AHERA - THREE YEAR REINSPECTION



MAINTENANCE SHOP

602-604 SOUTH PICKETT STREET
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-E4-15

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

SEPTEMBER 2, 2025

September 2, 2025

Mr. Lee Conroy
Alexandria City Public Schools
1715 North Beauregard Street
Alexandria, Virginia 22311

ECS Project No. 47:11652-E4-15

Reference: AHERA - Three Year Reinspection, Maintenance Shop , 602-604 South Pickett Street, Alexandria, Virginia

Dear Mr. Conroy:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the above referenced AHERA - Three Year Reinspection performed at Maintenance Shop located at 602-604 South Pickett Street in Alexandria, Virginia.

Previous asbestos surveys of the maintenance shop identified asbestos-containing materials. ECS performed a walk through of the building to observe present conditions.

This report summarizes our observations, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:39012-EP and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide Alexandria City Public Schools with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

Adam Truax
Environmental Senior Project Manager
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Christopher J. Chapman, CIH
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1.0 SITE DESCRIPTION

The subject property consists of Maintenance Shop , a one-story brick building located at 602-604 South Pickett Street in Alexandria, Virginia. The building was originally constructed in 1953 and encompasses approximately 11,400 square feet. Building finishes observed included concrete sub-floors, vinyl floor tiles, wood flooring, and/or ceramic tiles; the wall systems appeared to generally consist of concrete masonry unit (CMU) block walls, drywall wallboard, and/or ceramic wall tiles; and the ceiling systems appeared to generally consist of suspended drop ceilings with ceiling tiles.

Note: Based on the age of the structure, it is likely that asbestos insulation on piping and ductwork maybe present and concealed behind solid walls/above solid ceilings.

2.0 PURPOSE

The purpose of this Asbestos Hazard Emergency Response Act (AHERA) three-year re-inspection of asbestos-containing materials was to assess previously identified asbestos-containing building materials (ACBMs) present on the subject property. The survey was performed on the interior areas of the subject building. This survey is intended to provide a supporting document for the AHERA management plan.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by regulation(s) for the identification of Asbestos-Containing Materials (ACMs).

3.1 Asbestos Re-Inspection

The AHERA re-inspection survey was performed by David Stambaugh, a Virginia licensed asbestos inspector (license number 3303005057) who has received EPA-accredited training.

Before conducting the re-inspection, ECS reviewed existing inspection reports and then walked through areas where previously friable or non-friable ACBM were reported to be located, including assumed materials.

The scope of work for the re-inspection included the following items:

- Review the existing management plan to determine the areas requiring re-inspection.
- Visually reinspect and reassess the condition of known or assumed friable ACBM.
- Visually reinspect known or assumed non-friable ACBM and determine if it has become friable.
- Identify homogeneous areas that have changed conditions since previous re-inspections.
- Identify renovations or new materials that have been added to the building since the previous inspection.

At the request of the client, ECS did not sample additional materials during this inspection.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

An Asbestos-Containing Material (ACM) is defined as any material containing more than one percent (>1%) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM. Materials are categorized by the U.S. EPA in the following categories:

- Friable ACMs are defined as any ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.
- Non-friable ACMs are defined as any ACM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
    - Category I non-friable ACM are listed as following: packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent (>1%) asbestos.
    - Category II non-friable ACM are listed as any material, excluding Category I non-friable ACM, containing more than one percent (>1%) asbestos.

Regulated Asbestos Containing Materials (RACM) are friable ACM or non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or has crumbled, been pulverized, or reduced to powder in the course of renovation and/or demolition operations.

A table of previously identified ACBM in the building is appended to this report.

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the AHERA - Three Year Reinspection, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

All known ACM materials identified in the plan that were observed by ECS during this survey were found to be in good to fair condition. No action is required. Continue management under the O&M Plan for the building.

If ACMs are to be removed, it is recommended that an industrial hygienist monitor the project. This involves collecting air samples from within and outside abatement work areas to monitor the asbestos abatement contractor's work practices over the course of the project. Only after the industrial hygienist has determined the identified ACMs have been removed should final clearance air samples be collected.

For any future renovation project, a more in-depth survey should be performed for asbestos in the path of construction. Where asbestos is found, an asbestos abatement plan should be prepared by an accredited professional as outlined in AHERA prior to performing any asbestos removal work.

The results of this survey should be added to the school's AHERA management plan.

6.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

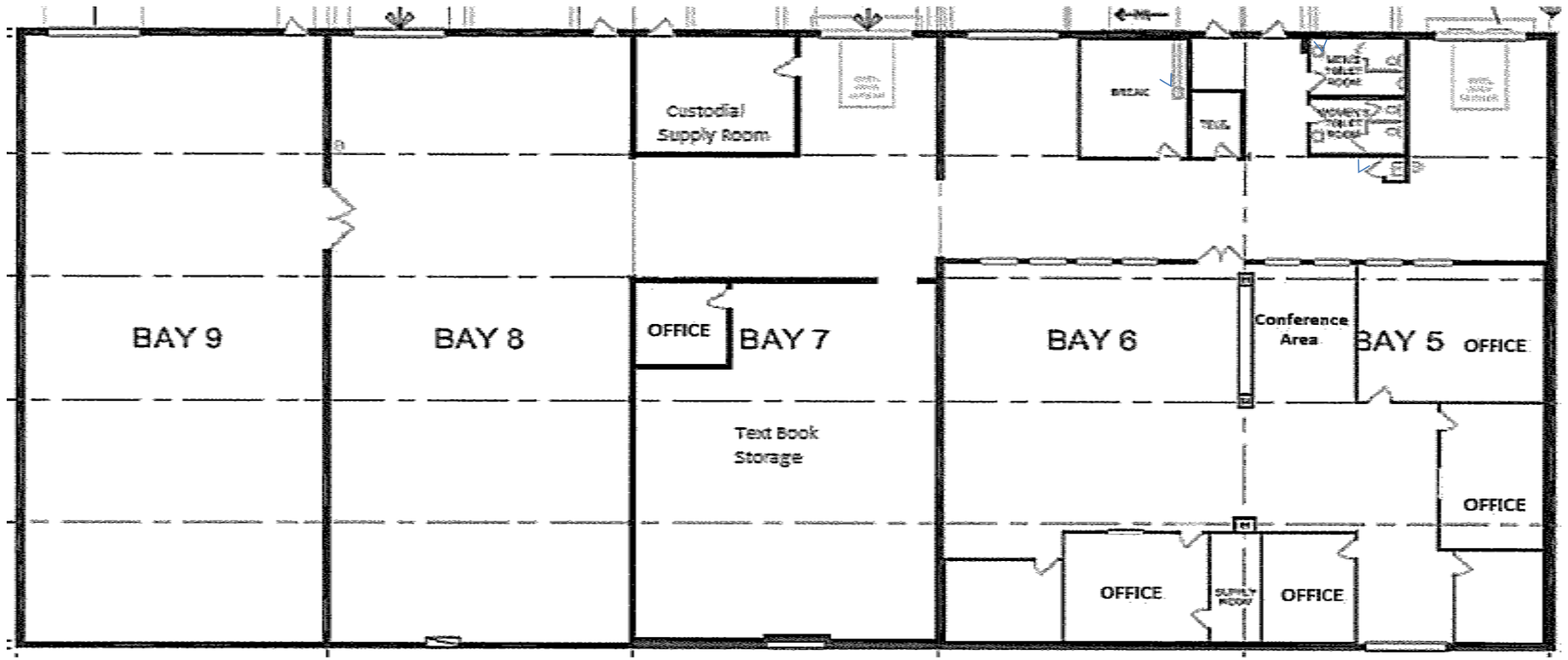
Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

Appendix I: AHERA ACBM Tables

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS IN JULY 3, 2025 SURVEY								
Drywall Wallboard and Joint Compound	Bay 6	NF	N/A	This material is reported as ACM; however, it was not observed in this area	3-Jul-25	Maintain in O & M Plan		3% Chrysotile
Pipe Jacket and associated Beige Mastic on Fiberglass Pipe Insulation	Warehouse	NF	N/A	Previously Damaged.	3-Jul-25	Maintain in O & M Plan		Verify Removal
MATERIALS ASSUMED TO CONTAIN ASBESTOS								
Pipe Flange Gaskets	Throughout the Building	Unknown	N/A	PACM until tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered
Electrical Panels: Transite Components	Mechanical Rooms	NF	N/A	PACM until tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered
Thermal System Insulation	Throughout building behind Solid Walls and Ceiling	F	N/A	PACM Until Tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered
Mirror Mastic	Bathrooms	NF	N/A	PACM until tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered
Interior Pipe Wrap associated with Water Fountains and Radiators	Throughout the Building	NF	N/A	PACM until tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered
Waterproofing Membranes/Mastics	Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and Under Ceramic Flooring	NF	N/A	PACM until tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered
Asphalt-Based Roofing Material and Caulks/Sealants	Roof	NF	N/A	PACM until tested	3-Jul-25	Maintain in O & M Plan		Sampling if encountered/uncovered

Notes: F = Friable; NF = Non-Friable; PACM = Presumed Asbestos Containing Material; O & M Plan = Operations and Maintenance Plan; NAD = No Asbestos Detected.

Appendix II: Floor Plan



ACPS Maintenance Shop
602-604 Pickett Street
Alexandria, VA 22304

Scale: NTS

Project No.

Site Visit:

Appendix III: Certifications/ Licenses

DPOR License Lookup License Number 3303005057

License Details

Name	STAMBAUGH, DAVID
License Number	3303005057
License Description	Asbestos Inspector License
Rank	Asbestos Inspector
Address	CLEAR BROOK, VA 22624
Initial Certification Date	2023-12-19
Expiration Date	2025-12-31

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DPOR License Lookup build 1,524 (built 2025-04-18 11:59:26).

DPOR License Lookup License Number 3304001722

License Details

Name	TRUAX, ADAM MICHAEL
License Number	3304001722
License Description	Asbestos Management Planner License
Rank	Asbestos Management Planner
Address	RANSON, WV 25438
Initial Certification Date	2023-03-30
Expiration Date	2026-03-31

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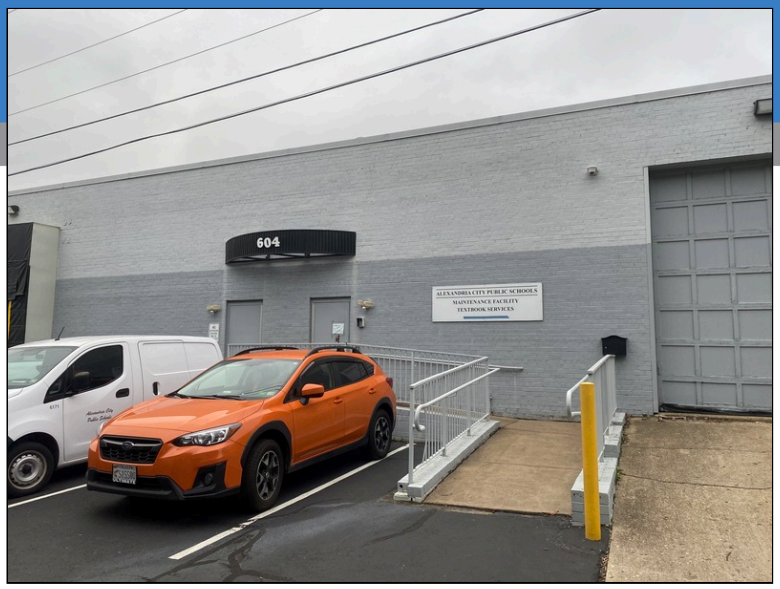
DPOR License Lookup build 1,524 (built 2025-04-18 11:59:26).

Appendix IV: Previous Reports

AHERA ASBESTOS-CONTAINING MATERIALS SURVEY



MAINTENANCE FACILITY

602-604 PICKETT STREET
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-E2

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

APRIL 28, 2022

April 28, 2022

Mr. John Contreras
Alexandria City Public Schools
1340 Braddock Place
Alexandria, Virginia 22314
john.contreras@acps.k12.va.us

ECS Project No. 47:11652-E2

Reference: AHERA Asbestos-Containing Materials Survey, Maintenance Facility, 602-604 Pickett Street, Alexandria, Virginia

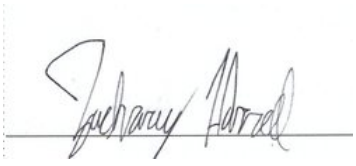
Dear Mr. Contreras:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the above referenced AHERA Asbestos-Containing Materials Survey performed at Maintenance Facility located at 602-604 Pickett Street in Alexandria, Virginia. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:16069-EP and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide Alexandria City Public Schools with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC





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EXECUTIVE SUMMARY

The subject property consists of the ACPS Maintenance Shop, a one-story brick building located at 602-604 Pickett Street in Alexandria, Virginia. Building finishes observed included concrete sub-floors, vinyl floor tiles, wood flooring, and/or ceramic tiles; the wall systems appeared to generally consist of concrete masonry unit (CMU) block walls, drywall wallboard, and/or ceramic wall tiles; and the ceiling systems appeared to generally consist of suspended drop ceilings with ceiling tiles.

The purpose of the survey was to determine if asbestos-containing building materials (ACBMs) present on the subject property. The survey was performed within interior areas of the building excluding the roofs and exterior materials. This survey is intended to provide a supporting document for the Asbestos Hazard Emergency Response Act (AHERA) management plan for the building.

Based on the laboratory analysis of the bulk samples collected during the survey, the following materials were reported to contain asbestos:

- Drywall Wallboard Joint Compound located in Bay 6.

Based on a review of historical documentation the following materials were previously identified as asbestos-containing and ECS does not have records of them being abated.

- Pipe Jacket and Associated Beige Mastic on Fiberglass Pipe Insulation in the Warehouse

Recommendations regarding the removal and disposal of the ACMs identified by ECS can be found in Section 5.0 of this report. The executive summary is an integral portion of this report, however, ECS recommends the report be read in its entirety.

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1.0 SITE DESCRIPTION

The subject property consists of the ACPS Maintenance Shop, a one-story brick building located at 602-604 Pickett Street in Alexandria, Virginia. Building finishes observed included concrete sub-floors, vinyl floor tiles, wood flooring, and/or ceramic tiles; the wall systems appeared to generally consist of concrete masonry unit (CMU) block walls, drywall wallboard, and/or ceramic wall tiles; and the ceiling systems appeared to generally consist of suspended drop ceilings with ceiling tiles.

2.0 PURPOSE

The purpose of this Asbestos Hazard Emergency Response Act (AHERA) asbestos re-inspection was to determine if asbestos-containing building materials (ACBMs) are present on the subject building that had not been previously identified, to account for the ACMs previously identified with regards to their general location and condition, and finally to generally identify if any of the previously noted ACMs had been abated. The survey was performed within interior areas of the subject building. Exterior and roofing materials were not included in this survey. This survey is intended to provide a supporting document for the AHERA management plan for the school.

US EPA AHERA regulations requires all public and private schools to survey school buildings and associated support school buildings for ACMs, and to prepare management plans for identified ACMs.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by regulation(s) for the identification of Asbestos-Containing Materials (ACMs).

3.1 Asbestos-Containing Materials

The non-invasive asbestos survey was performed by asbestos inspectors who have received EPA accredited training and are licensed by the Commonwealth of Virginia. Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to Scientific Analytical Institute, Inc. (SAI) in Greensboro, North Carolina for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. Scientific Analytical Institute, Inc. (SAI) is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM.

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs. It is important to

note that due to the COVID-19 pandemic, extra precautions were taken in order to avoid contact with students and staff, increasing the number of areas deemed inaccessible. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

Samples were collected in general accordance with EPA Standard 40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. Multiple samples of each unique material were submitted. Samples were analyzed using "Positive Stop" methodology. If one sample of a homogeneous material is reported to contain asbestos, the remaining samples of that material are not analyzed. EPA regulations stipulate that if one sample contains asbestos the entire quantity of that material contains asbestos, regardless of additional analysis.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

An Asbestos-Containing Material (ACM) is defined as any material containing more than one percent (>1%) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM. Materials are categorized by the U.S. EPA in the following categories:

- Friable ACMs are defined as any ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.
- Non-friable ACMs are defined as any ACM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
    - Category I non-friable ACM are listed as following: packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent (>1%) asbestos.
    - Category II non-friable ACM are listed as any material, excluding Category I non-friable ACM, containing more than one percent (>1%) asbestos.

Regulated Asbestos Containing Materials (RACM) are friable ACM or non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or has crumbled, been pulverized, or reduced to powder in the course of renovation and/or demolition operations.

AHERA requires identified asbestos-containing building materials (ACBMs) to be categorized by a trained AHERA inspector into the following categories:

• (1) Damaged or significantly damaged thermal system insulation ACBM.
• (2) Damaged friable surfacing ACBM.
• (3) Significantly damaged friable surfacing ACBM.
• (4) Damaged or significantly damaged friable miscellaneous ACBM.
• (5) ACBM with potential for damage.
• (6) ACBM with potential for significant damage.

• (7) Any remaining friable ACBM or friable suspected ACBM.

Definitions for the above-referenced categories can be found in the Appendices.

Scientific Analytical Institute, Inc. (SAI) submitted a signed final laboratory report to ECS on November 19, 2021. One of the bulk samples submitted for analysis were reported to contain asbestos in detectable concentrations. These materials are summarized below. A complete list of the sampled materials submitted for analysis and sample locations are located in the Appendix of this report. Additional details regarding the overall locations of the materials identified as asbestos-containing are provided further in the report. Photographs of collected samples reported as asbestos-containing are also located in the Appendix of this report.

In total, 12 bulk samples from homogeneous areas were submitted to the laboratory of which 12 layers were analyzed.

Summary of Asbestos-Containing Materials Identified for the most survey

Location	Material Description	Analytical Result	EPA Category	AHERA Category
Lock-Key Office (NAD), Bay 6 (ACM)	Drywall Wallboard and Joint Compound	3% Chrysotile	Category II Non-Friable	(6) ACBM with potential for significant damage.

Summary of Previously Identified Asbestos-Containing Materials

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Warehouse	Pipe Jacket and Associated Beige Mastic on Fiberglass Pipe Insulation	3% Chrysotile (Inseparable Layers)	Category II non-friable	Not Applicable	No abatement records available
Notes:					

Summary of Non Asbestos-Containing Materials Identified

Location	Material Description	Analytical Results
Materials Sampled in 2021 AHERA Survey		
Bay 6	Wood Pattern Peel and Stick Flooring	NAD
Bay 6	12" x 12" Marble Pattern Peel and Stick Floor Tile	NAD

Location	Material Description	Analytical Results
Bay 6 & 7	Drywall Wallboard	NAD
Bay 6 &7	Interior Gray Roll-up Door Caulk	NAD
Break Room and Bay 6 Office	2' x 4' White Pinhole Punch Ceiling Tile	NAD
Previously Sampled Materials		
Office and Warehouse	Drywall Joint Compound	NAD
Office, Warehouse Loading Dock, and NW Perimeter Wall	CMU Block Filler Coating	NAD
Office Area	12" x 12" Tan Floor Tile with Yellow/Clear Mastic	NAD
Office Area	4" White Cove Base with White Mastic	NAD
Office Area	Yellow Floor Mastic	NAD
Warehouse Area	Yellow/Clear Floor Joint Epoxy	NAD
Warehouse Area	Black Hard Floor Joint	NAD
Entry Doors	Interior White Door Caulk	NAD
Warehouse Area	4" Black Cove Base with Yellow Mastic	NAD
Mop Closet and Men's Bathroom	12" x 12" Gray Floor Tile with Brown/Black Mastic	NAD
Office in Warehouse, Lounge Room on 2nd Floor, & Office on 1st Floor	Beige Mastic on Fiberglass Duct Insulation	NAD
Office in Warehouse & Lounge Room on 2nd Floor	Drywall	NAD
Small Warehouse	Drywall Ceiling	NAD
Small Warehouse, Office in Warehouse, & Lounge Room on 2nd Floor	Joint Compound	NAD
Warehouse	Mudded Insulation on Fiberglass Pipe Fitting	NAD
Office in Warehouse	Gray Cove Base and Associated Tan Mastic	NAD

Location	Material Description	Analytical Results
Office in Warehouse	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	Both NAD
Office in Warehouse	Yellow Carpet Mastic	NAD
Entry Foyer on 1st Floor, Office on 2nd Floor, & Lounge Room on 2nd Floor	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	Both NAD
Office on 1st Floor, Stairwell on 2nd Floor, & Lounge Room on 2nd Floor	2' x 4' White Fissured Ceiling Tile	NAD
Stairs	Blue Stair Tread and Associated Yellow/Beige Glue	Both NAD
Lounge Room on 2nd Floor	White Interior Window Caulk	NAD
Lounge Room on 2nd Floor	Gray Interior Window Caulk	NAD
Entry Foyer on 1st Floor	Brown Interior Door Caulk	NAD
Notes: **NAD = No Asbestos Detected** **Due to the nondestructive means of this survey, newly applied and installed flooring components and air moving equipment components were not sampled to avoid voiding warranty or damage to said systems.** **Locations reflect the area in which the material was sampled. These materials may be representative of and located in other homogenous areas throughout the school.**		

Miscellaneous Materials

ECS observed asbestos-containing Drywall Wallboard and Joint Compound in Bay 6. This material may be present other areas of the building in similar applications. Other areas of the building should be sampled if they are scheduled to be disturbed for renovations.

4.2 Suspect or Assumed Asbestos-Containing Materials

Due to the inaccessibility or the destructive means that asbestos sampling requires, additional suspect ACMs may remain within the building hidden behind inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, sub-grade sealants, flooring located below underlayments, areas behind exterior walls, pipe trenches, and subsurface utilities, etc. These areas were deemed inaccessible and were not assessed.

If these materials are discovered during construction activities, they should be presumed to contain asbestos and be treated as ACMs or be sampled immediately upon discovery and prior to disturbance for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

Based upon our past experience in the identification of ACMs in similarly constructed buildings, the following additional suspect ACMs may also be located in inaccessible areas of the structure:

- **Boilers Components** in boilers (gasket, fire brick, etc.).
- **Duct Pin Mastic** associated with the HVAC Units.
- **Electrical Panels Asbestos Cement Components** in electrical systems.
- **Fire Door and associated Casing Insulation** in locations requiring a rated fire door and door casing.
-
- **"Transite" Panels** used chalk boards, soffits, panels under windows interior/exterior)
- **Water Fountain Components** in water fountains (mastics, pipe cloth, etc).
- **Thermal System Insulation (TSI)** on pipes within chases behind solid walls, within the inaccessible regions of crawl spaces, above the visible ductwork, or below subgrade.
- **Pipe Flange Gaskets** in heating and plumbing systems.
- **Air Handler Components** in the air handlers (interior components).
- **Vibration Dampener Cloth** associated with HVAC Systems
- **Asbestos-Cement Pipe Conduit** encased in duct banks and/or below sub-grade.
- **Exterior materials** (roofs, caulks, soffits, vapor barriers, water proofing etc.)

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the AHERA Asbestos-Containing Materials Survey, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

ECS recommends where a material type has been identified as asbestos-containing that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos. Please refer to Section 4.1 for a complete list of building materials that were reported positive for asbestos and to Section 4.2 for materials that were assumed to contain asbestos.

If ACMs are to be removed, it is recommended that an industrial hygienist monitor the project. This involves collecting air samples from within and outside abatement work areas to monitor the asbestos abatement contractor's work practices over the course of the project. The industrial hygienist should evaluate if the asbestos abatement work is in accordance with project specifications, U.S. EPA regulation 40 CFR Part 61-National Emission Standards for Hazardous Air Pollutants Subpart M: National Emission Standard for Asbestos, and U.S. Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 – Asbestos in Construction. The industrial hygienist should assess each work area to monitor the removal of ACMs. Only after the industrial hygienist has determined the identified ACMs have been removed should final clearance air samples be collected (if necessary).

Suspect ACMs not observed due to inaccessibility or not sampled due to the destructive means that sampling would require may also be encountered during construction activities. At the time of the survey, only limited destructive means were used to locate or sample suspect ACMs; therefore, additional suspect ACMs may remain within inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, exterior areas, sub-grade sealants, flooring located below underlayments, vapor barriers, pipe trenches and other subsurface utilities, etc. If additional suspect ACMs are uncovered which were not accessible during this survey, it is recommended that these materials either be assumed to contain asbestos or be sampled prior to disturbance upon discovery for asbestos content by an asbestos inspector in accordance with 29 CFR 1926.1101.

The results of this survey should be added to the school's management plan.

6.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No warranty, expressed or implied, is made.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site

that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

Appendix I: Site Photographs



1 - View of Drywall Board

Appendix II: Asbestos Bulk Sample Results

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

Sample #	Sampling Location	Material/Description	Analytical Results
1	Bay 6	Wood Pattern Peel and Stick Flooring	NAD
2	Bay 6	Wood Pattern Peel and Stick Flooring	NAD
3	Bay 6	12" x 12" Marble Pattern Peel and Stick Floor Tile	NAD
4	Bay 6	12" x 12" Marble Pattern Peel and Stick Floor Tile	NAD
5	Lock-Key Office	Drywall Wallboard	NAD
6	Bay 6	Drywall Wallboard	NAD
7	Lock-Key Office	Drywall Wallboard and Joint Compound	NAD
8	**Bay 6**	**Drywall Wallboard and Joint Compound**	**3% Chrysotile**
9	Bay 6/7	Interior Gray Roll-Up Door Caulk	NAD
10	Bay 6/7	Interior Gray Roll-Up Door Caulk	NAD
11	Break Room	2" x 4" White Pinhole Punch Ceiling Tile	NAD
12	Bay 6 Office	2" x 4" White Pinhole Punch Ceiling Tile	NAD

Table Notes:
Bold = Asbestos-Containing Materials
N/A = Not Analyzed
None Detected = No Asbestos Detected

Appendix III: Laboratory Report(s)

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E

NVLAP TESTING NVLAP LAB CODE 200664-0

INDUSTRIAL HYGIENE ISO/IEC 17025:2017 Accredited Laboratory AIHA LAP, LLC AIHAACCREDITEDLABS.ORG Lab ID # 173190

Customer: ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Michael Hamill

Project: 11652-E2/ AHERA Maintenance Facility

Lab Order ID: 71976763
Analysis ID: 71976763_PLM
Date Received: 10/13/2021
Date Reported: 10/19/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
1 *71976763PLM_1*	Wood Pattern Peel and Stick Flooring	**None Detected**		**100% Other**	Brown, Black Non Fibrous Homogeneous Crushed, Ashed
2 *71976763PLM_2*	Wood Pattern Peel and Stick Flooring	**None Detected**		**100% Other**	Brown, Black Non Fibrous Homogeneous Crushed, Ashed
3 *71976763PLM_3*	12" x 12" Marble Pattern Peel and Stick Floor Tile	**None Detected**		**100% Other**	Tan, Gray Non Fibrous Homogeneous Crushed, Ashed
4 *71976763PLM_4*	12" x 12" Marble Pattern Peel and Stick Floor Tile	**None Detected**		**100% Other**	Tan, Gray Non Fibrous Homogeneous Crushed, Ashed
5 *71976763PLM_5*	Drywall Wallboard	**None Detected**	**10% Cellulose**	**90% Other**	Gray Non Fibrous Homogeneous Crushed
6 *71976763PLM_6*	Drywall Wallboard	**None Detected**	**10% Cellulose**	**90% Other**	Gray Non Fibrous Homogeneous Crushed
7 *71976763PLM_7*	Drywall Wallboard Joint Compound	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Crushed
8 *71976763PLM_8*	Drywall Wallboard Joint Compound	**3% Chrysotile**		**97% Other**	Tan Non Fibrous Homogeneous Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Heather Davide (12)

Analyst

Approved Signatory

P-F-002 r15 1/16/2021

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E

NVLAP TESTING NVLAP LAB CODE 200664-0

INDUSTRIAL HYGIENE ISO/IEC 17025:2017 Accredited Laboratory AIHA LAP, LLC AIHAACCREDITEDLABS.ORG Lab ID # 173190

Customer: ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Michael Hamill

Project: 11652-E2/ AHERA Maintenance Facility

Lab Order ID: 71976763
Analysis ID: 71976763_PLM
Date Received: 10/13/2021
Date Reported: 10/19/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
9 *71976763PLM_9*	Interior Gray Roll-Up Door Caulk	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Crushed, Ashed
10 *71976763PLM_10*	Interior Gray Roll-Up Door Caulk	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Crushed, Ashed
11 *71976763PLM_11*	2" x 4" White Pinhole Punch Ceiling Tile	**None Detected**	**45% Cellulose** **45% Fiber Glass**	**7% Perlite** **3% Other**	Gray, White Fibrous Heterogeneous Teased, Crushed
12 *71976763PLM_12*	2" x 4" White Pinhole Punch Ceiling Tile	**None Detected**	**45% Cellulose** **45% Fiber Glass**	**7% Perlite** **3% Other**	Gray, White Fibrous Heterogeneous Teased, Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Heather Davide (12)

Analyst

Approved Signatory

Client:	ECS Mid-Atlantic, LLC
Contact:	Michael Hamill
Address:	14026 Thunderbolt Place, Suite
Phone:	(703)-471-8400
Fax:	
Email:	mhamill@ecslimited.com
Project:	11652-E2/ AHERA Maintenance Fa
Client Notes:	
P.O. #.	11652-E2/ AHERA Maintenance Fa
Date Submitted:	10/12/2021 0:00
Analysis:	PLM EPA 600/R-93/116
TurnAroundTime:	3-Day

***Instructions:**
Use Column "B" for your contact info

To See an Example Click the bottom Example Teb.

Enter samples between "<<" and ">>"
Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample.

Only Enter your data on the first sheet "Sheet1"

Note: Data 1 and Data 2 are optional *fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.*

Scientific Analytical Institute

4604 Dundas Drive
Greensboro, NC 27407
Phone: 336.292.3888
Fax: 336.292.3313
Email: lab@sailab.com

Sample Number	Data 1	Sample Description	Data 2
<<			
1		Wood Pattern Peel and Stick Flooring	Bay 6
2		Wood Pattern Peel and Stick Flooring	Bay 6
3		12" x 12" Marble Pattern Peel and Stick Floor Tile	Bay 6
4		12" x 12" Marble Pattern Peel and Stick Floor Tile	Bay 6
5		Drywall Wallboard	Lock-Key Office
6		Drywall Wallboard	Bay 6
7		Drywall Wallboard Joint Compound	Lock-Key Office
8		Drywall Wallboard Joint Compound	Bay 6
9		Interior Gray Roll-Up Door Caulk	Bay 6/7
10		Interior Gray Roll-Up Door Caulk	Bay 6/7
11		2" x 4" White Pinhole Punch Ceiling Tile	Break Room
12		2" x 4" White Pinhole Punch Ceiling Tile	Bay 6 Office
>>			

B Fuller 10/13
10:30A

Accepted ☒

Rejected ☐

Relinquished By

Received By

Appendix IV: Certifications/ Licenses

License Details

Name	HAMILL, MICHAEL PETER
License Number	3303003941
License Description	Asbestos Inspector License
Rank	Asbestos Inspector
Address	NATIONAL HARBOR, MD 20745
Initial Certification Date	2014-04-16
Expiration Date	2022-04-30

The license information in this application was last updated at Tue Apr 26 02:50:17 EDT.

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2022

NUMBER
3303004832

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE

ZACHARY DAVID HARRELL
1927 N CAMERON ST
ARLINGTON, VA 22207

DPOR

Mary Broz-Vaughan, Director

Status can be verified at http://www.dpor.virginia.gov

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE
NUMBER: 3303004832 EXPIRES: 12-31-2022

ZACHARY DAVID HARRELL
1927 N CAMERON ST
ARLINGTON, VA 22207

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

Appendix V: AHERA ACBM and Suspect ACBM Categories Document

AHERA ACBM and Suspect ACBM Categories

(1) Damaged or significantly damaged thermal system insulation ACM:

- (1) Means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

(2) Damaged friable surfacing ACM:

- (2) Means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

(3) Significantly damaged friable surfacing ACM:

- (3) Means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

(4) Damaged or significantly damaged friable miscellaneous ACM:

- (4) Means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

(5) ACBM with potential for damage:

- (5) Means circumstances in which:

    - (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.

- (2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

(6) ACBM with potential for significant damage:

- (6) Means circumstances in which:

  - (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.

  - (2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

  - (3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

(7) Any remaining friable ACBM or friable suspected ACBM:

- (1) Means any remaining friable ACBM or friable Suspected ACBM in a building.

Appendix VI: Previous Reports

ASBESTOS CONTAINING MATERIALS (AHERA) SURVEY



ACPS MAINTENANCE SHOP/OFFICES

604 SOUTH PICKETT STREET
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:1519-D

FOR

ALEXANDRIA CITY PUBLIC SCHOOLS

JANUARY 20, 2017

January 20, 2017

Mr. Derrick Fulcher
Alexandria City Public Schools
1340 Braddock Place
Alexandria, Virginia 22314
derrick.fulcher@acps.k12.va.us

ECS Project No. 47:1519-D

Reference: Asbestos Containing Materials (AHERA) Survey, ACPS Maintenance Shop/Offices, 604 South Pickett Street, Alexandria, Virginia

Dear Mr. Fulcher:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the above referenced Asbestos Containing Materials (AHERA) Survey performed at ACPS Maintenance Shop/Offices located at 604 South Pickett Street in Alexandria, Virginia. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:1750-EPR2, ACPS PO No. 17003633, and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide Alexandria City Public Schools with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

Beverly Sedon
Senior Project Manager
bsedon@ecslimited.com

Christopher J. Chapman, CIH
Director of Industrial Hygiene
cchapman@ecslimited.com

EXECUTIVE SUMMARY

The subject property is improved with a one-story industrial building that is utilized as a maintenance shop and offices. The building was reportedly constructed in the 1960s and was recently renovated prior to occupancy by ACPS. Offices are located at the central portion of the warehouse.

Per the United States Environmental Protection Agency (US EPA) requirements, the purpose of the survey was to evaluate the building materials within the areas occupied by ACPS for asbestos-containing materials (ACMs). The non-invasive survey was performed in general per EPA Standard 40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol.

The survey was performed for the readily accessible interior areas of the facility. Exterior and roofing materials were not included in this assessment as these areas are excluded under AHERA. During the survey, ECS attempted to locate suspect asbestos-containing building materials (ACBMs) in readily accessible areas. However, due to the destructive means required to access some materials, certain areas were deemed inaccessible (i.e. behind solid walls or sub-grade materials) and were not surveyed for suspect ACBMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

During our assessment, a total of 25 bulk samples were collected and a total of 35 layers were analyzed by the laboratory. Based on the laboratory analysis of the suspect bulk samples collected during the survey, none of the materials sampled were reported to contain asbestos. Please refer to Table 1 for a list of the suspect asbestos bulk samples collected during our survey. Findings and recommendations are provided further in the report.

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Appendix III: Laboratory Report(s)

1.0 SITE DESCRIPTION

The subject property is improved with a one-story industrial building that is utilized as a maintenance shop and offices. The building was reportedly constructed in the 1960s. Offices were recently built within the central portion of the warehouse.

The office areas are finished with newly installed floor tiles, drywall wallboards, and wood flooring. The warehouse area has areas of drywall boards, concrete masonry unit (CMU) walls, concrete flooring, and metal decking.

2.0 PURPOSE

The Asbestos Hazard Emergency Response Act (AHERA) requires public school districts to inspect their schools for asbestos-containing building materials and prepare management plans for identified asbestos containing materials and to take action to prevent or reduce asbestos hazards. This is based on an "in-place" management of asbestos-containing materials. Personnel working on asbestos activities in schools must be trained and accredited in accordance with US EPA Asbestos Model Accreditation Plan requirements. Prior to renovation or demolition of asbestos containing materials facility owners must also comply with the US EPA Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations.

The purpose of the Asbestos Containing Materials (AHERA) Survey was to identify asbestos-containing materials (ACMs) which may require special handling and/or disposal if removed disturbed during normal routine maintenance activities performed on the building.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by regulation(s) for the identification of Asbestos-Containing Materials (ACMs). The following represents our onsite work performed on January 10, 2017.

3.1 Asbestos-Containing Materials

The non-invasive asbestos survey was performed by asbestos inspectors (License Nos. 3303003186 and 3303003536) who have received EPA accredited training and are licensed by the Commonwealth of Virginia. Samples were collected in general accordance with EPA Standard 40 CFR 763 Subpart E, AHERA and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. Multiple samples of each unique material were submitted. Samples were analyzed using “Positive Stop” methodology. If one sample of a homogeneous material is reported to contain asbestos, the remaining samples of that material are not analyzed. EPA regulations stipulate that if one sample contains asbestos the entire quantity of that material contains asbestos, regardless of additional analysis.

Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to Scientific Analytical Institute, Inc. in Greensboro, North Carolina for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. Scientific Analytical Institute, Inc. is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM.

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas. In total, 25 bulk representative samples were submitted to the laboratory of which 35 layers were analyzed. Photographs of the collected samples are attached to this report. During the assessment, site drawings were not available.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

ACMs are defined as any material containing more than one percent (>1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, PLM.

None of the materials submitted for analysis to Scientific Analytical Institute, Inc. were reported to contain asbestos. Please refer to Table 1 attached to this report for a list of the suspect asbestos bulk samples collected during our survey.

4.2 Suspect or Assumed Asbestos-Containing Materials

Due to the inaccessibility or the destructive means that asbestos sampling requires, additional suspect ACMs may remain within the building hidden behind inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, sub-grade sealants, flooring located below underlayments, areas behind exterior walls, pipe trenches, and subsurface utilities, etc. These areas/materials were deemed inaccessible and were not assessed during this survey.

If these materials are discovered during construction activities, they should be presumed to contain asbestos and be treated as asbestos-containing materials (ACMs) or, otherwise, sampled immediately upon discovery and prior to disturbance for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

Materials which are commonly suspected to contain asbestos located in inaccessible areas of similarly constructed buildings include:

- Air Handler Components in the air handlers (interior components);

- Concrete Masonry Unit (Blocks/Walls) with Vermiculite filler;
- Duct Pin Mastics associated with HVAC insulation material;
- Electrical Panels Asbestos Cement Components in electrical systems;
- Fire Door and associated Casing Insulation in locations requiring a rated fire door and door casing;
- Light shield Insulation in light shields;
- Mirror Mastics behind/under mirrors;
- Roof Structures – roof systems;
- Thermal System Insulation (TSI) on pipes within chases behind walls and above ceilings;
- Water Fountain Components in water fountains (pipe cloth);
- Waterproofing Membrane/Mastics/vapor barriers within exterior wall cavities, behind Interior finishes, exterior veneer and/or subgrade walls;
- Wood Flooring Felts;

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the Asbestos Containing Materials (AHERA) Survey including future plans for renovation/demolition, etc., the laboratory analysis, our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

None of the bulk samples submitted to SAI were reported to contain detectable concentrations of asbestos. If additional suspect asbestos-containing materials are uncovered during future renovation activities which were not accessible during this sampling event, it is recommended that these materials be sampled or tested immediately upon discovery for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

Suspect ACMs may be present in inaccessible areas and portions of the building which were not assessed due to occupancy or locked areas. Prior to any renovation efforts which will involve any of those areas or the demolition of the building, a follow-up survey should be performed to include destructive means to access these areas as necessary.

This report should be filed with the AHERA documents for the facility.

6.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this

study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

Appendix I: Table 1: Asbestos Bulk Sample Results

TABLE 1
MAINTENANCE OFFICE SHOP/OFFICES
BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

Sample #	Sampling Location	Material/Description	Analytical Results
1	Office Area	Drywall Wallboard	NAD
2	Warehouse Area	Drywall Wallboard	NAD
3	Office Area	Drywall Joint Compound	NAD
4	Warehouse Area	Drywall Joint Compound	NAD
5	Office Area	CMU Block Filler Coating	NAD
6	Loading Dock Area	CMU Block Filler Coating	NAD
7	Northwest Perimeter Wall of Warehouse	CMU Block Filler Coating	NAD
8 - A	Office Area	12" x 12" Tan Floor Tile	NAD
8 - B	Office Area	Clear Mastic of 12" x 12" Tan Floor Tile	NAD
8 - C	Office Area	Yellow Mastic of 12" x 12" Tan Floor Tile	NAD
9 - A	Office Area	12" x 12" Tan Floor Tile	NAD
9 - B	Office Area	Clear Mastic of 12" x 12" Tan Floor Tile	NAD
9 - C	Office Area	Yellow Mastic of 12" x 12" Tan Floor Tile	NAD
10 - A	Office Area	4" White Cove Base	NAD
10 - B	Office Area	White Mastic of 4" White Cove Base	NAD
11 - A	Office Area	4" White Cove Base	NAD
11 - B	Office Area	White Mastic of 4" White Cove Base	NAD
12	Office Area	Yellow Floor Mastic	NAD
13	Office Area	Yellow Floor Mastic	NAD

Table Notes:
NAD = No Asbestos Detected
N/A = Sample Not Analyzed; Positive Stop
Bold - Asbestos Containing Materials

TABLE 1
MAINTENANCE OFFICE SHOP/OFFICES
BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

Sample #	Sampling Location	Material/Description	Analytical Results
14	Central Warehouse Area	Yellow/Clear Floor Joint Epoxy	NAD
15	Central Warehouse Area	Yellow/Clear Floor Joint Epoxy	NAD
16	Northwest Warehouse Area	Black Hard Floor Joint	NAD
17	East Warehouse Area	Black Hard Floor Joint	NAD
18	Main Entrance	Interior White Door Caulk	NAD
19	Main Entrance	Interior White Door Caulk	NAD
20	Warehouse Area	Brown Floor Joint Fiberboard	NAD
21	Warehouse Area	Brown Floor Joint Fiberboard	NAD
22 - A	Warehouse Area	4" Black Cove Base	NAD
22 - B	Warehouse Area	Yellow Mastic of 4" Black Cove Base	NAD
23 - A	Warehouse Area	4" Black Cove Base	NAD
23 - B	Warehouse Area	Yellow Mastic of 4" Black Cove Base	NAD
24 - A	Mop Closet	12" x 12" Gray Floor Tile	NAD
24 - B	Mop Closet	Brown/Black Mastic of 12" x 12" Gray Floor Tile	NAD
25 - A	Men's Bathroom	12" x 12" Gray Floor Tile	NAD
25 - B	Men's Bathroom	Brown/Black Mastic of 12" x 12" Gray Floor Tile	NAD

Table Notes:
NAD = No Asbestos Detected
N/A = Sample Not Analyzed; Positive Stop
Bold - Asbestos Containing Materials

Appendix II: Photographs



1. Typical view of the office areas, Samples 1,3



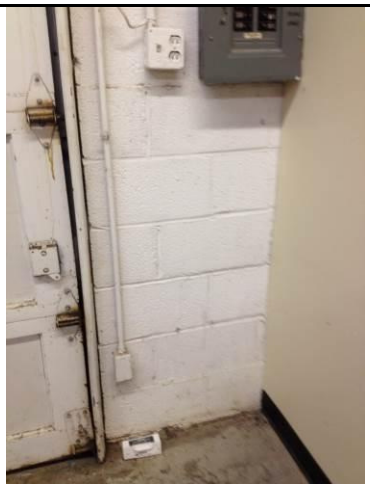
2. Typical view of central office area



3. View of the open ceiling



4. View of the warehouse area, Sample 2,4



5. View of the CMU block filler, Sample 5-7



6. View of tan floor tile, white cove base, and associated mastics, Samples 8-13

ACPS – Maintenance Building/Offices
604 S. Pickett Street
Alexandria, VA

Site Photographs
ECS Project No. 47:1519-D
Site Visit: January 10, 2017



7. View of floor joint products, Samples 14-17



8. View of white interior door caulk, Samples 18-19



9. View of 4” black cove base, Samples 22-23



10. View of 12”x12” gray floor tile, Samples 24-25

Appendix III: Laboratory Report(s)

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

AIHA LAP, LLC ACCREDITED LABORATORY INDUSTRIAL HYGIENE ISO/IEC 17025:2005 www.aihaaccreditedlabs.org LAB #173190

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Beverly Sedon

Project: 47:1519-D Maint Shop

Lab Order ID: 1700662
Analysis ID: 1700662_PLM
Date Received: 1/12/2017
Date Reported: 1/17/2017

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
1	Drywall Wallboard	None Detected	15% Cellulose	85% Other	White Non Fibrous Homogeneous
1700662PLM_1					Crushed
2	Drywall Wallboard	None Detected	10% Cellulose 5% Fiber Glass	85% Other	White Non Fibrous Homogeneous
1700662PLM_2					Crushed
3	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Homogeneous
1700662PLM_3					Crushed
4	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Homogeneous
1700662PLM_4					Crushed
5	CMU Block Filler Coating	None Detected		100% Other	White, Tan Non Fibrous Heterogeneous
1700662PLM_5					Crushed
6	CMU Block Filler Coating	None Detected		100% Other	White, Tan Non Fibrous Heterogeneous
1700662PLM_6					Crushed
7	CMU Block Filler Coating	None Detected	3% Wollastonite	97% Other	White Non Fibrous Homogeneous
1700662PLM_7					Ashed
8 - A	12" x 12" Tan Floor Tile with Yellow/Clear Mastic	None Detected		100% Other	Tan Non Fibrous Homogeneous
1700662PLM_8	*tile*				Dissolved

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Megan Javonovich (35)

Analyst

Approved Signatory

P-F-002 r15 1/15/2018

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

AIHA LAP, LLC ACCREDITED LABORATORY INDUSTRIAL HYGIENE ISO/IEC 17025:2005 www.aihaaccreditedlabs.org LAB #173190

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Beverly Sedon

Project: 47:1519-D Maint Shop

Lab Order ID: 1700662
Analysis ID: 1700662_PLM
Date Received: 1/12/2017
Date Reported: 1/17/2017

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
8 - B *1700662PLM_26*	12" x 12" Tan Floor Tile with Yellow/Clear Mastic *clear mastic*	**None Detected**		**100% Other**	Transparent Non Fibrous Homogeneous Dissolved
8 - C *1700662PLM_27*	12" x 12" Tan Floor Tile with Yellow/Clear Mastic *yellow mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
9 - A *1700662PLM_9*	12" x 12" Tan Floor Tile with Yellow/Clear Mastic *tile*	**None Detected**		**100% Other**	Tan Non Fibrous Homogeneous Dissolved
9 - B *1700662PLM_28*	12" x 12" Tan Floor Tile with Yellow/Clear Mastic *clear mastic*	**None Detected**		**100% Other**	Transparent Non Fibrous Homogeneous Dissolved
9 - C *1700662PLM_29*	12" x 12" Tan Floor Tile with Yellow/Clear Mastic *yellow mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
10 - A *1700662PLM_10*	4" White Cove Base with White Mastic *covebase*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Ashed
10 - B *1700662PLM_30*	4" White Cove Base with White Mastic *mastic*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Ashed
11 - A *1700662PLM_11*	4" White Cove Base with White Mastic *covebase*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Ashed

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Megan Javonovich (35)

Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

AIHA LAP, LLC ACCREDITED LABORATORY INDUSTRIAL HYGIENE ISO/IEC 17025:2005 www.aihaaccreditedlabs.org LAB #173190

NVLAP® NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Beverly Sedon

Project: 47:1519-D Maint Shop

Lab Order ID: 1700662
Analysis ID: 1700662_PLM
Date Received: 1/12/2017
Date Reported: 1/17/2017

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
11 - B	4" White Cove Base with White Mastic	**None Detected**		**100% Other**	White Non Fibrous Homogeneous
1700662PLM_31	*mastic*				Ashed
12	Yellow Floor Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1700662PLM_12					Dissolved
13	Yellow Floor Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1700662PLM_13					Dissolved
14	Yellow/Clear Floor Joint Epoxy	**None Detected**		**100% Other**	Transparent Non Fibrous Homogeneous
1700662PLM_14					Crushed
15	Yellow/Clear Floor Joint Epoxy	**None Detected**		**100% Other**	Transparent Non Fibrous Homogeneous
1700662PLM_15					Crushed
16	Black Hard Floor Joint	**None Detected**		**100% Other**	Black Non Fibrous Heterogeneous
1700662PLM_16					Dissolved, Crushed
17	Black Hard Floor Joint	**None Detected**		**100% Other**	Black, Tan Non Fibrous Heterogeneous
1700662PLM_17					Dissolved, Crushed
18	Interior White Door Caulk	**None Detected**		**100% Other**	White Non Fibrous Homogeneous
1700662PLM_18					Ashed

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Megan Javonovich (35)

Analyst

Approved Signatory

P-F-002 r15 1/15/2018

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

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NVLAP® NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Beverly Sedon

Project: 47:1519-D Maint Shop

Lab Order ID: 1700662
Analysis ID: 1700662_PLM
Date Received: 1/12/2017
Date Reported: 1/17/2017

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
19 *1700662PLM_19*	Interior White Door Caulk	None Detected		100% Other	White Non Fibrous Homogeneous Ashed
20 *1700662PLM_20*	Brown Floor Joint Fiberboard	None Detected	98% Cellulose	2% Other	Brown Fibrous Homogeneous Ashed
21 *1700662PLM_21*	Brown Floor Joint Fiberboard	None Detected	98% Cellulose	2% Other	Brown Fibrous Homogeneous Ashed
22 - A *1700662PLM_22*	4" Black Cove Base with Yellow Mastic *covebase*	None Detected		100% Other	Black Non Fibrous Homogeneous Ashed
22 - B *1700662PLM_32*	4" Black Cove Base with Yellow Mastic *mastic*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Ashed
23 - A *1700662PLM_23*	4" Black Cove Base with Yellow Mastic *covebase*	None Detected		100% Other	Black Non Fibrous Homogeneous Ashed
23 - B *1700662PLM_33*	4" Black Cove Base with Yellow Mastic *mastic*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Ashed
24 - A *1700662PLM_24*	12" x 12" Gray Floor Tile with Brown/Black Mastic *tile*	None Detected		100% Other	Gray Non Fibrous Homogeneous Dissolved

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Megan Javonovich (35)

Analyst

Approved Signatory

P-F-002 r15 1/15/2018

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

AIHA LAP, LLC ACCREDITED LABORATORY INDUSTRIAL HYGIENE ISO/IEC 17025:2005 www.aihaaccreditedlabs.org LAB #173190

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Attn: Beverly Sedon

Project: 47:1519-D Maint Shop

Lab Order ID: 1700662
Analysis ID: 1700662_PLM
Date Received: 1/12/2017
Date Reported: 1/17/2017

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
24 - B *1700662PLM_34*	12" x 12" Gray Floor Tile with Brown/Black Mastic *mastic*	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous Dissolved
25 - A *1700662PLM_25*	12" x 12" Gray Floor Tile with Brown/Black Mastic *tile*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Dissolved
25 - B *1700662PLM_35*	12" x 12" Gray Floor Tile with Brown/Black Mastic *mastic*	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous Dissolved

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Megan Javonovich (35)

Analyst

Approved Signatory

Client:	ECS Mid-Atlantic, LLC
Contact:	Beverly Sedon
Address:	14026 Thunderbolt Place, Suite
Phone:	301-672-2096 (cell)
Fax:	
Email:	bsedon@ecslimited.com
Project:	47:1519-D Maint Shop
Client Notes:	**Positive Stop**
P.O. #.	47:1519-D Maint Shop
Date Submitted:	1/11/2017 0:00
Analysis:	PLM EPA 600/R-93/116
TurnAroundTime:	5 Day TAT

Instructions:

Use Column "B" for your contact info

To See an Example Click the bottom Example Tab.

Enter samples between "<<" and ">>"
Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample.
Only Enter your data on the first sheet "Sheet1"

Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.

1700662

Scientific Analytical Institute

4604 Dundas Drive
Greensboro, NC 27407
Phone: 336.292.3888
Fax: 336.292.3313
Email: lab@sailab.com

Sample Number	Data 1	Sample Description	Data 2
<<			
1	HA1	Drywall Wallboard	Office Area
2	HA1	Drywall Wallboard	Warehouse Area
3	HA2	Drywall Joint Compound	Office Area
4	HA2	Drywall Joint Compound	Warehouse Area
5	HA3	CMU Block Filler Coating	Office Area
6	HA3	CMU Block Filler Coating	Warehouse Loading Dock Perimete
7	HA3	CMU Block Filler Coating	NW Perimeter Warehouse Wall
8	HA4	12" x 12" Tan Floor Tile with Yellow/Clear Mastic	Office Area
9	HA4	12" x 12" Tan Floor Tile with Yellow/Clear Mastic	Office Area
10	HA5	4" White Cove Base with White Mastic	Office Area
11	HA5	4" White Cove Base with White Mastic	Office Area
12	HA6	Yellow Floor Mastic	Office Area
13	HA6	Yellow Floor Mastic	Office Area
14	HA7	Yellow/Clear Floor Joint Epoxy	Warehouse Area
15	HA7	Yellow/Clear Floor Joint Epoxy	Warehouse Area
16	HA8	Black Hard Floor Joint	Warehouse Area
17	HA8	Black Hard Floor Joint	Warehouse Area
18	HA9	Interior White Door Caulk	Entry Doors

Accepted ☑

Rejected ☐

MCC 1/12 1030A

19	HA9	Interior White Door Caulk	Entry Doors
20	HA10	Brown Floor Joint Fiberboard	Warehouse Area
21	HA10	Brown Floor Joint Fiberboard	Warehouse Area
22	HA11	4" Black Cove Base with Yellow Mastic	Warehouse Area
23	HA11	4" Black Cove Base with Yellow Mastic	Warehouse Area
24	HA12	12" x 12" Gray Floor Tile with Brown/Black Mastic	Mop Closet
25	HA12	12" x 12" Gray Floor Tile with Brown/Black Mastic	Men's Bathroom

>>

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS 1N NOVEMBER 4, 2013 SURVEY								
Fire Doors	Newer Maintenance Shop	NF	Intact	This material is reported as ACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Verify Analytical Results
Fire Doors	Old Maintenance Shop	NF	Intact	This material is reported as ACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Verify Analytical Results
9" x 9" Red Floor Tiles and associated Mastic	Old Maintenance Shop	NF	Intact	Materials may be under carpet, existing partition walls, fixtures, cabinets, etc. throughout the building	4-Nov-13	Remove from O & M Plan pending verification of removal.	4-May-14	Not observed - Verify removal
12" x 12" Dark Tan Floor Tiles and associated Mastic	Newer Maintenance Shop	NF	Intact	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
4" Brown Cove Base and associated Mastic	Newer Maintenance Shop	NF	Intact	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
Plaster Walls	Newer Maintenance Shop	F	Intact	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
Window Glazing	Old Maintenance Shop	NF	Intact	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
Exterior Plaster	Newer Maintenance Shop	F	N/A	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
Metal Duct Mastic	Newer Maintenance Shop	NF	N/A	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
12" x 12" Light Brown Floor Tiles and associated Mastic	Old Maintenance Shop- Office/Warehouse	NF	N/A	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
Ceiling Plaster	Old Maintenance Shop	F	N/A	This material is reported as PACM; however, it was not observed in this area	4-Nov-13	Maintain in O & M Plan	4-May-14	Sampling if encountered/uncovered
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 4, 2013 SURVEY								
Pipe Jacket and associated Beige Mastic on Fiberglass Pipe Insulation	Warehouse	NF	Damaged	None	4-Nov-13	Add to O & M Plan; Repair or Remove ASAP	4-May-14	Asbestos: 3% Chrysotile
MATERIALS ASSUMED TO CONTAIN ASBESTOS								
2' x 4' Ceiling Tiles	Newer Maintenance Shop	F	N/A	Sampled as NAD by ECS.	4-Nov-13	Remove from O & M Plan	4-May-14	None
Fiberglass Duct Mastic	Newer Maintenance Shop	NF	N/A	Sampled as NAD by ECS.	4-Nov-13	Remove from O & M Plan	4-May-14	None
Window and Door Caulking	Newer Maintenance Shop	NF	N/A	Various types of caulk were sampled as NAD by ECS.	4-Nov-13	Remove from O & M Plan	4-May-14	None
Drywall/Joint Compound	Newer Maintenance Shop	F	N/A	Sampled as NAD by ECS.	4-Nov-13	Remove from O & M Plan	4-May-14	None
Window and Door Caulking	Old Maintenance Shop	NF	N/A	Various types of caulk were sampled as NAD by ECS.	4-Nov-13	Remove from O & M Plan	4-May-14	None
2' x 4' Ceiling Tiles	Old Maintenance Shop	F	N/A	Sampled as NAD by ECS.	4-Nov-13	Remove from O & M Plan	4-May-14	None
Pipe Flange Gaskets	Throughout the Building	Unknown	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered

Electrical Panels: Transite Components	Mechanical Rooms	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Thermal System Insulation	Throughout building behind Solid Walls and Ceiling	F	N/A	PACM Until Tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Floor Felt under Wood Flooring	Stage or Throughout the Building	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Mirror Mastic	Bathrooms	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Chalkboards and associated Mastics	Classrooms	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Interior Pipe Wrap associated with Water Fountains and Radiators	Throughout the Building	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Waterproofing Membranes/Mastics	Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and Under Ceramic Flooring	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
Asphalt-Based Roofing Material and Caulks/Sealants	Roof	NF	N/A	PACM until tested	4-Nov-13	Add to O & M Plan	4-May-14	Sampling if encountered/uncovered
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 4, 2013 SURVEY								
Beige Mastic on Fiberglass Duct Insulation	Office in Warehouse and 1st Floor and Lounge Room on the 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Drywall	Office in Warehouse, Small Warehouse, and Lounge Room on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Joint Compound	Office in Warehouse, Small Warehouse, and Lounge Room on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Mudded Insulation on Fiberglass Pipe Fitting	Warehouse	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Gray Cove Base and associated Tan Mastic	Office on the 1st Floor	N/A	N/A	N/A	N/A	N/A	N/A	Covebase - NAD Mastic - NAD
12" x 12" Blue Flecked Floor Tile and associated Yellow Mastic	Office on the 1st Floor	N/A	N/A	N/A	N/A	N/A	N/A	Floor Tile - NAD Mastic - NAD
Yellow Carpet Mastic	Office on the 1st Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
12" x 12" Gray Flecked Floor Tile and associated Yellow Mastic	Entry Foyer on 1st Floor, Office on 2nd Floor, and Lounge Room on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	Floor Tile - NAD Mastic - NAD
2' x 4' White Fissured Ceiling Tile	Office on the 1st Floor, Stairwell on the 2nd Floor, and Lounge Room on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Blue Stair Tread and associated Yellow/Beige Glue	Stairs	N/A	N/A	N/A	N/A	N/A	N/A	Tread - NAD Mastic - NAD
White Interior Window Caulk	Lounge on the 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Gray Interior Window Caulk	Lounge on the 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Brown Interior Door Caulk	Entry Foyer on 1st Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD

Notes: F = Friable; NF = Non-Friable; PACM = Presumed Asbestos Containing Material; O & M Plan = Operations and Maintenance Plan; NAD = No Asbestos Detected.

ECS MID-ATLANTIC, LLC "Setting the Standard for Service"
Geotechnical • Construction Materials • Environmental • Facilities

Letter of Transmittal
June 6, 2014

To: Mr. Derrick Fulcher
Facilities Occupational Health, Safety Specialist
Alexandria City Public Schools
4701 Seminary Road
Alexandria, Virginia 22304

Re: Asbestos Operations and Maintenance Program Manual, Three-Year AHERA Re-inspections, Alexandria City Public Schools (ACPS), Maintenance Shop, 116 South Quaker Lane, Alexandria, VA 22314

We are enclosing:
Asbestos Sampling
Physical Assessment
Recommendations
Table 3 – Bulk Sampling of Suspect ACMs
Photographs
Laboratory Analytical Results

These are transmitted:

__ For Approval _X__ For Your Use __ As Requested __ For Review & Comment

Remarks:

Dear Mr. Fulcher:

ECS Mid-Atlantic, LLC (ECS) visited the above referenced school building on November 4, 2013 to conduct a three-year AHERA re-inspection. The asbestos-containing materials (ACMs) database provided by ACPS was updated with the findings of our inspection and a formal report was prepared.

Please feel free to contact the ECS, if you have any questions.

Sincerely,

Joanna Vivanco
Environmental Project Manager

Stephen R. Geraci
Environmental Department Manager

I:\Environmental\RPT\22000\22003 ACPS - AHERA Re-Inspections\Maintenance Shop

MAINTENANCE SHOP

Asbestos Sampling

A summary of materials found to contain asbestos or assumed to contain asbestos can be found in Table 1. A list of materials sampled and tested for asbestos content can be found in Table 3.

TABLE 1
ASBESTOS-CONTAINING MATERIALS SUMMARY

Location	Material	Friability
SAMPLED BY ECS IN NOVEMBER 4, 2013		
Warehouse (Assumed in other Areas)	Pipe Jacket and associated Beige Mastic on Fiberglass Pipe Insulation*	Friable
MATERIALS ASSUMED TO CONTAIN ASBESTOS **		
Pipes within chases behind walls and above ceiling throughout the building	Thermal System Insulation (TSI)	Friable
Throughout Building	Pipe Flange Gaskets	Unknown
2nd Floor Office Area (Assumed in other Areas)	Fire Rated Access Door (Door Wall Hatch) Insulation	Friable
Warehouse	Rolling Garage Door Insulation	Friable
Throughout Building	Interior Materials associated with HVAC System	Unknown
Throughout Building	Interior Pipe Wrap associated with Water Fountains and Radiators	Category II Non-Friable
Throughout Building	Electric Panels: Transite Components	Category II Non-Friable
Bathrooms	Mirror Mastics	Category II Non-Friable

Location	Material	Friability
Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and under Ceramic Flooring	Waterproofing Membranes/Mastics	Category II Non-Friable
Roof	Asphalt-Based Roofing Materials and Caulks/Sealants	Non-Friable

Notes: * This material was observed to be damaged in the sampling location. Debris associated with this material was observed on the floor.
** These materials, if present, could not be reached at the time of the survey. These materials should be presumed to be asbestos-containing materials (ACMs).

Physical Assessment

A summary of the physical assessment category for each identified and presumed friable ACM can be found in Table 2.

TABLE 2
PHYSICAL ASSESSMENT OF FRIABLE
ASBESTOS CONTAINING MATERIALS

Location	Material	Physical Assessment Category
Warehouse	Pipe Jacket and associated Beige Mastic on Fiberglass Pipe Insulation	1 – Damaged or Significantly Damaged TSI ACBM
2nd Floor Office Area	Fire Rated Access Door Insulation (Door Wall Hatch)	7 – Friable Suspected ACBM
Warehouse	Rolling Garage Door Insulation	7 – Friable Suspected ACBM

Recommendations

The above identified asbestos-containing friable material was observed damaged in the warehouse and should be repaired or removed by a Commonwealth of Virginia licensed asbestos abatement contractor.

TABLE
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS
MAINTENANCE SHOP
116 South Quaker Lane, Alexandria, VA 22314

Sample Number	Sample Location	Material/Description	Analytical Results
MSHOP-1	Office in Warehouse	Beige Mastic on Fiberglass Duct Insulation	NAD
MSHOP-2	Office on 1st Floor	Beige Mastic on Fiberglass Duct Insulation	NAD
MSHOP-3	Lounge Room on 2nd Floor	Beige Mastic on Fiberglass Duct Insulation	NAD
MSHOP-4	Office in Warehouse	Drywall	NAD
MSHOP-5	Small Warehouse	Drywall Ceiling	NAD
MSHOP-6	Lounge Room on 2nd Floor	Drywall	NAD
MSHOP-7	Office in Warehouse	Joint Compound	NAD
MSHOP-8	Small Warehouse	Joint Compound	NAD
MSHOP-9	Lounge Room on 2nd Floor	Joint Compound	NAD
MSHOP-10	Warehouse	Pipe Jacket and Associated Beige Mastic on Fiberglass Pipe Insulation	Asbestos: 3% Chrysotile (Inseparable Layers)
MSHOP-11	Warehouse	Pipe Jacket and Associated Beige Mastic on Fiberglass Pipe Insulation	N/A (Inseparable Layers)
MSHOP-12	Warehouse	Pipe Jacket and Associated Beige Mastic on Fiberglass Pipe Insulation	N/A (Inseparable Layers)
MSHOP-13	Warehouse	Mudded Insulation on Fiberglass Pipe Fitting	NAD

Table Notes: NAD = No Asbestos Detected
N/A = Not Analyzed Due to Positive Stop

TABLE
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS
MAINTENANCE SHOP
116 South Quaker Lane, Alexandria, VA 22314

Sample Number	Sample Location	Material/Description	Analytical Results
MSHOP-14	Warehouse	Mudded Insulation on Fiberglass Pipe Fitting	NAD
MSHOP-15	Warehouse	Mudded Insulation on Fiberglass Pipe Fitting	NAD
MSHOP-16	Office on 1st Floor	Gray Cove Base and Associated Tan Mastic	Cove Base – NAD Mastic – NAD
MSHOP-17	Office on 1st Floor	Gray Cove Base and Associated Tan Mastic	Cove Base – NAD Mastic – NAD
MSHOP-18	Office on 1st Floor	Gray Cove Base and Associated Tan Mastic	Cove Base – NAD Mastic – NAD
MSHOP-19	Office on 1st Floor	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	Floor Tile – NAD Mastic – NAD
MSHOP-20	Office on 1st Floor	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	Floor Tile – NAD Mastic – NAD
MSHOP-21	Office on 1st Floor	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	Floor Tile – NAD Mastic – NAD
MSHOP-22	Office on 1st Floor	Yellow Carpet Mastic	NAD
MSHOP-23	Office on 1st Floor	Yellow Carpet Mastic	NAD
MSHOP-24	Office on 1st Floor	Yellow Carpet Mastic	NAD
MSHOP-25	Entry Foyer on 1st Floor	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	Floor Tile – NAD Mastic – NAD
MSHOP-26	Office on 2nd Floor	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	Floor Tile – NAD Mastic – NAD

Table Notes: NAD = No Asbestos Detected
N/A = Not Analyzed Due to Positive Stop

TABLE
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS
MAINTENANCE SHOP
116 South Quaker Lane, Alexandria, VA 22314

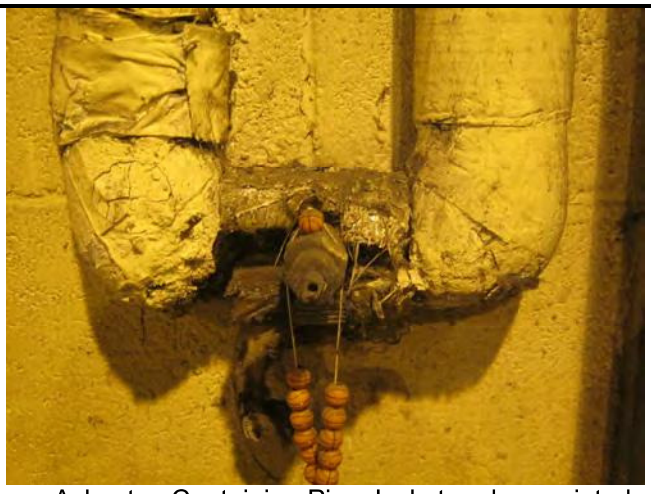
Sample Number	Sample Location	Material/Description	Analytical Results
MSHOP-27	Lounge Room on 2nd Floor	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	Floor Tile – NAD Mastic – NAD
MSHOP-28	Office on 1st Floor	2' x 4' White Fissured Ceiling Tile	NAD
MSHOP-29	Stairwell on 2nd Floor	2' x 4' White Fissured Ceiling Tile	NAD
MSHOP-30	Lounge Room on 2nd Floor	2' x 4' White Fissured Ceiling Tile	NAD
MSHOP-31	Stairs	Blue Stair Tread and Associated Yellow/Beige Glue	Stair Tread – NAD Mastic – NAD
MSHOP-32	Stairs	Blue Stair Tread and Associated Yellow/Beige Glue	Stair Tread – Not Sampled Mastic – NAD
MSHOP-33	Stairs	Blue Stair Tread and Associated Yellow/Beige Glue	Stair Tread – Not Sampled Mastic – NAD
MSHOP-34	Lounge Room on 2nd Floor	White Interior Window Caulk	NAD
MSHOP-35	Lounge Room on 2nd Floor	White Interior Window Caulk	NAD
MSHOP-36	Lounge Room on 2nd Floor	White Interior Window Caulk	NAD
MSHOP-37	Lounge Room on 2nd Floor	Gray Interior Window Caulk	NAD
MSHOP-38	Lounge Room on 2nd Floor	Gray Interior Window Caulk	NAD
MSHOP-39	Entry Foyer on 1st Floor	Gray Interior Window Caulk	NAD

Table Notes: NAD = No Asbestos Detected
N/A = Not Analyzed Due to Positive Stop

TABLE
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS
MAINTENANCE SHOP
116 South Quaker Lane, Alexandria, VA 22314

Sample Number	Sample Location	Material/Description	Analytical Results
MSHOP-40	Entry Foyer on 1st Floor	Brown Interior Door Caulk	NAD
MSHOP-41	Entry Foyer on 1st Floor	Brown Interior Door Caulk	NAD
MSHOP-42	Entry Foyer on 1st Floor	Brown Interior Door Caulk	NAD

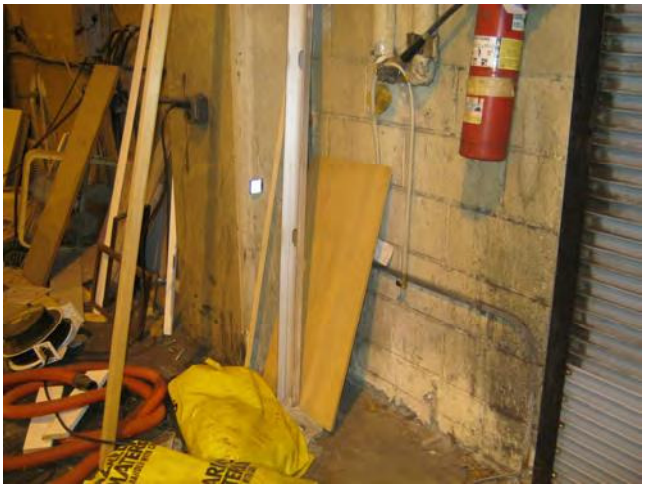
Table Notes: NAD = No Asbestos Detected
N/A = Not Analyzed Due to Positive Stop



1. Asbestos-Containing Pipe Jacket and associated Beige Mastic on Fiberglass Pipe Insulation in Warehouse. Samples MSHOP-10/11.



2. Asbestos-Containing Pipe Jacket and associated Beige Mastic on Fiberglass Pipe Insulation in Warehouse. Samples MSHOP-12.



3. Debris associated with Identified Asbestos-Containing Pipe Jacket and Beige Mastic on the Floor.



4. Presumed Asbestos-Containing Interior Pipe Wrap associated with Water Fountains. Not Sampled.



5. Presumed Asbestos-Containing Fire Rated Access Door (Door Wall Hatch) in 2nd Floor Office Area. Not Sampled.



6. Presumed Asbestos-Containing Materials associated with the HVAC System (Interior Components) Not Sampled.

MAINTENANCE SHOP
116 SOUTH QUAKER LANE
ALEXANDRIA, VA 22314
ECS PROJECT NO. 01:22003

ACPS – AHERA RE-INSPECTION
SAMPLE PHOTOGRAPHS
MAY 2014

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly VA 20151

Attn: Joanna Vivanco

Project: 22003-Maintenance Shop

Lab Order ID: 1321554
Analysis ID: 1321554_PLM
Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
MSHOP-1 / *1321554PLM_1*	Beige mastic on Fiberglass Duct Insulation	None Detected	3% Wollastonite	97% Other	Beige, Non Fibrous, Heterogeneous / Dissolved
MSHOP-2 / *1321554PLM_2*	Beige mastic on Fiberglass Duct Insulation	None Detected	3% Wollastonite	97% Other	Beige, Non Fibrous, Heterogeneous / Dissolved
MSHOP-3 / *1321554PLM_3*	Beige mastic on Fiberglass Duct Insulation	None Detected	3% Wollastonite	97% Other	Beige, Non Fibrous, Heterogeneous / Dissolved
MSHOP-4 / *1321554PLM_4*	Drywall	None Detected	10% Cellulose 2% Fiber Glass	88% Other	White, Tan, Fibrous, Heterogeneous / Crushed
MSHOP-5 / *1321554PLM_5*	Drywall	None Detected	10% Cellulose 2% Fiber Glass	88% Other	White, Tan, Fibrous, Heterogeneous / Crushed
MSHOP-6 / *1321554PLM_6*	Drywall	None Detected	10% Cellulose 2% Fiber Glass	88% Other	White, Tan, Fibrous, Heterogeneous / Crushed
MSHOP-7 / *1321554PLM_7*	Joint Compound	None Detected		100% Other	White, Non Fibrous, Heterogeneous / Crushed
MSHOP-8 / *1321554PLM_8*	Joint Compound	None Detected		100% Other	White, Non Fibrous, Heterogeneous / Crushed

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Charmel Dozier (52)

Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

NVLAP Lab Code: 200664-0

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Attn: Joanna Vivanco

Project: 22003-Maintenance Shop

Lab Order ID: 1321554
Analysis ID: 1321554_PLM
Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
MSHOP-9	Joint Compound	None Detected		100% Other	White Non Fibrous Heterogeneous
1321554PLM_9					Crushed
MSHOP-10	Pipe Jacket and Associted Beige Mastic on Fiberglass Pipe Insulation	3% Chrysotile	10% Cellulose	87% Other	Beige Fibrous Heterogeneous
1321554PLM_10	*inseparable layers*				Dissolved
MSHOP-11	Pipe Jacket and Associted Beige Mastic on Fiberglass Pipe Insulation	Not Analyzed			
1321554PLM_11	*inseparable layers*				
MSHOP-12	Pipe Jacket and Associted Beige Mastic on Fiberglass Pipe Insulation	Not Analyzed			
1321554PLM_12	*inseparable layers*				
MSHOP-13	Mudded Insulation on Fiberglass Pipe Fitting	None Detected	5% Fiber Glass	95% Other	White Fibrous Heterogeneous
1321554PLM_13					Crushed
MSHOP-14	Mudded Insulation on Fiberglass Pipe Fitting	None Detected	5% Fiber Glass	95% Other	White Fibrous Heterogeneous
1321554PLM_14					Crushed
MSHOP-15	Mudded Insulation on Fiberglass Pipe Fitting	None Detected	5% Fiber Glass	95% Other	White Fibrous Heterogeneous
1321554PLM_15					Crushed
MSHOP-16 - A	Gray Cove Base and Associated Tan Mastic	None Detected		100% Other	Gray Non Fibrous Homogeneous
1321554PLM_16	*cove base*				Ashed

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Bulk Asbestos Analysis

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Lab Order ID: 1321554
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Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
MSHOP-16 - B	Gray Cove Base and Associated Tan Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1321554PLM_43	*mastic*				Dissolved
MSHOP-17 - A	Gray Cove Base and Associated Tan Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1321554PLM_17	*cove base*				Ashed
MSHOP-17 - B	Gray Cove Base and Associated Tan Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1321554PLM_44	*mastic*				Dissolved
MSHOP-18 - A	Gray Cove Base and Associated Tan Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1321554PLM_18	*cove base*				Ashed
MSHOP-18 - B	Gray Cove Base and Associated Tan Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1321554PLM_45	*mastic*				Dissolved
MSHOP-19 - A	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1321554PLM_19	*tile*				Dissolved
MSHOP-19 - B	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1321554PLM_46	*mastic*				Dissolved
MSHOP-20 - A	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1321554PLM_20	*tile*				Dissolved

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Bulk Asbestos Analysis

By Polarized Light Microscopy
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Attn: Joanna Vivanco

Project: 22003-Maintenance Shop

Lab Order ID: 1321554
Analysis ID: 1321554_PLM
Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
MSHOP-20 - B *1321554PLM_47*	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
MSHOP-21 - A *1321554PLM_21*	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic *tile*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Dissolved
MSHOP-21 - B *1321554PLM_48*	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic *mastic - small sample*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
MSHOP-22 *1321554PLM_22*	Yellow Carpet Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Heterogeneous Dissolved
MSHOP-23 *1321554PLM_23*	Yellow Carpet Mastic	**None Detected**	**1% Synthetic Fibers**	**99% Other**	Yellow Non Fibrous Heterogeneous Dissolved
MSHOP-24 *1321554PLM_24*	Yellow Carpet Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Heterogeneous Dissolved
MSHOP-25 - A *1321554PLM_25*	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic *tile*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Dissolved
MSHOP-25 - B *1321554PLM_49*	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic *mastic - small sample*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved

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Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly VA 20151

Attn: Joanna Vivanco

Project: 22003-Maintenance Shop

Lab Order ID: 1321554
Analysis ID: 1321554_PLM
Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
MSHOP-26 - A	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1321554PLM_26	*tile*				Dissolved
MSHOP-26 - B	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1321554PLM_50	*mastic - small sample*				Dissolved
MSHOP-27 - A	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1321554PLM_27	*tile*				Dissolved
MSHOP-27 - B	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1321554PLM_51	*mastic - small sample*				Dissolved
MSHOP-28	2' x 4' White Fissured Ceiling Tile	**None Detected**	**40% Cellulose** **40% Mineral Wool**	**10% Perlite** **10% Other**	Tan Fibrous Heterogeneous
1321554PLM_28					Teased
MSHOP-29	2' x 4' White Fissured Ceiling Tile	**None Detected**	**40% Cellulose** **40% Mineral Wool**	**10% Perlite** **10% Other**	Tan Fibrous Heterogeneous
1321554PLM_29					Teased
MSHOP-30	2' x 4' White Fissured Ceiling Tile	**None Detected**	**40% Cellulose** **40% Mineral Wool**	**10% Perlite** **10% Other**	Tan Fibrous Heterogeneous
1321554PLM_30					Teased
MSHOP-31 - A	Blue Stair Tread and Associated Yellow/Beige Glue	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous
1321554PLM_31	*tread*				Ashed

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Charmel Dozier (52)

Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly VA 20151

Attn: Joanna Vivanco

Project: 22003-Maintenance Shop

Lab Order ID: 1321554
Analysis ID: 1321554_PLM
Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
MSHOP-31 - B	Blue Stair Tread and Associated Yellow/Beige Glue	None Detected		100% Other	Yellow Non Fibrous Heterogeneous
1321554PLM_52	*mastic*				Dissolved
MSHOP-32	Blue Stair Tread and Associated Yellow/Beige Glue	None Detected		100% Other	Yellow Non Fibrous Heterogeneous
1321554PLM_32	*mastic only*				Dissolved
MSHOP-33	Blue Stair Tread and Associated Yellow/Beige Glue	None Detected		100% Other	Yellow Non Fibrous Heterogeneous
1321554PLM_33	*mastic only*				Dissolved
MSHOP-34	White Interior Window Caulk	None Detected		100% Other	White Non Fibrous Homogeneous
1321554PLM_34					Ashed
MSHOP-35	White Interior Window Caulk	None Detected		100% Other	White Non Fibrous Homogeneous
1321554PLM_35					Ashed
MSHOP-36	White Interior Window Caulk	None Detected		100% Other	White Non Fibrous Homogeneous
1321554PLM_36					Ashed
MSHOP-37	Gray Interior Window Caulk	None Detected		100% Other	Gray Non Fibrous Homogeneous
1321554PLM_37					Ashed
MSHOP-38	Gray Interior Window Caulk	None Detected		100% Other	Gray Non Fibrous Homogeneous
1321554PLM_38					Ashed

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Charmel Dozier (52)

Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

NVLAP Lab Code: 200664-0

Customer: ECS Chantilly
14026 Thunderbolt Place
Suite 100
Chantilly VA 20151

Attn: Joanna Vivanco

Project: 22003-Maintenance Shop

Lab Order ID: 1321554
Analysis ID: 1321554_PLM
Date Received: 11/27/2013
Date Reported: 12/5/2013

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
MSHOP-39 *1321554PLM_39*	Gray Interior Window Caulk	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed
MSHOP-40 *1321554PLM_40*	Brown Interior Door Caulk	**None Detected**		**100% Other**	Black Non Fibrous Homogeneous Ashed
MSHOP-41 *1321554PLM_41*	Brown Interior Door Caulk	**None Detected**		**100% Other**	Black Non Fibrous Homogeneous Ashed
MSHOP-42 *1321554PLM_42*	Brown Interior Door Caulk	**None Detected**		**100% Other**	Black Non Fibrous Homogeneous Ashed

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Charmel Dozier (52)

Analyst

Approved Signatory

| 321554

Client:	ECS Mid-Atlantic, LLC	***Instructions:**
Contact:	Joanna Vivanco	*Use Column "B" for your contact info*
Address:	14026 Thunderbolt Place, Suite 100, Chantilly, VA 20151	
Phone:	703-471-8400	*To See an Example Click the bottom Example Tab.*
Fax:	703-834-5527	
Email:	jvivanco@ecslimited.com	***Enter samples between "<<" and ">>"***
Project:	#22003-Maintenance Shop	***Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample.***
Client Notes:		*Only Enter your data on the first sheet "Sheet1"*
P.O. #.		*Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.*
Date Submitted:	FEDEX	
Analysis:	PLM EPA 600/R-93/116 (Positive Stop)	
TurnAroundTime:	5 Days	

Sample Number	HA # (Bulk Sample)	Sample Description
MSHOP-1	HA #1	Beige mastic on Fiberglass Duct Insulation
MSHOP-2	HA #1	Beige mastic on Fiberglass Duct Insulation
MSHOP-3	HA #1	Beige mastic on Fiberglass Duct Insulation
MSHOP-4	HA #2	Drywall
MSHOP-5	HA #2	Drywall
MSHOP-6	HA #2	Drywall
MSHOP-7	HA #3	Joint Compound
MSHOP-8	HA #3	Joint Compound
MSHOP-9	HA #3	Joint Compound
MSHOP-10	HA #4	Pipe Jacket and Associted Beige Mastic on Fiberglass Pipe Insulation
MSHOP-11	HA #4	Pipe Jacket and Associted Beige Mastic on Fiberglass Pipe Insulation
MSHOP-12	HA #4	Pipe Jacket and Associted Beige Mastic on Fiberglass Pipe Insulation
MSHOP-13	HA #5	Mudded Insulation on Fiberglass Pipe Fitting
MSHOP-14	HA #5	Mudded Insulation on Fiberglass Pipe Fitting
MSHOP-15	HA #5	Mudded Insulation on Fiberglass Pipe Fitting
MSHOP-16	HA #6	Gray Cove Base and Associated Tan Mastic
MSHOP-17	HA #6	Gray Cove Base and Associated Tan Mastic
MSHOP-18	HA #6	Gray Cove Base and Associated Tan Mastic
MSHOP-19	HA #7	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic

Accepted ☑
Rejected ☐

11/27

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MSHOP-20	HA #7	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic
MSHOP-21	HA #7	12" x 12" Blue Flecked Floor Tile and Associated Yellow Mastic
MSHOP-22	HA #8	Yellow Carpet Mastic
MSHOP-23	HA #8	Yellow Carpet Mastic
MSHOP-24	HA #8	Yellow Carpet Mastic
MSHOP-25	HA #9	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic
MSHOP-26	HA #9	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic
MSHOP-27	HA #9	12" x 12" Gray Flecked Floor Tile and Associated Yellow Mastic
MSHOP-28	HA #10	2' x 4' White Fissured Ceiling Tile
MSHOP-29	HA #10	2' x 4' White Fissured Ceiling Tile
MSHOP-30	HA #10	2' x 4' White Fissured Ceiling Tile
MSHOP-31	HA #11	Blue Stair Tread ~~and~~ Associated Yellow/Beige ~~Glue~~ MASTIC
MSHOP-32	HA #11	Blue Stair Tread ~~and~~ Associated Yellow/Beige ~~Glue~~ MASTIC
MSHOP-33	HA #11	Blue Stair Tread ~~and~~ Associated Yellow/Beige ~~Glue~~ MASTIC
MSHOP-34	HA #12	White Interior Window Caulk
MSHOP-35	HA #12	White Interior Window Caulk
MSHOP-36	HA #12	White Interior Window Caulk
MSHOP-37	HA #13	Gray Interior Window Caulk
MSHOP-38	HA #13	Gray Interior Window Caulk
MSHOP-39	HA #13	Gray Interior Window Caulk
MSHOP-40	HA #14	Brown Interior Door Caulk
MSHOP-41	HA #14	Brown Interior Door Caulk
MSHOP-42	HA #14	Brown Interior Door Caulk

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