame, or gases produced by a fire.*
Paging System	*A system intended to page one or more persons by such means as voice over loudspeaker, coded audible signals or visible signals, or lamp annunciators.*
Photoelectric Light Obscuration Smoke Detection	*The principle of using a light source and a photosensitive sensor onto which the principal portion of the source emissions is focused. When smoke particles enter the light path, some of the light is scattered and some is absorbed, thereby reducing the light reaching the receiving sensor. The light reduction signal is processed and used to convey an alarm condition when it meets preset criteria.*

Photoelectric Light-Scattering Smoke Detection	*The principle of using a light source and a photosensitive sensor arranged so that the rays from the light source do not normally fall onto the photosensitive sensor. When smoke particles enter the light path, some of the light is scattered by reflection and refraction onto the sensor. The light signal is processed and used to convey an alarm condition when it meets preset criteria.*
Pneumatic Rate-of-Rise Tubing Heat Detector	*A line-type detector comprising small-diameter tubing, usually copper, that is installed on the ceiling or high on the walls throughout the protected area. The tubing is terminated in a detector unit containing diaphragms and associated contacts set to actuate at a predetermined pressure. The system is sealed except for calibrated vents that compensate for normal changes in temperature.*
Projected Beam–Type Detector	*A type of photoelectric light obscuration smoke detector wherein the beam spans the protected area.*
Proprietary Supervising Station	*A location to which alarm or supervisory signaling devices on proprietary fire alarm systems are connected and where personnel are in attendance at all times to supervise operation and investigate signals.*
Proprietary Supervising Station Fire Alarm System	*An installation of fire alarm systems that serves contiguous and noncontiguous properties, under one ownership, from a proprietary supervising station located at the protected property, or at one of multiple non-contiguous protected properties, at which trained, competent personnel are in constant attendance. This includes the proprietary supervising station; power supplies; signal-initiating devices; initiating device circuits; signal notification appliances; equipment for the automatic, permanent visual recording of signals; and equipment for initiating the operation of emergency building control services.*
Protected Premises (Local) Control Unit (Panel)	*A control unit that serves the protected premises or a portion of the protected premises and indicates the alarm via notification appliances inside the protected premises.*
Protected Premises (Local) Fire Alarm System	*A protected premises system that sounds an alarm at the protected premises as the result of the manual operation of a fire alarm box or the operation of protection equipment or systems, such as water flowing in a sprinkler system, the discharge of carbon dioxide, the detection of smoke, or the detection of heat.*
Public Fire Alarm Reporting System	*A system of fire alarm-initiating devices, receiving equipment, and connecting circuits used to transmit alarms from street locations to the communications center.*

Radiant Energy–Sensing Fire Detector	*A device that detects radiant energy, such as ultraviolet, visible, or infrared, that is emitted as a product of combustion reaction and obeys the laws of optics.*
Radio Alarm Repeater Station Receiver (RARSR)	*A system component that receives radio signals and resides at a repeater station that is located at a remote receiving location.*
Radio Alarm Supervising Station Receiver (RASSR)	*A system component that receives data and annunciates that data at the supervising station.*
Radio Alarm System (RAS)	*A system in which signals are transmitted from a radio alarm transmitter (RAT) located at a protected premises through a radio channel to two or more radio alarm repeater station receivers (RARSR) and that are annunciated by a radio alarm supervising station receiver (RASSR) located at the central station.*
Radio Alarm Transmitter (RAT)	*A system component at the protected premises to which initiating devices or groups of devices are connected that transmits signals indicating a status change of the initiating devices.*
Radio Channel	*A band of frequencies of a width sufficient to allow its use for radio communications.*
Rate Compensation Detector	*A device that responds when the temperature of the air surrounding the device reaches a predetermined level, regardless of the rate of temperature rise.*
Rate-of-Rise Detector	*A device that responds when the temperature rises at a rate exceeding a predetermined value.*
Remote Supervising Station Fire Alarm System	*A system installed in accordance with this Code to transmit alarm, supervisory, and trouble signals from one or more protected premises to a remote location where appropriate action is taken.*
Repeater Station	*The location of the equipment needed to relay signals between supervising stations, subsidiary stations, and protected premises.*
Restorable Initiating Device	*A device in which the sensing element is not ordinarily destroyed in the process of operation, whose restoration can be manual or automatic.*
Runner	*A person other than the required number of operators on duty at central, supervising, or runner stations (or otherwise in contact with these stations) available for prompt dispatching, when necessary, to the protected premises.*
Runner Service	*The service provided by a runner at the protected premises, including resetting and silencing of all equipment transmitting fire alarm or supervisory signals to an off-premises location.*

Signaling Line Circuit	*A circuit or path between any combination of circuit interfaces, control units, or transmitters over which multiple system input signals or output signals, or both, are carried.*
Signaling Line Circuit Interface	*A system component that connects a signaling line circuit to any combination of initiating devices, initiating device circuits, notification appliances, notification appliance circuits, system control outputs, and other signaling line circuits.*
Site-Specific Software	*Software that defines the specific operation and configuration of a particular system. Typically, it defines the type and quantity of hardware modules, customized labels, and specific operating features of a system.*
Smoke Detector	*A device that detects visible or invisible particles of combustion.*
Spark/Ember Detector	*A radiant energy–sensing fire detector that is designed to detect sparks or embers, or both. These devices are normally intended to operate in dark environments and in the infrared part of the spectrum.*
Spot-Type Detector	*A device in which the detecting element is concentrated at a particular location. Typical examples are bimetallic detectors, fusible alloy detectors, certain pneumatic rate-of-rise detectors, certain smoke detectors, and thermoelectric detectors.*
Supervision	*A means of monitoring system status and indicating abnormal conditions.*
Supervising Station	*A facility that receives signals and at which personnel are in attendance at all times to respond to these signals.*
Supervisory Service	*The service required to monitor performance of guard tours and the operative condition of fixed suppression systems or other systems for the protection of life and property.*
Supervisory Signal	*A signal indicating the need for action in connection with the supervision of guard tours, the fire suppression systems or equipment, or the maintenance features of related systems.*
Supervisory Signal-Initiating Device	*An initiating device such as a valve supervisory switch, water level indicator, or low air pressure switch on a dry-pipe sprinkler system in which the change of state signals an off-normal condition and its restoration to normal of a fire protection or life safety system; or a need for action in connection with guard tours, fire suppression systems or equipment, or maintenance features of related systems.*

Tactile Notification Appliance	*A notification appliance that alerts by the sense of touch or vibration.*
Textual Audible Notification Appliance	*A notification appliance that conveys a stream of audible information. An example of a textual audible notification appliance is a speaker that reproduces a voice message.*
Textual Visible Notification Appliance	*A notification appliance that conveys a stream of visible information that displays an alphanumeric or pictorial message. Textual visible notification appliances providetemporary text, permanent text, or symbols. Textual visible notification appliances include, but are not limited to, annunciators, monitors, CRTs, displays, and printers.*
Transmission Channel	*A circuit or path connecting transmitters to supervising stations or subsidiary stations on which signals are carried.*
Trouble Signal	*A signal initiated by the fire alarm system or device indicative of a fault in a monitored circuit or component.*
Visible Notification Appliance	*A notification appliance that alerts by the sense of sight.*
Wireless Protection System	*A system or a part of a system that can transmit and receive signals without the aid of wire. It can consist of either a wireless control panel or a wireless repeater.*
Wireless Repeater	*A component used to relay signals between wireless receivers or wireless control panels, or both.*

A. ALL FIRE DETECTION AND ALARM SYSTEMS

1.	**Existing Fire Detection and Alarm Systems** **General Information**	**Update**	**Annually**	**Forms PA 4097, 4098, 4099**

Review General Information Form for all Fire Detection and Alarm Systems, update as required.

2.	**New or Altered Fire Detection and Alarm Systems** **General Information**	**Update**	**As Required**	**Forms PA 4097, 4098, 4099**

Complete General Information Form for new Fire Detection and Alarm Systems or update General Information Form for Fire Detection and Alarm Systems that have been altered to include repairs and/or modifications to components.

B. ALARM NOTIFICATION APPLIANCES

1.	**Alarm Notification Appliances**	**Inspection**	**Semi-Annually**	**Form PA 4102**

2.	**Alarm Notification Appliances**	**Testing**	**Annually**	**Form PA 4107**

(a) Audible

Sound pressure level shall be measured with sound level meter meeting ANSI S1.4a, Specifications for Sound Level Meters, Type 2 requirements. Levels throughout protected area shall be measured and recorded. The sound level meter shall be set in accordance with ANSI S3.41, American National Standard Audible Evacuation Signal, using the time-weighted characteristic F (FAST). Record the maximum output when the audible emergency evacuation signal is on.

(b)	*Audible textural notification appliances (speakers and other appliances to convey voice messages)*	*Sound pressure level shall be measured with sound level meter meeting ANSI S1.4a, Specifications for Sound Level Meters, Type 2 requirements. Levels throughout protected area shall be measured and recorded. The sound level meter shall be set in accordance with ANSI S3.41, American National Standard Audible Evacuation Signal, using the time-weighted characteristic F (FAST). Record the maximum output when the audible emergency evacuation signal is on. 4Audible information shall be verified to be distinguishable and understandable.*
(c)	*Visible*	*Test shall be performed in accordance with the manufacturer's instructions. Appliance locations shall be verified to be per approved layout and it shall be confirmed that no floor plan changes affect the approved layout. Verify that the candela rating marking agrees with the approved drawings. It shall be confirmed that each appliance flashes.*

C. ALARM INITIATION DEVICES AND EQUIPMENT

1.	Initiation Devices	Inspection	Quarterly	Form PA 4101

(a) Radiant energy fire detectors
(b) Supervisory signal devices
(c) Waterflow devices

2.	Initiation Devices	Inspection	Semi-Annually	Form PA 4102

(a) Air sampling
(b) Duct detectors
(c) Electromechanical releasing devices
(d) Fire extinguishing system(s) or suppression system(s) switches
(e) Fire alarm boxes
(f) Heat detectors
(g) Smoke detectors

3.	**Initiation Devices – Smoke Detectors**	**Testing**	**Annually**	**Form PA 4106**

(a)	*Duct Type*	*Air duct detectors shall be tested or inspected to ensure that the device will sample the airstream. The test shall be made in accordance with the manufacturer's instructions.*
(b)	*System detectors and single-station smoke alarms used in other than one and two family dwellings*	*The detectors shall be tested in place to ensure smoke entry into the sensing chamber and an alarm response. Testing with smoke or listed aerosol approved by the manufacturer shall be permitted as acceptable test methods. Other methods approved by the manufacturer that ensure smoke entry into the sensing chamber shall be permitted. Any of the following tests shall be performed to ensure that each smoke detector is within its listed and marked sensitivity range:* *(1) Calibrated test method* *(2) Manufacturer's calibrated sensitivity test instrument* *(3) Listed control equipment arranged for the purpose* *(4) Smoke detector/control unit arrangement whereby the detector causes a signal at the control unit when its sensitivity is outside its listed sensitivity range* *(5) Other calibrated sensitivity test method approved by the authority having jurisdiction*
(c)	*Single- and multiple station smoke alarms*	*Functional tests shall be conducted according to manufacturer's instructions.*
(d)	*Air Sampling*	*Per manufacturer's recommended test methods, detector alarm response shall be verified through the end sampling port on each pipe run; airflow through all other ports shall be verified as well.*
(e)	*Projected beam type*	*The detector shall be tested by introducing smoke, other aerosol, or an optical filter into the beam path.*
(f)	*Smoke detector with built-in thermal element*	*Both portions of the detector shall be operated independently as described for the respective devices.*
(g)	*Smoke detectors with control output functions*	*It shall be verified that the control capability shall remain operable even if all of the initiating devices connected to the same initiating device circuit or signaling line circuit are in an alarm state.*

4.	**Initiation Devices – Electromechanical Releasing Device**	**Testing**	**Annually**	**Form PA 4106**

(a) Nonrestorable-type link

Correct operation shall be verified by removal of the fusible link and operation of the associated device. Any moving parts shall be lubricated as necessary.

(b) Restorable-type link

Correct operation shall be verified by removal of the fusible link and operation of the associated device. Any moving parts shall be lubricated as necessary.

Fusible thermal link detectors are commonly used to close fire doors and fire dampers. They are actuated by the presence of external heat, which causes a solder element in the link to fuse, or by an electric thermal device, which, when energized, generates heat within the body of the link, causing the link to fuse and separate.

5.	**Initiation Devices – Fire extinguishing system(s) or suppression system(s) alarm switch**	**Testing**	**Annually**	**Form PA 4106**

The switch shall be mechanically or electrically operated and receipt of signal by the control panel shall be verified.

6.	**Initiation Devices – Fire–Gas and Other Detectors**	**Testing**	**Annually**	**Form PA 4106**

Fire–gas detectors and other fire detectors shall be tested as prescribed by the manufacturer and as necessary for the application.

7.	**Initiation Devices – Heat Detectors**	**Testing**	**Annually**	**Form PA 4106**

(a)	*Fixed-temperature, rate-of-rise, rate of compensation, restorable line, spot type (excluding pneumatic tube type)*	*Heat test shall be performed with a heat source per the manufacturer's recommendations for response within 1 minute. A test method shall be used that is recommended by the manufacturer or other method shall be used that will not damage the nonrestorable fixed-temperature element of a combination rate-of-rise/fixed-temperature element detector.*
(b)	*Fixed-temperature, nonrestorable line type*	*Heat test shall not be performed. Functionality shall be tested mechanically and electrically. Loop resistance shall be measured and recorded. Changes from acceptance test shall be investigated.*
(c)	*Fixed-temperature, nonrestorable spot type*	*After 15 years from initial installation, all devices shall be replaced or two detectors per 100 shall be laboratory tested. The two detectors shall be replaced with new devices. If a failure occurs on any of the detectors removed, additional detectors shall be removed and tested to determine either a general problem involving faulty detectors or a localized problem involving one or two defective detectors. If detectors are tested instead of replaced, tests shall be repeated at intervals of 5 years.*
(d)	*Nonrestorable (general)*	*Heat tests shall not be performed. Functionality shall be tested mechanically and electrically.*
(e)	*Restorable line type, pneumatic tube only*	*Heat tests shall be performed (where test chambers are in circuit) or a test with pressure pump shall be conducted.*
(f)	*Single- and multiple-station heat alarms*	*Functional tests shall be conducted according to manufacturer's instructions. Nonrestorable heat detectors shall not be tested with heat.*

8.	**Initiation Devices – Fire Alarm Boxes**	**Testing**	**Annually**	**Form PA 4106**

Manual fire alarm boxes shall be operated per the manufacturer's instructions. Key-operated presignal and general alarm manual fire alarm boxes shall both be tested.

9.	**Initiation Devices – Radiant Energy Fire Detectors**	**Testing**	**Semi-Annually**	**Form PA 4105**

Flame detectors and spark/ember detectors shall be tested in accordance with the manufacturer's instructions to determine that each detector is operative. Flame detector and spark/ember detector sensitivity shall be determined using any of the following:

(1) Calibrated test method
(2) Manufacturer's calibrated sensitivity test instrument
(3) Listed control unit arranged for the purpose
(4) Other approved calibrated sensitivity test method that is directly proportional to the input signal from a fire, consistent with the detector listing or approval.

If designed to be field adjustable, detectors found to be outside of the approved range of sensitivity shall be replaced or adjusted to bring them into the approved range.

Flame detector and spark/ember detector sensitivity shall not be determined using a light source that administers an unmeasured quantity of radiation at an undefined distance from the detector.

10.	**Initiation Devices Supervisory**	**Testing**	**Quarterly**	**Form PA 4104**

(a)	*High- or low-air pressure switch*	*Switch shall be operated. Receipt of signal obtained where the required pressure is increased or decreased a maximum 70 kPa (10 psi) from the required pressure level shall be verified.*
(b)	*Room temperature switch*	*Switch shall be operated. Receipt of signal to indicate the decrease in room temperature to 4.4°C (40°F) and its restoration to above 4.4°C (40°F) shall be verified.*
(c)	*Water level switch*	*Switch shall be operated. Receipt of signal indicating the water level raised or lowered 76.2 mm (3 in.) from the required level within a pressure tank, or 305 mm (12 in.) from the required level of a nonpressure tank, shall be verified, as shall its restoral to required level.*

(d)	*Water temperature switch*	*Switch shall be operated. Receipt of signal to indicate the decrease in water temperature to 4.4°C (40°F) and its restoration to above 4.4°C (40°F) shall be verified.*

11.	**Initiation Devices Supervisory**	**Testing**	**Semi-Annually**	**Form PA 4105**

(a)	*Control valve switch*	*Valve shall be operated and signal receipt shall be verified to be within the first two revolutions of the hand wheel or within one-fifth of the travel distance, or per the manufacturer's specifications.*
(b)	*Mechanical, electrosonic, or pressure-type waterflow device*	*Water shall be flowed through an inspector's test connection indicating the flow of water equal to that from a single sprinkler of the smallest orifice size installed in the system for wet-pipe systems, or an alarm test bypass connection for dry-pipe, pre-action, or deluge systems in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.*

12.	**Emergency Voice/Alarm Communications Equipment**	**Inspection**	**Semi-Annually**	**Form PA 4102**

Two-way communications include all systems that responders or occupants may use in the event of an emergency

1028.11	Communication systems for areas of refuge,
907.2.12.3	Fire Department Communication Systems
403.12.1	Stairway Communications Systems

13.	**Emergency Voice/Alarm Communications Equipment**	**Testing**	**Annually**	**Form PA 4106**

(a)	*Amplifier/tone generators*	*Correct switching and operation of backup equipment shall be verified.*
(b)	*Call-in signal silence*	*Function shall be operated and receipt of correct visual and audible signals at control panel shall be verified.*
(c)	*Off-hook indicator (ring down)*	*Phone set shall be installed or phone shall be removed from hook and receipt of signal at control panel shall be verified.*

(d)	*Phone jacks*	*Phone jack shall be visually inspected and communications path through jack shall be initiated.*
(e)	*Phone set*	*Each phone set shall be activated and correct operation shall be verified.*
(f)	*System performance*	*System shall be operated with a minimum of any five handsets simultaneously. Voice quality and clarity shall be verified.*

14.	**Special Procedures**	**Inspection**	**Semi-Annually**	**Form PA 4103**

15.	**Special Procedures**	**Testing**	**Annually**	**Form PA 4107**

(a)	*Alarm verification*	*Time delay and alarm response for smoke detector circuits identified as having alarm verification shall be verified.*
(b)	*Multiplex systems*	*Communications between sending and receiving units under both primary and secondary power shall be verified.* *Communications between sending and receiving units under open circuit and short circuit trouble conditions shall be verified.* *Communications between sending and receiving units in all directions where multiple communications pathways are provided shall be verified.* *If redundant central control equipment is provided, switchover and all required functions and operations of secondary control equipment shall be verified.* *All system functions and features shall be verified in accordance with manufacturer's instructions.*

16.	**Special Hazard Equipment**	**Testing**	**Annually**	**Form PA 4107**

(a)	*Abort switch (IRI type)*	*Abort switch shall be operated. Correct sequence and operation shall be verified.*
(b)	*Abort switch (recycle type)*	*Abort switch shall be operated. Development of correct matrix with each sensor operated shall be verified.*

(c)	*Abort switch (special type)*	*Abort switch shall be operated. Correct sequence and operation in accordance with authority having jurisdiction shall be verified. Sequencing on as-built drawings or in owner's manual shall be observed.*
(d)	*Cross zone detection circuit*	*One sensor or detector on each zone shall be operated. Occurrence of correct sequence with operation of first zone and then with operation of second zone shall be verified.*
(e)	*Matrix-type circuit*	*All sensors in system shall be operated. Development of correct matrix with each sensor operated shall be verified.*
(f)	*Release solenoid circuit*	*Solenoid shall be used with equal current requirements. Operation of solenoid shall be verified.*
(g)	*Squibb release circuit*	*AGI flashbulb or other test light approved by the manufacturer shall be used. Operation of flashbulb or light shall be verified.*
(h)	*Verified, sequential, or counting zone circuit*	*Required sensors at a minimum of four locations in circuit shall be operated. Correct sequence with both the first and second detector in alarm shall be verified.*
(i)	*All above devices or circuits or combinations thereof*	*Supervision of circuits shall be verified by creating an open circuit.*

D. BATTERIES – FIRE ALARM SYSTEMS

GENERAL INFORMATION

(a)	*Visual inspection*	*Batteries shall be inspected for corrosion or leakage. Tightness of connections shall be checked and ensured. If necessary, battery terminals or connections shall be cleaned and coated. Electrolyte level in lead-acid batteries shall be visually inspected.*
(b)	*Battery replacement*	*Batteries shall be replaced in accordance with the recommendations of the alarm equipment manufacturer or when the recharged battery voltage or current falls below the manufacturer's recommendations.*
(c)	*Charger test*	*Operation of battery charger shall be checked in accordance with charger test for the specific type of battery.*

(d) Discharge test

With the battery charger disconnected, the batteries shall be load tested following the manufacturer's recommendations. The voltage level shall not fall below the levels specified.

Exception: An artificial load equal to the full fire alarm load connected to the battery shall be permitted to be used in conducting this test.

(e) Load voltage test

With the battery charger disconnected, the terminal voltage shall be measured while supplying the maximum load required by its application. The voltage level shall not fall below the levels specified for the specific type of battery. If the voltage falls below the level specified, corrective action shall be taken and the batteries shall be retested.

Exception: An artificial load equal to the full fire alarm load connected to the battery shall be permitted to be used in conducting this test.

1.	Batteries	Inspection	Monthly	Form PA 4101

Lead-acid Type

Primary Type (Dry Cell)

2.	Batteries	Inspection	Semi-Annually	Form PA 4102

Nickel-Cadmium Type

Sealed-lead Acid Type

3.	Batteries (Lead-acid Type)	Testing	Semi-Annually	Form PA 4105

1. Discharge test (30 minutes)

2. Load voltage test

Under load, the battery shall not fall below 2.05 volts per cell.

3.	*Specific gravity*	*The specific gravity of the liquid in the pilot cell or all of the cells shall be measured as required. The specific gravity shall be within the range specified by the manufacturer. Although the specified specific gravity varies from manufacturer to manufacturer, a range of 1.205–1.220 is typical for regular lead-acid batteries, while 1.240–1.260 is typical for high-performance batteries. A hydrometer that shows only a pass or fail condition of the battery and does not indicate the specific gravity shall not be used, because such a reading does not give a true indication of the battery condition.*

4.	**Batteries (Lead-acid Type)**	**Testing**	**Annually**	**Form PA 4106**

1.	*Charger test (replace battery as needed.)*	*With the batteries fully charged and connected to the charger, the voltage across the batteries shall be measured with a voltmeter. The voltage shall be 2.30 volts per cell ±0.02 volts at 25°C (77°F) or as specified by the equipment manufacturer.*

5.	**Batteries (Nickel-Cadmium type)**	**Testing**	**Semi-Annually**	**Form PA 4105**

1.	*Load voltage test*	*Under load, the float voltage for the entire battery shall be 1.42 volts per cell, nominal. If possible, cells shall be measured individually.*

6.	**Batteries (Nickel-Cadmium type)**	**Testing**	**Annually**	**Form PA 4106**

1.	*Charger test (replace battery as needed.)*	*With the batteries fully charged and connected to the charger, an ampere meter shall be placed in series with the battery under charge. The charging current shall be in accordance with the manufacturer's recommendations for the type of battery used. In the absence of specific information, 1 30 to 1 25 of the battery rating shall be used.*
2.	*Discharge test (30 minutes)*	

7.	**Batteries (Primary type – dry cell)**	**Testing**	**Monthly**	**Form PA 4104**

1.	*Load voltage test*	*The maximum load for a No. 6 primary battery shall not be more than 2 amperes per cell. An individual (1.5-volt) cell shall be replaced when a load of 1 ohm reduces the voltage below 1 volt. A 6-volt assembly shall be replaced when a test load of 4 ohms reduces the voltage below 4 volts.*

8.	**Batteries (Sealed lead-acid type)**	**Testing**	**Semi-Annually**	**Form PA 4105**

1.	*Load voltage test*	*Under load, the battery shall perform in accordance with the battery manufacturer's specifications.*

9.	**Batteries (Sealed lead-acid type)**	**Testing**	**Annually**	**Form PA 4106**

1.	*Charger test (replace battery within 5 years after manufacture or more frequently as needed.)*	*With the batteries fully charged and connected to the charger, the voltage across the batteries shall be measured with a voltmeter. The voltage shall be 2.30 volts per cell ±0.02 volts at 25°C (77°F) or as specified by the equipment manufacturer.*
2.	*Discharge test (30 minutes)*	

E. CONTROL EQUIPMENT

1.	**Control Equipment: Fire Alarm Systems Un-Monitored for Alarm, Supervisory, and Trouble Signals**	**Inspection**	**Weekly**	**Form PA 4100**

(a) Fuses
(b) Interfaced equipment
(c) Lamps and LEDs
(d) Primary (main) power supply

2.	**Control Equipment: Fire Alarm Systems Monitored for Alarm, Supervisory, and Trouble Signals**	**Inspection**	**Annually**	**Form PA 4108**

(a) Fuses
(b) Interfaced equipment
(c) Lamps and LEDs
(d) Primary (main) power supply

3.	**Control Equipment (Not Connected to a Supervising Station)**	**Testing**	**Quarterly**	**Form PA 4104**

(a)	*Functions*	*At a minimum, control equipment shall be tested to verify correct receipt of alarm, supervisory, and trouble signals (inputs), operation of evacuation signals and auxiliary functions (outputs), circuit supervision including detection of open circuits and ground faults, and power supply supervision for detection of loss of ac power and disconnection of secondary batteries.*
(b)	*Fuses*	*The rating and supervision shall be verified.*
(c)	*Interfaced equipment*	*Integrity of single or multiple circuits providing interface between two or more control panels shall be verified. Interfaced equipment connections shall be tested by operating or simulating operation of the equipment being supervised. Signals required to be transmitted shall be verified at the control panel.*
(d)	*Lamps and LEDs*	*Lamps and LEDs shall be illuminated.*
(e)	*Primary (main) power supply*	*All secondary (standby) power shall be disconnected and tested under maximum load, including all alarm appliances requiring simultaneous operation. All secondary (standby) power shall be reconnected at end of test. For redundant power supplies, each shall be tested separately.*
(f)	*Transponders*	

4.	**Control Equipment (Connected to a Supervising Station)**	**Testing**	**Annually**	**Form PA 4106**

(a)	*Functions*	*At a minimum, control equipment shall be tested to verify correct receipt of alarm, supervisory, and trouble signals (inputs), operation of evacuation signals and auxiliary functions (outputs), circuit supervision including detection of open circuits and ground faults, and power supply supervision for detection of loss of ac power and disconnection of secondary batteries.*
(b)	*Fuses*	*The rating and supervision shall be verified.*
(c)	*Interfaced equipment*	*Integrity of single or multiple circuits providing interface between two or more control panels shall be verified. Interfaced equipment connections shall be tested by operating or simulating operation of the equipment being supervised. Signals required to be transmitted shall be verified at the control panel.*
(d)	*Lamps and LEDs*	*Lamps and LEDs shall be illuminated.*
(e)	*Primary (main) power supply*	*All secondary (standby) power shall be disconnected and tested under maximum load, including all alarm appliances requiring simultaneous operation. All secondary (standby) power shall be reconnected at end of test. For redundant power supplies, each shall be tested separately.*
(f)	*Transponders*	

5.	**Control Unit Trouble Signals**	**Inspection**	**Weekly**	**Form PA 4100**

6.	**Control Unit Trouble Signals**	**Testing**	**Annually**	**Form PA 4106**

(a)	*Audible and visual*	*Operation of panel trouble signals shall be verified as well as ring-back feature for systems using a trouble-silencing switch that requires resetting.*
(b)	*Disconnect switches*	*If control unit has disconnect or isolating switches, performance of intended function of each switch shall be verified and receipt of trouble signal when a supervised function is disconnected shall also be verified.*
(c)	*Ground-fault monitoring circuit*	*If the system has a ground detection feature, the occurrence of ground-fault indication shall be verified whenever any installation conductor is grounded.*
(d)	*Transmission of signals to off-premises location*	*An initiating device shall be actuated and receipt of alarm signal at the off-premises location shall be verified. A trouble condition shall be created and receipt of a trouble signal at the off-premises location shall be verified. A supervisory device shall be actuated and receipt of a supervisory signal at the off-premises location shall be verified. If a transmission carrier is capable of operation under a single- or multiple-fault condition, an initiating device shall be activated during such fault condition and receipt of a trouble signal at the off-premises location shall be verified, in addition to the alarm signal.*

7.	**Remote Annunciators**	**Inspection**	**Semi-Annually**	**Form PA 4102**

8.	**Remote Annunciators**	**Testing**	**Annually**	**Form PA 4106**

Remote Annunciators	*The correct operation and identification of annunciators shall be verified. If provided, the correct operation of annunciator under a fault condition shall be verified.*

9.	**Interface Equipment**	**Inspection**	**Semi-Annually**	**Form PA 4102**

10.	**Interface Equipment**	**Testing**	**Annually**	**Form PA 4107**

Interface Equipment

Interface equipment connections shall be tested by operating or simulating the equipment being supervised. Signals required to be transmitted shall be verified at the control panel. Test frequency for interface equipment shall be the same as the frequency required by the applicable NFPA standard(s) for the equipment being supervised.

11.	**Fiber-Optic Cable Connections**	**Inspection**	**Annually**	**Form PA 4108**

12.	**Fiber-Optic Cable Power**	**Testing**	**Annually**	**Form PA 4106**

Fiber optics

The fiber-optic transmission line shall be tested in accordance with the manufacturer's instructions by the use of an optical power meter or by an optical time domain reflectometer used to measure the relative power loss of the line. This relative figure for each fiber-optic line shall be recorded in the fire alarm control panel. If the power level drops 2 percent or more from the value recorded during the initial acceptance test, the transmission line, section thereof, or connectors shall be repaired or replaced by a qualified technician to bring the line back into compliance with the accepted transmission level per the manufacturer's recommendations.

13.	**Off-Premises Transmission Equipment**	**Testing**	**Quarterly**	**Form PA 4104**

6.12.1 *Systems requiring transmission of signals to continuously attended locations providing supervising station service (e.g., central station, proprietary supervising station, remote supervising station) shall also comply with the applicable requirements of Chapter 8.*

6.12.2 *Relays or modules providing transmission of trouble signals to a supervising station shall be arranged to provide fail-safe operation.*

6.12.3 *Means provided to transmit trouble signals to supervising stations shall be arranged so as to transmit a trouble signal to the supervising station for any trouble condition received at the protected premises control unit, including loss of primary or secondary power.*

14.	**Supervising Station Fire Alarm Systems – Transmitters**	**Inspection**	**Semi-Annually**	**Form PA 4103**

(a) DACT
(b) DART
(c) McCulloh
(d) RAT

15.	**Supervising Station Fire Alarm Systems — Transmission Equipment**	**Testing**	**Annually**	**Form PA 4107**

(a) All equipment

Test shall be performed on all system functions and features in accordance with the equipment manufacturer's instructions.

Initiating device shall be actuated. Receipt of the correct initiating device signal at the supervising station within 90 seconds shall be verified. Upon completion of the test, the system shall be restored to its functional operating condition.

If test jacks are used, the first and last tests shall be made without the use of the test jack.

(b) Digital alarm communicator transmitter (DACT)

Connection of the DACT to two separate means of transmission shall be ensured.

Exception: DACTs that are connected to a telephone line (number) that is also supervised for adverse conditions by a derived local channel.

DACT shall be tested for line seizure capability by initiating a signal while using the primary line for a telephone call. Receipt of the correct signal at the supervising station shall be verified. Completion of the transmission attempt within 90 seconds from going off-hook to on-hook shall be verified.

The primary line from the DACT shall be disconnected. Indication of the DACT trouble signal at the premises shall be verified as well as transmission to the supervising station within 4 minutes of detection of the fault.

The secondary means of transmission from the DACT shall be disconnected. Indication of the DACT trouble signal at the premises shall be verified as

		well as transmission to the supervising station within 4 minutes of detection of the fault. *The DACT shall be caused to transmit a signal to the DACR while a fault in the primary telephone number is simulated. Utilization of the secondary telephone number by the DACT to complete the transmission to the DACR shall be verified.*
	(c) Digital alarm radio transmitter (DART)	*The primary telephone line shall be disconnected. Transmission of a trouble signal to the supervising station by the DART within 4 minutes shall be verified.*
	(d) McCulloh transmitter	*Initiating device shall be actuated. Production of not less than three complete rounds of not less than three signal impulses each by the McCulloh transmitter shall be verified.* *If end-to-end metallic continuity is present and with a balanced circuit, each of the following four transmission channel fault conditions shall be caused in turn, and receipt of correct signals at the supervising station shall be verified:* *(1) Open* *(2) Ground* *(3) Wire-to-wire short* *(4) Open and ground* *If end-to-end metallic continuity is not present and with a properly balanced circuit, each of the following three transmission channel fault conditions shall be caused in turn, and receipt of correct signals at the supervising station shall be verified:* *(1) Open* *(2) Ground* *(3) Wire-to-wire short*
	(e) Radio alarm transmitter (RAT)	*A fault between elements of the transmitting equipment shall be caused. Indication of the fault at the protected premises shall be verified or it shall be verified that a trouble signal is transmitted to the supervising station.*
16. Supervising Station Fire Alarm Systems — Receivers	**Inspection**	**Monthly**	**Form PA 4104**
*(a) DACR**			

**Reports of automatic signal receipt shall be verified daily.*

17.	**Supervising Station Fire Alarm Systems — Receivers**	**Inspection**	**Semi-Annually**	**Form PA 4103**

*(b) DARR**
*(c) McCulloh systems**
*(d) Two-way RF multiplex**
*(e) RASSR**
*(f) RARS**
*(g) Private microwave**

**Reports of automatic signal receipt shall be verified daily.*

18.	**Supervising Station Fire Alarm Systems — Receiving Equipment**	**Testing**	**Monthly**	**Form PA 4107**

(a) All equipment

Tests shall be performed on all system functions and features in accordance with the equipment manufacturer's instructions for correct operation in conformance with the applicable sections of ***Chapter 8 – NFPA 72 (2002).***

Initiating device shall be actuated. Receipt of the correct initiating device signal at the supervising station within 90 seconds shall be verified. Upon completion of the test, the system shall be restored to its functional operating condition.

If test jacks are used, the first and last tests shall be made without the use of the test jack.

(b) Digital alarm communicator receiver (DACR)

Each telephone line (number) shall be disconnected in turn from the DACR and audible and visual annunciation of a trouble signal in the supervising station shall be verified.

A signal shall be caused to be transmitted on each individual incoming DACR line at least once every 24 hours. Receipt of these signals shall be verified.

(c) Digital alarm radio

The following conditions of all DARRs on all subsidiary receiver (DARR) and repeater station receiving equipment shall be caused. Receipt at the supervising station of correct signals for each of the following conditions shall be verified:

(1) AC power failure of the radio equipment
(2) Receiver malfunction
(3) Antenna and interconnecting cable failure

		(4) Indication of automatic switchover of the DARR *(5) Data transmission line failure between the DARR and the supervising or subsidiary station*
(d)	*McCulloh systems*	*The current on each circuit at each supervising and subsidiary station under the following conditions shall be tested and recorded:* *(1) During functional operation* *(2) On each side of the circuit with the receiving equipment conditioned for an open circuit* *A single break or ground condition shall be caused on each transmission channel. If such a fault prevents the functioning of the circuit, receipt of a trouble signal shall be verified.* *Each of the following conditions at each of the supervising or subsidiary stations and all repeater station radio transmitting and receiving equipment shall be caused; receipt of correct signals at the supervising station shall be verified:* *(1) RF transmitter in use (radiating)* *(2) AC power failure supplying the radio equipment* *(3) RF receiver malfunction* *(4) Indication of automatic switchover*
(e)	*Radio alarm supervising station receiver (RASSR) and radio alarm repeater station receiver (RARSR)*	*Each of the following conditions at each of the supervising or subsidiary stations and all repeater station radio transmitting and receiving equipment shall be caused; receipt of correct signals at the supervising station shall be verified:* *(1) AC power failure supplying the radio equipment* *(2) RF receiver malfunction* *(3) Indication of automatic switchover, if applicable*
(f)	*Private microwave radio systems*	*Each of the following conditions at each of the supervising or subsidiary stations and all repeater station radio transmitting and receiving equipment shall be caused; receipt of correct signals at the supervising station shall be verified:* *(1) RF transmitter in use (radiating)* *(2) AC power failure supplying the radio equipment* *(3) RF receiver malfunction* *(4) Indication of automatic switchover*

19.	**Low-Power Radio – Wireless Systems**	**Inspection**	**Monthly**	**Form PA 4101**
	(1)	*Batteries for all components in the system shall be checked monthly. If the control panel checks all batteries and all components daily, the system shall not require monthly testing of the batteries.*		
20.	**Low-Power Radio – Wireless Systems**	**Testing**	**Annually**	**Form PA 4107**
		The following procedures describe additional acceptance and reacceptance test methods to verify wireless protection system operation:		
	(1)	*The manufacturer's manual and the as-built drawings provided by the system supplier shall be used to verify correct operation after the initial testing phase has been performed by the supplier or by the supplier's designated representative.*		
	(2)	*Starting from the functional operating condition, the system shall be initialized in accordance with the manufacturer's manual. A test shall be conducted to verify the alternative path, or paths, by turning off or disconnecting the primary wireless repeater. The alternative communications path shall exist between the wireless control panel and peripheral devices used to establish initiation, indication, control, and annunciation. The system shall be tested for both alarm and trouble conditions.*		

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - GENERAL INFORMATION - FIRE ALARM CONTROL PANELS

PA 4097 / 02-12

Original Installation Date:	**U.E.I. (Unique Element Identification) :**

Date: _____ **Building ID:** _____ **FACP ID:** _____

Fire Alarm Panels

Fire Alarm Panel - Make/Model/Manufacturer: _____

Fire Alarm Panel – Location: _____

Signals Transmitted to: _____

Emergency Power provided by: _____

Identify Number and Location of SubPanels, Nodes, DGPs, Annunciator panels, Smoke Management panels, Fire Suppression Releasing panels, etc., connected to this fire alarm panel. Provide unique identifier for each. Use reverse side of form if necessary.

_____

_____

Alarm Notification Devices

Total number of Audible Notification Devices: _____

Total number of Visual Notification Devices: _____

Alarm Initiating Devices

Total number of Smoke Detection Devices: _____

Total number of Heat Detection Devices: _____

Total number of Manual Pull Stations: _____

Number of Water Flow Alarm Signals: _____

Number of Tamper Switch signals: _____

Number of Supervisory Signals: _____

Number/Description of Other Alarm Initiating Devices: _____

_____

Special Functions

Smoke Purge / Smoke Management Systems	☐ Yes	☐ No
Releasing Devices i.e. Electromagnetic Locks, Electric Strike Locks, Door Hold Open Devices, etc.	☐ Yes	☐ No
Emergency Voice/Alarm Communications Systems	☐ Yes	☐ No
Fire Suppression System Activation i.e., FM200 systems, Deluge Sprinkler Systems, Dry Chemical Extinguishing Systems, etc.	☐ Yes	☐ No

Other Fire Alarm System Special Functions: _____

_____

Notes: _____

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - GENERAL INFORMATION - ALARM INITIATING DEVICES

PA 4098 / 02-12

Date: _____ **Building ID:** _____ **FACP ID:** _____

Total Number of Alarm Initiating Devices: _____

1. Device Identification - Provide unique identifier for each Alarm Initiating Device
2. Provide location of Alarm Initiating Device
3. Identify Type of Alarm Initiating Device i.e., Smoke Detector, Manual Pull Station, Sprinkler Water Flow Alarm, Clean Agent Discharge, etc.
4. Provide Date Alarm Initiating Device was installed.
5. Provide any other information in Notes.

Device ID U.E.I.	Location	Type of Alarm Initiating Device	Date Installed	Notes

FIRE DETECTION AND ALARM SYSTEMS - GENERAL INFORMATION - ALARM NOTIFICATION DEVICES

PA 4099 / 02-12

Date: _____ **Building ID:** _____ **FACP ID:** _____

Total Number of Alarm Notification Devices: _____

1. Device Identification - Provide unique identifier for each Alarm Notification Device
2. Provide location of Alarm Notification Device
3. Identify Type of Alarm Notification Device i.e., Horn, Bell, Horn/Strobe, Strobe, Voice Speaker
4. Provide Date Alarm Notification Device was installed.
5. Provide any other information in Notes.

Device ID U.E.I.	Location	Type of Alarm Notification Device	Date Installed	Notes

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - WEEKLY INSPECTION

PA 4100 / 02-12

Building ID: _____ **FACP ID:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Date:													
Inspector													
Control Equipment for Fire Alarm Systems Unmonitored for Alarm, Supervisory, and Trouble Signals.													
Fuses													
Interface Equipment													
Lamps and LEDs													
Primary (Main) Power Supply													
Control Panel Trouble Signal													

Notes: _____

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - MONTHLY / QUARTERLY INSPECTIONS

PA 4101 / 02-12

Building ID: _____ **FACP ID:** _____

Y = Satisfactory **N** = Unsatisfactory (explain on reverse) **N/A** = Not applicable

Monthly Inspection

Date:												
Inspector:												
Engine driven generator facility & alarm systems:												
Lead-acid battery:												
Dry-cell primary battery:												
Low-Power Radio – Wireless Systems:												
DACR - Receiver(s):												

Quarterly Inspection

Date:												
Inspector:												
Radiant energy fire detectors:												
Supervisory signal devices:												
Waterflow devices:												

Notes: _____

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - SEMI-ANNUAL INSPECTION (Page 1 of 2) PA 4102 / 02-12

Building ID: _____ **ACP ID:** _____

Identify the Number of Devices or Systems inspected and specify device or system information on the reverse side of this form.

Date:		
Inspector:		
Nickel-Cadmium Batteries Inspected		
Sealed Lead-Acid Batteries Inspected		
Transient suppressors		
Control panel trouble signals		
Emergency Voice/Alarm Communications Equipment Inspected		
Number of Remote Annunciators Inspected		
Air-sampling initiating devices		
Number of Duct Smoke Detectors Inspected		
Number of Electromechanical Releasing Devices Inspected		
Number of Fire Extinguishing System Switches Inspected		
Number of Fire Suppression System Switches Inspected		
Number of Fire alarm boxes (manual stations) Inspected		
Number of Heat Detectors Inspected		
Number of Smoke Detectors Inspected		
Interface Equipment Inspected		
Number of Alarm Notification Appliances Inspected		

Notes: _____

FIRE DETECTION AND ALARM SYSTEMS - SEMI-ANNUAL INSPECTION (Page 2 of 2) PA 4102 / 02-12

Building ID: _____ **FACP ID:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Date		
Inspector		
Supervising Station FA Systems - Transmitters		
DACT		
DART		
McCulloh		
RAT - Signal Receipt		
Supervising Station FA Systems - Receivers		
DACR		
DARR		
McCulloh		
Two-way RF		
RASSR		
RARSR		
Private Microwave		

Notes (Including Description for Inspection of Special Procedures): _____

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - MONTHLY/QUARTERLY TESTS

PA 4104 / 02-12

Building ID: _____ **FACP ID:** _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Monthly Test												
Date:												
Inspector:												
Load voltage for dry-cell batteries:												
Monthly Test - Supervising Station FA System - Receivers												
Receivers - All Equipment:												
DACR:												
DARR:												
McCulloh System:												
Two-way RF Multiplex:												
RASSR:												
RARSR:												
Private Microwave:												
Quarterly Test (for Fire Alarm Systems having Unmonitored Signals)												
Date:												
Inspector:												
Functions:												
Fuses:												
Interfaced equipment:												
Lamps and LEDs:												
Primary (main) power supply:												
Transponders:												
Supervisory signal devices except tamper switches:												
Off-premises transmission equipment:												

Notes: _____

Continue on reverse if necessary

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - SEMI-ANNUAL TEST

PA 4105 / 02-12

Building ID: _____ **FACP ID** _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Date		
Inspector		
Lead-acid battery discharge test		
Lead-acid battery load voltage test		
Lead-acid battery specific gravity		
Nickel-cadmium battery load voltage test		
Sealed lead-acid battery load voltage test		
Radiant Energy Fire Detectors		
Control Valve Tamper Switches		
Waterflow Devices		

Notes: _____

FIRE DETECTION AND ALARM SYSTEMS - ANNUAL TEST (Page 1 of 2) PA 4106 / 02-12

Date: _____ **Building ID:** _____ **FACP ID:** _____

Inspector: _____

	Yes	No	N/A
Control Equipment: Fire Alarm Systems Monitored for Alarm, Supervisory, and Trouble Signals			
Functions			
Fuses			
Interfaced Equipment			
Lamps and LEDs			
Primary (main) power supply			
Transponders			
Batteries—Fire Alarm Systems			
Lead-Acid Type — Charger Test (Replace battery as needed.)			
Nickel-Cadmium Type — Charger Test (Replace battery as needed.)			
Nickel-Cadmium Type — Discharge Test (30 min)			
Sealed Lead-Acid Type — Charger Test (Replace battery every 4 years.)			
Sealed Lead-Acid Type — Discharge Test (30 min)			
Other			
Fiber-Optic Cable Power			
Control Unit Trouble Signals			
Emergency Voice-Alarm Communications Equipment			
Remote Annunciators			
Initiating Devices			
Duct smoke detectors			
Electromechanical releasing device			
Fire extinguishing system(s) or suppression system(s) switches			
Fire-gas and other detectors			
Heat detectors			
Fire alarm boxes (manual stations)			
All smoke detectors—functional			
Smoke detectors—sensitivity			

FIRE DETECTION AND ALARM SYSTEMS - ANNUAL TEST (Page 2 of 2) PA 4106 / 02-12

Date: _____ **Building ID:** _____ **FACP ID:** _____

Inspector: _____

	Yes	No	N/A
Interface Equipment			
Special Hazard Equipment			
Alarm Notification Appliances			
Audible devices			
Speakers			
Visible devices			
Supervising Station FA Systems - Transmitters			
Transmitters - All Equipment			
DACT			
DART			
McCulloh			
RAT			
Supervising Station FA Systems - Receivers			
DACR			
DARR			
McCulloh			
RASSR			
RARSR			
Private Microwave			
Low-Power Radio – Wireless Systems			

Notes (Including Description for Tests of Special Procedures): _____

THE PORT AUTHORITY OF NY & NJ

FIRE DETECTION AND ALARM SYSTEMS - ANNUAL INSPECTION

PA 4108 / 02-12

Date: _____ **Building ID:** _____ **FACP ID:** _____

Location: _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not applicable

Date	
Inspector	
Monitored FA System Control Equipment	
Fuses	
Interface equipment	
Lamp & LEDs	
Primary (main) power supply	
Fiber Optic Cable Connection	

Notes: _____

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STANDARD CONTRACT TERMS AND CONDITIONS

PART I GENERAL DEFINITIONS

To avoid undue repetition, the following terms, as used in this Agreement, shall be construed as follows:

Authority or Port Authority - shall mean the Port Authority of New York and New Jersey.

Contract, Document or Agreement - shall mean the writings setting forth the scope, terms, conditions and Specifications for the procurement of Goods and/or Services, as defined hereunder and shall include, but not be limited to: Invitation for Bid (IFB), Request for Quotation (RFQ), Request for Proposal (RFP), Purchase Order (PO), Cover Sheet, executed Signature Sheet, AND PRICING SHEETS with Contract prices inserted," "STANDARD CONTRACT TERMS AND CONDITIONS," and, if included, attachments, endorsements, schedules, exhibits, or drawings, the Authority's acceptance and any written addenda issued over the name of the Assistant Director, Commodities and Services Division, Procurement Department..

Days or Calendar Days - shall mean consecutive calendar days, Saturdays, Sundays, and holidays, included.

Week - unless otherwise specified, shall mean seven (7) consecutive calendar days, Saturdays, Sundays, and holidays.

Month - unless otherwise specified, shall mean a calendar month.

Director - shall mean the Director of the Department which operates the facility of the Port Authority at which the services hereunder are to be performed, for the time being, or his/her successor in duties for the purpose of this Contract, or one of his/her authorized representatives for the purpose of this Contract.

Manager - shall mean the Manager of the Facility for the time being, or his successor in duties for the purpose of this Contract, or his duly authorized representative for the purpose of this Contract.

No person shall be deemed a representative of the Director or Manager except to the extent specifically authorized in an express written notice to the Contractor signed by the Director or Manager, as the case may be. Further, no person shall be deemed a successor in duties of the Director unless the Contractor is so notified in writing signed by the Assistant Director, Commodities & Services Division, Procurement Department. No person shall be deemed a successor in duties of the Manager unless the Contractor is so notified in a writing signed by the Director.

Minority Business Enterprise (MBE) - shall mean a business entity which is at least 51% owned and controlled by one or more members of one or more minority groups, or, in the case of a publicly held corporation, at least 51% of the stock of which is owned by one or more minority groups, and whose management and daily business operations are controlled by one or more such individuals who are citizens or permanent resident aliens.

"Minority Group" means any of the following racial or ethnic groups:

(a) Black persons having origins in any of the Black African racial groups not of Hispanic origin;

(b) Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race;

(c) Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands;

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

Site of the Work - or words of similar import shall mean the Facility and all buildings and properties associated therewith as described in this Contract.

Small Business Enterprise (SBE) - The criteria for a Small Business Enterprise are:

- The principal place of business must be located in New York or New Jersey;
- The firm must have been in business for at least three years with activity;
- Average gross income limitations by industry as established by the Port Authority.

Subcontractor - shall mean anyone who performs work (other than or in addition to the furnishing of materials, plant or equipment) in connection with the services to be provided hereunder, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of contract with the Contractor), but shall not include any person who furnished merely his own personal labor or his own personal services. "Subcontractor", however, shall exclude the Contractor or any subsidiary or parent of the Contractor or any person, firm or corporation which has a substantial interest in the Contractor or in which the Contractor or the parent or the subsidiary of the Contractor, or an officer or principal of the Contractor or of the parent of the subsidiary of the Contractor has a substantial interest, provided, however, that for the purpose of the clause hereof entitled "Assignments and Subcontracts" the exclusion in this paragraph shall not apply to anyone but the Contractor itself.

Women-Owned Business Enterprise (WBE) - shall mean a business enterprise which is at least 51% owned by one or more women, or, in the case of a publicly held corporation, at least 51% of the stock of which is owned by one or more women and whose management and daily business operations are controlled by one or more women who are citizens or permanent or resident aliens.

Work - shall mean all services, equipment and materials (including materials and equipment, if any, furnished by the Authority) and other facilities and all other things necessary or proper for, or incidental to the services to be performed or goods to be furnished in connection with the service to be provided hereunder.

PART II GENERAL PROVISIONS

1. Facility Rules and Regulations of The Port Authority

a. The Contractor shall observe and obey (and compel its officers, employees, guests, invitees, and those doing business with it, to observe and obey) the facility 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 term of this Agreement be promulgated by the Port Authority for reasons of safety, health, preservation of property or maintenance of a good and orderly appearance and efficient operation of the Facility. The Port Authority agrees that, except in case of emergency, it shall give notice to the Contractor of every Rule and Regulation hereafter adopted by it at least five days before the Contractor shall be required to comply therewith.

b. A copy of the facility Rules and Regulations of the Port Authority shall be available for review by the Contractor at the Office of the Secretary of the Port Authority.

2. Contractor Not An Agent

This Agreement does not constitute the Contractor the agent or representative of the Port Authority for any purpose whatsoever except as may be specifically provided in this Agreement. It is hereby specifically acknowledged and understood that the Contractor, in performing its services hereunder, is and shall be at all

times an independent Contractor and the officers, agents and employees of the Contractor shall not be or be deemed to be agents, servants or employees of the Port Authority.

3. Contractor's Warranties

The Contractor represents and warrants:

a. That it is financially solvent, that it is experienced in and competent to perform the requirements of this Contract, that the facts stated or shown in any papers submitted or referred to in connection with the solicitation are true, and, if the Contractor be a corporation, that it is authorized to perform this Contract;
b. That it has carefully examined and analyzed the provisions and requirements of this Contract, and that from its own investigations it has satisfied itself as to the nature of all things needed for the performance of this Contract, the general and local conditions and all other matters which in any way affect this Contract or its performance, and that the time available to it for such examination, analysis, inspection and investigation was adequate;
c. That the Contract is feasible of performance in accordance with all its provisions and requirements and that it can and will perform it in strict accordance with such provisions and requirements;
d. That no Commissioner, officer, agent or employee of the Port Authority is personally interested directly or indirectly in this Contract or the compensation to be paid hereunder;
e. That, except only for those representations, statements or promises expressly contained in this Contract, no representation, statement or promise, oral or in writing, of any kind whatsoever by the Port Authority, its Commissioners, officers, agents, employees or consultants has induced the Contractor to enter into this Contract or has been relied upon by the Contractor, including any with reference to: (1) the meaning, correctness, suitability, or completeness of any provisions or requirements of this Contract; (2) the nature, quantity, quality or size of the materials, equipment, labor and other facilities needed for the performance of this Contract; (3) the general or local conditions which may in any way affect this Contract or its performance; (4) the price of the Contract; or (5) any other matters, whether similar to or different from those referred to in (1) through (4) immediately above, affecting or having any connection with this Contract, the bidding thereon, any discussions thereof, the performance thereof or those employed therein or connected or concerned therewith.

Moreover, the Contractor accepts the conditions at the Site of the Work as they may eventually be found to exist and warrants and represents that it can and will perform the Contract under such conditions and that all materials, equipment, labor and other facilities required because of any unforeseen conditions (physical or otherwise) shall be wholly at its own cost and expense, anything in this Contract to the contrary notwithstanding.

Nothing in the Specifications or any other part of the Contract is intended as or shall constitute a representation by the Port Authority as to the feasibility of performance of this Contract or any part thereof.

The Contractor further represents and warrants that it was given ample opportunity and time and by means of this paragraph was requested by the Port Authority to review thoroughly all documents forming this Contract prior to opening of Bids on this Contract in order that it might request inclusion in this Contract of any statement, representation, promise or provision which it desired or on which it wished to place reliance; that it did so review said documents, that either every such statement, representation, promise or provision has been included in this Contract or else, if omitted, that it expressly relinquishes the benefit of any such omitted statement, representation, promise or provision and is willing to perform this Contract without claiming reliance thereon or making any other claim on account of such omission.

The Contractor further recognizes that the provisions of this numbered clause (though not only such provisions) are essential to the Port Authority's consent to enter into this Contract and that without such provisions, the Authority would not have entered into this Contract.

4. Personal Non-Liability

Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Contractor with any liability, or held personally liable to the Contractor 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. Non-Discrimination Requirements

The Contractor shall take all necessary and reasonable steps to ensure non-discrimination in the performance and administration of all aspects of this Contract.

A. Contractor hereby agrees that no person on the ground of race, color, national origin, creed/religion, sex, age or handicap/disability shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the furnishing of goods or services or in the selection and retention of subcontractors and/or vendors under this Contract. Contractor shall also ascertain and comply with all applicable federal, state and local laws, ordinances, rules, regulations, and orders that pertain to equal employment opportunity, affirmative action, and non-discrimination in employment.

B. Contractor agrees that these "Non-Discrimination Requirements" are a binding part of this Contract. Without limiting the generality of any other term or provision of this Contract, in the event the Authority, or a state or federal agency finds that the Contractor or any of its subcontractors or vendors has not complied with these "Non-Discrimination Requirements", the Authority may cancel, terminate or suspend this Contract in accordance with Section 14 of these Standard Terms and Conditions entitled "Default, Revocation, or Suspension of Contract."

C. Contractor agrees to cooperate fully with the Authority's investigation of allegations of discrimination. Cooperation includes, but is not limited to, allowing the Authority to question employees during the investigation of allegations of discrimination, and complying with directives that the Authority or the State or Federal government deem essential to ensure compliance with these "Non-Discrimination Requirements."

6. Rights and Remedies of the Port Authority

The Port Authority shall have the following rights in the event the Contractor is deemed guilty of a breach of any term whatsoever of this Contract:

a. The right to take over and complete the Work or any part thereof as agent for and at the expense of the Contractor, either directly or through others.
b. The right to cancel this Contract as to any or all of the Work yet to be performed.
c. The right to specific performance, an injunction or any appropriate equitable remedy.
d. The right to money damages.

For the purpose of this Contract, breach shall include but not be limited to the following, whether or not the time has yet arrived for performance of an obligation under this Contract: a statement by the Contractor to any representative of the Port Authority indicating that the Contractor cannot or will not perform any one or more of its obligations under this Contract; any act or omission of the Contractor or any other occurrence which makes it improbable at the time that it will be able to perform any one or more of its obligations under this Contract; any suspension of or failure to proceed with any part of the Work by the Contractor which makes it improbable at the time that it will be able to perform any one or more of its obligations under this Contract.

The enumeration in this numbered clause or elsewhere in this Contract of specific rights and remedies of the Port Authority shall not be deemed to limit any other rights or remedies which the Authority would have in the absence of such enumeration; and no exercise by the Authority of any right or remedy shall operate as a waiver of any other of its rights or remedies not inconsistent therewith or to estop it from exercising such other rights or remedies.

7. Rights and Remedies of the Contractor

Inasmuch as the Contractor can be adequately compensated by money damages for any breach of this Contract which may be committed by the Port Authority, the Contractor expressly agrees that no default, act or omission of the Port Authority shall constitute a material breach of this Contract, entitling the Contractor to cancel or rescind this Contract or to suspend or abandon performance.

8. Submission To Jurisdiction

The Contractor hereby irrevocably submits itself to the jurisdiction of the Courts of the State of New York and New Jersey, in regard to any controversy arising out of, connected with, or in any way concerning this Contract.

The Contractor agrees that the service of process on the Contractor in relation to such jurisdiction may be made, at the option of the Port Authority, either by registered or certified mail addressed to it at the address of the Contractor indicated on the signature sheet, or by actual personal delivery to the Contractor, if the Contractor is an individual, to any partner if the Contractor be a partnership or to any officer, director or managing or general agent if the Contractor be a corporation.

Such service shall be deemed to be sufficient when jurisdiction would not lie because of the lack of basis to serve process in the manner otherwise provided by law. In any case, however, process may be served as stated above whether or not it might otherwise have been served in a different manner.

9. Harmony

a. The Contractor 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 operation of the Port Authority or with the operations of lessees, licensees or other users of the Facility or with the operations of the Contractor under this Contract.

   The Contractor shall immediately give notice to the Port Authority (to be followed by written notices and reports) of any and all impending or existing labor complaints, troubles, disputes or controversies and the progress thereof. The Contractor shall use its best efforts to resolve any such complaint, trouble, dispute or controversy. If any type of strike, boycott, picketing, work stoppage, slowdown or other labor activity is directed against the Contractor at the Facility or against any operations of the Contractor under this Contract, whether or not caused by the employees of the Contractor, and if any of the foregoing, in the opinion of the Port Authority, results or is likely to result in any curtailment or diminution of the services to be performed hereunder or to interfere with or affect the operations of the Port Authority , or to interfere with or affect the operations of lessees, licensees, or other users of the Facility or in the event of any other cessation or stoppage of operations by the Contractor hereunder for any reason whatsoever, the Port Authority shall have the right at any time during the continuance thereof to suspend the operations of the Contractor under this Contract, and during the period of the suspension the Contractor shall not perform its services hereunder and the Port Authority shall have the right during said period to itself or by any third person or persons selected by it to perform said services of the Contractor using the equipment which is used by the Contractor in its operations hereunder as the Port Authority deems necessary and without cost to the Port Authority. During such time of suspension, the Contractor shall not be entitled to any compensation. Any flat fees, including management fees, shall be prorated. Prior to the exercise of such right by the Port Authority, it shall give the Contractor notice thereof, which notice may be oral. No exercise by the Port Authority of the rights granted to it in the above subparagraph shall be or be deemed to be a waiver of any rights of termination or revocation contained in this Contract or a waiver of any rights or remedies which may be available to the Port Authority under this Contract or otherwise.

b. During the time that the Contractor is performing the Contract, other persons may be engaged in other operations on or about the worksite including Facility operations, pedestrian, bus and vehicular traffic and other Contractors performing at the worksite, all of which shall remain uninterrupted.

The Contractor shall so plan and conduct its operations as to work in harmony with others engaged at the site and not to delay, endanger or interfere with the operation of others (whether or not specifically mentioned above), all to the best interests of the Port Authority and the public as may be directed by the Port Authority.

10. Claims of Third Persons

The Contractor undertakes to pay all claims lawfully made against it by subcontractors, suppliers and workers, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of this Contract and to cause all subcontractors to pay all such claims lawfully made against them.

11. No Third Party Rights

Nothing contained in this Contract is intended for the benefit of third persons, except to the extent that the Contract specifically provides otherwise by use of the words "benefit" or "direct right of action."

12. Provisions of Law Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included therein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

13. Costs Assumed By The Contractor

It is expressly understood and agreed that all costs of the Contractor of whatever kind or nature and whether imposed directly upon the Contractor under the terms and provisions hereof or in any other manner whatsoever because of the requirements of the operation of the service or otherwise under this Agreement shall be borne by the Contractor or without compensation or reimbursement from the Port Authority, except as specifically set forth in this Agreement. The entire and complete cost and expense of the Contractor's services and operations hereunder shall be borne solely by the Contractor and under no circumstances shall the Port Authority be liable to any third party (including the Contractor's employees) for any such costs and expenses incurred by the Contractor and under no circumstances shall the Port Authority be liable to the Contractor for the same, except as specifically set forth in this Section.

14. Default, Revocation or Suspension of Contract

a. If one or more of the following events shall occur:

1. If fire or other cause shall destroy all or a substantial part of the Facility.

2. If any governmental agency shall condemn or take a temporary or permanent interest in all or a substantial part of the Facility, or all of a part of the Port Authority's interest herein;

then upon the occurrence of such event or at any time thereafter during the continuance thereof, the Port Authority shall have the right on twenty-four (24) hours written notice to the Contractor to revoke this Contract, such revocation to be effective upon the date and time specified in such notice.

In such event this Contract shall cease and expire on the effective date of revocation as if said date were the date of the expiration of this Contract. Such revocation shall not, however, relieve the Contractor of any liabilities or obligations hereunder which shall have accrued on or prior to the effective date of

revocation.

b. If one or more of the following events shall occur:

1. The Contractor 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 its property; or
2. By order or decree of a court the Contractor shall be adjudged bankrupt or an order shall be made approving a petition filed by any of the creditors, or, if the Contractor is a corporation, by any of the stockholders of the Contractor, 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 Contractor and shall not be dismissed within thirty (30) days after the filing thereof; or
4. The interest of the Contractor under this Contract shall be transferred to, passed to or devolve upon, by operation of law or otherwise, any other person, firm or corporation, or
5. The Contractor, if a corporation, shall, without the prior written approval of the Port Authority, become a surviving or merged corporation in a merger, a constituent corporation in a consolidation, or a corporation in dissolution; or
6. If the Contractor is a partnership, and the said partnership shall be dissolved as the result of any act or omission of its copartners 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 having jurisdiction, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of the Contractor and such possession or control of all or substantially all of the property of the Contractor and shall continue in effect for a period of fifteen (15) days;

then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Port Authority shall have the right upon five (5) days notice to the Contractor to terminate this Contract and the rights of the Contractor hereunder; termination to be effective upon the date and time specified in such notice as if said date were the date of the expiration of this Contract. Termination shall not relieve the Contractor of any liabilities or obligations hereunder which have accrued on or prior to the effective date of termination.

c. If any of the following shall occur:

1. The Contractor shall cease, abandon any part of the service, desert, stop or discontinue its services in the premises for any reason whatsoever and regardless of the fault of the Contractor; or

2. The Contractor shall fail to keep, perform and observe each and every other promise, covenant and agreement set forth in this Contract on its part to be kept, performed or observed, within five (5) days after receipt of notice of default thereunder from the Port Authority (except where fulfillment of its obligations requires activity over a greater period of time, and the Contractor shall have commenced to perform whatever may be required for fulfillment within five (5) 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 during the continuance thereof, the Port Authority shall have the right on twenty four (24) hours notice to the Contractor to terminate this Contract and the rights of the Contractor hereunder, termination to be effective upon the date and time specified in such notice. Termination shall not relieve the Contractor of any liabilities which shall have accrued on or prior to the effective date of termination.

d. If any of the events enumerated in this Section shall occur prior to commencement date of this Contract the Port Authority upon the occurrence of any such event or any time thereafter during the continuance thereof by twenty-four (24) hours notice may terminate or suspend this Contract and the rights of the Contractor hereunder, such termination or suspension to be effective upon the date specified in such notice.

e. No payment by the Port Authority of any monies to the Contractor for any period or periods after default of any of the terms, covenants or conditions hereof to be performed, kept and observed by the Contractor and no act or thing done or omitted to be done by the Port Authority shall be deemed to be a waiver of the right of the Port Authority to terminate this Contract or of any other right or remedies to which the Port Authority may be entitled because of any breach thereof. No waiver by the Port Authority of any default on the part of the Contractor in the performance of any of the terms, covenants and conditions hereof to be performed, kept or observed by the Contractor shall be or be construed to be a waiver by the Port Authority of any other subsequent default in the performance of any of the said terms, covenants and conditions.

f. In addition to all other rights of revocation or termination hereunder and notwithstanding any other provision of this Contract the Port Authority may terminate this Contract and the rights of the Contractor hereunder without cause at any time upon five (5) days written notice to the Contractor and in such event this Contract shall cease and expire on the date set forth in the notice of termination as fully and completely as though such dates were the original expiration date hereof and if such effective date of termination is other than the last day of the month, the amount of the compensation due to the Contractor from the Port Authority shall be prorated when applicable on a daily basis. Such cancellation shall be without prejudice to the rights and obligations of the parties arising out of portions already performed but no allowance shall be made for anticipated profits.

g. Any right of termination contained in this paragraph, shall be in addition to and not in lieu of any and all rights and remedies that the Port Authority shall have at law or in equity consequent upon the Contractor's breach of this Contract and shall be without prejudice to any and all such other rights and remedies. It is hereby specifically agreed and understood that the exercise by the Port Authority of any right of termination set forth in this paragraph shall not be or be deemed to be an exercise by the Port Authority of an election of remedies so as to preclude the Port Authority from any right to money damages it may have for the period prior to the effective date of termination to the original expiration date of the Contract, and this provision shall be deemed to survive the termination of this Contract as aforesaid.

h. If (1) the Contractor fails to perform any of its obligations under this Contract or any other agreement between the Port Authority and the Contractor (including its obligation to the Port Authority to pay any claim lawfully made against it by any supplier, subcontractor or worker or other person which arises out of or in connection with the performance of this Contract or any other agreement with the Port Authority) or (2) any claim (just or unjust) which arises out of or in connection with this Contract or any other agreement between the Port Authority and the Contractor is made against the Port Authority or (3) any subcontractor under this Contract or any other agreement between the Port Authority and the Contractor fails to pay any claims lawfully made against it by any supplier, subcontractor, worker or other third person which arises out of or in connection with this Contract or any other agreement between the Port Authority and the Contractor or if in the opinion of the Port Authority any of the aforesaid contingencies is likely to arise, then

the Port Authority shall have the right, in its discretion, to withhold out of any payment (final or otherwise) such sums as the Port Authority may deem ample to protect it against delay or loss or to assure the payment of just claims of third persons, and to apply such sums in such manner as the Port Authority may deem proper to secure such protection or satisfy such claims. All sums so applied shall be deducted from the Contractor's compensation. Omission by the Port Authority to withhold out of any payment, final or otherwise, a sum for any of the above contingencies, even though such contingency has occurred at the time of such payment, shall not be deemed to indicate that the Port Authority does not intend to exercise its right with respect to such contingency. Neither the above provisions for rights of the Port Authority to withhold and apply monies nor any exercise or attempted exercise of, or omission to exercise, such rights by the Port Authority shall create any obligation of any kind to such supplier, subcontractors, worker or other third persons. If, however, the payment of any amount due the Contractor shall be improperly delayed, the Port Authority shall pay the Contractor interest thereon at the rate of 6% per annum for the period of the delay, it being agreed that such interest shall be in lieu of and in liquidation of any damages to the Contractor because of such delay.

i. If the Port Authority has paid any sum or has incurred any obligation or expense which the Contractor has agreed to pay or reimburse the Port Authority, 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 Contractor to perform or fulfill any one or more of the conditions, covenants, or agreements contained in this Contract, or as a result of an act of omission of the Contractor contrary to the said conditions, covenants and agreements, the Contractor shall pay to the Port Authority the sum or sums so paid or expense so incurred, including all interests, costs and damages, promptly upon the receipt of the Port Authority's statement therefore. The Port Authority may, however, in its discretion, elect to deduct said sum or sums from any payment payable by it to the Contractor.

j. If the Port Authority pays any installment to the Contractor without reducing said installment as provided in this Contract, it may reduce any succeeding installment by the proper amount, or it may bill the Contractor for the amount by which the installment paid should have been reduced and the Contractor shall pay to the Port Authority any such amount promptly upon receipt of the Port Authority's statement therefore.

k. The Port Authority shall also have the rights set forth above in the event the Contractor shall become insolvent or bankrupt or if his affairs are placed in the hands of a receiver, trustee or assignee for the benefit of creditors.

15. Sales or Compensating Use Taxes

Purchases of services and tangible personal property by the Port Authority in the States of New York and New Jersey are generally exempt from state and local sales and compensating use taxes, and from most federal excises (Taxes). Therefore, the Port Authority's purchase of the Contractor's services under this Contract is exempt from Taxes. Accordingly, the Contractor must not include Taxes in the price charged to the Port Authority for the Contractor's services under this Contract**.** The Contractor certifies that there are no such taxes included in the prices for this Contract. The Contractor shall retain a copy of this Contract to substantiate the exempt sale.

The compensation set forth in this Agreement is the complete compensation to the Contractor, and the Port Authority will not separately reimburse the Contractor for any taxes unless specifically set forth in this Agreement.

16. No Estoppel or Waiver

The Port Authority shall not be precluded or estopped by any payment, final or otherwise, issued or made under this Contract, from showing at any time the true amount and character of the services performed, or

from showing that any such payment is incorrect or was improperly issued or made; and the Port Authority shall not be precluded or estopped, notwithstanding any such payment, from recovering from the Contractor any damages which it may sustain by reason of any failure on its part to comply strictly with this Contract, and any moneys which may be paid to it or for its account in excess of those to which it is lawfully entitled.

No cancellation, rescission or annulment hereof, in whole or as to any part of the services to be provided hereunder, or because of any breach hereof, shall be deemed a waiver of any money damages to which the Port Authority may be entitled because of such breach. Moreover, no waiver by the Authority of any breach of this Contract shall be deemed to be a waiver of any other or any subsequent breach.

17. Records and Reports

The Contractor shall set up, keep and maintain (and shall cause its subcontractors to set up, keep and maintain) in accordance with generally accepted accounting practice during the term of this Agreement and any extensions thereof and for three years after the expiration, termination or revocation thereof, records, payroll records and books of account (including, but not limited to, records of original entry and daily forms, payroll runs, cancelled checks, time records, union agreements, contracts with health, pension and other third party benefit providers) recording all transactions of the Contractor(and its subcontractors), at, through or in any way connected with or related to the operations of the Contractor (and its subcontractors) hereunder, including but not limited to all matters relating to the charges payable to the Contractor hereunder, all wages and supplemental benefits paid or provided to or for its employees (and its subcontractors' employees) and such additional information as the Port Authority may from time to time and at any time require, and also including, if appropriate, recording the actual number of hours of service provided under the Contract, and keeping separate records thereof which records and books of account shall be kept at all times within the Port District. The Contractor shall permit (and cause its subcontractors to permit) in ordinary business hours during the term of this Agreement including any extensions thereof and for three years thereafter the examination and audit by the officers, employees and representatives of the Port Authority of such records and books of account and also any records and books of account of any company which is owned or controlled by the Contractor, or which owns or controls the Contractor if said company performs services similar to those performed by the Contractor anywhere in the Port District. However, if within the aforesaid three year period the Port Authority has notified the Contractor in writing of a pending claim by the Port Authority under or in connection with this Contract to which any of the aforesaid records and documents of the Contractor or of its subcontractors relate either directly or indirectly, then the period of such right of access shall be extended to the expiration of six years from the date of final payment with respect to the records and documents involved.

Upon request of the Port Authority, the Contractor shall furnish or provide access to the federal Form I-9 (Employment Eligibility Verification) for each individual performing work under this Contract. This includes citizens and noncitizens.

The Contractor (and its subcontractors) shall, at its own expense, install, maintain and use such equipment and devices for recording the labor hours of the service as shall be appropriate to its business and necessary or desirable to keep accurate records of the same and as the general manager or the Facility Manager may from time to time require, and the Contractor (and its subcontractors) shall at all reasonable times allow inspection by the agents and employees of the Port Authority of all such equipment or devices.

a. The Contractor hereby further agrees to furnish to the Port Authority from time to time such written reports in connection with its operations hereunder as the Port Authority may deem necessary or desirable. The format of all forms, schedules and reports furnished by the Contractor to the Port Authority shall be subject to the continuing approval of the Port Authority.
b. No provision in this Contract giving the Port Authority a right of access to records and documents is intended to impair or affect any right of access to records and documents which they would have in the absence of such provision. Additional record keeping may be required under other sections of this Contract.

18. General Obligations

a. Except where expressly required or permitted herein to be oral, all notices, requests, consents and approvals required to be given to or by either party shall be in writing and all such notices, requests, consents and approvals shall be personally delivered to the other party during regular business hours or forwarded to such party by United States certified mail, return receipt requested, addressed to the other party at its address hereinbefore or hereafter provided. Until further notice the Contractor hereby designates the address shown on the bottom of the Contractors Signature Sheet as their address to which such notices, requests, consents, or approvals may be forwarded. All notices, requests, consents, or approvals of the Contractor shall be forwarded to the Manager at the Facility.

b. The Contractor shall comply with the provisions of all present and future federal, state and municipal laws, rules, regulations, requirements, ordinances, orders and directions which pertain to its operations under this Contract and which affect the Contract or the performance thereof and those engaged therein as if the said Contract were being performed for a private corporation, except where stricter requirements are contained in the Contract in which case the Contract shall control. The Contractor shall procure for itself all licenses, certificates, permits or other authorization from all governmental authorities, if any, having jurisdiction over the Contractor's operations hereunder which may be necessary for the Contractor's operations. The Contractor's obligation to comply with governmental requirements are not to be construed as a submission by the Port Authority to the application to itself of such requirements.

c. The Contractor shall pay all taxes, license, certification, permit and examination fees and excises which may be assessed on its property or operations hereunder or income therefrom, and shall make all applications, reports and returns required in connection therewith.

d. The Contractor shall, in conducting its operations hereunder, take all necessary precautions to protect the general environment and to prevent environmental pollution, contamination, damage to property and personal injury. In the event the Contractor encounters material reasonably believed to be asbestos, polychlorinated biphenyl (PCB) or any other hazardous material, in conducting its operations hereunder, the Contractor shall immediately stop Work in the area affected and report the condition in writing to the Manager. Work in the affected area shall not thereafter be resumed by the Contractor except upon the issuance of a written order to that effect from the Manager.

e. The Contractor shall promptly observe, comply with and execute the provisions of any and all present and future rules and regulations, requirements, standard orders and directions of the American Insurance Association, the Insurance Services Office, National Fire Protection Association, and any other body or organization exercising similar functions which may pertain or apply to the Contractor's operations hereunder.

The Contractor shall not do or permit to be done any act which:

1. will invalidate or be in conflict with any fire insurance policies covering the Facility or any part thereof or upon the contents of any building thereon; or
2. 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; or
3. in the opinion of the Port Authority will constitute a hazardous condition, so as to increase the risk normally attendant upon the operations contemplated by this Contract; or
4. may cause or produce in the premises, or upon the Facility any unusual, noxious or objectionable smoke, gases, vapors, odors; or
5. 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 Facility; or
6. shall constitute a nuisance in or on the Facility or which may result in the creation, commission or maintenance of a nuisance in or on the Facility.

f. If by reason of the Contractor's failure to comply with the provisions of this Section and provided the

Port Authority has given the Contractor five (5) days written notice of its failure and the Contractor shall not have cured said failure within said five (5) days, 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 Contractor shall on demand pay the Port Authority that part of all fire insurance, extended coverage or rental insurance premiums paid or payable by the Port Authority which shall have been charged because of such violations by the Contractor.

g. The Contractor shall conduct its operations hereunder so as not to endanger, unreasonably interfere with, or delay the operations or activities of any tenants or occupants on the premises or the Facility and, moreover, shall use the same degree of care in performance on the premises as would be required by law of the Port Authority and shall conduct operations hereunder in a courteous, efficient and safe manner.

h. The Contractor shall provide such equipment and medical facilities as may be necessary to supply first aid service in case of accidents to its personnel who may be injured in the furnishing of service hereunder. The Contractor shall maintain standing arrangements for the removal and hospital treatment of any of its personnel who may be injured.

19. Assignments and Subcontracting

a. The Contractor shall not sell, transfer, mortgage, pledge, subcontract or assign this Contract or any part thereof or any of the rights granted hereunder or any moneys due or to become due to it hereunder or enter into any contract requiring or permitting the doing of anything hereunder by an independent Contractor, without the prior written approval of the Port Authority, and any such sale, transfer, mortgage, pledge, subcontract, assignment or contract without such prior written approval shall be void as to the Port Authority.

b. All subcontractors who provide permanent personnel to the Contractor for work under this Contract shall be given written notice to comply with all requirements of the Contract. The Contractor shall be responsible and liable for the performance and acts of each subcontractor.

c. All persons to whom the Contractor sublets services shall be deemed to be its agents and no subletting or approval thereof shall be deemed to release this Contractor from its obligations under this Contract or to impose any obligations on the Port Authority to such subcontractor or to give the subcontractor any rights against the Port Authority.

20. Indemnification and Risks Assumed By The Contractor

To the extent permitted by law, the Contractor shall indemnify and hold harmless the Port Authority, its Commissioners, officers, representatives and employees from and against all claims and demands, just or unjust, of third persons (including Contractor's employees, employees, officers, and agents of the Port Authority) arising out of or in any way connected or alleged to arise out of or alleged to be in any way connected with the Contract and all other services and activities of the Contractor under this Contract and for all expenses 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, whether they arise from the acts or omissions of the Contractor, the Port Authority, third persons(including Contractor's employees, employees, officers, and agents of the Port Authority), or from the acts of God or the public enemy, or otherwise, including claims and demands of any local jurisdiction against the Port Authority in connection with this Contract.

The Contractor assumes the following risks, whether such risks arise from acts or omissions (negligent or not) of the Contractor, the Port Authority or third persons (including Contractor's employees, employees, officers, and agents of the Port Authority)or from any other cause, excepting only risks occasioned solely by affirmative willful acts of the Port Authority done subsequent to the opening of proposals on this Contract, and shall to the extent permitted by law indemnify the Port Authority for all loss or damage incurred in connection with such risks:

a. The risk of any and all loss or damage to Port Authority property, equipment (including but not limited to automotive and/or mobile equipment), materials and possessions, on or off the premises, the loss or

damage of which shall arise out of the Contractor's operations hereunder. The Contractor shall if so directed by the Port Authority, repair, replace or rebuild to the satisfaction of the Port Authority, any and all parts of the premises or the Facility which may be damaged or destroyed by the acts or omissions of the Contractor, its officers, agents, or employees and if the Contractor shall fail so to repair, replace, or rebuild with due diligence the Port Authority may, at its option, perform any of the foregoing work and the Contractor shall pay to the Port Authority the cost thereof.

b. The risk of any and all loss or damage of the Contractor's property, equipment (including but not limited to automotive and/or mobile equipment) materials and possessions on the Facility.

c. The risk of claim, whether made against the Contractor or the Port Authority, for any and all loss or damages occurring to any property, equipment (including but not limited to automotive and/or mobile equipment), materials and possessions of the Contractor's agents, employees, materialmen and others performing work hereunder.

d. The risk of claims for injuries, damage or loss of any kind just or unjust of third persons arising or alleged to arise out of the performance of work hereunder, whether such claims are made against the Contractor or the Port Authority.

If so directed, the Contractor 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 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.

Neither the requirements of the Port Authority under this Contract, nor of the Port Authority of the methods of performance hereunder nor the failure of the Port Authority to call attention to improper or inadequate methods or to require a change in the method of performance hereunder nor the failure of the Port Authority to direct the Contractor to take any particular precaution or other action or to refrain from doing any particular thing shall relieve the Contractor of its liability for injuries to persons or damage to property or environmental impairment arising out of its operations.

21. Approval of Methods

Neither the approval of the Port Authority of the methods of furnishing services hereunder nor the failure of the Port Authority to call attention to improper or inadequate methods or to require a change in the method of furnishing services hereunder, nor the failure of the Port Authority to direct the Contractor to take any particular precautions or to refrain from doing any particular thing shall relieve the Contractor of its liability for injuries to persons or damage to property or environmental impairment arising out of its operations.

22. Safety and Cleanliness

a. The Contractor shall, in the furnishing of services hereunder, exercise every precaution to prevent injury to person or damage to property or environmental impairment and avoid inconvenience to the occupants of or any visitors to the Facility. The Contractor shall, without limiting the generality hereof, place such personnel, erect such barricades and railings, give such warnings, display such lights, signals or signs, place such cones and exercise precautions as may be necessary, proper or desirable.

b. The Contractor shall in case of unsafe floor conditions due to construction, wetness, spillage, sickness and all other types of hazardous conditions proceed to rope off the unsafe area and place appropriate warnings signs to prevent accidents from occurring. The Contractor shall clean said area to the satisfaction of the Manager.

c. The Contractor shall at all times maintain in a clean and orderly condition and appearance any and all facilities provided by the Port Authority for the Contractor's operations, and all fixtures, sink closets, equipment, and other personal property of the Port Authority which are located in said facilities.

23. Accident Reports

The Contractor shall promptly report in writing to the Manager of the Facility and to the Deputy Chief, Litigation Management of the Port Authority all accidents whatsoever arising out of or in connection with its operations hereunder and which result in death or injury to persons or damage to property, setting forth such details thereof as the Port Authority may desire. In addition, if death or serious injury or serious damage is caused, such accidents shall be immediately reported by telephone to the aforesaid representatives of the Port Authority.

24. Trash Removal

The Contractor shall remove daily from the Facility by means provided by the Contractor all garbage, debris and other waste material (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 clear and sanitary condition, approved by the Facility Manager and shall be kept covered except when filling or emptying them. The Contractor shall exercise care in removing such garbage, debris and other waste materials from the Facility. The manner of such storage and removal shall always be subject in all respects to the continual approval of the Port Authority. No equipment or facilities of the Port Authority shall be used in 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.

25. Lost and Found Property

The Contractor shall instruct its personnel that all items of personal property found by the Contractor's employees at the Site must be turned in to the Port Authority and a receipt will be issued therefor.

26. Property of the Contractor

a. All property of the Contractor at the Site by virtue of this Contract shall be removed on or before the expiration or sooner termination or revocation of this Contract.

b. If the Contractor shall fail to remove its property upon the expiration, termination or revocation of this Contract the Port Authority may, at its option, dispose of such property as waste or as agent for the Contractor and at the risk and expense of the Contractor, remove such property to a public warehouse, or may retain the same in its own possession, and in either event after the expiration of thirty (30) days may sell the same in accordance with any method deemed appropriate; the proceeds of any such sale shall be applied first, to the expenses of sale and second, to any sums owed by the Contractor to the Port Authority; any balance remaining shall be paid to the Contractor. Any excess of the total cost of removal, storage and sale and other costs incurred by the Port Authority as a result of such failure of performance by the Contractor over the proceeds of sale shall be paid by the Contractor to the Port Authority upon demand.

27. Modification of Contract

This Contract may not be changed except in writing signed by the Port Authority and the Contractor. The Contractor agrees that no representation or warranties shall be binding upon the Port Authority unless expressed in writing in this Contract.

28. Invalid Clauses

If any provision of this Contract shall be such as to destroy its mutuality or to render it invalid or illegal, then, if it shall not appear to have been so material that without it the Contract would not have been made by

the parties, it shall not be deemed to form part thereof but the balance of the Contract shall remain in full force and effect.

29. Approval of Materials, Supplies and Equipment

Only Port Authority approved materials, supplies, and equipment are to be used by the Contractor in performing the Work hereunder. Inclusion of chemical containing materials or supplies on the Port Authority Approved Products List – Environmental Protection Supplies constitutes approval. The list may be revised from time to time and at any time by the Port Authority and it shall be incumbent upon the Contractor to obtain the most current list from the Manager of the Facility.

At anytime during the Solicitation, pre-performance or performance periods, the Contractor may propose the use of an alternate product or products to those on the Approved Products List – Environmental Protection Supplies, which product(s) shall be subject to review and approval by the Port Authority. Any alternate product so approved by the Port Authority may be used by the Contractor in performing the Services hereunder. Until such approval is given, only products on the Approved Products List – Environmental Protection Supplies may be used.

30. Intellectual Property

The right to use all patented materials, appliances, processes of manufacture or types of construction, trade and service marks, copyrights and trade secrets, collectively hereinafter referred to as "Intellectual Property Rights", in the performance of the work, shall be obtained by the Contractor without separate or additional compensation. Where the services under this Agreement require the Contractor to provide materials, equipment or software for the use of the Port Authority or its employees or agents, the Port Authority shall be provided with the Intellectual Property Rights required for such use without further compensation than is provided for under this Agreement.

The Contractor shall indemnify the Port Authority against and save it harmless from all loss and expense incurred as a result of any claims in the nature of Intellectual Property Rights infringement arising out of the Contractor's or Port Authority's use, in accordance with the above immediately preceding paragraph, of any Intellectual Property. The Contractor, if requested, shall conduct all negotiations with respect to and defend such claims. If the Contractor or the Port Authority, its employees or agents be enjoined either temporarily or permanently from the use of any subject matter as to which the Contractor is to indemnify the Port Authority against infringement, then the Port Authority may, without limiting any other rights it may have, require the Contractor to supply temporary or permanent replacement facilities approved by the Manager, and if the Contractor fails to do so the Contractor shall, at its expense, remove all such enjoined facilities and refund the cost thereof to the Port Authority or take such steps as may be necessary to insure compliance by the Contractor and the Port Authority with said injunction, to the satisfaction of the Port Authority.

In addition, the Contractor shall promptly and fully inform the Director in writing of any intellectual property rights disputes, whether existing or potential, of which it has knowledge, relating to any idea, design, method, material, equipment or any other matter related to the subject matter of this Agreement or coming to its attention in connection with this Agreement.

31. Contract Records and Documents – Passwords and Codes

When the performance of the contract services requires the Contractor to produce, compile or maintain records, data, drawings, or documents of any kind, regardless of the media utilized, then all such records, drawings, data and documents which are produced, prepared or compiled in connection with this contract, shall become the property of the Port Authority, and the Port Authority shall have the right to use or permit

the use of them and any ideas or methods represented by them for any purpose and at any time without other compensation than that specifically provided herein.

When in the performance of the contract services the Contractor utilizes passwords or codes for any purpose, at any time during or after the performance of such services, upon written request by the Authority, the Contractor shall make available to the designated Authority representative all such passwords and codes.

32. Designated Secure Areas

Services under the Contract may be required in designated secure areas, as the same may be designated by the Manager from time to time ("Secure Areas"). The Port Authority shall require the observance of certain security procedures with respect to Secure Areas, which may include the escort to, at, and/or from said high security areas by security personnel designated by the Contractor or any subcontractor's personnel required to work therein. All personnel that require access to designated secure areas who are not under positive escort by an authorized individual will be required to undergo background screening and personal identity verification.

Forty-eight (48) hours prior to the proposed performance of any work in a Secure Area, the Contractor shall notify the Manager. The Contractor shall conform to the procedures as may be established by the Manager from time to time and at any time for access to Secure Areas and the escorting of personnel hereunder. Prior to the start of work, the Contractor shall request a description from the Manager of the Secure Areas which will be in effect on the commencement date. The description of Secure Areas may be changed from time to time and at any time by the Manager during the term of the Contract.

33. Notification of Security Requirements

The Authority has the responsibility of ensuring safe, reliable and secure transportation facilities, systems, and projects to maintain the well-being and economic competitiveness of the region. Therefore, the Authority reserves the right to deny access to certain documents, sensitive security construction sites and facilities (including rental spaces) to any person that declines to abide by Port Authority security procedures and protocols, any person with a criminal record with respect to certain crimes or who may otherwise poses a threat to the construction site or facility security. The Authority reserves the right to impose multiple layers of security requirements on the Contractor, its staff and subcontractors and their staffs depending upon the level of security required, or may make any amendments with respect to such requirements as determined by the Authority.

These security requirements may include but are not limited to the following:

- <u>Execution of Port Authority Approved Non-disclosure Agreements</u>

  At the direction of the Port Authority, the Contractor shall be required to have its principals, staff and/or subcontractor(s) and their staff, execute Port Authority approved non-disclosure agreements.

- <u>Contractor/ Subcontractor identity checks and background screening</u>

  The Port Authority's designated background screening provider may require inspection of not less than two forms of valid/current government issued identification (at least one having an official photograph) to verify staff's name and residence; screening federal, state, and/or local criminal justice agency information databases and files; screening of any terrorist identification files; access identification to include some form of biometric security methodology such as fingerprint, facial or iris scanning, or the like.

  The Contractor may be required to have its staff, and any subcontractor's staff, material-men, visitors or others over whom the Contractor/subcontractor has control, authorize the Authority or its designee to perform background checks, and a personal identity verification check. Such authorization shall be in a form acceptable to the Authority. The Contractor and subcontractors may also be required to use an organization designated by the Authority to perform the background checks.

  As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority

approved provider to be used to conduct background screening and personal identity verification, except as otherwise required by federal law and/or regulation (such as the Transportation Worker Identification Credential for personnel performing in secure areas at Maritime facilities). Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at http://www.secureworker.com, or S.W.A.C. may be contacted directly at (877) 522-7922 for more information and the latest pricing. The cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Contractor (and its subcontractors) as an out-of-pocket expense as provided herein. Staff that are rejected for a credential for any reason are not reimbursable.

- Issuance of Photo Identification Credential

No person will be permitted on or about the Authority construction site or facility (including rental spaces) without a facility-specific photo identification credential approved by the Authority. If the authority requires facility-specific identification credential for the Contractor's and the subcontractor's staff, the Authority will supply such identification at no cost to the Contractor or its subcontractors. Such facility-specific identification credential shall remain the property of the Authority and shall be returned to the Authority at the completion or upon request prior to completion of the individual's assignment at the specific facility. It is the responsibility of the appropriate Contractor or subcontractor to immediately report to the Authority the loss of any staff member's individual facility-specific identification credential. The Contractor or subcontractor shall be billed for the cost of the replacement identification credential. Contractor's and subcontractor's staff shall display Identification badges in a conspicuous and clearly visible manner, when entering, working or leaving an Authority construction site or facility.

Employees may be required to produce not less than two forms of valid/current government issued identification having an official photograph and an original, unlaminated social security card for identify and SSN verification. Where applicable, for sensitive security construction sites or facilities, successful completion of the application, screening and identify verification for all employees of the Contractor and subcontractors shall be completed prior to being provided a S.W.A.C. ID Photo Identification credential.

- Access control, inspection, and monitoring by security guards

The Authority may provide for Authority construction site or facility (including rental spaces) access control, inspection and monitoring by Port Authority Police or Authority retained contractor security guards. However, this provision shall not relieve the Contractor of its responsibility to secure its equipment and work and that of its subconsultant/subcontractor's and service suppliers at the Authority construction site or facility (including rental spaces). In addition, the Contractor, subcontractor or service provider is not permitted to take photographs, digital images, electronic copying and/or electronic transmission or video recordings or make sketches on any other medium at the Authority construction sites or facilities (including rental spaces), except when necessary to perform the Work under this Contract, without prior written permission from the Authority. Upon request, any photograph, digital images, video recording or sketches made of the Authority construction site or facility shall be submitted to the Authority to determine compliance with this paragraph, which submission shall be conclusive and binding on the submitting entity.

- Compliance with the Port Authority Information Security Handbook

The Contract may require access to Port Authority information considered Protected Information ("PI") as defined in the Port Authority Information Security Handbook ("Handbook"), dated October, 2008, corrected as of November 14, 2013, and as may be further amended. The Handbook and its requirements are hereby incorporated into this agreement and will govern the possession, distribution and use of PI if at any point during the lifecycle of the project or solicitation it becomes necessary for the Contractor to have access to PI. Protecting sensitive information requires the application of uniform safeguarding measures to prevent unauthorized disclosure and to control any authorized disclosure of this information within the Port Authority or when released by the Port Authority to outside entities. The following is an outline of some of the procedures, obligations and directives contained in the Handbook:

(1) require that the Contractor and subcontractors, when appropriate, sign Non-Disclosure Agreements (NDAs), or an Acknowledgment of an existing NDA, provided by the Authority as a condition of being granted access to Protected Information categorized and protected as per the Handbook;
(2) require that individuals needing access to PI be required to undergo a background check, pursuant to the process and requirements noted in § 3.2 of the Information Security Handbook.
(3) require Contractors and commercial enterprises to attend training to ensure security awareness regarding Port Authority information;
(4) specific guidelines and requirements for the handling of PI to ensure that the storage and protection of PI;
(5) restrictions on the transfer, shipping, and mailing of PI;
(6) prohibitions on the publication, posting, modifying, copying, reproducing, republishing, uploading, transmitting, or distributing PI on websites or web pages. This may also include restricting persons, who either have not passed a pre-screening background check, or who have not been granted access to PI, from viewing such information;
(7) require that PI be destroyed using certain methods, measures or technology pursuant to the requirements set forth in the Handbook;
(8) require the Contractor to mandate that each of its subcontractors maintain the same levels of security required of the Contractor under any Port Authority awarded contract.
(9) prohibit the publication, exchange or dissemination of PI developed from the project or contained in reports, except between Contractors and subcontractors, without prior approval of the Port Authority;
(10) require that PI only be reproduced or copied pursuant to the requirements set forth in the Handbook.

- Audits for Compliance with Security Requirements

  The Port Authority may conduct random or scheduled examinations of business practices under this section entitled "NOTIFICATION OF SECURITY REQUIREMENTS" and the Handbook in order to assess the extent of compliance with security requirements, Protected Information procedures, protocols and practices, which may include, but not be limited to, verification of background check status, confirmation of completion of specified training, and/or a site visit to view material storage locations and protocols.

34. Construction In Progress

The Contractor recognizes that construction may be in progress at the Facility and may continue throughout the term of this Contract. Notwithstanding, the Contractor shall at all times during the term hereof maintain the same standards of performance and cleanliness as prevails in non-affected areas as required by the standards hereunder.

35. Permit-Required Confined Space Work

Prior to commencement of any work, the Contractor shall request and obtain from the Port Authority a description of all spaces at the facility which are permit-required confined spaces requiring issuance of an OSHA permit.

Prior to the commencement of any work in a permit-required confined space at a Port Authority facility requiring issuance of an OSHA permit, the Contractor shall contact the Manager to obtain an Authority Contractor Permit-Required Confined Space Notification form. The notification form must be filled out and submitted prior to commencing permit-required confined space work. All confined space work shall be performed in accordance with all applicable OSHA requirements. The Contractor shall provide its employees with a copy of its own company permit and shall furnish the Port Authority with a copy of the permit upon completion of the work. The Contractor must supply all equipment required for working in a confined space.

36. Signs

Except with the prior written approval of the Port Authority, the Contractor shall not erect, maintain or display any signs or posters or any advertising on or about the Facility.

37. Vending Machines, Food Preparation

The Contractor shall not install, maintain or operate on the Facility, or on any other Port Authority property, any vending machines without the prior written approval of the Port Authority. No foods or beverages shall be prepared or consumed at the Facility by any of the Contractor's employees except in areas as may be specifically designated by the Port Authority for such purpose.

38. Confidential Information/Non-Publication

a. As used herein, confidential information shall mean all information disclosed to the Contractor or the personnel provided by the Contractor hereunder which relates to the Authority's and/or PATH's past, present, and future research, development and business activities including, but not limited to, software and documentation licensed to the Authority or proprietary to the Authority and/or PATH and all associated software, source code procedures and documentation. Confidential information shall also mean any other tangible or intangible information or materials including but not limited to computer identification numbers, access codes, passwords, and reports obtained and/or used during the performance of the Contractor's Services under this Contract.

b. Confidential information shall also mean and include collectively, as per *The Port Authority of New York & New Jersey Information Security Handbook (October 15, 2008, corrected as of November 14, 2013),* Protected Information, Confidential Proprietary Information, Confidential Privileged Information and information that is labeled, marked or otherwise identified by or on behalf of the Authority so as to reasonably connote that such information is confidential, privileged, sensitive or proprietary in nature. Confidential Information shall also include all work product that contains or is derived from any of the foregoing, whether in whole or in part, regardless of whether prepared by the Authority or a third-party or when the Authority receives such information from others and agrees to treat such information as Confidential.

c. The Contractor shall hold all such confidential information in trust and confidence for the Authority, and agrees that the Contractor and the personnel provided by the Contractor hereunder shall not, during or after the termination or expiration of this Contract, disclose to any person, firm or corporation, nor use for its own business or benefit, any information obtained by it under or in connection with the supplying of services contemplated by this Contract. The Contractor and the personnel provided by the Contractor hereunder shall not violate in any manner any patent, copyright, trade secret or other proprietary right of the Authority or third persons in connection with their services hereunder, either before or-after termination or expiration of this Contract. The Contractor and the personnel provided by the Contractor hereunder shall not willfully or otherwise perform any dishonest or fraudulent acts, breach any security procedures, or damage or destroy any hardware, software or documentation, proprietary or otherwise, in connection with their services hereunder. The Contractor shall promptly and fully inform the Director in writing of any patent, copyright, trade secret or other intellectual property rights or disputes, whether existing or potential, of which the Contractor has knowledge, relating to any idea, design, method, material, equipment or other matter related to this Contract or coming to the Contractor's attention in connection with this Contract.

d. The Contractor shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Port Authority or to the fact that goods have been, are being or will be provided to it and/or that services have been, are being or will be performed for it in connection with this Agreement, unless the vendor first obtains the written approval of the Port Authority. Such approval may be

withheld if for any reason the Port Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.

39. Time is of the Essence

Time is of the essence in the Contractor's performance of this Contract inasmuch as the Work to be performed will affect the operation of public facilities.

40. Holidays

The following holidays will be observed at the Site:

New Year's Day	Labor Day
Martin Luther King Jr. Day	Columbus Day
Presidents Day	Veterans Day
Memorial Day	Thanksgiving Day
Independence Day	Day After Thanksgiving
Christmas Day	

This list is subject to periodic revision and the Contractor shall be responsible for obtaining all updated lists from the office of the Manager. If any such holiday falls on a Sunday then the next day shall be considered the holiday and/or if any such holiday falls on a Saturday then the preceding day shall be considered the holiday.

41. Personnel Standards

In addition to any specific personnel requirements that may be required under the clause entitled "Personnel Requirements" in the Specifications, the Contractor (and any Subcontractor) shall furnish competent and adequately trained personnel to perform the Work hereunder. If, in the opinion of the Manager, any employee so assigned is performing their functions unsatisfactorily, they shall be replaced by the Contractor within twenty-four (24) hours following the Contractor's receipt of the Manager's request for such replacement.

All Contractor's employees performing Work hereunder shall have the ability to communicate in the English language to the extent necessary to comprehend directions given by either the Contractor's supervisory staff or by the Manager's staff. Any employee operating a motor vehicle must have a valid driver's license.

The Contractor shall verify that employees working under this Contract in the United States are legally present in the United States and authorized to work by means of the federally required I-9 program

42. General Uniform Requirements for Contractor's Personnel

In addition to any specific uniform requirements that may be required by the Specifications, uniforms must be worn at all times during which the Services are being performed hereunder. The Contractor agrees that his/her employees will present a neat, clean and orderly appearance at all times. Uniforms shall include the Contractor's identification badge with picture ID bearing the employee's name. All uniforms, colors, types and styles shall be subject to the prior approval of the Manager. The Contractor will also be responsible for ensuring that its employees are wearing shoes appropriate for the tasks performed. The Manager shall have the right to require removal of any employee who shall fail to wear the proper uniform and shoes, and the exercise of this right shall not limit the obligation of the Contractor to perform the Services or to furnish any required number of employees at a specific location at the Site as specified.

43. Labor, Equipment and Materials Supplied by the Contractor

The Contractor shall, at all times during the performance of this Contract, furnish all necessary labor, supervision, equipment and materials necessary for the prompt and efficient performance of the Work, whether such materials and equipment are actually employed in the furnishing of the Work or whether incidental thereto.

All materials used by the Contractor in furnishing Work hereunder shall be of such quality as to accomplish the purposes of this Contract and the Services to be furnished hereunder in such manner so as not to damage any part of the Site.

The Port Authority by its officers, employees and representatives shall have the right at all times to examine the supplies, materials and equipment used by the Contractor, to observe the operations of the Contractor, its agents, servants and employees and to do any act or thing which the Port Authority may be obligated or have the right to do under this Contract or otherwise.

All equipment, materials and supplies used in the performance of this Contract required hereunder shall be used in accordance with their manufacturer's instructions.

Materials and supplies to be provided by the Contractor hereunder shall comply with OSHA and all applicable regulations.

44. Contractor's Vehicles – Parking - Licenses

At the discretion of the Manager, the Port Authority may permit the Contractor during the effective period of this Contract to park vehicle(s) used by it in its operations hereunder in such location as may from time to time or at any time be designated by the Manager. The Contractor shall comply with such existing rules, regulations and procedures as are now in force and such reasonable future rules, regulations and procedures as may hereafter be adopted by the Port Authority for the safety and convenience of persons who park automotive vehicles in any parking area at the Site or for the safety and proper persons who park automotive vehicles in any parking area at the Site or for the safety and proper identification of such vehicles, and the Contractor shall also comply with any and all directions pertaining to such parking which may be given from time to time and at any time by the Manager. Any vehicle used by the Contractor hereunder shall be marked or placarded, identifying it as the Contractor's vehicle.

45. Manager's Authority

In the performance of the Work hereunder, the Contractor shall conform to all orders, directions and requirements of the Manager and shall perform the Work hereunder to the satisfaction of the Manager at such times and places, by such methods and in such manner and sequence as he/she may require, and the Contract shall at all stages be subject to his/her inspection. The Manager shall determine the amount, quality, acceptability and fitness of all parts of the Work and shall interpret the Specifications and any orders for Extra Work. The Contractor shall employ no equipment, materials, methods or staff or personnel to which the Manager objects. Upon request, the Manager shall confirm in writing any oral order, direction, requirement or determination.

The Manager shall have the authority to decide all questions in connection with the Services to be performed hereunder. The exercise by the Manager of the powers and authorities vested in him/her by this section shall be binding and final upon the Port Authority and the Contractor.

46. Price Preference

If this solicitation has not been set aside for the purposes of making an award based on bids solicited from Port Authority certified Minority Business, Women Business or Small Business Enterprises as indicated by the bidder pre-requisites in Part II hereof, for awards of contracts, not exceeding $1,000,000, for:

(a) Services, a price preference of 5% is available for New York or New Jersey Small Business Enterprises (SBE); or

(b) Services (excluding Janitorial/Cleaning Services), a price preference of 10% is available for New York or New Jersey Minority or Women Business Enterprises (M/WBE),

certified by the Port Authority by the day before the bid opening.

If the Bidder is a Port Authority certified MBE, WBE or SBE, enter the applicable date(s) certification was obtained in the space provided on the Signature Sheet attached hereto.

47. M/WBE Good Faith Participation

If specified as applicable to this Contract, the Contractor shall use every good-faith effort to provide for participation by certified Minority Business Enterprises (MBEs) and certified Women-owned Business Enterprises (WBEs) as herein defined, in all purchasing and subcontracting opportunities associated with this Contract, including purchase of equipment, supplies and labor services.

Good Faith efforts to include participation by MBEs/WBEs shall include the following:

a. Dividing the services and materials to be procured into small portions, where feasible.

b. Giving reasonable advance notice of specific contracting, subcontracting and purchasing opportunities to such MBEs/WBEs as may be appropriate.

c. Soliciting services and materials from a Port Authority certified MBE/WBE or seeking MBEs/WBEs from other sources. To access the Port Authority's Directory of MBE/WBE Certified Firms go to www.panynj.gov/supplierdiversty

d. Ensuring that provision is made to provide progress payments to MBEs/WBEs on a timely basis.

e. Observance of reasonable commercial standards of fair dealing in the respective trade or business.

Subsequent to Contract award, all changes to the M/WBE Participation Plan must be submitted via a modified M/WBE Participation Plan to the Manager for review and approval by the Authority's Office of Business Diversity and Civil Rights. For submittal of modifications to the M/WBE Plan, Contractors are directed to use form PA3749C, which may be downloaded at http://www.panynj.gov/business-opportunities/become-vendor.html. The Contractor shall not make changes to its approved M/WBE Participation Plan or substitute M/WBE subcontractors or suppliers for those named in their approved plan without the Manager's prior written approval. Unauthorized changes or substitutions, including performing the work designated for a subcontractor with the Contractor's own forces, shall be a violation of this section. Progress toward attainment of M/WBE participation goals set forth herein will be monitored throughout the duration of this Contract.

The Contractor shall also submit to the Manager, along with invoices, the Statement of Subcontractor Payments as the M/WBE Participation Report, which may be downloaded at http://www.panynj.gov/business-opportunities/become-vendor.html. The Statement must include the name and business address of each M/WBE subcontractor and supplier actually involved in the Contract, a description of the work performed and/or product or service supplied by each such subcontractor or supplier, the date and amount of each expenditure, and such other information that may assist the Manager in determining the Contractor's compliance with the foregoing provisions.

If, during the performance of this Contract, the Contractor fails to demonstrate good faith efforts in carrying out its M/WBE Participation Plan and the Contractor has not requested and been granted a full or partial waiver of the M/WBE participation goals set forth in this Contract, the Authority will take into consideration the Contractor's failure to carry out its M/WBE Participation Plan in its evaluation for award of future Authority contracts.

PART III CONTRACTOR'S INTEGRITY PROVISIONS

1. Certification of No Investigation (criminal or civil anti-trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure of Other Information

By bidding on this Contract, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that the Bidder and each parent and/or affiliate of the Bidder has not

a. been indicted or convicted in any jurisdiction;
b. been suspended, debarred, found not responsible or otherwise disqualified from entering into any contract with any governmental agency or been denied a government contract for failure to meet standards related to the integrity of the Bidder;
c. had a contract terminated by any governmental agency for breach of contract or for any cause based in whole or in part on an indictment or conviction;
d. ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Bid;
e. had any business or professional license suspended or revoked or, within the five years prior to bid opening, had any sanction imposed in excess of fifty thousand dollars ($50,000) as a result of any judicial or administrative proceeding with respect to any license held or with respect to any violation of a federal, state or local environmental law, rule or regulation;
f. 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; and
g. been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, including an inspector general of a governmental agency or public authority.

2. Non-Collusive Bidding, and Code of Ethics Certification, Certification of No Solicitation Based On Commission, Percentage, Brokerage, Contingent or Other Fees

By bidding on this Contract, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, that

a. the prices in its bid have been arrived at independently without collusion, consultation, communication or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
b. the prices quoted in its bid have not been and will not be knowingly disclosed directly or indirectly by the Bidder prior to the official opening of such bid to any other bidder or to any competitor;
c. no attempt has been made and none will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition;
d. this organization has not made any offers or agreements or taken any other action with respect to any Authority employee or former employee or immediate family member of either which would constitute a breach of ethical standards under the Code of Ethics dated March 11, 2014, or as may be revised, (a copy of which is available upon request) nor does this organization have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of the ethical standards set forth in said Code;
e. no person or selling agency other than a bona fide employee or bona fide established commercial or selling agency maintained by the Bidder for the purpose of securing business, has been employed or retained by the Bidder to solicit or secure this Contract on the understanding that a commission, percentage, brokerage, contingent, or other fee would be paid

to such person or selling agency; and

f. the Bidder has not offered, promised or given, demanded or accepted, any undue advantage, directly or indirectly, to or from a public official or employee, political candidate, party or party official, or any private sector employee (including a person who directs or works for a private sector enterprise in any capacity), in order to obtain, retain, or direct business or to secure any other improper advantage in connection with this Contract.

g. no person or organization has been retained, employed or designated on behalf of the Bidder to impact any Port Authority determination with respect to (i) the solicitation, evaluation or award of this Contract, or (ii) the preparation of specifications or request for submissions in connection with this Contract.

The foregoing certifications in this Part III, Sections 1 and 2, shall be deemed to have been made by the Bidder as follows:

* if the Bidder is a corporation, such certification shall be deemed to have been made not only with respect to the Bidder itself, but also with respect to each parent, affiliate, director, and officer of the Bidder, as well as, to the best of the certifier's knowledge and belief, each stockholder of the Bidder with an ownership interest in excess of 10%;
* if the Bidder is a partnership, such certification shall be deemed to have been made not only with respect to the Bidder itself, but also with respect to each partner.

Moreover, the foregoing certifications, if made by a corporate Bidder, shall be deemed to have been authorized by the Board of Directors of the Bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the Bidder cannot make the foregoing certifications, the Bidder shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the reasons therefor. If the Bidder is uncertain as to whether it can make the foregoing certifications, it shall so indicate in a signed statement furnished with its bid, setting forth in such statement the reasons for its uncertainty. With respect to the foregoing certification in paragraph “2g”, if the Bidder cannot make the certification, it shall provide, in writing, with the signed bid: (i) a list of the name(s), address(es), telephone number(s), and place(s) of principal employment of each such individual or organization; and (ii) a statement as to whether such individual or organization has a “financial interest” in this Contract, as described in the Procurement Disclosure Policy of the Authority (a copy of which is available upon request to the Chief Procurement Officer of the Procurement Department of the Authority). Such disclosure is to be updated, as necessary, up to the time of award of this Contract. As a result of such disclosure, the Port Authority shall take appropriate action up to and including a finding of non-responsibility.

Failure to make the required disclosures shall lead to administrative actions up to and including a finding of non-responsiveness or non-responsibility.

Notwithstanding that the Bidder may be able to make the foregoing certifications at the time the bid is submitted, the Bidder shall immediately notify the Authority in writing during the period of irrevocability of bids and the term of the Contract, if Bidder is awarded the Contract, of any change of circumstances which might under this clause make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure. The foregoing certifications or signed statement shall be deemed to have been made by the Bidder with full knowledge that they would become a part of the records of the Authority and that the Authority will rely on their truth and accuracy in awarding and continuing this Contract. In the event that the Authority should determine at any time prior or subsequent to the award of this Contract that the Bidder has falsely certified as to any material item in the foregoing certifications, has failed to immediately notify the Port Authority of any change in circumstances which might

make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure, or has willfully or fraudulently furnished a signed statement which is false in any material respect, or has not fully and accurately represented any circumstance with respect to any item in the foregoing certifications required to be disclosed, the Authority may determine that the Bidder is not a responsible Bidder with respect to its bid on the Contract or with respect to future bids on Authority contracts and may exercise such other remedies as are provided to it by the Contract with respect to these matters. In addition, Bidders are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g. New York Penal Law, Section 175.30 et seq.). Bidders are also advised that the inability to make such certification will not in and of itself disqualify a Bidder, and that in each instance the Authority will evaluate the reasons therefor provided by the Bidder. Under certain circumstances the Bidder may be required as a condition of Contract award to enter into a Monitoring Agreement under which it will be required to take certain specified actions, including compensating an independent Monitor to be selected by the Port Authority, said Monitor to be charged with, among other things, auditing the actions of the Bidder to determine whether its business practices and relationships indicate a level of integrity sufficient to permit it to continue business with the Port Authority.

3. Bidder Eligibility for Award of Contracts - Determination by an Agency of the State of New York or New Jersey Concerning Eligibility to Receive Public Contracts

Bidders are advised that the Authority has adopted a policy to the effect that in awarding its contracts it will honor any determination by an agency of the State of New York or New Jersey that a Bidder is not eligible to bid on or be awarded public contracts because the Bidder has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing rate of wage legislation.

The policy permits a Bidder whose ineligibility has been so determined by an agency of the State of New York or New Jersey to submit a bid on a Port Authority contract and then to establish that it is eligible to be awarded a contract on which it has bid because (i) the state agency determination relied upon does not apply to the Bidder, or (ii) the state agency determination relied upon was made without affording the Bidder the notice and hearing to which the Bidder was entitled by the requirements of due process of law, or (iii) the state agency determination was clearly erroneous or (iv) the state determination relied upon was not based on a finding of conduct demonstrating a lack of integrity or violation of a prevailing rate of wage law.

The full text of the resolution adopting the policy may be found in the Minutes of the Authority's Board of Commissioners meeting of September 9, 1993.

4. Contractor Responsibility, Suspension of Work and Termination

During the term of this Contract, the Contractor shall at all times during the Contract term remain responsible. The Contractor agrees, if requested by the Port Authority to present evidence of its continuing legal authority to do business in the States of New Jersey or New York, integrity, experience, ability, prior performance, and organizational and financial capacity.

The Port Authority, in its sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when it discovers information that calls into question the responsibility of the Contractor. In the event of such suspension, the Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Contractor must comply with the terms of the suspension order. Contract activity may resume at such time as the Port Authority issues a written notice authorizing a resumption of performance under the Contract.

Upon written notice to the Contractor, and an opportunity to be heard with appropriate Port Authority officials or staff, the Contract may be terminated by Port Authority at the Contractor's expense where the Contractor is determined by the Port Authority to be non-responsible. In such event, the Port Authority or its designee may

complete the contractual requirements in any manner he or she may deem advisable and pursue available legal or equitable remedies for breach, including recovery of costs from Contractor associated with such termination.

5. No Gifts, Gratuities, Offers of Employment, Etc.

At all times, the Contractor shall not offer, give or agree to give anything of value either to a Port Authority employee, agent, job shopper, consultant, construction manager or other person or firm representing the Port Authority, or to a member of the immediate family (i.e., a spouse, child, parent, brother or sister) of any of the foregoing, in connection with the performance by such employee, agent, job shopper, consultant, construction manager or other person or firm representing the Port Authority of duties involving transactions with the Contractor on behalf of the Port Authority, whether or not such duties are related to this Contract or any other Port Authority contract or matter. Any such conduct shall be deemed a material breach of this Contract.

As used herein "anything of value" shall include but not be limited to any (a) favors, such as meals, entertainment, transportation (other than that contemplated by the Contract or any other Port Authority contract), etc. which might tend to obligate the Port Authority employee to the Contractor, and (b) gift, gratuity, money, goods, equipment, services, lodging, discounts not available to the general public, offers or promises of employment, loans or the cancellation thereof, preferential treatment or business opportunity. Such term shall not include compensation contemplated by this Contract or any other Port Authority contract. Where used herein, the term "Port Authority" shall be deemed to include all subsidiaries of the Port Authority.

The Contractor shall insure that no gratuities of any kind or nature whatsoever shall be solicited or accepted by it and by its personnel for any reason whatsoever from the passengers, tenants, customers or other persons using the Facility and shall so instruct its personnel.

In the event that the Contractor becomes aware of the occurrence of any conduct that is prohibited by this section entitled “No Gifts, Gratuities, Offers of Employment, Etc.”, it shall report such occurrence to the Port Authority’s Office of Inspector General within three (3) business days of obtaining such knowledge. (See “http://www.panynj.gov/inspector-general” for information about to report information to the Office of Inspector General). Failing to report such conduct shall be grounds for a finding of non-responsibility.

In addition, during the term of this Contract, the Contractor shall not make an offer of employment or use confidential information in a manner proscribed by the Code of Ethics and Financial Disclosure dated March 11, 2014, or as may be revised (a copy of which is available upon request to the Office of the Secretary of the Port Authority).

The Contractor shall include the provisions of this clause in each subcontract entered into under this Contract.

6. Conflict of Interest

During the term of this Contract, the Contractor shall not participate in any way in the preparation, negotiation or award of any contract (other than a contract for its own services to the Authority) to which it is contemplated the Port Authority may become a party, or participate in any way in the review or resolution of a claim in connection with such a contract if the Contractor has a substantial financial interest in the contractor or potential contractor of the Port Authority or if the Contractor has an arrangement for future employment or for any other business relationship with said contractor or potential contractor, nor shall the Contractor at any time take any other action which might be viewed as or give the appearance of conflict of interest on its part. If the possibility of such an arrangement for future employment or for another business arrangement has been or is the subject of a previous or current discussion, or if the Contractor has reason to believe such an arrangement may be the subject of future discussion, or if the Contractor has any financial interest, substantial or not, in a contractor or potential contractor of the Authority, and the Contractor's participation in the preparation, negotiation or award of any contract with such a contractor or the review or resolution of a claim in connection with such a contract is contemplated or if the Contractor has reason to believe that any other situation exists which might be viewed as

or give the appearance of a conflict of interest, the Contractor shall immediately inform the Chief Procurement Officer in writing of such situation giving the full details thereof. Unless the Contractor receives the specific written approval of the Chief Procurement Officer, the Contractor shall not take the contemplated action which might be viewed as or give the appearance of a conflict of interest. The Chief Procurement Officer may require the Contractor to submit a mitigation plan addressing and mitigating any disclosed or undisclosed conflict, which is subject to the approval of the Chief Procurement Officer and shall become a requirement, as though fully set forth in this Contract. In the event the Chief Procurement Officer shall determine that the performance by the Contractor of a portion of its Services under this Agreement is precluded by the provisions of this numbered paragraph, or a portion of the Contractor's said Services is determined by the Chief Procurement Officer to be no longer appropriate because of such preclusion, then the Chief Procurement Officer shall have full authority on behalf of both parties to order that such portion of the Contractor's Services not be performed by the Contractor, reserving the right, however, to have the Services performed by others and any lump sum compensation payable hereunder which is applicable to the deleted work shall be equitably adjusted by the parties. The Contractor's execution of this document shall constitute a representation by the Contractor that at the time of such execution the Contractor knows of no circumstances, present or anticipated, which come within the provisions of this paragraph or which might otherwise be viewed as or give the appearance of a conflict of interest on the Contractor's part. The Contractor acknowledges that the Authority may preclude it from involvement in certain disposition/privatization initiatives or transactions that result from the findings of its evaluations hereunder or from participation in any contract, which results, directly or indirectly, from the Services provided by the Contractor hereunder. The Port Authority's determination regarding any questions of conflict of interest shall be final.

7. Definitions

As used in this section, the following terms shall mean:

Affiliate - Two or more firms are affiliates if a parent owns more than fifty percent of the voting stock of each of the firms, or a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the firms, or if the firms have a common proprietor or general partner.

Agency or Governmental Agency - Any federal, state, city or other local agency, including departments, offices, public authorities and corporations, boards of education and higher education, public development corporations, local development corporations and others.

Investigation - Any inquiries made by any federal, state or local criminal prosecuting and/or law enforcement agency and any inquiries concerning civil anti-trust investigations made by any federal, state or local governmental agency. Except for inquiries concerning civil anti-trust investigations, the term does not include inquiries made by any civil government agency concerning compliance with any regulation, the nature of which does not carry criminal penalties, nor does it include any background investigations for employment, or Federal, State, and local inquiries into tax returns.

Officer - Any individual who serves as chief executive officer, chief financial officer, or chief operating officer of the Bidder by whatever titles known.

Parent - An individual, partnership, joint venture or corporation which owns more than 50% of the voting stock of the Bidder.

If the solicitation is a Request for Proposal:

Bid - shall mean Proposal;
Bidder - shall mean Proposer;
Bidding - shall mean submitting a Proposal.

In a Contract resulting from the taking of bids:

Bid - shall mean bid;
Bidder - shall mean Bidder; except and until the Contract has been awarded, then it shall mean Contractor
Bidding - shall mean executing this Contract.

In a Contract resulting from the taking of Proposals:

Bid - shall mean Proposal;
Bidder - shall mean Proposer;
Bidding - shall mean executing this Contract.