



**INSPECTION REPORT FOR  
ASBESTOS CONTAINING MATERIALS,  
LEAD CONTAINING PAINT, PCBs  
AND UNIVERSAL/REGULATED MATERIAL**

*Performed at:*

**BUILDING 79  
HOWLAND HOOK MARINE TERMINAL  
PORT IVORY  
40 WESTERN AVE  
STATEN ISLAND, NY**

*Performed for:*

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

**PANYNJ Contract # HH-934.900**

*Prepared by:*

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**ATC Project No: 15.14777-0536**

**November 16, 2010**



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November 16, 2010

Robert Pruno P.E.  
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Newark, NJ 07102

**Subject: Inspection Report for Asbestos Containing Materials, Lead Containing Paint, PCBs and Universal/ Regulated Material**

**Re: Building 79 - Howland Hook Marine Terminal, Port Ivory, Staten Island, NY**

Dear Mr. Pruno:

ATC Associates Inc. (ATC) has completed the inspection for asbestos-containing materials (ACM), Polychlorinated Biphenyls-containing caulking (PCB-containing caulking), and universal/regulated material for the proposed work at the above referenced site. The inspection included visual observation, material sampling, and laboratory analysis of suspect ACM and PCB-containing caulking as well as a visual inventory of universal/regulated material. ATC reviewed and incorporated the ACM and lead containing paint (LCP) inspection data from previous Port Authority of New York and New Jersey (PANYNJ) survey reports.

The attached report presents our inspections procedures, findings, assessments and recommendations. ACM, LCP and PCB-containing caulking laboratory results, ACM and PCB-containing caulking sample location drawings, ACM location drawings, ACM and universal/regulated material photographic logs, universal/regulated material table, universal/regulated material drawings, laboratory accreditations, personnel certifications, and cost estimate are provided in the Appendices.

ATC appreciates this opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further assistance to you, please contact us.

Sincerely,

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Guillermo Solis  
Asbestos Inspector

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Gilbert Gedeon, P.E.  
Operations Manager

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Appendix A: ACM Analysis Results in Tabular Form, Chain of Custodies and Laboratory Results

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Appendix F: PCB-Containing Caulking Sample Analysis Results

Appendix G: Universal/Regulated Material Location Drawings

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## **1.0 EXECUTIVE SUMMARY**

ATC Associates Inc. has performed an Inspection for ACM, PCB-Containing Caulking and Universal/Regulated Material at Building 79 located at Howland Hook Marine Terminal, Port Ivory, Staten Island, NY (the "Site"). The survey was conducted at the request of Port Authority of New York and New Jersey. The survey was conducted at the request of Port Authority of New York and New Jersey. The intent of this survey was to locate and identify all accessible ACM, PCBs and universal/regulated material within the above referenced building and to provide a cost estimate for removal of the aforementioned items.

ATC's ACM and PCB-Containing Caulking survey was performed by Mr. Guillermo Solis and Mr. Gilbert Gedeon on August 20 2010 through September 10, 2010. Mr. Solis and Mr. Gedeon hold certifications from the New York State Department of Labor as Asbestos Inspectors (AH-06-00720 and AH-94-04294), accordingly. This survey was conducted to supplement previous asbestos inspection activities performed by PANYNJ. The Universal/Regulated Material inventory was performed by Mr. John J. Mascioli, M.S. on August 24, 2010. ATC and PANYNJ asbestos bulk sample results are included in Appendices A and B, respectively. PCB sample results are included in Appendix F.

## **2.0 BUILDING DESCRIPTION**

Building 79 was constructed in 1980. It is a single-story structure; approximately 4,766 square feet in size including the tunnel which houses a decommissioned conveyor belt leading to Building 80. Both the main building and the tunnel are constructed primarily of metal decking and cinder block/metal siding and are located south of Building 80. Building 79 currently serves as an office building with the horizontal portion of the tunnel being used as a storage area. The inclined portion of the tunnel is abandoned. The building and the tunnel are both scheduled for complete demolition in the future.

## **3.0 FIELD SURVEY PROCEDURES AND SAMPLE ANALYSIS METHODS**

Guidelines used for the inspection were established by the Environmental Protection Agency (EPA) in the Guidance for Controlling Asbestos Containing Materials in Buildings, Office of Pesticides and Toxic Substances, Doc 560/5-85-024, and 40 CFR Part 763, Asbestos Hazard Emergency Response Act (AHERA).

Field information was organized in accordance with the AHERA methodology of homogeneous area (HA). During the survey, reasonable effort was made to identify all locations and types of ACM materials associated with the scope of work. Sampling has included multiple samples of the same materials chosen at random. However, due to inconsistencies of a manufacturer's processes and the contractor's installation methods, materials of similar construction may contain various amounts of asbestos. Further, some materials that were not originally specified to contain asbestos may in fact contain this mineral. For example, Cementitious pipe insulation and plaster were frequently mixed with asbestos at the construction site for ease of application. Locating all asbestos materials can only be definitively achieved by conducting exploratory demolition and sampling every section of pipe

insulation, fitting or valve covering, fireproofing, and other suspect ACM.

Bulk samples of suspect ACM were analyzed using Polarized Light Microscopy (PLM) coupled with dispersion staining, as described in 40 CFR Part 763 and the National Emissions Standard for Hazardous Air Pollutants (NESHAP). NESHAP is the standard industry protocol for the determination of asbestos in building materials. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The color displays that results are compared to a standardized atlas whereby the specific variety of asbestos is determined. It should also be recognized that PLM is primarily a qualitative identification method whereby asbestos percentage, if any, is estimated.

The New York State Department of Health has revised the PLM Stratified Point Counting Method. The new method, "Polarized Light Microscopy Methods for Identifying and Quantifying Asbestos in Bulk Samples" can be found as method 198.1 in the Environmental Laboratory Approval program (ELAP) Certification manual. The method specifies a procedure of analysis for bulk samples that fall into the category of "Non-friable Organically Bound" (NOB). This category includes any sample in a flexible to rigid asphalt or vinyl matrix (floor tiles, mastic, roofing shingles, roofing felt, etc.). Additional materials that may fall into this category are textured paints and stucco, pipe valve and joint packing, and a variety of other applications. These samples must be "ashed" in a muffle furnace at 4-degrees Celsius (to remove organic matrix), treated with acid (to remove any mineral carbonate), and filtered through a 0.4-micron filter before being analyzed by PLM Method 198.6. The sample must be weighted between each of these steps to track the percent loss of organic matrix.

ELAP has determined that analysis of NOB materials is not reliably performed by PLM. Therefore, if PLM yields results of 1-percent asbestos or less, the result must be confirmed by TEM method 198.4. Bulk samples that undergo TEM analysis use the sample reduction methodology stated above for NOB analysis by PLM. ELAP certified laboratories must include the following statement with their PLM analysis results for each "negative" (1-percent or less asbestos) NOB sample: "Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-ACM, confirmation must be made by quantitative transmission electron microscopy".

All samples were initially analyzed by Polarized Light Microscopy. Samples which yielded a negative PLM result and which are classified as a "non-friable" material were then re-analyzed utilizing Transmission Electron Microscopy methodology described above. The laboratory performing both these analysis procedures was ATC Associates Inc., located at 104 East 25th Street, New York, New York. The laboratory has received accreditation from the following agencies:

- National Voluntary Laboratory Accreditation Program (Lab Code 101187-0)
- New York State Environmental Laboratory Approval Program (Lab No. 10879)
- American Industrial Hygiene Association Accredited Laboratory (Lab No. 100229)

#### **4.0 ACM INSPECTION SCOPE AND FINDINGS**

The intent of this survey was to locate and identify all accessible ACM. As part of inspection ATC

reviewed the previous PANYNJ inspection report and conducted the initial walkthrough of the site. Based on the review and walkthrough ATC conducted an asbestos inspection and collected suspect ACM samples. ATC performed limited intrusive/destructive sampling in the areas as this building is occupied. The areas inspected included the main building passageway roofs, main building and passageway exterior, main building interior office space, and interior passageway.

The materials examined and sampled for ACM during the inspections were:

- 1st Floor Front Entrance - Mastic under 12”x12” - White Tiles with Black Dots
- 1st Floor Kitchen - Sink Under side Coating - White
- 1st Floor Copy room, Storage/File Room - Carpet Mastic - Gray
- 1st Floor Women’s Bath Room, Storage/File Room - Gypsum Board - White
- 1st Floor Women’s Bath Room, Storage/File Room - Joint Compound - White
- 1st Floor Front Entrance, Storage/File Room - Cove Base - Black
- 1st Floor Front Entrance, Storage/File Room - Cove Base Mastic - Cream
- Exterior/Interior Doors - Fire Door Insulation - Brown Paper
- Exterior Coating on Foundation Wall - Beige
- Exterior Caulking on Metal Siding - Beige
- Exterior Window Caulking - Black
- Exterior Window Caulking - Gray
- Exterior Window Panel Insulation - Brown
- Main Roof - Tar Sealant on Metal on Decking - Black
- Main Roof - Vent Caulking - White
- Main Roof - Vent Caulking - Black
- Main Roof - Tar Sealant Around Vent - Black
- Tunnel Interior - Pipe Insulation under Metal Jacket - White
- Tunnel Interior - Joint Sealant on Metal - Black
- Tunnel Interior - Sky Light Caulking - White
- Tunnel Interior - Joint Sealant on Metal - White

The gray window caulking, which was found to contain asbestos, is present on the exterior of two windows located on the north side of the main building.

The gray vent caulking and tar sealant, which were found to contain asbestos, are present on vents and metal decking joints on the roof of the main building.

The black metal joint sealant, which was found to be asbestos containing, is present along the wall bottom of the horizontal tunnel walls.

## 5.0 ACM INSPECTION RESULTS

Based upon visual inspection and analytical results of bulk samples collected, **the following materials contain asbestos (> 1%)**.

ATC Sample Number	Sampling Date	Material Description	Asbestos Content	Approximate Quantity
PI-79-26	8/23/10	Gray Window Caulking from Exterior Window North of the building	2% Anthophyllite	240 LF
PI-79-30	8/23/10	Black Tar Sealant from Metal Decking on East side of Roof	4.3% Chrysotile	55 SF
PI-79-34	8/23/10	Gray/Black Vent Caulking from the Roof Vent located at South East corner of Roof	4.4% Chrysotile	
PI-79-36	8/23/10	Black Tar Sealant Around Roof Vent located at West side of Roof	6.4% Chrysotile	2 SF
PI-79-41	9/10/10	Black Metal Joint Sealant from Horizontal Tunnel South end of Computer Room.	3.5% Chrysotile	275 LF

PANYNJ Sample Number	Material Description	Asbestos Content	Approximate Quantity
HHPI-2202	Red Exterior Window Caulking near North Loading Dock Doors- 1st floor	2.8% Chrysotile	300 LF
HHPI-2203	Red Exterior Window Caulking near North Loading Dock Doors- 1st floor	1.6% Chrysotile	
HHPI-2204	Red Exterior Window Caulking near North Loading Dock Doors- 1st floor	1.1% Chrysotile	

**Port Authority Sample Results Summary:**

Based on the review of the sample data and survey report provided by PANYNJ.

Based on the review of the sample data and survey report provided by PANYNJ, no samples were collected by PANYNJ. Materials assumed to contain asbestos by PANYNJ were sampled by ATC accordingly.

**6.0 LEAD CONTAINING PAINT (LCP) RESULTS**

ATC has reviewed and incorporated the LCP sample results provided by the PANYNJ into this report under Appendix B. The following samples were confirmed by the PANYNJ to be lead-containing:

- Light gray paint on metal frame of walkway on North end of Building 79
- Brown paint on metal door frame of bath room located in East side of Building 79
- Yellow paint on safety rails along East side of Building 79

## 7.0 PCB-CONTAINING CAULKING INSPECTION FINDINGS

ATC Associates Inc. (ATC) collected nine (9) samples from suspect PCB-Containing Caulking and submitted to a third party laboratory for analysis. The suspect PCB-containing caulking samples collected were based on building component, application type as well as color and texture. Caulking and expansion joint materials with similar characteristics were assumed to be homogenous materials.

- Beige caulking on metal siding-south east entrance
- Black window caulking - south west windows
- Gray window caulking - north windows
- White vent caulking - south east corner of roof
- Black vent caulking - south east corner of roof
- Black metal wall joint sealant - horizontal tunnel north end east wall bottom
- White interior skylight caulking - horizontal tunnel south end
- Beige interior skylight caulking - horizontal tunnel north end
- White metal wall joint sealant- inclined tunnel north end east wall

Based on laboratory analysis and results provided by New York Environmental & Analytical Laboratories Inc, PCB levels are below the report limit (mg/kg). Corresponding laboratory results are attached in Appendix F

## 8.0 UNIVERSAL/REGULATED MATERIAL INVENTORY

ATC conducted a limited visual inspection on August 24, 2010 to identify and document universal/regulated materials at the site in order to prepare an inventory of these materials for the planned demolition and renovation activities. Materials inspected included but not limited to lamps, ballasts, capacitors, mercury containing equipment, transformers, batteries, hydro fluorocarbons and miscellaneous oils and chemicals.

Based on the age of the building, it was assumed that lamp ballasts/capacitors contain Polychlorinated Biphenyls (PCBs) and/or di (2) ethylhexyl phthalate (DEHP). A tabulation of the inventory is summarized in the tables below. Drawings with the locations of the observed materials are attached in Appendix G.

### *Lighting Fixtures:*

<b>Bulb Type</b>	<b>Fixture height from floor (Ft.)</b>	<b>No. of Fixtures</b>	<b>No. of Bulbs</b>	<b>No. of Ballasts or Capacitors</b>	<b>Bulb Size (Length in Ft)</b>
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Fluorescent (Interior)	~8	5	10	5	4
Fluorescent (Interior)	~9	4	8	4	8
Fluorescent (Interior)	~10	25	100	50	4
HID (Interior)	~8	1	1	1	NA
<b>TOTALS</b>		<b>35</b>	<b>119</b>	<b>60</b>	NA

***Miscellaneous Equipment:***

<b>Equipment Type</b>	<b>Location</b>	<b>Quantity</b>	<b>Notes</b>
Fire Extinguisher (Interior)	West room	1	Nitrogen type
Water Cooler (Interior)	Located along the west wall	2	May contain CFCs
Batteries (Interior Emergency Lighting)	Emergency lighting above two exits	2	Type unknown, not accessible
Refrigerant 22 (Exterior)	Exterior – southwest of building	9 lbs.	Located within ground-mounted AC/condenser unit.

**9.0 CONCLUSIONS AND RECOMMENDATIONS**

Various types of ACM universal/regulated material have been identified in our survey effort that may be impacted as part of the proposed demolition work at Building 79. The materials reported in Section 5.0 of this report would require complete abatement prior to the start of any work that may impact the ACM.

**10.0 ASSUMPTIONS AND LIMITATIONS**

The results, findings, conclusions, and recommendations expressed in this report are based only on conditions that were noted at the time of the inspection.

The report is designed to aid the PANYNJ in identifying and locating ACM, LCP, PCB-containing caulking, and universal/regulated material. Under no circumstances is the report to be utilized as a bidding document or as a project specification document since it does not have all the components required to serve as an environmental abatement/remediation work plan.

If questions arise regarding asbestos content in building materials that were not tested by ATC, additional testing services should be procured to test those areas.

This report is intended for the sole use of the PANYNJ. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document or the findings, conclusions, or recommendations contained herein is at the risk of said user.