AHERA - THREE YEAR REINSPECTION



JOHN ADAMS ES AND ECC

5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA 22311

ECS PROJECT NO. 47:11652-E4-13

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

SEPTEMBER 2, 2025

September 2, 2025

Mr. Lee Conroy
Alexandria City Public Schools
1713 North Beauregard Street
Alexandria, Virginia 22311

ECS Project No. 47:11652-E4-13

Reference: AHERA - Three Year Reinspection, John Adams ES and ECC, 5651 Rayburn Avenue, 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 John Adams Elementary School and Early Childhood Center (ECC) located at 5651 Rayburn Avenue in Alexandria, Virginia.

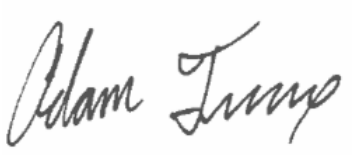
Previous asbestos surveys of the school identified asbestos-containing materials. ECS performed a walk through of the school to observe present conditions.

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



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1.0 SITE DESCRIPTION

The subject property consists of John Adams ES and ECC, a two-story brick school building located at 5651 Rayburn Avenue in Alexandria, Virginia. The school was originally constructed in 1966 and encompasses approximately 137,350 square feet. Building finishes observed included concrete sub-floors, vinyl floor tiles, carpet, and 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 and some plaster finishes.

Based on a review of historical documentation, the following materials were previously identified as asbestos-containing and have since been abated.

- Asbestos-containing Black Mastic on pipe insulation wrap was abated from the kitchen, former kitchen office and associated storage room, and Room 160E. Floor tile and associated Black Mastic from the cafeteria, Room 160E, stairwell into the cafeteria, and hallways on either side of the stage in 2020 (ECS Project No. 47:1519-J1).
- Asbestos-containing Floor Tiles and associated Black Mastic from the 1st floor hallway by the cafeteria, by rooms 146-160 (ECS Project No. 47:11652-C) and Rooms 201, 202, 204, and 206-227 in 2021 (ECS Project No. 47:11652-C1).
- Asbestos-containing Floor Tile and associated Mastic from the first floor south hallways in 2022 (ECS Project No. 47:11652-C6).
- Asbestos-containing Floor Tile and associated Black Mastic from the Auxiliary Gym, Room 136 (ECS Project No. 47:11652-C7), the entrance to door 10, the hallway adjacent to the gym hallway, the hallway of Rooms 130-144 (ECS Project No. 47:11652-C8), and the North Hallway adjacent to Rooms 129-133 in 2024 (ECS Project No. 47:11652-C9).

Note: Based on the age of the structure, it is likely that asbestos insulation on piping and ductwork is present and concealed behind solid walls/above solid ceilings. Floor tile and mastic is assumed to be also present throughout the school, even in areas where it was reported abated (concealed under fixtures such as cabinets etc.).

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, 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 school.

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								
12" X 12" Olive Green Specked Floor Tile and associated Mastic	Custodial Office near Kitchen and Select Hallways Through the Building	NF	Intact	Observed in Room 162	27-Jun-25	Maintain in O & M Plan		Floor Tile: 4% Chrysotile Mastic: 6% Chrysotile
Black Sink Undercoat	Art Classroom 152	NF	Intact	None	27-Jun-25	Maintain in O & M Plan		5% Chrysotile
12" x 12" Beige Flecked Floor Tile and assocaited Brown Mastic	Storage Closet in Hallway by Stairwell B (asumed present in other areas)	NF	Intact	Materials abated in ECS Project No. 47:11652-C8. Observed in Rooms 129, 131, 132, 133C,-135, 137, 144, 146-149, 152-155, 163-169, and Kindergarten Wing	27-Jun-25	Maintain in O & M Plan		Floor Tile: 5% Chryostile Mastic: 8% Chrysotile
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS ON JUNE 27, 2025 SURVEY								
12" x 12' Dark Gray with White Specks Floor Tile and Associated Black Mastic	229 - Library Break Room (assumed to be present in other areas)	NF	N/A	None	27-Jun-25	Maintain in O & M Plan		Floor Tile: 4% Chrysotile Mastic: 6% Chrysotile
Resideual Brown Mastic associated with a Removed Cove Base	Outside Library - Hallway by Court Yard (assumed to be present in other areas)	NF	N/A	This material is reported as ACM: however it was not observed in the area.	27-Jun-25	Maintain in O & M Plan		3% Chrysotile
Gray Fireproofing	East, West, and South Hallways	F	N/A	This material is reported as ACM: however it was not observed in the area.	27-Jun-25	Maintain in O & M Plan		15% Chrysotile
Black Pipe Insulation Sealant	East, West, and South Hallways	NF	N/A	Abated within the Kitchen and Cafeteria (ECS Project No. 47:1519-J1). Assumed present in inaccessable areas.	27-Jun-25	Remove from O & M Plan pending verification of removal		Verify Removal
Window Caulk	South and West Hallways	NF	N/A	Assumed to be present throughout the building	27-Jun-25	Maintain in O & M Plan		8% Chrysotile
12" x 12" Green with White Flecks Floor Tile and associated Black Mastic	Stage	NF	N/A	Assumed to be concealed under fuax wood flooring.	27-Jun-25	Maintain in O & M Plan		Floor Tile: 5% Chryostile Mastic: 8% Chrysotile
12" x 12" Light Green Flecked Floor Tile and associated Black Mastic	Closet in Hallway	NF	N/A	Abated ECS Project No. 47:11652-C8. Assumed to be present in inaccessable areas	27-Jun-25	Maintain in O & M Plan		Verify Removal
12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic	Storage Room in Office 229	NF	N/A	This material is reported as ACM: however it was not observed in the area.	27-Jun-25	Maintain in O & M Plan		Floor Tile: 3% Chryostile Mastic: 8% Chrysotile
12" x 12" Greenish Gray Floor Tile and associated Black Mastic	Supply/Copy Room in Office 229 (under carpet)	NF	N/A	This material is reported as ACM: however it was not observed in the area.	27-Jun-25	Maintain in O & M Plan		Floor Tile: 5% Chryostile Mastic: 8% Chrysotile
Off-White Floor Tile and associated Black Mastic	Hallway on 2nd Floor (under Water Fountain)	NF	N/A	Abated during ECS Project No. 47:11652-C1), assumed to be present in inaccessable areas	27-Jun-25	Maintain in O & M Plan		Floor Tile: 5% Chryostile Mastic: 5% Chrysotile
White Vibration Damper Cloth	1st Floor G1 Electrical Room	F	N/A	This material is reported as ACM: however it was not observed in the area. Assumed to be present in inaccessable areas.	27-Jun-25	Maintain in O & M Plan		70% Chrysotile
MATERIALS ASSUMED TO CONTAIN ASBESTOS								
Boards above Windows and Drop Ceiling Tiles	Classrooms	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Tectum Boards and associated Mastic	Cafeteria (160) on 1st Floor	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Gypsum Roof Boards	Throughout the Building	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Pipe Flange Gaskets	Throughout the Building	Unknown	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Electrical Panels: Transite Components	Mechanical Rooms	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered

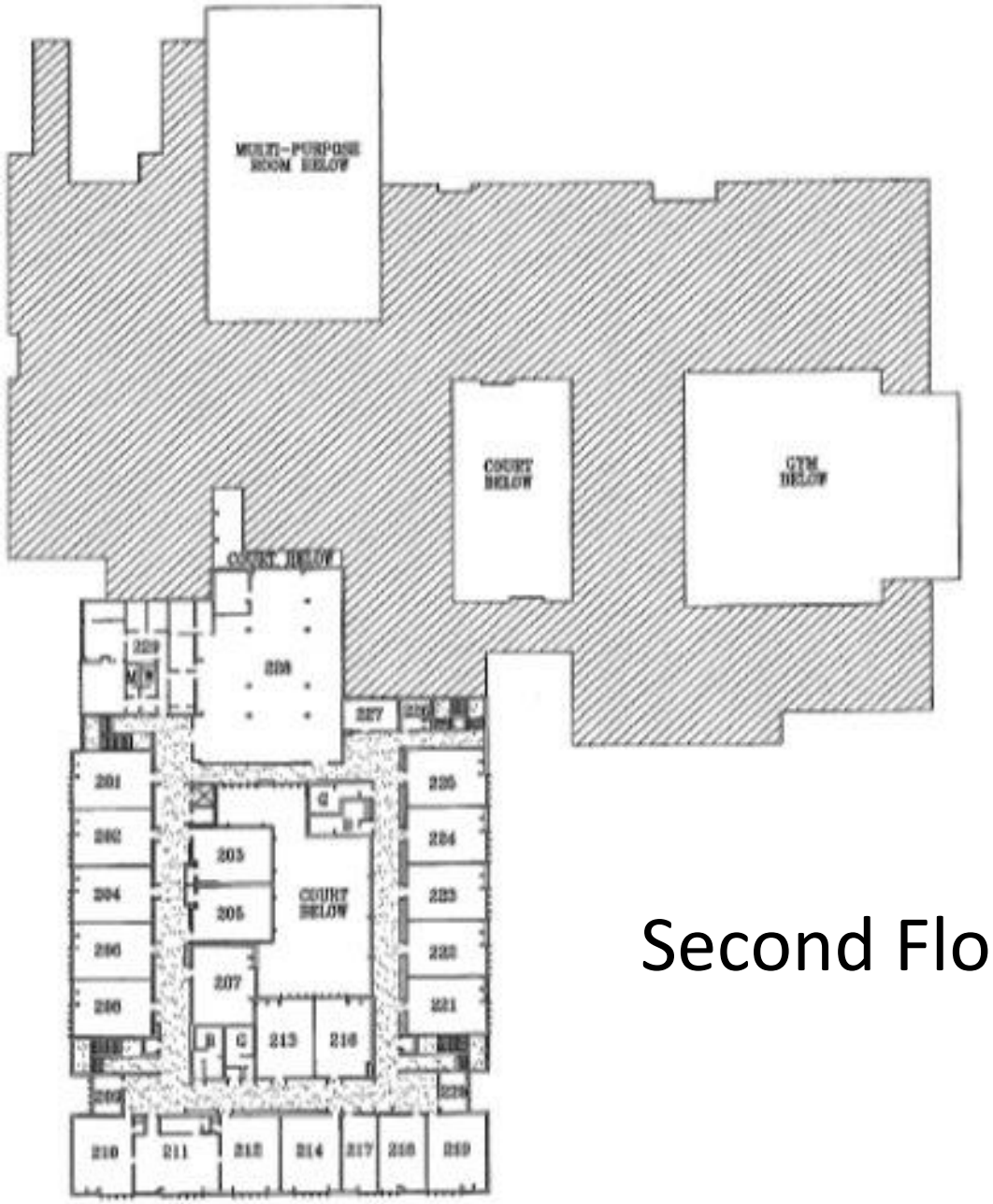
Thermal System Insulation (TSI)	Pipes within Chases behind Walls and above Ceiling throughout Building	F	Not Observed	PACM Until Tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Mirror Mastic	Bathrooms	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Boards and associated Mastics	Classrooms and Hallways	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Interior Pipe Wrap associated with Water Fountains and Radiators	Throughout the Building	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Waterproofing Membranes/Mastics	Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and Under Ceramic Flooring	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	Sampling if encountered/uncovered
Asphalt-Based Roofing Material and Caulks/Sealants	Roof	NF	Intact	PACM until tested	27-Jun-25	Maintain in O & M Plan	19-May-14	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


SERVICE
160 CAFETORIUM
161 KITCHEN
150 HOUSE
COURTYARD
133 GYM
COURTYARD
DUC
DEPICK STO
BOX

First Floor



Second Floor

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

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

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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



JOHN ADAMS ELEMENTARY SCHOOL AND EARLY CHILDHOOD CENTER

5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA 22311

ECS PROJECT NO. 47:11652-E2

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

MARCH 21, 2022

March 21, 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, John Adams Elementary School and Early Childhood Center, 5651 Rayburn Avenue, Alexandria, Virginia

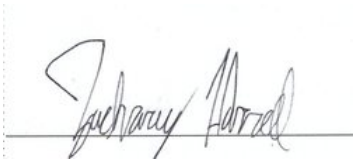
Dear Mr. Contreras:

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 John Adams Elementary School and Early Childhood Center located at 5651 Rayburn Avenue 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 47:11652-E2 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, John Adams Elementary School And Early Childhood Center, is a 137,350 square foot school building reportedly originally constructed in 1966.

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

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

- 12"x12" Olive Green Specked Floor Tile and associated Mastic- Observed as present in room 229, custodial closets, as well as select hallways throughout the building that have yet to be renovated.
- 12"x12" Dark Gray with White Specks Floor Tile and associated Black Mastic- Observed to be present in the media center break room, and may be located in other inaccessible areas of the building.
- Residual Brown Mastic associated with a removed Cove Base- Observed to be present throughout the hallway in front of the media center and may be concealed under a new cove base application throughout the building.

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.

- Gray Fireproofing in East, West and South Hallways - Not observed during survey but may be located in inaccessible areas.
- Sink Undercoating- Observed in the Art Classroom.
- Vibration Cloth - Not observed during survey but may be located in inaccessible areas.
- Window Caulk- Observed to be present in the South Hallway, but may be in inaccessible or concealed (due to caulk re-application) areas throughout the building.

Based on a review of historical documentation the following materials were previously identified as asbestos-containing and have since been abated.

- Black Pipe and Elbow Insulation Sealant - Abatement records (ECS Project No. 47:1519-J1) found that pipe insulation had been abated within the Kitchen and Cafeteria area. The material may be located throughout the building in inaccessible areas.
- Vinyl Floor Tiles Rooms and associated Mastics- Abatement records (ECS Project No. 47:11652-C1) found that floor tile and mastic had been abated within rooms: 201, 202, 204, 206, 207, 208, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 209, 210, 211, 212, 213, 214, 215, 216, and 217. ACM floor tile still remains within certain areas of the building that were not included in the abatement, notably, the hallway in front of the cafeteria, the hallway to the gym, and Room 136-143 Hallway.

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 both Alexandria City Public School's (ACPS) John Adams Elementary School and the Early Childhood Center (ECC) , a two-story brick school building located at 5651 Rayburn Avenue in Alexandria, Virginia. The school was originally constructed in 1966 and encompasses approximately 137,350 square feet. Building finishes observed included concrete sub-floors, vinyl floor tiles, carpet, and 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 and some plaster finishes.

2.0 PURPOSE

The purpose of this Asbestos Hazard Emergency Response Act (AHERA) re-inspection asbestos-containing materials survey was to determine if asbestos-containing building materials (ACBMs) are present on the subject property. The survey was performed within interior areas of the subject buildings. Exterior and roofing materials were not included in this survey. This survey is intended to provide a supporting document for an AHERA management plan.

The AHERA 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 practices and methods specified by regulations for the identification of Asbestos-Containing Materials (ACMs).

3.1 Asbestos-Containing Materials

The non-destructive asbestos survey was performed by an asbestos inspector who has received EPA accredited training and is licensed by 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 (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 (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. ECS did not have access to occupied classrooms, select inaccessible closets, the kitchen, and roofs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas. 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.

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 (SAI) submitted a signed final laboratory report to ECS on December 7, 2021. Three 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, 42 bulk samples from homogeneous areas were submitted to the laboratory of which 53 layers were analyzed.

Summary of Asbestos-Containing Materials Identified

Location	Material Description	Analytical Result	EPA Category	AHERA Category
Custodial Office near Kitchen and Select Hallways throughout the Building	12"x12" Olive Green Specked Floor Tile and associated Mastic	Tile- 6% Chrysotile Mastic- Insufficient amount sampled	Category I Non-Friable	Not Applicable
229- Library Break Room(Assumed to be Concealed in other Locations)	12"x12" Dark Gray with White Specks Floor Tile and associated Black Mastic	Tile- 4% Chrysotile Mastic- 6% Chrysotile	Category I Non-Friable	Not Applicable
Outside Library-Hallway by Court Yard (Assumed to be Concealed in other Locations)	Residual Brown Mastic associated with a Removed Cove Base	3% Chrysotile	Category I Non-Friable	Not Applicable

Summary of Previously Identified Asbestos-Containing Materials

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
East, West and South Hallways	Gray Fireproofing***	15% Chrysotile	Friable	(5) ACBM with potential for damage.	Not observed assumed to be present in inaccessible areas

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
East, West and South Hallways	Black Pipe Insulation Sealant**	5% Chrysotile	Category II Non-Friable	Not Applicable	Abated within the Kitchen and Cafeteria (ECS Project No. 47:1519-J1) The material may be located throughout the building in inaccessible areas.
East and West Hallways	Black Pipe Elbow Insulation Sealant**	8% Chrysotile	Category II Non-Friable	Not Applicable	Not observed assumed to be present in inaccessible areas
South and West Hallways	Window Caulk*	8% Chrysotile	Category II Non-Friable	Not Applicable	Observed and assumed to be present throughout the building.
Stage	12" x 12" Green with White Flecks Floor Tile and associated Black Mastic	Floor Tile – 5% Chrysotile Mastic – 5% Chrysotile	Category I Non-Friable	Not Applicable	Not observed, assumed to be concealed under faux wood flooring
Closet in the Hallway	12" x 12" Light Green Flecked Floor Tile and associated Black Mastic	Floor Tile – 5% Chrysotile Mastic - 8% Chrysotile	Category I Non-Friable	Not Applicable	Observed in the hallway in front of the cafeteria, the hallway to the gym, and Room 136-143 Hallway.
Art Classroom 152	Black Sink Undercoat	5% Chrysotile	Category II Non-friable	Not Applicable	Observed on Survey (pictured)

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Storage Room in Office 229	12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic	Floor Tile – 3% Chrysotile Mastic – 8% Chrysotile	Category I Non-Friable	Not Applicable	Observed on Survey (pictured and sampled)
Supply/ Copy Room in Office 229 (under Carpet)	12" x12" Greenish Gray Floor Tile and associated Black Mastic	Floor Tile – 5% Chrysotile Mastic – 8% Chrysotile	Category I Non-Friable	Not Applicable	Not observed, assumed to be present
Storage Closet in Hallway by Stairwell B	12" x 12" Beige Flecked Floor Tile and associated Black Mastic	Floor Tile – 5% Chrysotile Mastic – 8% Chrysotile	Category I Non-Friable	Not Applicable	Observed in the hallway in front of the cafeteria, the hallway to the gym, and Room 136-143 Hallway.
Hallway on 2nd Floor (under Water Fountain)	Off-White Floor Tile and associated Black Mastic	Floor Tile – 5% Chrysotile Mastic – 5% Chrysotile	Category I Non-Friable	Not Applicable	Abated in 2021.
1st Floor G1 Electric Room	White Vibration Damper Cloth****	70% Chrysotile	Friable	(5) ACBM with potential for damage.	Not observed, assumed to be present in inaccessible areas

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Notes: **1. No additional description of the vinyl floor tiles abated was provided in historical documentation reviewed.** **2. ACM vinyl floor tiles remains within rooms 229, custodial closets, as well as hallways throughout the building that have yet to be renovated.** ***ACM window caulk is assumed to be present on the windows a throughout the hallways.** ****ACM pipe sealants are assumed to be present throughout the pipe systems present above the drop ceilings and in inaccessible areas throughout the hallways.** *****ACM gray fireproofing is assumed to be present on structural building components above drop ceilings and in inaccessible areas throughout the building.** ******No description of white vibration damper cloth abatement was provided in historical documentation reviewed. This material is assumed to be present in inaccessible locations.**					

Summary of Non Asbestos-Containing Materials Identified

Location	Material Description	Analytical Results
Materials Sampled in 2021 AHERA Survey		
Pump Room D5	12"x12" Beige Specked Floor Tile and associated Mastic	Both NAD
Pump Room D5	2'x2' Pinhole and Small Fissure Ceiling Tile	NAD
Boiler Room	White Fibrous Pipe to Wall Packing	NAD
Boiler Room	Tan Mastic associated with Stair Tread Carpet	Both NAD
Boiler Room	Red (painted white) Pipe to Wall Packing	NAD
160 Cafeteria	White Fibrous Acoustic Panels	NAD
Stairs to Stage of 160	Blue Vinyl Stair Tread and associated Mastic	Both NAD
Stairs to Stage of 160	6" Dark Blue Cove Base and associated White Mastic	Both NAD
Stairs to Stage of 160 (Exit Door 7)	Gray Interior Door Caulk	NAD
Stairs next to Office 162	Tan Vinyl Stair Tread	NAD

Location	Material Description	Analytical Results
Stairs next to Office 162	12"x12" Light Blue Streaked Floor Tile and associated mastic	Both NAD
160A Storage	2'x2' Pinhole and Large Fissure Ceiling Tile	NAD
Outside Library- Hallway by court yard	Residual Tan Mastic associated with a removed Cove Base	NAD
Outside Stairwell A and Library (observed throughout 2nd Floor Halls)	18"x5" Gray Self-Stick Floor Tile	NAD
Stairwell A (observed throughout stairwells)	White Stairwell Stringer Caulk	NAD
Outside Room 157 (observed throughout 1st Floor Halls)	2'x2' Gray with White, Brown, and Black Speck Self-Stick Floor Tile	NAD
Stairwell A	Green Vinyl Stair Tread	NAD
Previously Sampled Materials		
West & South Hallways, Custodial Office in Kitchen, & Stairwell at Exit Doors 5-6	Ceiling Plaster	NAD
East, West, & South Hallways	2’ x 4’ Ceiling Tile	NAD
East, West, & South Hallways	Yellow 12” x 12” Floor Tile and Mastic	Both NAD
East & West Hallways	4” Gray Cove Base with associated Tan Mastic	Both NAD
Girl Restroom in Cafeteria by the Stage	Drywall and Joint Compound	Drywall – NAD Joint Compound – NAD
Office 149E & Hallway on 2nd Floor by Elevator	Drywall	NAD
Hallway at Exit Door 12, Office 149E, & Hallway on 2nd Floor by Elevator	Joint Compound	NAD
Stage	4" Black Cove Base and associated Brown Mastic	Both NAD
Stage	Blue Fire Rate Curtain	NAD
Stage	Beige Fire Rate Curtain	NAD

Location	Material Description	Analytical Results
Exit Door 10 (Gymnasium) & Exit Door by Room 154	Light Gray Interior Door Caulk	NAD
Hallway on 1st Floor by Gymnasium	2' x 4' White Pinhole Punch Ceiling Tile	NAD
Hallway on 1st Floor by Gymnasium	Gray Mastic on Metal Duct	NAD
Classrooms 112, 115, 120,155, & 201	Spray-on Ceiling Insulation	NAD
Girl Restroom on 1st Floor	White Solid Drywall Ceiling Tile	NAD
Hallway on 2nd Floor, Classroom 129, & Classroom 155	Gray Interior Window Caulk	NAD
Classroom 155	Black Pipe Wrap	NAD
Art Classroom 151 & Classroom 154	Gray Sink Undercoat	NAD
Classroom 153	White Sink Undercoat	NAD
Storage Closet in Hallway by Stairwell B	4" Brown Cove Base and associated Brown Mastic	Both NAD
1st FL, Hall at G1 Electric Room	4" Gray Cove Base with White Mastic	Both NAD
Boiler Room	White Bridging Mastic on Fiberglass of Hot Water Tank	NAD
Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD
Notes: **NAD = No Asbestos Detected** **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.**		

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 underlayment, 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.)
- **Kitchen Components** due to inaccessibility during survey
- **Vermiculite Filler** associated with Concrete Masonry Unit (Blocks/Walls)
- **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
- **Mastics or Cement Boards** associated with Baseboard Heaters/Radiator Components/Wall Mounted Fan Coil Units in and/or behind Radiators/Baseboards
- **Elevator Components**
- **Mastics** behind/under mirrors and dry-erase/chalk boards.
- **Water Fountain Components** in water fountains (mastics, pipe cloth, etc)
- **Waterproofing Membrane/Mastics/Vapor Barriers/Sub-grade Pipe Conduit** within exterior wall cavities, behind interior finishes, exterior veneer and/or subgrade walls

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 the identified ACMs are scheduled to be disturbed in the future, it is recommended that this work be performed by a Commonwealth of Virginia licensed asbestos abatement contractor. The Commonwealth of Virginia requires 20 calendar-days notice prior to an asbestos project involving greater than or equal to 10 linear feet or 10 squared feet. The EPA requires 10 working days notice prior to removal of regulated ACM (RACM) in quantities greater than or equal to 160 square feet, 260 linear feet, or 35 cubic feet. Note that EPA Region III no longer requires notification of asbestos projects but rather request all notification go to the appropriate state agencies. Notification requirements in general will be dependent on the means/methods used by the contractor to abate the material found in 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. 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

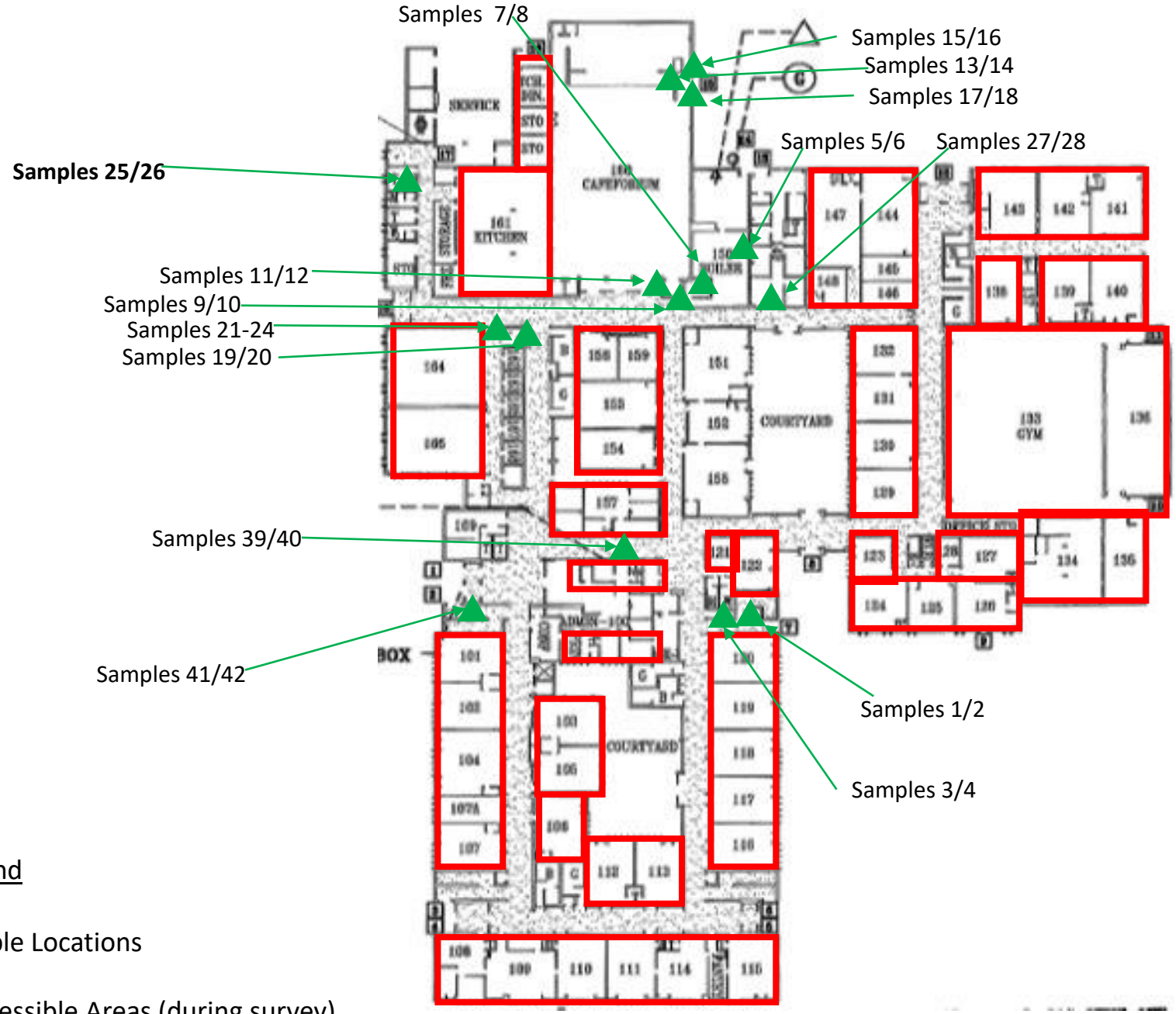
The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards 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: Figures



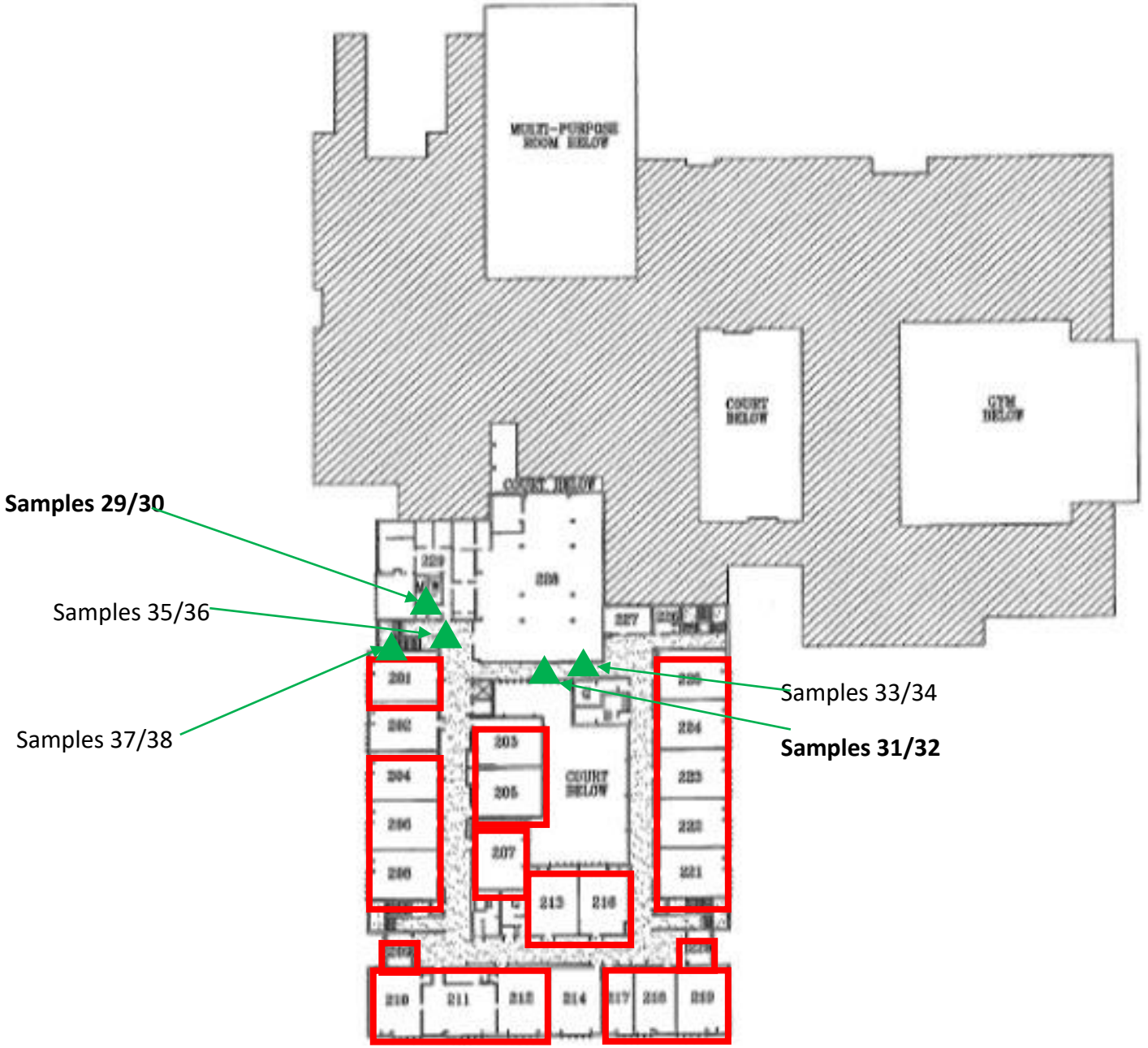
John Adams Elementary School
& Early Childhood Center
5651 Rayburn Avenue
Alexandria, VA 22311

Sample Location
Sketch
First Floor

Scale: NTS

Project No.
11652-E2

Site Visit Date
11/19/21



Legend

▲ Sample Locations

▭ Inaccessible Areas (during survey)

(Note: Samples in **Bold** were sampled as ACM)

John Adams Elementary School
& Early Childhood Center
5651 Rayburn Avenue
Alexandria, VA 22311

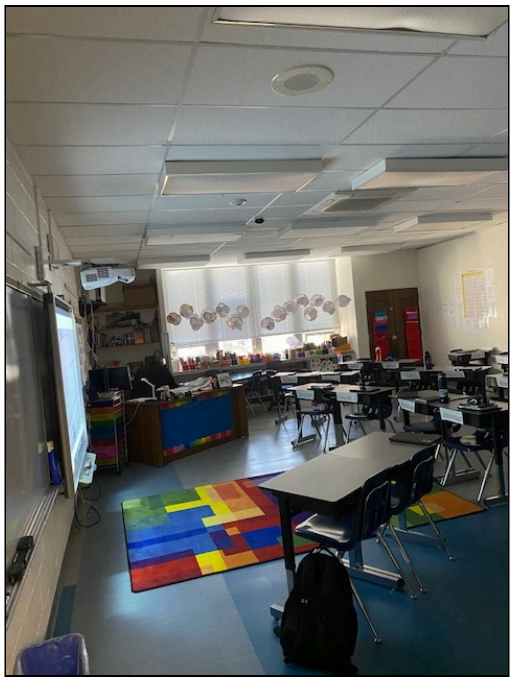
Sample Location Sketch
Second Floor

Scale: NTS

Project No.
11652-E2

Site Visit Date
11/19/21

Appendix II: Site Photographs



1 - View of Inside Classroom 214



2 - View of Media Center Break Room 12" x 12" Dark Gray Floor Tile (sampled as ACM)



3 - View of Media Center Storage 12" x 12" Beige and White Specked Floor Tile (previously reported as ACM)



4 - View of Olive Floor Tile In Custodial Office (reported as ACM (Samples: 25/26))



5 - View of Outside Boiler Room and Cafeteria Beige and Green 12x12" Floor Tile (previously reported as ACM)



6 - View of Pump Room D5 Floor Tile (NAD)



7 - View of Red Wall Packing In Boiler Room Sample Site (NAD)



8 - View of Media Center



9 - View of Inside Office



10 - View of Kitchen (Inaccessible)



11 - View of Library Break Room Floor Tile (previously reported as ACM)



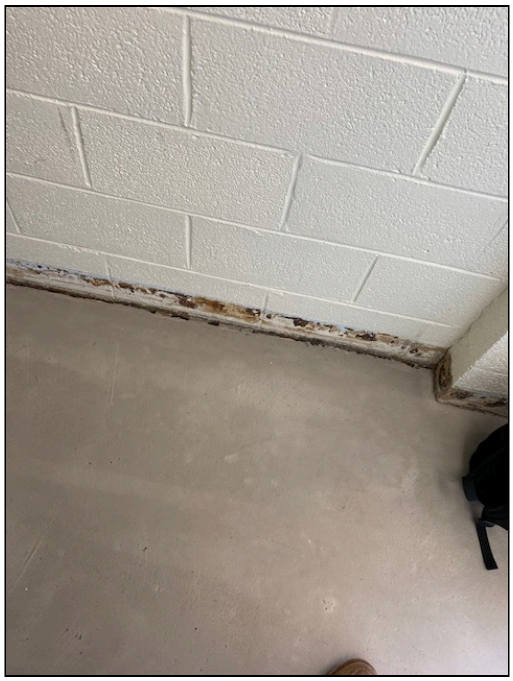
12 - View of Main Office renovated Floor Tile



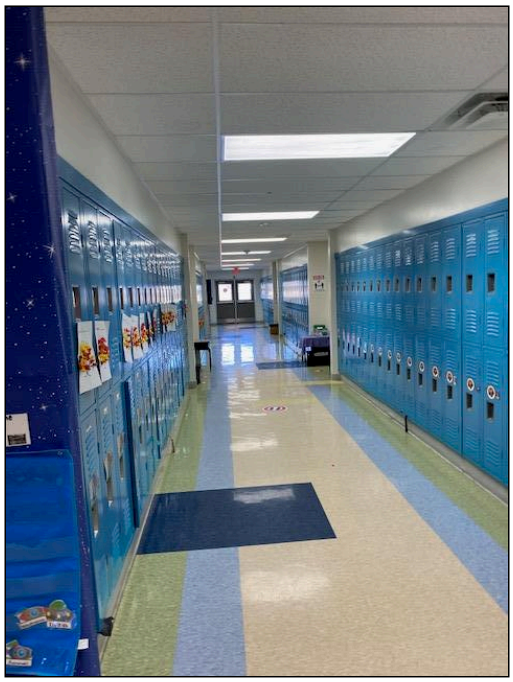
13 - View of Main Office Conference Room



14 - View of Main Office Hallway



15 - View of Residual Cove Brown Base Mastic (identified as ACM through this Survey (Samples 31/32))



16 - View of Rm 136-143 Hallway Beige and Green 12x12" Floor Tile (previously reported as ACM)



17 - View of Stage In Cafeteria



18 - View of Storage Hallway By Kitchen Beige 12x12" Floor Tile (previously reported as ACM)



19 - View of Stored New Flooring Materials



20 - View of Stage Fire Curtain Tag- Blue



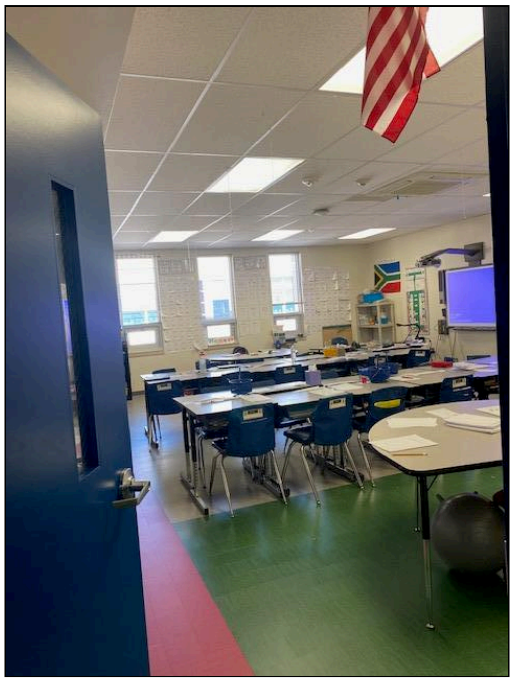
21 - View of Science Classroom with 12x12" Beige Floor Tile (previously reported as ACM)



22 - View of Server Room with 12x12" Gray Floor Tile (previously reported as ACM)



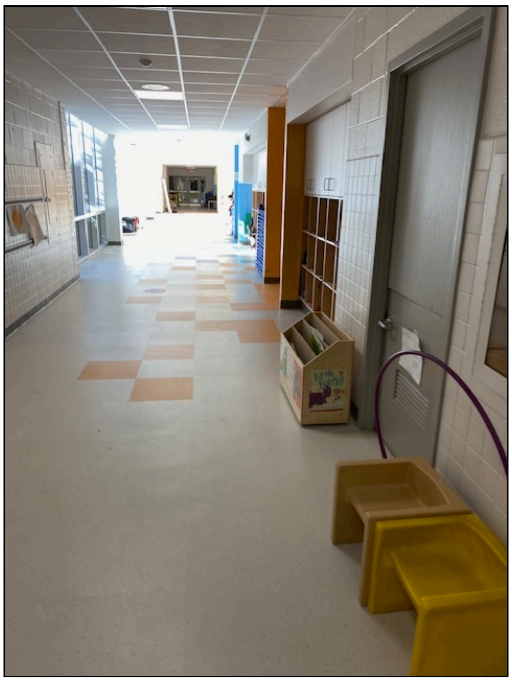
23 - View of Stage Fire Curtain Tag- Black



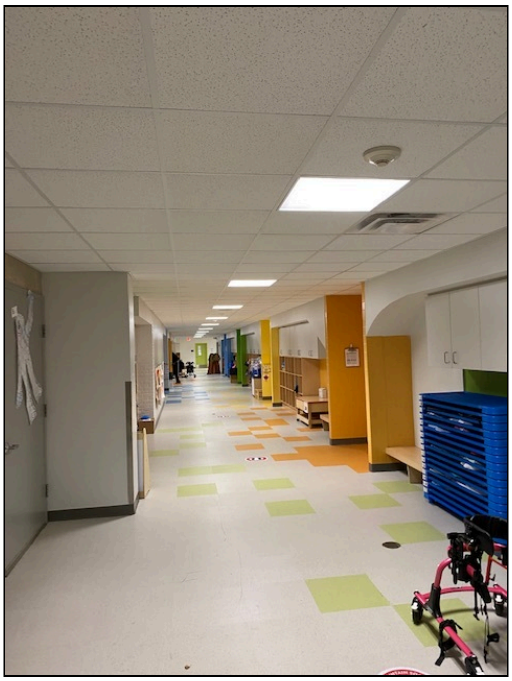
24 - View of Inside Classroom 203 (New Flooring)



25 - View of Black Sink Undercoat In Art Room (previously sampled as ACM)



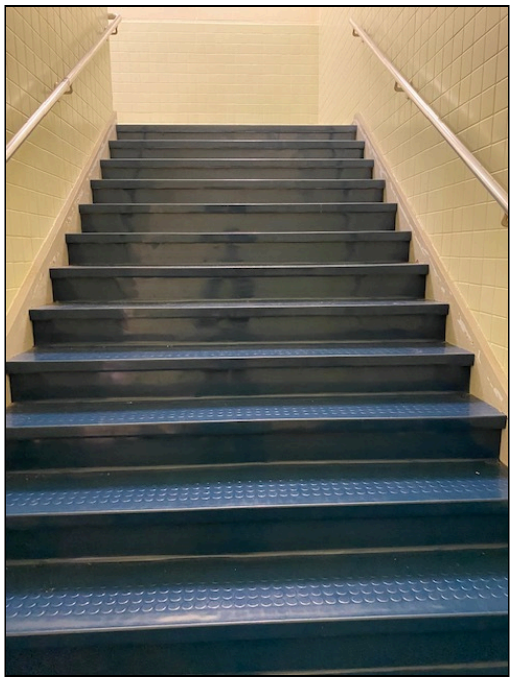
26 - View of ECC Hallway (New Flooring)



27 - View of ECC Hallway 4



28 - View of Cafeteria



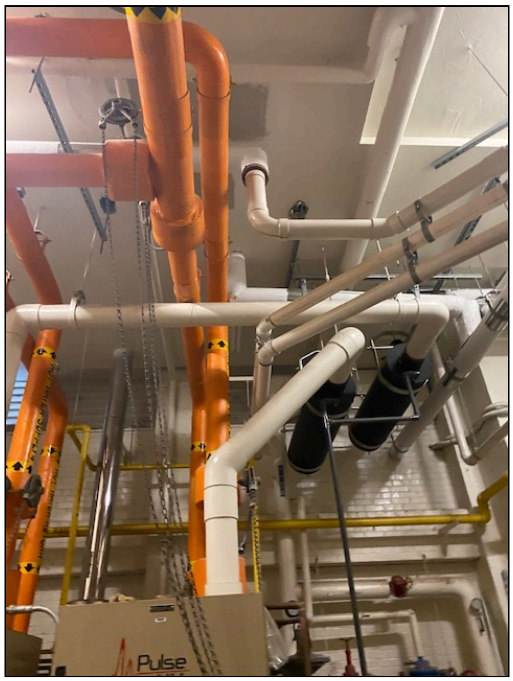
29 - View of Blue Stair Tread Sample Location (NAD)



30 - View of Boiler Room



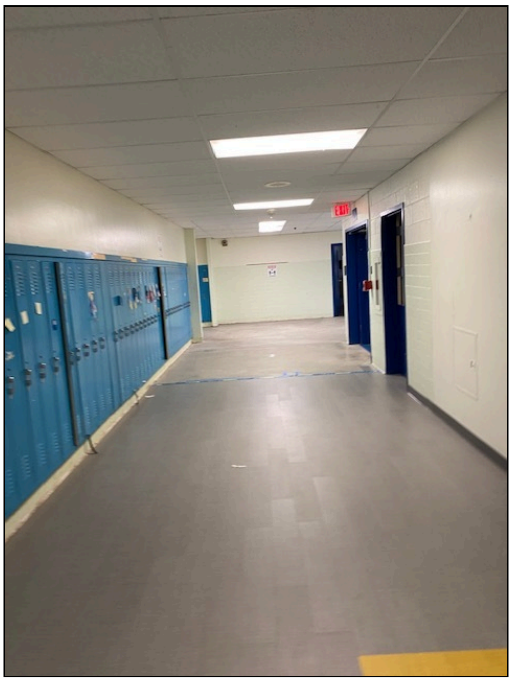
31 - View of Boiler Room Fibrous Wall Pipe Packing (NAD)



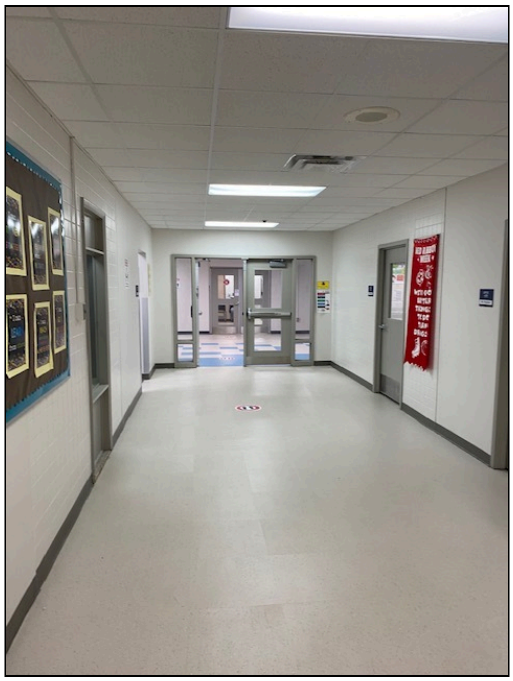
32 - View of Boiler Room TSI and Gaskets



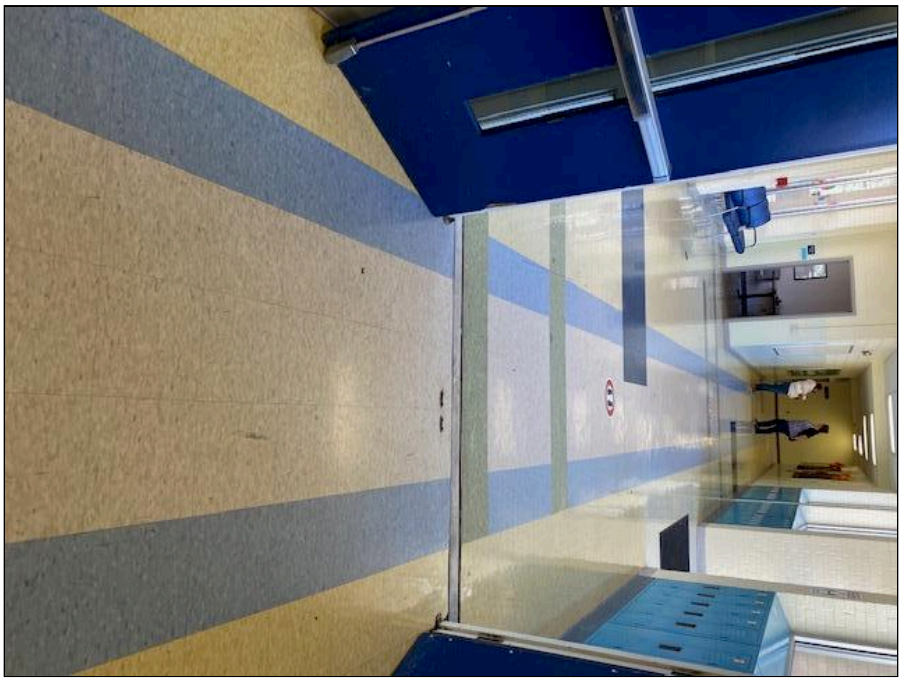
33 - View of Boiler Room Wall



34 - 11-19-21- View of ECC Hallway Stripped Floor



35 - 11-19-21- View of First Floor Hallway



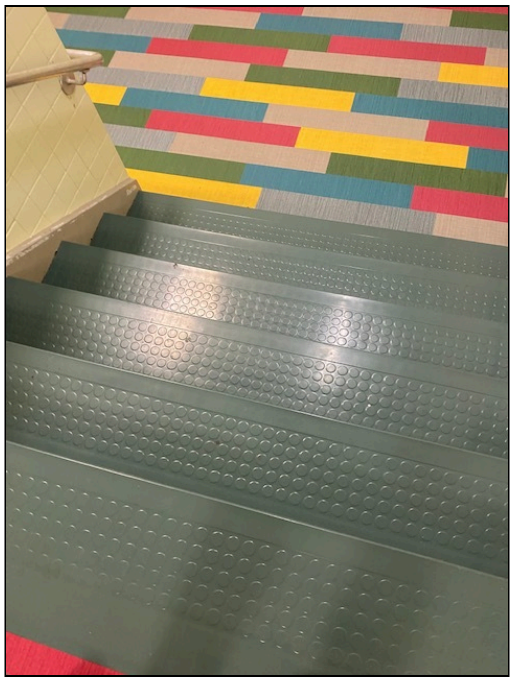
36 - View of First Floor Hallway Beige 12x12" Floor Tile (previously reported as ACM)



37 - View of First Floor Hallway Stripped Floor



38 - View of Front Entrance



39 - View of Green Vinyl Stair Tread Sample Location (NAD)



40 - View of Gym Hallway with Beige and Green 12x12" Floor Tile (previously reported as ACM)



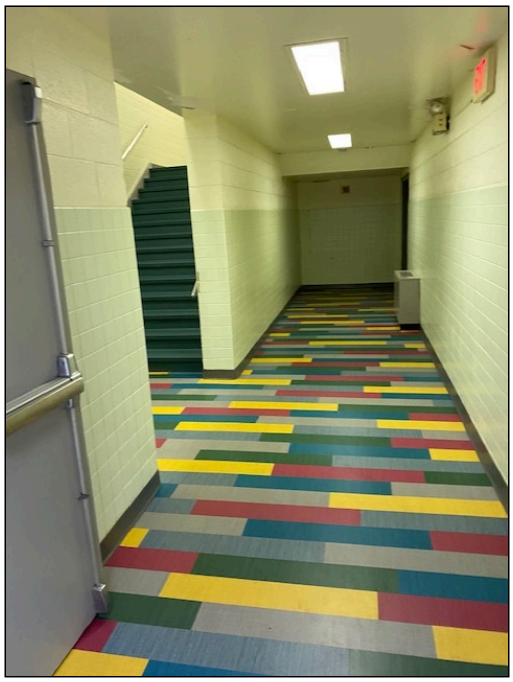
41 - View of Exit Door Interior Caulking Sample Location (NAD)



42 - View of ECC Second Floor Hallway (New Flooring)



43 - View of ECC Hallway Stripped Floor and Cove Base and Self Stick Floor Tile (Cove Base Mastic identified as ACM)



44 - View of ECC Stairwell Self Stick Floor Tile (New Flooring)

Appendix III: Asbestos Bulk Sample Results

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

Lab ID # 173190

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

Attn: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
1 - A *71980545PLM_1*	12"x12" beige specked floor tile and associated mastic *tile*	**None Detected**		**100% Other**	Beige Non Fibrous Homogeneous Dissolved
1 - B *71980545PLM_43*	12"x12" beige specked floor tile and associated mastic *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
2 - A *71980545PLM_2*	12"x12" beige specked floor tile and associated mastic *tile*	**None Detected**		**100% Other**	Beige Non Fibrous Homogeneous Dissolved
2 - B *71980545PLM_44*	12"x12" beige specked floor tile and associated mastic *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
3 *71980545PLM_3*	2'x2' pinhole and small fissure ceiling tile	**None Detected**	**40% Cellulose** **40% Fiber Glass**	**10% Perlite** **10% Other**	Gray Fibrous Homogeneous Ashed
4 *71980545PLM_4*	2'x2' pinhole and small fissure ceiling tile	**None Detected**	**40% Cellulose** **40% Fiber Glass**	**10% Perlite** **10% Other**	Gray Fibrous Homogeneous Ashed
5 *71980545PLM_5*	White fibrous pipe to wall packing	**None Detected**	**70% Hair**	**30% Other**	Brown, White Fibrous Homogeneous Dissolved, Teased
6 *71980545PLM_6*	White fibrous pipe to wall packing	**None Detected**	**70% Hair**	**30% Other**	Brown, White Fibrous Homogeneous Dissolved, Teased

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%.

Megan Javonovich (53)

Analyst

Approved Signatory

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

Lab ID # 173190

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

Attn: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
7	Tan mastic associated with stair tread carpet	None Detected		100% Other	Tan Non Fibrous Homogeneous
71980545PLM_7					Dissolved
8	Tan mastic associated with stair tread carpet	None Detected		100% Other	Tan Non Fibrous Homogeneous
71980545PLM_8					Dissolved
9	Red (painted white) pipe to wall packing	None Detected	5% Fiber Glass	95% Other	Red Non Fibrous Homogeneous
71980545PLM_9					Ashed
10	Red (painted white) pipe to wall packing	None Detected	5% Fiber Glass	95% Other	Red Non Fibrous Homogeneous
71980545PLM_10					Ashed
11	White fibrous acoustic panels	None Detected	60% Cellulose	40% Other	White, Tan Fibrous Homogeneous
71980545PLM_11					Ashed
12	White fibrous acoustic panels	None Detected	60% Cellulose	40% Other	White, Tan Fibrous Homogeneous
71980545PLM_12					Ashed
13 - A	Blue vinyl stair tread and associated mastic	None Detected		100% Other	Blue Non Fibrous Homogeneous
71980545PLM_13	*tread*				Ashed
13 - B	Blue vinyl stair tread and associated mastic	None Detected		100% Other	Yellow Non Fibrous Homogeneous
71980545PLM_45	*mastic*				Dissolved

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Megan Javonovich (53)

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

AIHA ACCREDITED LABS.ORG Lab ID # 173190

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

Attn: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
14 - A *71980545PLM_14*	Blue vinyl stair tread and associated mastic *tread*	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous Ashed
14 - B *71980545PLM_46*	Blue vinyl stair tread and associated mastic *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
15 - A *71980545PLM_15*	6" dark blue cove base and associated white mastic *cove base*	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous Ashed
15 - B *71980545PLM_47*	6" dark blue cove base and associated white mastic *mastic*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Ashed
16 - A *71980545PLM_16*	6" dark blue cove base and associated white mastic *cove base*	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous Ashed
16 - B *71980545PLM_48*	6" dark blue cove base and associated white mastic *mastic*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Ashed
17 *71980545PLM_17*	Gray Interior door caulk	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed
18 *71980545PLM_18*	Gray Interior door caulk	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed

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Megan Javonovich (53)

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

Lab ID # 173190

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

Attn: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
19 *71980545PLM_19*	Tan vinyl stair tread	None Detected		100% Other	Tan Non Fibrous Homogeneous Ashed
20 *71980545PLM_20*	Tan vinyl stair tread	None Detected		100% Other	Tan Non Fibrous Homogeneous Ashed
21 - A *71980545PLM_21*	12"x12" Light blue streaked floor tile and associated mastic *tile*	None Detected		100% Other	Blue Non Fibrous Homogeneous Dissolved
21 - B *71980545PLM_49*	12"x12" Light blue streaked floor tile and associated mastic *mastic*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved
22 - A *71980545PLM_22*	12"x12" Light blue streaked floor tile and associated mastic *tile*	None Detected		100% Other	Blue Non Fibrous Homogeneous Dissolved
22 - B *71980545PLM_50*	12"x12" Light blue streaked floor tile and associated mastic *mastic*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved
23 - A *71980545PLM_23*	12"x12" Dark Blue streaked floor tile and associated mastic *tile*	None Detected		100% Other	Blue Non Fibrous Homogeneous Dissolved
23 - B *71980545PLM_51*	12"x12" Dark Blue streaked floor tile and associated mastic *mastic - small sample*	None Detected		100% Other	Black Non Fibrous Homogeneous Dissolved

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Megan Javonovich (53)

Analyst

Approved Signatory

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: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
24 *71980545PLM_24*	12"x12" Dark Blue streaked floor tile and associated mastic *tile only*	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous Dissolved
25 *71980545PLM_25*	12"x12" Olive green specked floor tile and associated mastic *tile only*	**6% Chrysotile**		**94% Other**	Tan Non Fibrous Homogeneous Dissolved
26 *71980545PLM_26*	12"x12" Olive green specked floor tile and associated mastic *tile only*	**Not Analyzed**			
27 *71980545PLM_27*	2'x2' pinhole and large fissure ceiling tile	**None Detected**	**40% Cellulose** **40% Fiber Glass**	**10% Perlite** **10% Other**	Gray Fibrous Homogeneous Ashed
28 *71980545PLM_28*	2'x2' pinhole and large fissure ceiling tile	**None Detected**	**40% Cellulose** **40% Fiber Glass**	**10% Perlite** **10% Other**	Gray Fibrous Homogeneous Ashed
29 - A *71980545PLM_29*	12"x12" Dark Gray with white specks floor tile and associated black mastic *tile*	**4% Chrysotile**		**96% Other**	Tan Non Fibrous Homogeneous Dissolved
29 - B *71980545PLM_52*	12"x12" Dark Gray with white specks floor tile and associated black mastic *mastic*	**6% Chrysotile**		**94% Other**	Black Non Fibrous Homogeneous Dissolved
30 - A *71980545PLM_30*	12"x12" Dark Gray with white specks floor tile and associated black mastic *tile*	**Not Analyzed**			

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Megan Javonovich (53)

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: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
30 - B	12"x12" Dark Gray with white specks floor tile and associated black mastic	**Not Analyzed**			
71980545PLM_53	*mastic*				
31	Residual brown mastic associated with a removed cove base	**3% Chrysotile**		**97% Other**	Brown Non Fibrous Homogeneous
71980545PLM_31					Dissolved
32	Residual brown mastic associated with a removed cove base	**Not Analyzed**			
71980545PLM_32					
33	Residual tan mastic associated with a removed cove base	**None Detected**		**100% Other**	Tan Non Fibrous Homogeneous
71980545PLM_33					Dissolved
34	Residual tan mastic associated with a removed cove base	**None Detected**		**100% Other**	Tan Non Fibrous Homogeneous
71980545PLM_34					Dissolved
35	18"x5" Gray self-stick floor tile	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
71980545PLM_35					Dissolved
36	18"x5" Gray self-stick floor tile	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
71980545PLM_36					Dissolved
37	White stairwell stringer caulk	**None Detected**		**100% Other**	White Non Fibrous Homogeneous
71980545PLM_37					Ashed

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Megan Javonovich (53)

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

Lab ID # 173190

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

Attn: Lauren Kesslak

Project: 11652-E2/ AHERA ACPS John Adams (ECC) (11-19-21) Survey

Lab Order ID: 71980545
Analysis ID: 71980545_PLM
Date Received: 12/1/2021
Date Reported: 12/7/2021

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
38	White stairwell stringer caulk	None Detected		100% Other	White Non Fibrous Homogeneous
71980545PLM_38					Ashed
39	2'x2' Gray with white, brown, and black speck self-stick floor tile	None Detected		100% Other	Gray Non Fibrous Homogeneous
71980545PLM_39	*self stick tile*				Ashed
40	2'x2' Gray with white, brown, and black speck self-stick floor tile	None Detected		100% Other	Gray Non Fibrous Homogeneous
71980545PLM_40					Ashed
41	Green vinyl stair tread	None Detected		100% Other	Blue Non Fibrous Homogeneous
71980545PLM_41					Ashed
42	Green vinyl stair tread	None Detected		100% Other	Blue Non Fibrous Homogeneous
71980545PLM_42					Ashed

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Megan Javonovich (53)

Analyst

Approved Signatory

71980545

Client:	ECS Mid-Atlantic, LLC	***Instructions:***	
Contact:	Lauren Kesslak	*Use Column "B" for your contact info*	
Address:	14026 Thunderbolt Place, Suite		
Phone:	(703)-471-8400	*To See an Example Click the bottom Example Tab.*	
Fax:			
Email:	Lkesslak@ecslimited.com	***Enter samples between "<<" and ">>" Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample.***	
Project:	11652-E2/ AHERA ACPS John Ada		
Client Notes:		*Only Enter your data on the first sheet "Sheet1"*	
P.O. #.	11652-E2/ AHERA ACPS John Ada	*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:	11/19/2021 0:00		
Analysis:	PLM EPA 600/R-93/116		
TurnAroundTime:	3-Day		

Scientific Analytical Institute

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

Sample Number	Data 1	Sample Description	Data 2
<<			
1		12"x12" beige specked floor tile and associated mastic	Pump Room D5
2		12"x12" beige specked floor tile and associated mastic	Pump Room D5
3		2'x2' pinhole and small fissure ceiling tile	Pump Room D5
4		2'x2' pinhole and small fissure ceiling tile	Pump Room D5
5		White fibrous pipe to wall packing	Boiler Room
6		White fibrous pipe to wall packing	Boiler Room
7		Tan mastic associated with stair tread carpet	Boiler Room
8		Tan mastic associated with stair tread carpet	Boiler Room
9		Red (painted white) pipe to wall packing	Boiler Room
10		Red (painted white) pipe to wall packing	Boiler Room
11		White fibrous acoustic panels	160 Cafeteria
12		White fibrous acoustic panels	160 Cafeteria
13		Blue vinyl stair tread and associated mastic	Stairs to Stage of 160
14		Blue vinyl stair tread and associated mastic	Stairs to Stage of 160
15		6" dark blue cove base and associated white mastic	Stairs to Stage of 160
16		6" dark blue cove base and associated white mastic	Stairs to Stage of 160
17		Gray interior door caulk	Stairs to Stage of 160 (Exit Door 7)
18		Gray interior door caulk	Stairs to Stage of 160 (Exit Door 7)
19		Tan vinyl stair tread	Stairs next to Office 162
20		Tan vinyl stair tread	Stairs next to Office 162
21		12"x12" Light blue streaked floor tile and associated mastic	Stairs next to Office 162
22		12"x12" Light blue streaked floor tile and associated mastic	Stairs next to Office 162
23		12"x12" Dark Blue streaked floor tile and associated mastic	Stairs next to Office 162
24		12"x12" Dark Blue streaked floor tile and associated mastic	Stairs next to Office 162
25		12"x12" Olive green specked floor tile and associated mastic	Custodial Office near Kitchen
26		12"x12" Olive green specked floor tile and associated mastic	Custodial Office near Kitchen
27		2'x2' pinhole and large fissure ceiling tile	160A Storage
28		2'x2' pinhole and large fissure ceiling tile	160A Storage
29		12"x12" Dark Gray with white specks floor tile and associated black mastic	229- Library Break Room
30		12"x12" Dark Gray with white specks floor tile and associated black mastic	229- Library Break Room
31		Residual brown mastic associated with a removed cove base	Outside Library- Hallway by court yard
32		Residual brown mastic associated with a removed cove base	Outside Library- Hallway by court yard
33		Residual tan mastic associated with a removed cove base	Outside Library- Hallway by court yard
34		Residual tan mastic associated with a removed cove base	Outside Library- Hallway by court yard
35		18"x5" Gray self-stick floor tile	Outside Stairwell A and Library (observed throughout 2nd Floor Halls)
36		18"x5" Gray self-stick floor tile	Outside Stairwell A and Library (observed throughout 2nd Floor Halls)
37		White stairwell stringer caulk	Stairwell A (observed throughout stairwells)
38		White stairwell stringer caulk	Stairwell A (observed throughout stairwells)
39		2'x2' Gray with white, brown, and black speck self-stick floor tile	Outside Room 157 (observed throughout 1st Floor Halls)
40		2'x2' Gray with white, brown, and black speck self-stick floor tile	Outside Room 157 (observed throughout 1st Floor Halls)
41		Green vinyl stair tread	Stairwell A
42		Green vinyl stair tread	Stairwell A
>>			

Accepted ☑ 12/1 10:30am

Rejected ☐

Relinquished By

Received By

Appendix IV: Certifications/ Licenses

Certificate of Completion

Zachary Harrell

Asbestos Inspector Initial

EPA Approved Under TSCA Title II

September 21-23, 2021	September 23, 2021	**ECS 21 1118**
Course Dates	Examination Date	Certificate Number

14026 Thunderbolt Place Chantilly, Virginia 20151	September 23, 2022
Course Location	Expiration Date

Christopher J. Chapman
Training Manager

Robert Rhett
Instructor

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Chantilly, Virginia
(703) 471-8400

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

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

May 14, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue**
Alexandria, VA 22311

CC:

ENCL: Field Report # 1 5/11/2020 9 pcm

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for supersequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project No.	**1519-J1**
Report No.	**1**
Day & Date	**Monday 5/11/2020**
Weather	**50 °/ Sunny**
On-Site Time	**10.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.00**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **9 pcm**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement.

At 6:00 am, the undersigned met with Asbestos Specialists Inc. (ASI) to discuss the project details and work plan for the day. The material to be removed today is approximately 200 linear feet of pipe insulation wrap with asbestos-containing black mastic from the kitchen work area, which includes the kitchen, former kitchen office, and a portion of the former kitchen storage room.

KITCHEN WORK AREA MONITORING

The abatement contractor requested a pre-abatement survey of the regulated work area. The Pre-Abatement Checklist was completed and is attached to this report.

Prior to starting the removal of the specified materials, the abatement contractor employees were asked to provide their asbestos abatement license for review. No workers were found to be without valid asbestos abatement licenses.

Between 10:05 am and 10:06 am, PCM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 12:50 pm and 12:51 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area for analysis.

The abatement contractor stated the specified materials had been removed from the regulated work area and requested a visual survey to confirm compliance. The Final Clearance Visual Survey Checklist was completed and is attached to this report.

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area. After waiting for the encapsulant to dry, five (5) PCM air samples were started within the regulated work area. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute.

At 3:22 pm, the sampling pumps were checked using a rotameter after the air within the regulated work area was sampled using PCM cassettes for 120 minutes at 10.0 liters per minute. The air sampling pumps were stopped and the cassettes were gathered for analysis.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags were labeled and placed in a temporary storage area.

The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM final clearance air samples collected from the kitchen work area were reported to be less than the maximum allowable limits set by applicable regulations, which meets the project requirements.

Note: pipe insulation wrap with asbestos-containing black mastic is still present on pipes above the ceiling in Corridor Q, located south of the kitchen and may also be present in other areas of the school building. These areas are out of the scope of work for this project and the material remains in place.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-J1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

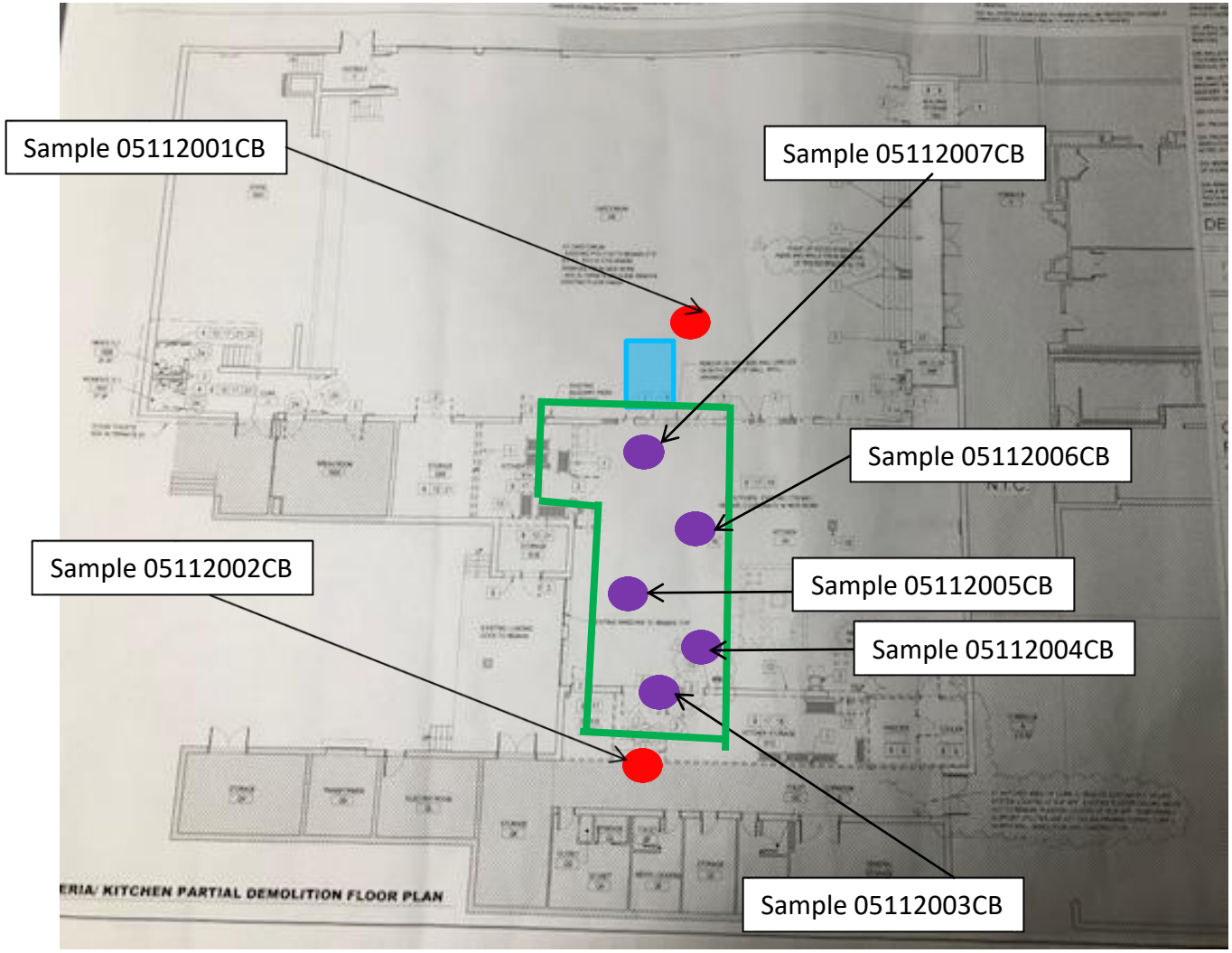
Date: 5/11/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
05112007 CB	FC - Kitchen Work Area	1:22 PM	3:22 PM	10.0	10.0	10.0	120	1200.0	3.0	100	0.001
05112009 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05112003 CB	FC- Kitchen Work Area	1:22 PM	3:22 PM	10.0	10.0	10.0	120	1200.0	6.0	100	0.002
05112002 CB	OWA- South of Kitchen Work Area	10:05 AM	12:51 PM	2.0	2.0	2.0	166	332.0	3.0	100	0.004
05112008 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05112005 CB	FC - Kitchen Work Area	1:22 PM	3:22 PM	10.0	10.0	10.0	120	1200.0	12.0	100	0.005
05112006 CB	FC- Kitchen Work Area	1:22 PM	3:22 PM	10.0	10.0	10.0	120	1200.0	2.0	100	0.001
05112004 CB	FC - Kitchen Work Area	1:22 PM	3:22 PM	10.0	10.0	10.0	120	1200.0	5.0	100	0.002
05112001 CB	OWA- North of Kitchen Work Area	10:06 AM	12:50 PM	2.0	2.0	2.0	164	328.0	1.0	100	0.001

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). FC= Final Clearance

ECS Technician: Catey Bourne **Date:** 5/11/2020



Legend

Work Area

Daily Sample location

3-stage decontamination unit location

Final PCM Sample location

John Adams Elementary School
5651 Rayburn Avenue
Alexandria, VA 22311

SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-J1

Date 5/11/2020

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-J1 **Date:** 5/11/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Kitchen - Black Mastic on Pipe Insulation Wrap

	Work Area Location/Description	Kitchen - Black Mastic on Pipe
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/11/2020

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 1519-J1 **Date:** 5/11/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Kitchen - Black Mastic on Pipe Insulation Wrap

	Work Area Location/Description	Kitchen - Black Mastic on Pipe
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	2
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half Face APR
	Type of Filters Used	P100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/11/2020

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 1519-J1 **Date:** 5/11/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Kitchen - Black Mastic on Pipe Insulation Wrap

	Work Area Location/Description	Kitchen - Black Mastic on Pipe
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	Satisfactory
	Mechanical Equipment	Satisfactory
	Ducts	Satisfactory
	Pipes	Satisfactory
	Lighting	Satisfactory
	Other Surfaces	Satisfactory
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	PCM
	Number of Samples Collected	5
	Sample Volume (liters)	1200
	Work Area Acceptable	Yes

Notes: Pipe insulation wrap with asbestos-containing black mastic is still present on pipes above the ceiling in Corridor Q, located south of the kitchen and may also be present in other areas of the school building. These areas are out of the scope of work for this project and the material remains in place.

ECS Technician: Bobby Rhett **Date:** 5/11/2020

Attachments



View of Pipe Insulation Wrap with Asbestos-Containing Black Mastic in the Kitchen Work Area

Figure 1



View of Pipe Insulation Wrap with Asbestos-Containing Black Mastic in the Kitchen Work Area

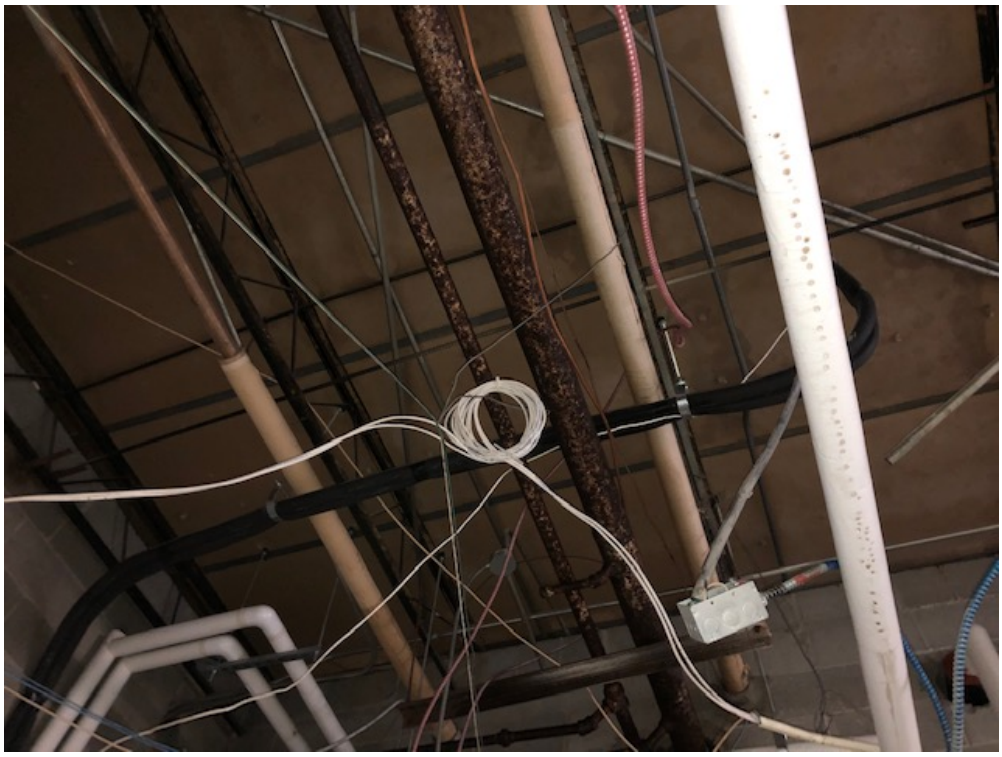
Figure 2

Attachments



View of the Kitchen Work Area during the Final Clearance Visual Survey

Figure 3



View of the Kitchen Work Area during the Final Clearance Visual Survey

Figure 4

Attachments



View of the Kitchen Work Area during the Final Clearance Visual Survey

Figure 5

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

May 13, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

CC:

ENCL:

Field Report # 2	5/12/2020	0 pcm

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

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4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for supersequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project No.	**1519-J1**
Report No.	**2**
Day & Date	**Tuesday 5/12/2020**
Weather	**60 °/ Sunny**
On-Site Time	**8.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**8.50**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **0 pcm**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**2:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement.

The abatement contractor started setting up and preparing the cafetorium work area for the abatement of asbestos-containing floor tile and associated mastic, and thermal system pipe insulation wrap with black mastic.

No asbestos abatement work was performed while ECS was on-site today.

ECS Mid Atlantic, LLC
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Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

May 19, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

CC:

ENCL:

Field Report # 3	5/15/2020	5 PCM

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

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FIELD REPORT

Project No.	**1519-J1**
Report No.	**3**
Day & Date	**Friday 5/15/2020**
Weather	**75 °/ Sunny**
On-Site Time	**9.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**9.00**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **5 PCM**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**3:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The material to be removed today is floor tile and associated mastic, and pipe insulation wrap with black mastic from the cafetorium work area. The cafetorium work area consists of the cafetorium, room 160E, and hallways on either side of the stage.

CAFETORIUM WORK AREA MONITORING

The abatement contractor requested a pre-abatement survey of the regulated work area. The Pre-Abatement Checklist was completed and is attached to this report.

Prior to starting the removal of the specified materials, the abatement contractor employees were asked to provide their asbestos abatement license for review. No workers were found to be without valid asbestos abatement licenses.

Between 7:35 am and 7:40 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Utilizing a ride-on tile scraper and various hand tools, two layers of floor tiles were removed from the work area. Room 160E had previously been trenched by other contractors and some of the tile had previously been removed.

Between 1:07 pm and 1:10 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area for analysis.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and polyethylene lined waste drums. The waste containers were sealed in general accordance with the applicable regulations. Waste containers were labeled and placed in a temporary storage area.

The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

Sample 05152001CB was overloaded with particulate and could not be analyzed. The abatement contractor was notified and advised to use more engineering controls to keep dust levels lower within the work area.

The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the cafetorium work area were reported to be less than this maximum allowable limit, which meets the project requirements.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-J1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

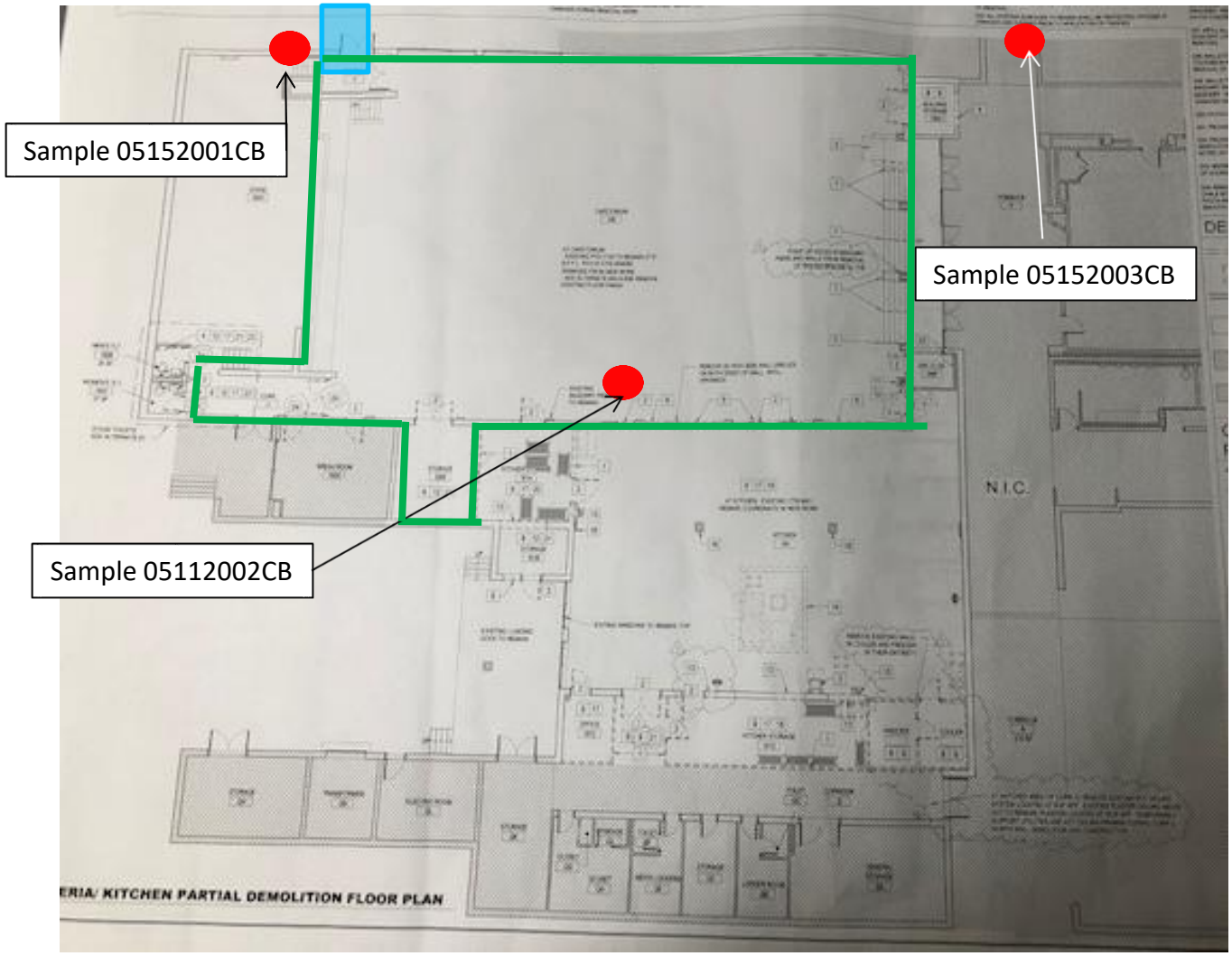
Date: 5/15/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
05152003 CB	OWA - Cafetorium - Negative Air Machine Exhaust at Room 149	7:36 AM	1:08 PM	2.0	2.0	2.0	332	664.0	0.0	100	0.000
05152001 CB	IWA- Cafetorium	7:35 AM	1:07 PM	2.0	2.0	2.0	332	664.0	N/A	N/A	
05152002 CB	OWA- Cafetorium - Decontamination Unit	7:40 AM	1:10 PM	2.0	2.0	2.0	330	660.0	2.0	100	0.001
05152005 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05152004 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: Sample 05152001CB was overloaded with particulate and could not be analyzed. The abatement contractor was notified and advised to use more engineering controls to keep dust levels lower within the work area. N/A = Not Available.

ECS Technician: Catey Bourne **Date:** 5/15/2020



Legend

Work Area

Daily Sample location

3-stage decontamination unit location

Final PCM Sample location

John Adams Elementary School
5651 Rayburn Avenue
Alexandria, VA 22311

SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-J1

Date 5/15/2020

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 1519-J1 **Date:** 5/15/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafetorium - Floor Tile, Floor Mastic, Pipe Insulation Mastic

	Work Area Location/Description	Cafetorium - Floor Tile, Floor
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	6
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half Face APR
	Type of Filters Used	P100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/15/2020

Attachments



View of the Cafetorium Work Area during the Pre-Abatement Survey

Figure 1



View of the Cafetorium Work Area during the Pre-Abatement Survey

Figure 2

Attachments



View of the Cafetorium Hallway Work Area during the Pre-Abatement Survey

Figure 3



View of 160E prior to abatement

Figure 4



View of black mastic on pipe insulation in the work area

Figure 5



View of the work area during removal of floor tile

Figure 6

Attachments



View of the work area during removal of floor tile

Figure 7

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-J1 **Date:** 5/15/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafetorium/Floor Tile, Floor Mastic, Pipe Insulation Mastic

	Work Area Location/Description	Cafetorium/Floor Tile, Floor Mastic,
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	3
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/15/2020

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

May 19, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue**
Alexandria, VA 22311

CC:

ENCL:

Field Report # 4	5/18/2020	8 PCM

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

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14026 Thunderbolt Place
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(703) 471-8400 [Phone]
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FIELD REPORT

Project No.	**1519-J1**
Report No.	**4**
Day & Date	**Monday 5/18/2020**
Weather	**65 °/ Cloudy**
On-Site Time	**9.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**9.00**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **8 PCM**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**3:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The material to be removed today is floor tile and associated mastic, and pipe insulation wrap with black mastic from the cafetorium work area. The cafetorium work area consists of the cafeteria, room 160E, and hallways on either side of the stage.

CAFETORIUM WORK AREA MONITORING

Between 6:30 am and 6:35 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 2:10 pm and 2:12 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area for analysis.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and polyethylene lined waste drums. The waste containers were sealed in general accordance with the applicable regulations. Waste containers were labeled and placed in a temporary storage area.

The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the cafetorium work area were reported to be less than this maximum allowable limit, which meets the project requirements.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-J1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 5/18/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
05182008 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05182007 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05182005 CB	OWA- South Critical Barrier	10:16 AM	2:11 PM	2.5	2.5	2.5	235	587.5	7.0	100	0.006
05182004 CB	OWA- Decontamination Unit	10:15 AM	2:10 PM	2.5	2.5	2.5	235	587.5	4.0	100	0.003
05182006 CB	OWA- East Critical Barrier	10:17 AM	2:12 PM	2.5	2.5	2.5	235	587.5	3.0	100	0.003
05182003 CB	OWA- East Critical Barrier	6:32 AM	10:17 AM	2.5	2.5	2.5	225	562.5	6.0	100	0.005
05182002 CB	OWA- South Critical Barrier	6:32 AM	10:16 AM	2.5	2.5	2.5	224	560.0	5.0	100	0.004
05182001 CB	OWA- Decontamination Unit	6:30 AM	10:15 AM	2.5	2.5	2.5	225	562.5	3.0	100	0.003

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes:

ECS Technician: Catey Bourne **Date:** 5/18/2020

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-J1 **Date:** 5/18/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafetorium - Floor Tile, Floor Mastic, Pipe Insulation Mastic

	Work Area Location/Description	Cafetorium - Floor Tile, Floor
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	6
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/18/2020

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

May 24, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

CC:

ENCL:

Field Report # 5	5/19/2020	5 pcm 5 TEM

Chris J. Chapman, CIH
Director of Industrial Hygiene Services

Robert Lawrence Rhett
Environmental Project Manager

Disclaimer

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for supersequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project No.	**1519-J1**
Report No.	**5**
Day & Date	**Tuesday 5/19/2020**
Weather	**60 °/ Cloudy**
On-Site Time	**13.25**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**13.25**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **5 pcm 5 TEM**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**7:15P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The material to be removed today is floor tile and associated mastic and pipe insulation wrap with black mastic from the cafetorium work area. The cafetorium work area consists of the cafeteria, Room 160E, and hallways on either side of the stage.

CAFETORIUM WORK AREA MONITORING

Between 6:15 and 6:20 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

The abatement contractor was observed using an angle grinder with HEPA attachments to remove the black floor tile mastic from the edges of the work area and fine cleaning the work area after the mastic had been removed.

The abatement contractor stated the specified materials had been removed from the regulated work area and requested a visual survey to confirm compliance. The Final Clearance Visual Survey Checklist was completed and is attached to this report.

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area.

Between 1:00 and 1:05 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area for analysis.

At 3:30 pm, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling

pumps were calibrated using a rotameter to 8.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

At 6:00 pm, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 150 minutes at 8.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL, Beltsville MD for analysis.

The EPA and Virginia maximum allowable airborne asbestos concentration from within the work area is 70 structures per millimeter squared (s/mm2). In order to be deemed acceptable, the average of the interior samples analyzed must have asbestos concentrations of 70 s/mm2 or less. EMSL informed ECS that the analytical results of the TEM final clearance air samples collected from the Cafetorium work area found the airborne asbestos fiber concentrations to be less than this maximum allowable concentration. The client was informed of the results. A copy of the laboratory report is attached.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and waste drums and sealed in general accordance with the applicable regulations. Waste bags were labeled and placed in a dumpster that was lined and covered with polyethylene sheeting.

The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the cafetorium work area were reported to be less than this maximum allowable limit, which meets the project requirements.

Attachments



View of the Cafetorium Work Area during the Final Clearance Visual Survey

Figure 1



View of the Cafetorium Work Area during the Final Clearance Visual Survey

Figure 2

Attachments



View of the Cafetorium Work Area during the Final Clearance Visual Survey

Figure 3



View of the Cafetorium Work Area during the Final Clearance Visual Survey

Figure 4

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-J1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 5/20/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
05192005 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05192001 CB	OWA- Decontamination Unit	6:15 AM	1:00 PM	2.0	2.0	2.0	405	810.0	0.0	100	0.000
05192002 CB	OWA- East Critical Barrier	6:16 AM	1:04 PM	2.0	2.0	2.0	408	816.0	0.0	100	0.000
05192004 CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
05192003 CB	IWA	6:18 AM	1:05 PM	2.0	2.0	2.0	407	814.0	17.0	100	0.010

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes:

ECS Technician: Catey Bourne **Date:** 5/20/2020

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192004844
Customer ID: ECMA78
Customer PO:
Project ID:

Attention: Bobby Rhett
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
Project: 47:1519-J1

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 05/20/2020 08:44 AM
Analysis Date: 05/20/2020
Collected Date: 05/19/2020

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5µ < 5µ	#Structures ≥5µ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
1	IWA - CAFETORIUM	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192004844-0001										
2	IWA - CAFETORIUM	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192004844-0002										
3	IWA - CAFETORIUM	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192004844-0003										
4	IWA - CAFETORIUM	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192004844-0004										
5	IWA - CAFETORIUM	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192004844-0005										

Analyst(s)

Emily Baker (5)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in both structures/cm3 and structures/mm2 are dependent on the volume of air sampled and measured by non-laboratory personnel are not the responsibility of EMSL and are not covered by the laboratory's NVLAP accreditation. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from: 05/20/2020 17:08 PM

OrderID: 192004844

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 192004844

PHONE:
FAX:

Company Name: ECS Mid-Atlantic	**EMSL Customer ID:**
Street: 14026 Thunderbolt Pl	**City:** Chantilly **State/Province:** VA
Zip/Postal Code: 20151 **Country:** USA	**Telephone #:** 703-471-8400 **Fax #:**
Report To (Name): Bobby Rhett	**Please Provide Results:** ☐ Fax ☑ Email
Email Address: brhett@ecslimited.com	**Purchase Order:**
Project Name/Number: 47:1519 - J1	**EMSL Project ID** *(Internal Use Only)*:
U.S. State Samples Taken: VA	**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt

EMSL-Bill to: ☐ Same ☐ Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☒ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

PCM - Air ☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☐ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0 25%) ☐ 1000 (<0 1%)
Point Count w/Gravimetric
☐ 400 (<0 25%) ☐ 1000 (<0.1%)
☐ NYS 198 1 (friable in NY)
☐ NYS 198 6 NOB (non-friable-NY)
☐ NYS 198.8 SOF-V
☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
☒ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
☐ PLM EPA 600/R-93/116 with milling prep (<0 25%)
☐ TEM EPA 600/R-93/116 with milling prep (<0 1%)
☐ TEM Qualitative via Filtration Prep
☐ TEM Qualitative via Drop Mount Prep
☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM (BC only)

Other:
☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Filter Pore Size (Air Samples): ☐ 0.8µm ☑ 0.45µm

Samplers Name: Catey Bourne **Samplers Signature:** CBourne

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1	IWA - Cafetorium	1200 L	5/19/20
2			
3			
4			
5			

Client Sample # (s): 1-13 **Total # of Samples:** 13

Relinquished (Client): CBourne **Date:** 5/19/20 **Time:**

Received (Lab): J. Kenneth Fuqua **Date:** **Time:**

Comments/Special Instructions: only analyze IWA samples 1-5

RECEIVED
2020 MAY 22 P 3:11
EMSL ANALYTICAL, INC.
PITTSTOWN, NJ

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
6	OWA - Cafetorium	1200 L	5/19/20
7	↓	↓	↓
8			
9			
10	↓	↓	
11	Field Blank	-	
12	Field Blank	-	↓
13	Sealed Blank	-	-

*Comments/Special Instructions:

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 1519-J1 **Date:** 5/20/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafetorium Work Area

	Work Area Location/Description	Cafetorium Work Area
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	Satisfactory
	Mechanical Equipment	Satisfactory
	Ducts	Satisfactory
	Pipes	Satisfactory
	Lighting	Satisfactory
	Other Surfaces	Satisfactory
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	TEM
	Number of Samples Collected	13
	Sample Volume (liters)	1200
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/20/2020

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-J1 **Date:** 5/20/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafetorium Work Area

	Work Area Location/Description	Cafetorium Work Area
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	3
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 5/20/2020

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

July 7, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

CC:

ENCL:

Field Report # 6	7/2/2020	6 PCM

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

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3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project No.	**1519-J1**
Report No.	**6**
Day & Date	**Thursday 7/2/2020**
Weather	**86 °/ Sunny**
On-Site Time	**7.25**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**7.25**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **6 PCM**

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**8:00A**	**9:15A**
				11:30A	**5:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The material specified to be removed today is asbestos-containing mastic from the back stair area of the multipurpose room. ASI is on-site and setting up a containment with a three-stage decon in the stairwell area of the multipurpose room.

Prior to starting the removal of the specified material, the abatement permit and abatement worker licenses were reviewed by the undersigned. The appropriate documentation was available on-site.

At 8:15 am, background PCM air samples were started inside and outside the stairwell work area. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

The abatement contractor requested a pre-abatement survey of the regulated work area. The Pre-Abatement Checklist was completed and is attached to this report.

The regulated work area was set up in general accordance with EPA and Commonwealth of Virginia regulations. ECS verified that workers were wearing the appropriate PPE including disposable coveralls and half-face respirators with HEPA cartridges and removal of the mastic began. Workers are using scrapers and abrasive methods with HEPA filtration and amended water to remove the mastic. The white 12" x 12" floor tile and blue vinyl stair tread will be removed and disposed of as asbestos-containing materials as the mastic is adhered to these materials. The Daily Work Area Survey Checklist was completed and is attached to this report.

At 11:30 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The background PCM air samples were stopped and gathered from from inside and outside the work area. The undersigned started a new set of samples in the same locations prior to the start of abatement.

By Lauren E. Kesslak 1310

65955

At 4:30 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from from inside and outside the work area. Workers were cleaning up for the day.

ECS prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached. The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the daily air samples collected from stairwell area were reported to be less than the maximum allowable limits set by applicable regulations which meets the project requirements.

At 5:30 pm, ASI and ECS departed from the site.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-J1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/3/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
070220LK 04	Center of Containment (IWA)	11:31 AM	4:31 PM	2.5	0.0	1.3	300	390.0	7.0	100	0.009
070220LK 03	Decon Entrance (OWA)	11:30 AM	4:30 PM	2.5	2.5	2.5	300	750.0	3.5	100	0.002
070220LK 02	Inside Containment (Center) Background (IWA)	8:31 AM	11:31 AM	2.5	2.5	2.5	180	450.0	8.5	100	0.009
070220LK 05	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
070220LK 01	In front of Decon (OWA) Background	8:30 AM	11:30 AM	2.5	2.5	2.5	180	450.0	2.0	100	0.002
070220LK 06	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes:

ECS Technician: Lauren E. Kesslak **Date:** 7/3/2020

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 1519-J1 **Date:** 7/3/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: MultiPurpose Room Stairwell Floor Mastic

	Work Area Location/Description	MultiPurpose Room Stairwell Floor
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	1 plus a backup
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half-Face
	Type of Filters Used	P-100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 7/3/2020

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-J1 **Date:** 7/3/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: MultiPurpose Room Stairwell Floor Mastic

	Work Area Location/Description	MultiPurpose Room Stairwell Floor
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 7/3/2020

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

July 10, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

CC: Alexandria City Public Schools - Azjargal Bartlett

ENCL: Field Report # 7 7/6/2020 4 PCM 5 TEM

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

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5. *The results of samples and/or specimens obtained or prepared for supersequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project No.	**1519-J1**
Report No.	**7**
Day & Date	**Monday 7/6/2020**
Weather	**90 °/ Sunny**
On-Site Time	**5.00**
Lab Time	**0.00**
Travel Time*	**1.25**
Total	**6.25**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **4 PCM 5 TEM**

Trip Charges* Tolls/Parking* Mileage* **40**

Chargeable Items

Times of	Arrival	Departure
	6:00A	**7:00A**
	8:15A	**9:30A**
	10:30A	**12:15P**
	2:00P	**3:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The material to be removed today is asbestos-containing floor tile and associated mastic from the stairwell leading into the cafeteria.

CAFETERIA STAIRWELL WORK AREA

At 6:45 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

At 11:00 am, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area.

The abatement contractor stated the specified materials had been removed from the regulated work area and requested a visual survey to confirm compliance. The Final Clearance Visual Survey Checklist was completed and is attached to this report.

At 12:02 pm, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 8.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

At 2:32 pm, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 150 minutes at 8.0 liters per minute. The

sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. (EMSL) in Beltsville, Maryland for analysis. A copy of the chain of custody has been attached.

EMSL informed ECS that the TEM air samples were overloaded with particulates and/or dust, and therefore the air samples could not be analyzed. The ongoing construction work in the cafeteria may have influenced the air samples. The results were reported to the client.

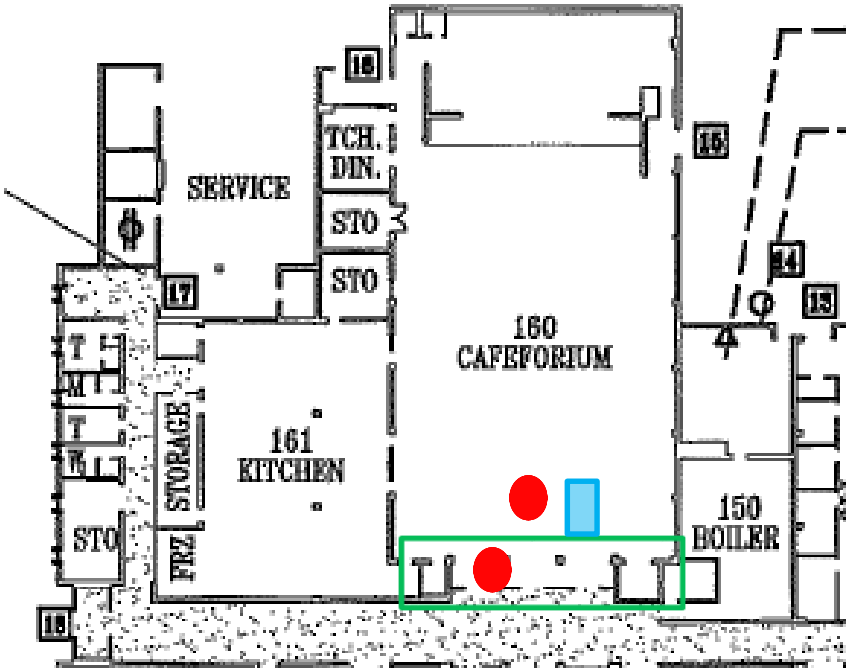
GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags were labeled and stored in a temporary waste hauling vehicle.

The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM final clearance air samples collected from inside and outside the work area were overloaded, and therefore these air samples could not be analyzed. Outside contractors were observed working in surrounding areas and creating dust from sanding materials, which may have influenced the PCM samples.



Legend

Work Area

Daily Sample location

3-stage decontamination unit location

John Adams Elementary School
5651 Rayburn Avenue
Alexandria, VA 22311

ECS

SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-J1

Date 07/06/2020

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-J1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/7/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07062001CB	OWA- Cafeteria Steps Work Area	6:45 AM	11:00 AM	2.0	2.0	2.0	255	510.0	0.0	0	0.000
07062002CB	OWA- Cafeteria Steps Work Area	6:45 AM	11:00 AM	2.0	2.0	2.0	255	510.0	0.0	0	0.000
07062003CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07062004CB	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: Samples 07062001CB and 07062002CB were overloaded and unable to be analyzed. Outside contractors were observed working in surrounding areas and creating dust from sanding materials, which may have influenced PCM samples.

ECS Technician: Catey Bourne **Date:** 7/7/2020

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192006446
Customer ID: ECMA78
Customer PO: 47-1519-J1
Project ID:

Attention: Bobby Rhett
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 07/07/2020 08:30 AM
Analysis Date: 07/07/2020
Collected Date: 07/06/2020

Project: 47-1519-J1/JOHN ADAMS CAFETERIA/AGGRESSIVE SAMPLING

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm^2)	Non Asb	Asbestos Type(s)	#Structures ≥0.5μ < 5μ	#Structures ≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm^2)	Asbestos Concentration (S/cc)
07062001CB *192006446-0001*	INSIDE WORK AREA - CAFETERIA STEPS	1200.00			Overloaded					N/A
07062002CB *192006446-0002*	INSIDE WORK AREA - CAFETERIA STEPS	1200.00			Overloaded					N/A
07062003CB *192006446-0003*	INSIDE WORK AREA - CAFETERIA STEPS	1200.00			Overloaded					N/A
07062004CB *192006446-0004*	INSIDE WORK AREA - CAFETERIA STEPS	1200.00			Overloaded					N/A
07062005CB *192006446-0005*	INSIDE WORK AREA - CAFETERIA STEPS	1200.00			Overloaded					N/A

Analyst(s)

()

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in both structures/cm3 and structures/mm2 are dependent on the volume of air sampled and measured by non-laboratory personnel are not the responsibility of EMSL and are not covered by the laboratory's NVLAP accreditation. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from: 07/07/2020 13:38 PM

OrderID: 192006446

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(lab use only)*: 192006446

PHONE
FAX

Company Name : ECS Mid-Atlantic		**EMSL Customer ID:**	
Street: 14026 Thunderbolt Place; Suite 100		**City:** Chantilly	**State or Province:** VA
Zip/Postal Code: 20151	**Country:** USA	**Telephone #:** 703-471-8400	**Fax #:**
Report To (Name): Bobby Rhett		**Please Provide Results via:** ☐ Fax ☒ Email	
email Address: brhett@ecslimited.com		**Purchase Order Number:** 47:1519-J1	
Client Project ID: 47-1519-J1/John Adams Cafeteria		**EMSL Project ID** *(internal use only)*:	
State or Province Collected: Virginia		**CT only** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☑ Same ☐ Different - *If bill to is different note instructions in comment. Third party billing requires written authorization from third party*

Turnaround Time (TAT) Options Please Check

☐ 3 Hr[1]	☐ 4-4.5Hr[1] AHERA Only	☐ 6 Hr[1]	☒ 24 Hr	☐ 32 Hr[2]	☐ 48 Hr	☐ 72 Hr	☐ 96 Hr	☐ 1 Week	☐ 2 Week

[1] *Premium Service Charge applies for 3 Hour TEM AHERA or EPA Level II TAT – you will be asked to sign an authorization form. TEM Air 3-6 Hour, please call ahead to schedule*
[2] *32 Hour TAT available for select tests only, samples must be submitted by 11:30 am.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0 25%) ☐ 1000 (<0 1%)
- ☐ NYS 198.1 (friable - NY)
- ☐ NYS 198 6 NOB (non-friable-NY)
- ☐ NYS 198 8 SOF-V
- ☐ NIOSH 9002 (<1%)

TEM – Air[1]
- ☒ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Settled Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil – Rock – Vermiculite (reporting limit)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0 1%)*
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep
- ☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM

*Lower reporting limits avaialble on request

Other test (please specify):

☐ **Stop At First Positive** ***(clearly identify homogenous areas below)*** **Filter Pore Size (Air Samples):** ☐ **0.8µm** ☐ **0.45µm**

Sampler's Name: Catey Bourne **Sampler's Signature:** CBourne

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
07062001CB	Inside Work Area- Cafeteria Steps	1200 L	7/6/20
07062002CB	Inside Work Area- Cafeteria Steps	1200 L	7/6/20
07062003CB	Inside Work Area- Cafeteria Steps	1200 L	7/6/20
07062004CB	Inside Work Area- Cafeteria Steps	1200 L	7/6/20
07062005CB	Inside Work Area- Cafeteria Steps	1200 L	7/6/20

Client Sample # (s): 07062001CB - 07062013CB **Total # of Samples:** 13

Relinquished by (Client): CBourne **Date:** 7/6/20 **Time:** 5:45 pm

Received by (Lab): [illegible] **Date:** 7/7/2020 **Time:** 8:30am

Comments/Special Instructions:
Aggressive sampling. Please analyze samples 07062001CB to 07062005CB only (inside work area samples).

EMSL Analytical, Inc.'s (DBA: LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

OrderID: 192006446

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
07062006CB	Outside Work Area- Cafeteria Steps	1200 L	07/06/20
07062007CB	Outside Work Area- Cafeteria Steps	1200 L	07/06/20
07062008CB	Outside Work Area- Cafeteria Steps	1200 L	07/06/20
07062009CB	Outside Work Area- Cafeteria Steps	1200 L	07/06/20
07062010CB	Outside Work Area- Cafeteria Steps	1200 L	07/06/20
07062011CB	Field Blank (Inside Work Area)	N/A	07/06/20
07062012CB	Field Blank (Outside Work Area)	N/A	07/06/20
07062013CB	Sealed Blank	-	-

***Comments/Special Instructions:**

Aggressive sampling. Please analyze samples 07062001CB to 07062005CB only (inside work area samples).

EMSL Analytical, Inc.'s (DBA: LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

Attachments



View of Work Area Exterior

Figure 1



View of Work Area Interior during Final Clearance Visual Survey

Figure 2

Attachments



View of Work Area Interior during Final Clearance Visual Survey

Figure 3

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-J1 **Date:** 7/7/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafeteria Stairs

	Work Area Location/Description	Cafeteria Stairs
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 7/7/2020

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 1519-J1 **Date:** 7/7/2020

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Cafeteria Stairs Work Area

	Work Area Location/Description	Cafeteria Stairs Work Area
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	N/A
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	N/A
	Mechanical Equipment	N/A
	Ducts	N/A
	Pipes	N/A
	Lighting	N/A
	Other Surfaces	Satisfactory
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	TEM
	Number of Samples Collected	13
	Sample Volume (liters)	1200
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 7/7/2020

ECS Mid Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

LETTER OF TRANSMITTAL

July 10, 2020

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS - John Adams School ACM Monitoring Services**
ECS Job # **1519-J1**

Permits:
Location: **5651 Rayburn Avenue**
Alexandria, VA 22311

CC: Alexandria City Public Schools - Azjargal Bartlett

ENCL:

Field Report # 8	7/7/2020	5 TEM

Diana D. Krass
Environmental Senior Project Manager

Robert Lawrence Rhett
Environmental Project Manager

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for supersequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project No.	**1519-J1**
Report No.	**8**
Day & Date	**Tuesday 7/7/2020**
Weather	**90 °/ Sunny**
On-Site Time	**3.75**
Lab Time	**0.00**
Travel Time*	**1.00**
Total	**4.75**
Re Obs Time	**0.00**

Project	**ACPS - John Adams School ACM Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks **5 TEM**

Trip Charges*	Tolls/Parking*	Mileage*	**30**	Time of	Arrival	Departure
Chargeable Items					**5:00P**	**8:45P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform final clearance TEM air samples in the cafeteria stairs work area after the removal of floor tile and mastic from the work area.

Previous TEM samples, collected on July 06, 2020, were reported as overloaded. TEM samples were collected today after the construction site had closed for the day in order to avoid dust from other work overloading the samples.

At 5:47 pm, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 8.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

At 8:17 pm, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 150 minutes at 8.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. (EMSL) in Beltsville, Maryland for asbestos analysis. A copy of the chain of custody has been attached.

The EPA and Commonwealth of Virginia maximum allowable airborne asbestos concentration from within the work area is 70 structures per millimeter squared (s/mm2). In order to be deemed acceptable, the average of the interior samples analyzed must have asbestos concentrations of 70 s/mm2 or less. EMSL informed ECS that the analytical results of the TEM final clearance air samples collected from the Cafeteria stairs work area found the airborne asbestos fiber concentrations to be less than the maximum allowable concentration. The client was informed of the results. A copy of the laboratory report and the chain of custody are attached.

By Catey Bourne 1302

66020

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192006485
Customer ID: ECMA78
Customer PO: 47:1519-J1
Project ID:

Attention: Bobby Rhett
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
Project: 47:1519-J1/JOHN ADAMS

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 07/08/2020 08:30 AM
Analysis Date: 07/08/2020
Collected Date: 07/07/2020

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5µ < 5µ	#Structures ≥5µ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
07072001CB	INSIDE WORK AREA - CAFETERIA STEPS	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192006485-0001										
07072002CB	INSIDE WORK AREA - CAFETERIA STEPS	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192006485-0002										
07072003CB	INSIDE WORK AREA - CAFETERIA STEPS	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192006485-0003										
07072004CB	INSIDE WORK AREA - CAFETERIA STEPS	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192006485-0004										
07072005CB	INSIDE WORK AREA - CAFETERIA STEPS	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192006485-0005										

Analyst(s)

Emily Baker (5)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in both structures/cm3 and structures/mm2 are dependent on the volume of air sampled and measured by non-laboratory personnel are not the responsibility of EMSL and are not covered by the laboratory's NVLAP accreditation. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from: 07/08/2020 15:11 PM

OrderID: 192006485

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(lab use only)*: 192006485

Company Name: ECS Mid-Atlantic		**EMSL Customer ID:**	
Street: 14026 Thunderbolt Place		**City:** Chantilly	**State or Province:** VA
Zip/Postal Code: 20151	**Country:** USA	**Telephone #:** 703-471-8400	**Fax #:**
Report To (Name): Bobby Rhett		**Please Provide Results via:** ☐ Fax ☒ Email	
email Address: brhett@ecslimited.com		**Purchase Order Number:** 47:1519-J1	
Client Project ID: 47 1519-J1/ John Adams		**EMSL Project ID** *(internal use only)*:	
State or Province Collected: VA		**CT only** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☒ Same ☐ Different - *If bill to is different note instructions in comment. Third party billing requires written authorization from third party*

Turnaround Time (TAT) Options Please Check

☐ 3 Hr[1]	☐ 4-4.5Hr[1] AHERA Only	☒ 6 Hr[1]	☐ 24 Hr	☐ 32 Hr[2]	☐ 48 Hr	☐ 72 Hr	☐ 96 Hr	☐ 1 Week	☐ 2 Week

[1]*Premium Service Charge applies for 3 Hour TEM AHERA or EPA Level II TAT – you will be asked to sign an authorization form. TEM Air 3-6 Hour, please call ahead to schedule*
[2] *32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable - NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NYS 198.8 SOF-V
- ☐ NIOSH 9002 (<1%)

TEM – Air[1]
- ☒ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198 4 (non-friable-NY)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Settled Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil – Rock – Vermiculite (reporting limit)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep
- ☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM

**Lower reporting limits avaialble on request*

Other test (please specify):

☐ **Stop At First Positive** *(clearly identify homogenous areas below)*

Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Sampler's Name: [signature] **Sampler's Signature:** [signature]

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
07072001CB	Inside Work Area - Cafeteria Steps	1200 L	07/07/20
07072002CB	Inside Work Area - Cafeteria Steps	1200 L	07/07/20
07072003CB	Inside Work Area - Cafeteria Steps	1200 L	07/07/20
07072004CB	Inside Work Area - Cafeteria Steps	1200 L	07/07/20
07072005CB	Inside Work Area - Cafeteria Steps	1200 L	07/07/20

Client Sample # (s): 07072001CB - 07072013CB **Total # of Samples:** 13

Relinquished by (Client): [signature] **Date:** 7/7/20 **Time:** 915 pm

Received by (Lab): K. Howarth Drop Box **Date:** 7/8/20 **Time:** 8:30 am

Comments/Special Instructions:
Please analyze 01-05 Inside Work Area samples only.

EMSL Analytical, Inc 's (DBA: LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

PROJECT REGISTRATION

Office#	01	Signed Proposal/Rev	33584 /	Dept/Team	6 /
ECS Job#	10977-A	Start	03/01/2010	Assigned to	DJF
PO/Contract#		Complete	03/30/2010	Registered by	BES
Registered	03/01/2010	Estimate	1,255.00	Principal Engr	WRL
Project Name	John Adams Elementary School Ltd Asbestos Survey			Market SubSect	19
Address	5651 RayburnAvenue			ECS Function	17
City	Alexandria	State VA	Zip 22311-	Estimate Type	1
County	City of Alexandria	Miles	Tvl Time	Report Type	6
Map Book	NV Page 16 Grid F 13	Lat 38.8327112	Long -77.121658	Skill Profile	029

PROJECT TEAM and REPORT DISTRIBUTION

Client # (& Type)	Name & Address	Contact Name & Phone Numbers
GENERAL CONTRACTOR	HITT Contracting	Mr. Nick Tose
01:0618-03 (32)	2900 Fairview Park Drive	Voice (703)846-9000
Invoiced	Falls Church, VA 22042	Direct (703)846-9075
Reports:		Cell
***Email: ntose@hitt-gc.com**		Fax (703)846-9110

Permits:

Comments:

* - Report Delivery Mode

** - Actual Mileage/Travel Time from Project Data Sheet

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Doug Finch**
ECS Mid-Atlantic, LLC (VA)
915 Maple Grove Drive
Suite 206
Fredericksburg, VA 22407

Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-1A *041004455-0001*	SOUTH WALL	Gray Fibrous Heterogeneous		85% Non-fibrous (other)	**15% Chrysotile**
30310JAE-1B *041004455-0002*	SOUTH WALL				**Stop Positive (Not Analyzed)**
30310JAE-1C *041004455-0003*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1D *041004455-0004*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1E *041004455-0005*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1F *041004455-0006*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1G *041004455-0007*	EAST WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The test results meet all NELAC requirements unless otherwise specified.
Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

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Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-2A *041004455-0008*	SOUTH WALL	Gray Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-2B *041004455-0009*	SOUTH WALL	Gray Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-2C *041004455-0010*	WEST WALL	Gray Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3A *041004455-0011*	SOUTH WALL	Gray/White Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3B *041004455-0012*	WEST WALL	Gray/White Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3C *041004455-0013*	EAST WALL	Gray Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-4A *041004455-0014*	SOUTH WALL	Black Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**

Analyst(s)

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Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

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Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-4B *041004455-0015*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-4C *041004455-0016*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5A *041004455-0017*	WEST WALL	Black Fibrous Heterogeneous		92% Non-fibrous (other)	**8% Chrysotile**
30310JAE-5B *041004455-0018*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5C *041004455-0019*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-6A *041004455-0020*	SOUTH WALL	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**
30310JAE-6B *041004455-0021*	SOUTH WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

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Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-6C *041004455-0022*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-7A-TILE *041004455-0023*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7A-MASTIC *041004455-0023A*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-TILE *041004455-0024*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-MASTIC *041004455-0024A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7C-TILE *041004455-0025*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-7C-MASTIC *041004455-0025A*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-COVEBASE *041004455-0026*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-MASTIC *041004455-0026A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-COVEBASE *041004455-0027*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-MASTIC *041004455-0027A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8C-COVEBASE *041004455-0028*	EAST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

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Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-8C-MASTIC *041004455-0028A*	EAST WALL	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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or other approved signatory

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THIS IS THE LAST PAGE OF THE REPORT.

041004455

C 4/1/05

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore
Avenue
Beltsville, MD 20705

Phone: (301) 937-8700
Fax: (301) 937-8701
http://www.emsl.com

Please print all information legibly

Company:	LCS Mid-Atlantic, LLC	*Bill To:*	LCS Mid-Atlantic, LLC
Address1	915 Maple Grove Drive	*Address1*	915 Maple Grove Drive
Address2	Suite 206	*Address2*	Suite 206
City, State	Fredericksburg, VA	*City, State*	Fredericksburg, VA
Zip, Post Code	22407	*Zip/Post Code*	22407
Country	USA	*Country*	USA
Contact Name:	Beverly Sedon	*Attn:*	Beverly Sedon
Phone	540-785-6100	*Phone*	540-785-6100
Fax	540-785-3537	*Fax*	540-785-3537
Email	bsedon@lcsmmited.com	*Email*	bsedon@lcsmmited.com
EMSL Rep:	Sheri Sherman	*P.O. Number:*	~~10977-A~~ 10977-A
Project Name Number:	Soha Dolans, ES	10977-A	

MATRIX			TURNAROUND			
Air	Soil	Micro-Vac	3 Hours	6 Hours	Same Day or 12 Hours*	24 Hours (1 day)
Bulk	Drinking Water		48 Hours (2 days)	72 Hours (3 days)	96 Hours (4 days)	~~120 Hours~~ (5 days)
Wipe	Wastewater		144 hours (6-10 days)			

TEM AIR: 3 hours, 6 hours. Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

12 hours must arrive by 11:00a.m. Mon - Fri. Please Refer to Price Guide

PCM - Air
- NIOSH 7400 A (Sec 2 Area Clear)
- OSHA w/ TWA
- Other:

PLM - Bulk
- EPA 600/R-93/116
- EPA Point Count
- NY Stratified Point Count
- PLM NOB (Gravimetric NYS 198.1)
- NIOSH 9002
- EMSL Standard Addendum

SEM Air or Bulk
- Qualitative
- Quantitative

TEM Air
- AHERA 40 CFR, Part 763 Subpart E
- NIOSH 7402
- EPA Level II

TEM BULK
- Drop Mount (Qualitative)
- Chatfield SOP - 1988.02
- TEM NOB (Gravimetric NYS - 198.4)
- EMSL Standard Addition

PLM Spil
- EPA Protocol Qualitative
- EPA Protocol Quantitative
- EMSL NSD Point Method

TEM WATER
- EPA 100.1
- EPA 100.2
- NYS 198.2

TEM Microvac/Wipe
- ASTM D 6480-05 (Qualitative/Quantitative)
- Wipe Qualitative

XRD
- Asbestos
- Silica (NIOSH 7500)

OTHER

SAMPLES ACCEPTED

041004455

C4/CC 1/4/35 Page 2 of 3

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore
Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 30310JAE-1A · 30310JAE-2C Total Samples #: 28

Relinquished: [signature] Date: 3/3/10 Time: 7:00 AM

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: FX-16307 Date: 3-5-10 Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
30310JAE-1A	Fire proofing South wall	
1B	South wall	
1C	WEST	
1D	WEST	
1E	WEST ~~EAST~~	
1F	EAST	
1G	EAST	
2A	Ceiling Board SOUTH	
2B	SOUTH	
2C	WEST	
3A	Ceiling Tile SOUTH	
3B	WEST	
3C	EAST	
4A	Pipe Insulation SOUTH	

Page 2 of 3 ... Chain of Custody ... Asbestos Lab Services ... EMSL Analytical, Inc.

041004455

Page 1 of 1

Chain of Custody

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Beltsville, MD 20705

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http://www.emsl.com

Please print all information legibly

Client Sample # (s): [illegible]

Total Samples #: [illegible]

Relinquished: [illegible] Date: 3/3/10 Time: [illegible]

Received: Date: Time:

Relinquished: Date: Time:

Received: Date: Time:

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	

RECEIVED

041004455

Chain of Custody

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Beltsville, MD 20705

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Company:	ECS Mid-Atlantic, LLC	***Bill To:***	ECS Mid-Atlantic, LLC
Address1:	915 Maple Grove Drive	*Address1:*	915 Maple Grove Drive
Address2:	Suite 206	*Address2:*	Suite 206
City, State:	Fredericksburg, VA	*City, State:*	Fredericksburg, VA
Zip/Post Code:	22407	*Zip/Post Code:*	22407
Country:	USA	*Country:*	USA
Contact Name:	~~Beverly Sedon~~ Douglas Finch	***Attn:***	~~Beverly Sedon~~ Douglas Finch
Phone:	540-785-6100	*Phone:*	540-785-6100
Fax:	540-785-3577	*Fax:*	540-785-3577
Email:	~~bsedon@ecslimited.com~~ dfinch@ecslimited.com	*Email:*	~~bsedon@ecslimited.com~~ dfinch@ecslimited.com
EMSL Rep:	Sherl Steinman	***P.O. Number:***	~~5086~~ 10977-A
Project Name/Number:	John Adams ES	10977-A	

MATRIX			TURNAROUND			
Air	Soil	Micro-Vac	3 Hours	6 Hours	Same Day or 12 Hours*	24 Hours (1 day)
X Bulk	Drinking Water		48 Hours (2 days)	72 Hours (3 days)	96 Hours (4 days)	~~120 Hours (5 days)~~
Wipe	Wastewater		144+ hours (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

***12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote**

* Positive Stop

PCM - Air	**TEM Air**	**TEM WATER**
NIOSH 7400(A) Issue 2: August 1994	AHERA 40 CFR, Part 763 Subpart E	EPA 100.1
OSHA w/TWA	NIOSH 7402	EPA 100.2
Other:	EPA Level II	NYS 198.2
PLM - Bulk	**TEM BULK**	**TEM Microvac/Wipe**
X EPA 600/R-93/116	Drop Mount (Qualitative)	ASTM D 5755-95 (quantative method)
EPA Point Count	Chatfield SOP - 1988-02	Wipe Qualitative
NY Stratified Point Count	TEM NOB (Gravimetric) NYS 198.4	
PLM NOB (Gravimetric) NYS 198.1	EMSL Standard Addition:	**XRD**
NIOSH 9002:		Asbestos
EMSL Standard Addition:	**PLM Soil**	Silica NIOSH 7500
SEM Air or Bulk	EPA Protocol Qualitative	
Qualitative	EPA Protocol Quantitative	**OTHER**
Quantitative	EMSL MSD 9000 Method fibers gram	

RECEIVED
EMSL
WESTMONT, NJ
10 MAR -5 AM 11:26

SAMPLES ACCEPTED
FOR ANALYSIS BY
EMSL ANALYTICAL INC.

041004455 Page 2 of 3

Chain of Custody

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Beltsville, MD 20705

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http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 30310JAE-1A - 30310JAE-8C Total Samples #: 28

Relinquished: [signature] Date: 3/3/10 Time: 7:40 AM

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: DM-FX-10304 Date: 3.5.10 Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
30310JAE-1A	FIREPROOFING SOUTH WALL	
1B	SOUTH WALL	
1C	WEST	
1D	WEST	
1E	WEST	
1F	EAST	
1G	EAST	
2A	UPPER Ceiling Board SOUTH	
2B	SOUTH	
2C	WEST	
3A	Ceiling Tile SOUTH	
3B	WEST	
3C	EAST	
4A	Pipe Insulation mastic SOUTH	

RECEIVED EMSL WESTMONT, NJ MAR 5 2010

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

041004455

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http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 30310JAE-1A - 30310JAE-8C **Total Samples #:** 22

Relinquished: _____ **Date:** 3/3/10 **Time:** 7:00AM

Received: _____ **Date:** _____ **Time:** _____

Relinquished: _____ **Date:** _____ **Time:** _____

Received: _____ **Date:** _____ **Time:** _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
30310JAE-4B	Pipe Insulation BLACK MASTIC EAST WALL	
4C	" " WEST WALL	
5A	Pipe Elbow insulation WEST	
5B	" " WEST	
5C	" " East	
6A	Window Caulk SOUTH	
6B	" " SOUTH	
6C	" " WEST	
7A	Yellow 12"x12" FLOOR Yellow TILE + MASTIC SOUTH	
7B	" " WEST	
7C	" " East	
8A	4" Gray Cove Base Yellow + MASTIC West	
8B	" " " West	
8C	" " " East	

10 MAR -5 AM 11:26
RECEIVED
EMSL
WESTMONT, NJ

SAMPLES ACCEPTED
FOR ANALYSIS BY
EMSL ANALYTICAL INC.

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Doug Finch**
ECS Mid-Atlantic, LLC (VA)
915 Maple Grove Drive
Suite 206
Fredericksburg, VA 22407

Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
30310JAE-1A *041004455-0001*	SOUTH WALL	Gray Fibrous Heterogeneous		85% Non-fibrous (other)	**15% Chrysotile**
30310JAE-1B *041004455-0002*	SOUTH WALL				**Stop Positive (Not Analyzed)**
30310JAE-1C *041004455-0003*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1D *041004455-0004*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1E *041004455-0005*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1F *041004455-0006*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1G *041004455-0007*	EAST WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The test results meet all NELAC requirements unless otherwise specified.
Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-2A *041004455-0008*	SOUTH WALL	Gray Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-2B *041004455-0009*	SOUTH WALL	Gray Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-2C *041004455-0010*	WEST WALL	Gray Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3A *041004455-0011*	SOUTH WALL	Gray/White Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3B *041004455-0012*	WEST WALL	Gray/White Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3C *041004455-0013*	EAST WALL	Gray Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-4A *041004455-0014*	SOUTH WALL	Black Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**

Analyst(s)

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Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
30310JAE-4B *041004455-0015*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-4C *041004455-0016*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5A *041004455-0017*	WEST WALL	Black Fibrous Heterogeneous		92% Non-fibrous (other)	**8% Chrysotile**
30310JAE-5B *041004455-0018*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5C *041004455-0019*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-6A *041004455-0020*	SOUTH WALL	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**
30310JAE-6B *041004455-0021*	SOUTH WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

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Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
30310JAE-6C *041004455-0022*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-7A-TILE *041004455-0023*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7A-MASTIC *041004455-0023A*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-TILE *041004455-0024*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-MASTIC *041004455-0024A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7C-TILE *041004455-0025*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-7C-MASTIC *041004455-0025A*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-COVEBASE *041004455-0026*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-MASTIC *041004455-0026A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-COVEBASE *041004455-0027*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-MASTIC *041004455-0027A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8C-COVEBASE *041004455-0028*	EAST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-8C-MASTIC *041004455-0028A*	EAST WALL	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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or other approved signatory

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01: 10977-A

ECS MID-ATLANTIC, LLC

GEOTECHNICAL • CONSTRUCTION MATERIALS • ENVIRONMENTAL • FACILITIES

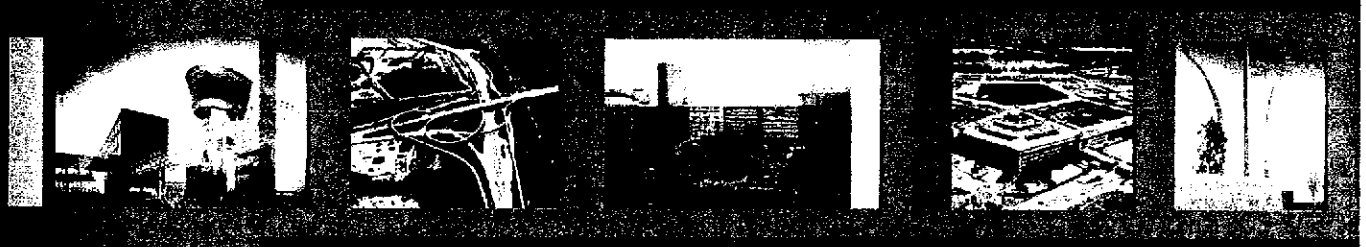
Proposal for

Limited Asbestos Survey

Proposal No. 01:33584-EP

John Adams Elementary School Capacity Work
5651 Rayburn Avenue
Alexandria, Virginia

March 1, 2010



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

March 1, 2010

Mr. Nick Tose
HITT Contracting
2900 Fairview Park Drive
Falls Church, Virginia 22042
ntose@hitt-gc.com

ECS Proposal No. 01:33584-EP

Proposal for: Limited Asbestos Survey, John Adams Elementary School Capacity Work, 5651 Rayburn Avenue, Falls Church, Virginia 22311

Dear Mr. Tose:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide HITT Contracting with the general specifications and a cost estimate for performing a Limited Asbestos Survey at the above-referenced property. Our proposal contains: a summary of relevant information as we understand it, a project schedule and the estimated costs for completion of the proposed work.

PROJECT OVERVIEW AND SCOPE OF SERVICE

Based on our conversation with you additions of modular classrooms will be added to the courtyard of the school. Disturbances to, renovations, and/or mechanical work activities will be performed within the areas of the walls, floors, and/or ceiling cavities. At this time ECS has been requested to provide an asbestos survey of the area limited to disturbance within the school. The survey is to be performed after school hours within the afternoon or evening time.

ASBESTOS SURVEY

As the building is currently occupied, non-destructive sampling techniques will be utilized. During the survey, every attempt will be made to access all building materials in all areas. However, due to the nature of an asbestos assessment and the inability and impracticality of accessing all hidden locations, some areas/materials may still be deemed inaccessible and/or not inspected. Access to materials behind walls, above hard ceilings, within pipe chases and wall cavities, etc will be limited. Reasonable assumptions regarding the presence of suspect asbestos-containing materials will be made as necessary.

The asbestos inspection will be conducted by an EPA accredited asbestos inspector to identify asbestos-containing materials in accordance with EPA Standard 40 CFR 763, Sub Part E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. The survey includes the collection of bulk samples of friable

(easily crumbled under hand pressure) and non-friable materials suspected as containing asbestos for laboratory testing. A minimum of three bulk samples will be collected from each homogeneous area (i.e., materials with similar color and texture). Additional samples of surfacing materials (e.g., wall plaster, fireproofing, textured coatings, etc.) may be required based on EPA regulations. Samples will be analyzed using "Positive Stop" methodology. If one sample of a homogeneous material is found 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.

Roof and exterior materials are included in this survey. Roof patching will be performed by the surveyor unless told otherwise, thereby releasing ECS from any liability in regards to future roof leaks or the voiding of the roof warranty.

All of the collected samples will be submitted to a laboratory for analysis by polarized light microscopy (PLM) in accordance with EPA testing methods. Samples will be analyzed by EPA method (EPA 600/4-93/116) Determination of Asbestos in Bulk Building Materials or EPA Method (EPA 600M4-82-020) for the Determination of Asbestos in Bulk Insulation Samples. The laboratory is accredited by the U.S. Department of Commerce, National Institute of Standards and Technologies, National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos identification by PLM.

The results of the asbestos bulk sampling will be included in a written survey report detailing pertinent observations made while on-site, estimated quantities of ACMs, estimated cost of abatement and recommendations for removal prior to demolition activities.

REPORTING

One report for the survey will be prepared outlining the results of our testing, observations, and findings. The report will include locations, estimated quantities, and recommendations for pre-demolition remediation,. A copy of the survey report will be forwarded electronically upon completion of the project in addition to two hard copies of the report.

COSTS

The cost for performance of the tasks that have been outlined above is attached.

SCHEDULE

Our proposed scope of work can be initiated after we receive formal authorization to proceed. We anticipate that the proposed investigation for the subject site can be completed within 10 business days of authorization to proceed.

Attached to this letter, and an integral part of our proposal, are our "General Conditions of Service." These conditions represent the current recommendations of the Association of Soil and Foundation Engineers, the Consulting Engineers' Council, and the Geotechnical Division of the American Society of Civil Engineers.

This letter is the agreement for our services. Your acceptance of this proposal may be indicated by signing and returning the enclosed copy to us. If you have any questions or comments, please feel free to contact us.

Respectfully,

ECS MID-ATLANTIC, LLC

Beverly E. Sedon
Senior Environmental Scientist

William R. Leonard, C.P.G.
Environmental Group Manager

Enclosures: Table I – Total Estimated Costs
Proposal Acceptance
General Conditions of Service

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TABLE 1 – TOTAL ESTIMATED COSTS

LIMITED ASBESTOS SURVEY
JOHN ADAMS ELEMENTARY SCHOOL CAPACITY WORK
5651 RAYBURN AVENUE
ALEXANDRIA, VIRIGNIA

ECS PROPOSAL NO. 01:33584-EP

1.	Limited Asbestos Survey Senior Environmental Scientist (5 hours x $85.00/hour)	$ 425.00
2.	Asbestos Bulk Samples Analyzed by PLM (2-day Turn around Time) (30 samples x $11.00/sample)**	$ 330.00
3.	Travel/Mileage	$ 50.00
4.	Report Preparation	$ 450.00
TOTAL ESTIMATED COST FOR ALL TASKS AND SERVICES PROPOSED		**$ 1,255.00**

**ECS estimates a total of 30 PLM samples will be analyzed based on experience with projects of similar size and building construction. ECS will only invoice for samples analyzed. If samples exceed 50, ECS will contact the client for approval prior to analysis.

PROPOSAL ACCEPTANCE

Proposal No.: 01:33584-EP
Scope of Work: Limited Asbestos Survey
Location: John Adams Elem. School Capacity Work
Alexandria, Virginia

Client Signature: _____ Date: 3/1/2010

Please complete this page and return one copy of this proposal to ECS to indicate acceptance of this proposal and to initiate work on the above-referenced project. The Client's signature above also indicates that he/she has read or has had the opportunity to read the accompanying Terms and Conditions of Service and agrees to be bound by such Terms and Conditions of Service.

BILLING INFORMATION
(Please Print or Type)

Name of Client: HITT Contracting
Name of Contact Person: Joe Zanone
Telephone No. of Contact Person: 703-846-9010
Party Responsible for Payment: Suzanne Gaglyon
Company Name: HITT Contracting
Person/Title: Joe Zanone / Project Manager
Department: Institutional
Billing Address: 2900 Fairview Park Dr
Falls Church, VA 22042

Telephone Number: 703-846-9000
Fax Number: 703-846-9110
Client Project/Account Number: 49469
Special Conditions for Invoice: N/A
Submittal and Approval: _____

ECS offers a full array of services to assist you with *all* phases of your project, including but not limited to:

□ *Phase I, II and III Environmental Site Assessments*	□ *Third Party Mechanical, Electrical, Plumbing Inspections Services*	□ *Building Envelope, Roofing, and Waterproofing Inspection and Consultation*
□ *Archaeological Assessments*	□ *Geotechnical Engineering Services*	□ *Pre- and Post-Construction Condition Assessments*
□ *Wetlands Delineations*	□ *Construction Materials Testing*	□ *Specialty Materials and Forensics Testing*
□ *Asbestos/Lead Paint Services*	□ *Septic/Drainfield Design Services*	
□ *Indoor Air Quality Mold Services*	□ *LEED® Consulting Services*	

Please indicate any of the services you are interested in and a member of the ECS team will contact you to discuss how we can be of service to your project.

ECS MID-ATLANTIC, LLC
TERMS AND CONDITIONS OF SERVICE

These Terms and Conditions of Service, including any supplements that may be agreed to, along with the accompanying Scope of Services and Professional Fees constitute the entire Agreement ["AGREEMENT"] under which Services are to be provided by ECS Mid-Atlantic, LLC ["ECS"] (including its employees, officers, successors and assigns) for Client ["CLIENT"] (including its employees, officers, successors and assigns).

1.0 INDEPENDENT CONSULTANT STATUS

1.1 Except as may be otherwise noted herein, ECS shall serve as an independent professional consultant to CLIENT and shall have control over, and responsibility for, the means and methods for providing the Services under this AGREEMENT, including the retention of Subcontractors and Subconsultants. Unless expressly stated in ECS' Scope of Services, ECS shall not serve as CLIENT'S agent or representative.

2.0 SCOPE OF SERVICES

2.1 It is understood that the Scope of Services, Professional Fees, and time schedule defined in the Scope of Services are based on information provided by CLIENT and/or CLIENT'S contractors and consultants. CLIENT acknowledges that if this information is not current, is incomplete or inaccurate, or if conditions are discovered that could not be foreseen by a reasonable person, the Scope of Services may change, even while the Services are in progress.

3.0 STANDARD OF CARE

3.1 ECS shall strive to perform its professional Services in a manner consistent with that level of skill and care ordinarily exercised by competent members of the same profession providing similar Services in the same region, under similar conditions during the same time period. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this AGREEMENT, or in any ECS report, opinion, plan or other Document of Service, in connection with ECS' Services.

3.2 CLIENT understands and agrees that ECS' professional judgment must rely on the facts learned during performance of the Scope of Services. CLIENT acknowledges that such data collection is limited to the immediate area that is sampled, tested and/or observed. Consequently, CLIENT agrees that it shall not bring a claim, based upon facts subsequently learned, regarding conditions between sampling/testing points, in areas not evaluated by ECS, or which were not part of the immediate area(s) explicitly evaluated by ECS.

3.3 ECS' professional Services shall be provided in a manner consistent with sound engineering and professional practices. If a situation arises that causes ECS to believe compliance with CLIENT'S wishes could result in ECS violating applicable Laws or Regulations, or will expose ECS to claims or other charges, ECS shall so advise CLIENT. If CLIENT'S actions or inaction result in a violation of applicable Laws or Regulations, ECS shall have the right to terminate its Services in accordance with the TERMINATION provisions of this AGREEMENT.

3.4 If CLIENT decides to disregard ECS' recommendations with respect to complying with applicable Laws or Regulations, ECS shall determine if ECS is required to notify the appropriate public officials. CLIENT agrees that such determinations are ECS' sole right to make. CLIENT also agrees that ECS shall not bear liability for failing to report conditions that are CLIENT'S responsibility to report.

4.0 CLIENT DISCLOSURES

4.1 CLIENT shall furnish and/or shall direct CLIENT'S consultant(s) or agent(s) to furnish ECS information identifying the type and location of utility lines and other man-made objects known, suspected, or assumed beneath the Site's surface, where the Scope of Services requires ECS to penetrate the Site surface.

4.2 CLIENT shall notify ECS of any known, assumed, or suspected regulated, contaminated, or Hazardous Materials that may exist at the Site prior to ECS mobilizing to the Site. Such Hazardous Materials shall include but not be limited to any substance which poses or may pose a present or potential hazard to human health or the environment whether contained in a product, material, by-product, waste, or sample, and whether it exists in a solid, liquid, semi-solid or gaseous form ["Hazardous Materials"].

4.3 If any Hazardous Materials are discovered, or are reasonably suspected by ECS after its Services are initiated, a Changed Condition shall exist.

5.0 INFORMATION PROVIDED BY OTHERS

5.1 CLIENT waives any claim of liability against ECS regarding any claim for injury or loss allegedly arising from errors, omissions, or inaccuracies in documents and other information in any form provided to ECS, including such information that becomes incorporated into ECS Documents of Service.

6.0 CONCEALED RISKS

6.1 CLIENT acknowledges that special risks are associated with the identification of concealed conditions [i.e., subsurface conditions, conditions behind a wall, etc., that are hidden from view, are not readily apparent, or cannot be accessed for sampling/testing].

6.2 Conditions that ECS infers to exist between sampling/testing points may differ significantly from the conditions that exist at the sampling/testing points. Since some conditions can change substantially over time, the CLIENT recognizes that, because of natural occurrences or human intervention at or near the Site, actual conditions discovered through sampling/testing may be subject to rapid or gradual change.

6.3 ECS will make reasonable efforts to anticipate and identify potential concealed conditions for exploration, sampling or testing. However, CLIENT understands that such risks cannot be eliminated and agrees that the Scope of Services is that which CLIENT agrees suits CLIENT'S own risk tolerances. CLIENT may request ECS to evaluate the risks and provide a higher level of exploration to reduce such risks, if desired or appropriate.

7.0 RIGHT OF ENTRY/DAMAGE RESULTING FROM SERVICES

7.1 CLIENT warrants that it possesses the authority to provide right of entry permission for the performance of ECS' Services. CLIENT hereby grants ECS and its subcontractors and/or agents, the right to enter from time to time onto the property owned by CLIENT and/or other(s) in order for ECS to perform the Scope of Services.

7.2 Except where ECS' Scope of Services explicitly includes obtaining permits, licenses, and/or utility clearances for the performance of ECS' Services, CLIENT warrants that it possesses all necessary permits, licenses and/or utility clearances for the Services to be provided by ECS.

7.3 ECS will take reasonable precautions to limit damage to the Site and Improvements during the performance of ECS' Services. CLIENT understands that use of exploration, sampling, or testing equipment may cause some damage, the correction and restoration of which is not part of this AGREEMENT, unless explicitly stated in ECS' Scope of Services, and reflected in the Professional Fees.

7.4 CLIENT agrees that it will not bring any claims for liability or for injury or loss allegedly arising from procedures associated with exploration, sampling or testing activities, or discovery of Hazardous Materials, or suspected Hazardous Materials, or ECS' findings, conclusions, opinions, recommendations, plans, and/or specifications related to discovery of contamination.

8.0 UNDERGROUND UTILITIES

8.1 In addition to CLIENT-furnished information regarding underground utilities, ECS shall take reasonable and locally customary precautions, possibly including contacting local public and/or private utility locating services, and/or conducting research of publicly available information, to identify underground utilities, as deemed appropriate in ECS' professional opinion. The extent of such precautions shall be at ECS' sole discretion.

8.2 CLIENT recognizes that despite due care, ECS may be unable to identify the locations of all subsurface utility lines and man-made features, and that information obtained by ECS and/or ECS' subcontractor(s) or provided to ECS from any entity may contain errors or be incomplete.

8.3 CLIENT agrees that ECS shall not be liable for damage or injury, consequential economic damages, and/or penalties resulting from damage to subterranean structures (pipes, tanks, cables, or other utilities, etc.) which are not called to ECS' attention in writing and correctly shown on the diagram(s) furnished by CLIENT or CLIENT'S consultants, or for underground features not marked, or improperly located by governmental or quasi-governmental locators, utility owners, or private utility locating services.

9.0 SAMPLES

9.1 Soil, rock, water, building materials and/or other samples and sampling by-products obtained from the Site are the property of CLIENT. ECS will store samples not consumed in laboratory testing for up to sixty (60) calendar days after the issuance of any document containing data obtained from those samples, unless other arrangements are mutually agreed upon in writing. Samples consumed by laboratory testing procedures will not be stored as outlined above.

9.2 Unless CLIENT directs otherwise, CLIENT authorizes ECS to dispose of CLIENT'S non-hazardous samples and sampling or testing process byproducts in accordance with applicable Laws.

10.0 ENVIRONMENTAL RISKS

10.1 All substances on, in, or under CLIENT'S Site, or obtained from CLIENT'S Site as samples or as byproducts of the sampling process, are and will remain CLIENT'S property.

10.2 When Hazardous Materials are known, assumed, or suspected to exist at the Site, ECS shall take appropriate precautions deemed prudent in ECS' sole and professional opinion to comply with applicable Laws and Regulations, and to reduce the risks to ECS' employees, public health, safety, and welfare, and the environment. CLIENT agrees to compensate ECS for such precautions.

10.3 When Hazardous Materials are known, assumed, or suspected to exist at the Site, ECS will handle such materials as Hazardous Materials. ECS or ECS' subcontractors will containerize and label such Materials in accordance with applicable Law, and will leave the containers on Site. CLIENT is responsible for the retrieval and lawful removal, transport and disposal of such contaminated samples, and sampling process byproducts.

10.4 Unless explicitly stated in ECS' Scope of Services, ECS shall not subcontract nor arrange for the transport, disposal, or treatment of Hazardous Materials. At CLIENT'S request, ECS may assist CLIENT in identifying appropriate alternatives for transport, off-site treatment, storage, or disposal of such substances, but CLIENT, not ECS, shall make final selection of methods and firms to provide such services. CLIENT shall sign all manifests for the disposal of substances affected by Hazardous Materials contaminants and shall otherwise exercise prudence in arranging for lawful disposal.

10.5 In those instances where ECS is expressly retained by CLIENT to assist CLIENT in the disposal of Hazardous Materials, samples, or wastes, ECS shall do so only as CLIENT'S agent (notwithstanding any other provision of this AGREEMENT to the

contrary) so that ECS shall not assume the role of, nor be considered a generator, storer, transporter, or disposer of Hazardous Materials.

10.6 Subsurface sampling may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or excavation/boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous body not previously contaminated, or connects an uncontaminated zone with a contaminated zone. Because sampling is an essential element of ECS' Services indicated herein, CLIENT agrees this risk cannot be eliminated. CLIENT will not hold ECS liable for such cross-contamination if ECS provides its Services in accordance with the applicable Standard of Care.

10.7 CLIENT understands that a Phase I Environmental Site Assessment (ESA) is conducted solely to permit ECS to render a professional opinion about the likelihood of the site having a Recognized Environmental Condition on, in, beneath, or near the Site at the time the Services are conducted. No matter how thorough a Phase I ESA study may be, findings derived from its conduct are highly limited and ECS cannot know or state for an absolute fact that the Site is unaffected by one or more Recognized Environmental Conditions. Given the foregoing, CLIENT'S acceptance of this AGREEMENT shall signify that CLIENT understands the limitations associated with Phase I ESAs.

11.0 OWNERSHIP OF DOCUMENTS

11.1 With the exception of the copies of the ECS Documents of Service provided to the CLIENT, all documents, technical reports, letters, photos, boring logs, field data, field notes, laboratory test data, calculations, designs, plans, specifications, reports, or similar documents and estimates of any kind furnished by ECS ["Documents of Service"] maintained in any form deemed appropriate by ECS, are and remain, the property of ECS.

11.2 Any exploration, reconnaissance, data review, observations, testing, surveys or similar Services, analyses and recommendations associated with the Services shall be provided by ECS (including subcontracted Services) for the CLIENT'S sole use. CLIENT understands and agrees that any use of the Documents of Service by anyone other than the CLIENT is not permitted.

11.3 CLIENT agrees to not use ECS' Documents of Service for any other projects, or for the Project which has changed in scope, or extensions of the Project, from the details contemplated in ECS' Documents of Service. Any reuse without ECS' written consent shall be at CLIENT'S sole risk and without liability to ECS or to ECS' subcontractor(s).

11.4 CLIENT agrees that ECS' Documents of Service may not under any circumstances be altered by any party except ECS. CLIENT warrants that ECS' Documents of Service shall be used only and exactly as submitted by ECS.

11.5 Except for daily field reports and concrete test reports sent electronically by ECS to CLIENT and CLIENT'S designees, the following shall apply to all electronic files: Files in electronic media format of text, data, graphics, or other types that are furnished by ECS are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies shall govern.

12.0 SAFETY

12.1 CLIENT agrees that ECS is responsible solely for the basic safety of ECS' employees on the Project Site. These responsibilities shall not be inferred by any party to mean that ECS has responsibility for any portion of site safety for any reason. Unless otherwise expressly agreed to in writing, ECS' Scope of Services excludes responsibility for any aspect of site safety other than for ECS' own employees, and nothing herein shall be construed to relieve CLIENT and/or its other contractors, consultants, or other parties from their responsibility for the safety of their own employees. For active construction sites, CLIENT also agrees that the General Contractor is solely responsible for Project Site safety, and that ECS personnel rely on the safety measures provided by the General Contractor.

12.2 In the event ECS expressly assumes health and safety responsibilities for toxic or other concerns specified, the acceptance of such responsibility does not and shall not be deemed an acceptance of responsibility for any other health and safety requirements, such as those relating to excavating, trenching, shoring, drilling, backfilling, blasting, or other construction activities.

13.0 CONSTRUCTION TESTING AND REMEDIATION SERVICES

13.1 CLIENT understands that construction testing and observation Services are conducted to reduce, not eliminate, the risk of problems arising during or after construction or remediation, and that provision of such Services does not create a warranty or guarantee of any type.

13.2 Monitoring and/or testing Services provided by ECS shall not in any way relieve the CLIENT'S contractor(s) from their responsibilities and obligations for the quality or completeness of construction, nor for complying with applicable Laws and codes.

13.3 The professional activities of ECS, or the presence of ECS employees and subcontractors, shall not be construed to imply ECS has any responsibility for the means, methods, techniques, sequencing of construction, or procedures of construction selected, for safety precautions and programs incidental to the Contractor's Work. Furthermore, ECS does not and shall not have or accept authority to supervise, direct, control, or stop Contractor's Work.

13.4 ECS strongly recommends that CLIENT retain ECS to provide its Services on a full time basis to lower the risk of defective or incomplete Work being installed by CLIENT'S contractor(s). If CLIENT elects to retain ECS on a part time basis for any aspect of construction monitoring and/or testing, CLIENT accepts the increased risks that a significantly lower level of construction quality may occur and that such defects may not be undetected by ECS' part time observations. Therefore CLIENT waives any and all claims against ECS related to unsatisfactory quality or performance of elements observed or tested by ECS on a part time basis.

14.0 CERTIFICATIONS

14.1 CLIENT may request, or governing jurisdictions may require, ECS to provide a "certification" regarding Services provided by ECS. Any "certification" required of ECS by the CLIENT, or jurisdiction(s) having authority over some or all aspects of the Project, shall consist of ECS' inferences and professional opinions based on limited sampling, observations, tests, and/or analyses performed by ECS at discrete locations and times. ECS' "certification" shall consist of ECS' professional opinion of a condition's existence, but ECS does not guarantee that such condition exists, nor does it relieve other parties of responsibilities or obligations such parties have. CLIENT agrees not to make resolution of any dispute with ECS or payment of any amount due to ECS in any way contingent upon ECS signing any such "certification" documents.

15.0 BILLINGS AND PAYMENTS

15.1 Billings will be based on the unit rates, travel costs, and other reimbursable expenses stated in the Professional Fees. Any Estimate of Professional Fees stated in this AGREEMENT shall not be considered as a not-to-exceed or lump sum amount unless otherwise explicitly stated in this AGREEMENT.

15.2 Should ECS identify a Changed Condition, ECS shall notify the CLIENT of the Changed Condition(s) that in ECS' professional judgment require an amendment of the Professional Fees, time schedule, and/or Scope of Services. ECS and CLIENT shall promptly and in good faith negotiate an amendment to this AGREEMENT.

15.3 CLIENT recognizes that time is of the essence with respect of payment of ECS' invoices, and that timely payment is a material part of the consideration of this AGREEMENT. Payment shall be in U.S. funds drawn upon U.S. banks and in accordance with the rates and charges set forth in the Professional Fees. Invoices shall be due and payable upon receipt.

15.4 If CLIENT disputes all or part of an invoice, CLIENT shall provide ECS with written notice stating in detail the facts of the dispute within twenty-one (21) calendar days of the invoice date and agrees to pay the undisputed amount of such invoice promptly.

15.5 ECS reserves the right to charge CLIENT an additional charge of one-and-one-half (1.5) percent (or the maximum percentage allowed by Law, whichever is lower) of the invoiced amount per month for any payment received by ECS more than thirty (30) calendar days from the date of the invoice, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment will first be applied to accrued interest and then to the unpaid principal amount. Payment of invoices shall not be subject to unilateral discounting or set-offs by CLIENT.

15.6 CLIENT agrees that its obligation to pay for the Services is not contingent upon CLIENT'S ability to obtain financing, zoning, approval of governmental or regulatory agencies, permits, final adjudication of a lawsuit in which ECS is not involved, upon CLIENT'S successful completion of the Project, settlement of a real estate transaction, receipt of payment from CLIENT'S client, or any other event. Retainage shall not be withheld from any payment, nor shall any deduction be made from any invoice on account of penalty, liquidated damages, or other sums incurred by CLIENT. It is agreed that all costs and legal fees including actual attorney's fees, and expenses incurred by ECS in enforcing any provision of the AGREEMENT, in perfecting or obtaining a lien, recovery under a bond, collecting any delinquent amounts due, or executing judgments, shall be reimbursed by CLIENT.

15.7 Payment of any invoice by the CLIENT shall be taken to mean that the CLIENT agrees to the provisions of the AGREEMENT and is satisfied with ECS' Services and is not aware of any defects in those Services, unless CLIENT has provided notice to ECS in accordance with the DEFECTS IN SERVICE provisions of this AGREEMENT.

16.0 DEFECTS IN SERVICE

16.1 CLIENT and CLIENT'S personnel and contractors shall promptly inform ECS of any actual or suspected defects in ECS' Services, to help ECS take those prompt, effective measures that in ECS' opinion will help reduce or eliminate the consequences of any such defect. Corrections of defects attributable to ECS' Services shall be provided at no cost to CLIENT, except in the case that the deficiency is directly attributable to CLIENT-furnished information, CLIENT shall compensate ECS for the costs of correcting such defects.

16.2 Modifications to reports, documents and plans required as a result of jurisdictional reviews or CLIENT requests shall not be considered to be defects in Services. CLIENT shall compensate ECS for Additional Services required as a result of jurisdictional review requirements.

17.0 INSURANCE

17.1 ECS represents that it and its subcontractors and subconsultants are protected by Workers Compensation insurance, and that ECS is covered by general liability, automobile and professional liability insurance policies which it deems reasonable and adequate.

17.2 ECS shall furnish certificates of insurance upon request. The CLIENT is responsible for requesting specific inclusions or limits of coverage that are not present in ECS insurance, the cost of such inclusions or coverage increases, if available, will be at the expense of the CLIENT.

18.0 LIMITATION OF LIABILITY

18.1 CLIENT AGREES TO ALLOCATE CERTAIN OF THE RISKS ASSOCIATED WITH THE PROJECT BY LIMITING ECS' TOTAL LIABILITY TO CLIENT, SUBJECT TO AVAILABLE INSURANCE PROCEEDS, ARISING FROM ECS' PROFESSIONAL ACTS, ERRORS, OR OMISSIONS AND FOR ANY AND ALL CAUSES INCLUDING NEGLIGENCE, STRICT LIABILITY, BREACH OF CONTRACT, OR BREACH OF WARRANTY, INJURIES, DAMAGES, CLAIMS, LOSSES, EXPENSES, OR CLAIM EXPENSES (INCLUDING REASONABLE ATTORNEY'S FEES) UNDER THIS AGREEMENT TO THE FULLEST EXTENT PERMITTED BY LAW, AS FOLLOWS. For projects where ECS' Fee Estimate or proposed fees are:

18.1.1 $10,000 or less, ECS' total aggregate liability to CLIENT shall not exceed $5,000, or the total fee for the services rendered, whichever is greater.

18.1.2 In excess of $10,000, ECS' total aggregate liability to CLIENT shall not exceed $50,000, or the total fee for the services rendered, whichever is greater.

18.2 CLIENT agrees that ECS shall not be responsible for bodily injury and property damage or losses arising directly or indirectly, in whole or in part, from acts or omissions by the CLIENT, its employees, agents, staff, consultants or subcontractors or by any other person or combination of persons to the extent such injury, damage, or loss is caused by acts or omissions of CLIENT, its employees, agents, staff, consultants or subcontractors.

19.0 INDEMNIFICATION

19.1 ECS agrees, subject to the limitation of liability provisions of this AGREEMENT, to hold harmless and indemnify CLIENT from and against damages arising from ECS' negligent performance of its Services to the extent that such injury is found to be caused by ECS' negligent acts, errors or omissions, specifically excluding any damages caused by any third party or by the CLIENT.

19.2 To the fullest extent permitted by applicable Law, CLIENT agrees to indemnify, defend, and hold ECS harmless from and against any and all liability, claims, damages, demands, fines, penalties, costs and expenditures (including reasonable attorneys' fees and costs of litigation defense and/or settlement) ["Damages"] caused in whole or in part by the negligent acts, errors, or omissions of the CLIENT and CLIENT'S employees, agents, staff, contractors, subcontractors, consultants, and clients, provided such Damages are attributable to: (a) the bodily injury, personal injury, sickness, disease and/or death of any person; (b) injury to or loss of value to tangible personal property; or (c) a breach of this AGREEMENT, except to the extent such Damage is caused by the sole negligence or willful misconduct of ECS.

19.3 It is specifically understood and agreed that in no case shall ECS be required to pay an amount of Damages disproportional to ECS' culpability, or any share of any amount levied to recognize more than actual economic damages, subject to any limitations of liability and INDEMNIFICATION provisions contained in this AGREEMENT.

19.4 IF CLIENT IS A HOMEOWNER, HOMEOWNERS' ASSOCIATION, CONDOMINIUM OWNER, CONDOMINIUM OWNER'S ASSOCIATION, OR SIMILAR RESIDENTIAL OWNER, ECS RECOMMENDS THAT LEGAL COUNSEL BE RETAINED BY CLIENT BEFORE ENTERING INTO THIS AGREEMENT TO EXPLAIN CLIENT'S RIGHTS, AND THE LIMITATIONS, AND RESTRICTIONS IMPOSED BY THIS AGREEMENT. CLIENT AGREES THAT FAILURE OF CLIENT TO RETAIN SUCH COUNSEL SHALL BE A KNOWING WAIVER OF LEGAL COUNSEL AND SHALL NOT BE ALLOWED ON GROUNDS OF AVOIDING ANY PROVISION OF THIS AGREEMENT.

19.5 If CLIENT is a residential builder or residential developer, CLIENT shall indemnify, defend and hold harmless ECS against any and all claims or demands due to injury or loss initiated by one or more homeowners, unit-owners, or their homeowners' association, cooperative board, or similar entity against CLIENT which results in ECS being brought into the dispute.

20.0 CONSEQUENTIAL DAMAGES

20.1 CLIENT shall not be liable to ECS and ECS shall not be liable to CLIENT for any consequential damages incurred by either due to the fault of the other, regardless of the nature of the fault, or wherever committed by the CLIENT or ECS, their employees, consultants, agents, contractors or subcontractors, or whether such liability arises in breach of contract or warranty, tort (including negligence), Statute, or any other cause of action. Consequential damages include, but are not limited to, loss of use and loss of profit.

20.2 ECS shall not be liable to CLIENT, or any entity engaged directly or indirectly by CLIENT, for any liquidated damages due to any fault, or failure to act, in part or in total by ECS, its employees, agents, or subcontractors.

21.0 SOURCES OF RECOVERY

21.1 All claims for damages related to the Services provided under this AGREEMENT shall be made against the ECS entity contracting with the CLIENT for the Services, and no other person or entity. CLIENT agrees that it shall not name any affiliated entity including parent, peer, or subsidiary entity or any individual officer, director, or employee of ECS, unless such claims are based on acts unrelated to the provision of Services under this AGREEMENT.

21.2 CLIENT agrees that it will not seek Damages from any individual associated with ECS as an officer, principal, partner, employee, or owner, from any and all claims or liability for injury or loss that would require such individual to relinquish personal assets to satisfy such claim.

22.0 THIRD PARTY CLAIMS EXCLUSION

22.1 This AGREEMENT shall not create any rights or benefits to parties other than CLIENT and ECS. No third-party shall have the right to rely on ECS' opinions rendered in connection with ECS' Services without both CLIENT'S and ECS' written consent and the third-party's agreement to be bound to the same terms and conditions contained in this AGREEMENT as CLIENT, and third-party's agreement that ECS' Scope of Services performed is adequate.

23.0 DISPUTE RESOLUTION

23.1 All claims, disputes or controversies ["Disputes"] arising out of, or in relation to the interpretation, application or enforcement of this AGREEMENT shall be decided as follows:

23.1.1 CLIENT and ECS agree to attend a dispute resolution meeting within fourteen (14) days of identification of a Dispute by either party. CLIENT and ECS agree to negotiate in good faith to resolve the Dispute.

23.1.2 Should negotiation fail to resolve the dispute, CLIENT and ECS agree to mediate their dispute via a mediator selected by either party, and acceptable to both parties.

23.1.3 Should mediation fail to result in resolution of the Dispute, CLIENT and ECS agree that litigation may be brought by either party.

23.2 Should third-party dispute resolution be required, through mediation or litigation, the non-prevailing party shall reimburse the prevailing party for the prevailing party's documented legal costs, in addition to whatever other judgments or settlement sums may be due. Such legal costs include, but are not be limited to, reasonable attorney's fees, court costs, forensic consultants and expert witness fees, and other documented expenses.

23.3 Where legal action is brought by either party to resolve a dispute, the claim shall be brought and tried in the judicial jurisdiction of the county in which ECS' office contracting with the CLIENT is located. CLIENT waives the right to remove any litigation action to any other jurisdiction, unless mutually agreed to by both parties.

23.4 This AGREEMENT including all matters related to performance and remediation shall be interpreted according to the substantive Laws of the state of Virginia (but not including its choice of law rules).

24.0 CURING A BREACH

24.1 A party that believes the other has materially breached this AGREEMENT shall issue a written termination notice to the other, identifying the cause for termination within five (5) business days of identifying such cause. Both parties shall then bargain promptly and in good faith to cure such cause. If an acceptable cure can be achieved within fourteen (14) calendar days from the date of the termination notice, the parties shall commit their understandings to writing and termination shall not occur.

24.2 Either party may waive any right provided by this AGREEMENT in curing an actual or alleged breach; however, such waiver shall not affect future application of such provision or any other provision.

25.0 TERMINATION

25.1 CLIENT or ECS may terminate this AGREEMENT for breach of this AGREEMENT, or for any other reasons which may arise. In the event of termination, the party effecting termination shall so notify the other party in writing, and termination shall become effective fourteen (14) calendar days after receipt of the termination notice.

25.2 Irrespective of which party shall effect termination, or the cause therefore, ECS shall promptly render to CLIENT a final invoice and CLIENT shall immediately compensate ECS for Services rendered and costs incurred, in accordance with ECS' prevailing Fee Schedule and expense reimbursement policy. Services shall include those rendered up to the time of termination, as well as those associated with termination itself, including without limitation, demobilizing, modifying schedules, and reassigning personnel.

26.0 TIME BAR TO LEGAL ACTION

26.1 Unless prohibited by Law, and notwithstanding any Statute that may provide additional protection, CLIENT and ECS agree that claims by either party arising out of this AGREEMENT or the Services provided hereunder shall not be initiated more than two (2) years from the time the party knew, or should have known, of the condition giving rise to its claim, and shall under no circumstances be initiated more than three (3) years from the date of substantial completion of ECS' Services.

27.0 ASSIGNMENT

27.1 Except for Services normally or customarily subcontracted by ECS in the performance of its Services including, but not limited to surveyors, specialized consultants, drilling and excavating subcontractors, and testing laboratories, neither the CLIENT nor ECS may delegate, assign, sublet or transfer its duties, responsibilities or interests in this AGREEMENT without the written consent of the other party.

28.0 SEVERABILITY

28.1 Any provision of this AGREEMENT later held to violate a Law, Statute, or Regulation, shall be deemed void, and all remaining provisions shall continue in full force and effect. CLIENT and ECS shall endeavor to quickly replace a voided provision with a valid substitute that expresses the intent of, or at least addresses, the issues covered by the original provision.

29.0 TITLES

29.1 The titles used in this AGREEMENT are for general reference only and are not part of the AGREEMENT.

30.0 SURVIVAL

30.1 All obligations arising prior to the termination of this AGREEMENT and all provisions of this AGREEMENT allocating responsibility or liability between the CLIENT and ECS shall survive the substantial completion of Services and the termination of this AGREEMENT.

31.0 ENTIRE AGREEMENT

31.1 This AGREEMENT including the Scope of Services and Professional Fees and all exhibits, appendixes, and other documents appended to it, constitute the entire AGREEMENT between CLIENT and ECS. CLIENT acknowledges that all prior understandings and negotiations are superseded by this AGREEMENT. CLIENT acknowledges acceptance of these terms by submitting a CLIENT Work Authorization to ECS.

31.2 CLIENT and ECS agree that subsequent modifications to this AGREEMENT shall not be binding unless made in writing and signed by authorized representatives of both parties.

31.3 All preprinted Terms and Conditions on CLIENT'S purchase order or Work Authorization, or other service acknowledgement forms, are inapplicable and superseded by this AGREEMENT.

31.4 If CLIENT fails to provide ECS with a signed copy of this AGREEMENT or a Work Authorization, by the act of authorizing and accepting the services of ECS, CLIENT agrees to be fully bound by the terms of this AGREEMENT as if signed by CLIENT.

< END OF TERMS AND CONDITIONS OF SERVICE >

MasiMax
Resources, Inc.

THREE-YEAR REINSPECTION OF ASBESTOS-CONTAINING MATERIALS
ALEXANDRIA CITY PUBLIC SCHOOL SYSTEMS (ACPS)
John Adams Elementary School
August 10, 2007

MasiMax Resources Inc. – Environmental Health & Safety Services (MasiMax) conducted the Three Year Re-Inspection of Asbestos-Containing Materials (ACM) at the John Adams Elementary School on June 21, 2007. The purpose of the re-inspection was to assess the condition of all friable and non-friable Asbestos Containing Building Materials (ACBMs) listed as present from the previous triennial re-inspection.

The Scope of Work included a review of the Asbestos Operations & Management Plan (O&M), asbestos inspection and assessment of ACBM, and updated recommended response actions based on the condition of the ACBM.

All tasks were performed in accordance with re-inspection and assessment criteria established by the Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), 40 CFR, Part 763.85 and Part 763.88. Each homogeneous area of ACM identified by the previous triennial re-inspection report was inspected. Additionally, the quantity, type, current conditions and recommendations are provided in the table presented in Attachment A.

MasiMax's performed an assessment of the school's asbestos O&M to review if the information required by AHERA is present and current. A checklist of the assessment findings is presented in Attachment B. Included in the checklist is the Local Education Agency's (LEA) designated person listed in the on-site O&M plan; however, ACPS should verify if this information is current.

The re-inspection was conducted by Virginia state licensed asbestos inspectors. All work was directed and supervised by a Certified Industrial Hygienist (CIH) who is also licensed by the State of Virginia as an Asbestos Management Planner. Copies of the Virginia asbestos inspector and management planner licenses are presented in Attachment C.

Under the AHERA requirements 763.93, a copy of the triennial re-inspection report shall be included in the ACPS's Management Plan. In addition, all six (6) month periodic inspection reports, response actions conducted at the school, and personnel training records shall be included in the Management Plan. It is the responsibility of the LEA designated person to ensure the Management Plan is updated regularly and made available to any interested party.

Mark Schneider, CIH, PG, LAC
VA Management Planner # 3304 001536
Exp. 06/30/2008

Bjarne Smith
VA Asbestos Inspector # 3303 002764
Exp. 08/31/2007

Amy Chang
VA Asbestos Inspector # 3303 002399
Exp. 05-31-2008

Corporate Headquarters
1375 Piccard Drive • Suite 175 • Rockville, MD 20850
Phone: 240-632-0610 • Fax: 240-632-0519 • www.masimax.com

Environmental Health and Safety Services
11417 Sunset Hills Road • Suite 225 • Reston, VA 20190
Phone: 571-203-7766 • Fax: 571-203-7911

CHECKLIST FOR ALEXANDRIA CITY PUBIC SCHOOLS AHERA MANAGEMENT PLANS

SCHOOL NAME: John Adams

Yes No

■ ☐ Name and address of school, including a statement of whether the facility has friable, non-friable ACBM, suspect friable ACBM, or suspect non-friable ACBM.

Comments: _____

Yes

■ LEA – Designated Person

Name: William Simms Phone #: 703-836-7565

Yes No

■ ☐ Initial Inspection Reports including:

- Date of inspection;
- Diagram or description of ACBM material locations;
- Bulk sample analysis report;
- Initial response action recommendations;
- Assessment of asbestos materials; and,
- Signature, state, and accreditation # of inspector(s).

Comments: _____

Yes No

☐ ■ Records of all response actions for the last three (3) years (or longer), including:

- Detailed description of response actions;
- Air sample results;
- Signature, state, and accreditation of air sampler;
- Signature, state and accreditation of designer; and,
- Signature, state, and accreditation of contractor.

Comments: Also did not have record of Boiler Room abatement.

Yes No

■ ☐ Recommendations for all response actions.

Comments: _____

Yes No

■ ☐ Signature, State, and accreditation of Management Planner, Inspector(s), Designer(s), and Contractor(s) for initial and all re-inspections.

Comments: 2004 re-inspection report present.

Yes No

☐ ■ 6-Month O&M Inspections

Comments: Only six month inspection record for 1990.

Inspector (s): Bjarne Smith and Amy Chang Date: 6/21/2007

Management Planner: _____ Date: 08/21/2007

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
1st flr. entire perimeter	Spray-on Insulation	ALL	Gray	ALL	ALL	Along I-beams above windows, throughout Marked	2	Yes	Yes	Throughout	ALL	Air Erosion	O & M
Boiler Room	TSI-boiler insulation	ALL	N/A	2	EA	Boilers 1 & 2. boiler abated.	1	Yes	Yes	Throughout	8 SF	Distributed	Verify Removal
Boiler Room	TSI-tank insulation	ALL	N/A	1	EA	New fiberglass insulation on tank	5	Yes	No	N/A	N/A	N/A	N/A
Boiler Room	TSI-elbows, joints	ALL	N/A	10	EA	Labeled as ACM. Many replaced,reduced to 10 each.	1	Yes	Yes	Throughout	3 EA	Impact	Repair/Remove
Boiler Room	TSI-elbow	3 in	White	50	EA	(3" water line-silver). Reduced to 20 each, some replaced	5	No	No	N/A	N/A	N/A	O & M

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Boiler Room	Pipe fitting insulation	ALL	Gray	20	EA	Elbows-suspect, 1(18") elbow previously sampled,	5	No	No	N/A	N/A	N/A	O & M
Boiler Room	Breaching Insulation	ALL	White	600	SF	Unable to locate in 2007	5	No	No	N/A	N/A	N/A	Verify Repair/Removal
Ground floor Elec. room (near kitchen/room 121 in old drawing)	Vibration Damper	ALL	White	1	EA	Unable to locate.	5	No	No	N/A	N/A	N/A	O & M
Gym	TSI -4 vibration dampers & 18 elbows	ALL		N/A	N/A	Unable to locate	5	No	No	N/A	N/A	N/A	Verify Repair/Removal
Gym & Throughout - Above Ceiling Tiles	TSI-elbow	6 in	N/A	ALL	EA	Wrapped with Duct Tape. Good Condition.	5	No	No	N/A	N/A	N/A	O & M

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Gym Men Locker Old Bathroom Area/Book Storage	TSI		White			3" elbow PACM GC, 4" elbows-men's rm & 5 fittings.	5	No	No	N/A	N/A	N/A	O & M
Hallway outside room 8 (room 121 in old drawing)_	Floor Tile	9x9	Green	10	SF	Carpeted/tiled over or removed	5	No	No	N/A	N/A	N/A	O & M
Hallway outside room 8 (room 121 on old drawing)	Floor Tile	9x9	Black	10	SF	Carpeted/tiled/removed	5	No	No	N/A	N/A	N/A	O & M
Hallways	Fire Doors	door	Various	ALL	ALL	Metal & wood	5	No	No	N/A	N/A	N/A	O & M
Incinerator Room	Ceiling	ALL	Gray	100	SF	No access; Currently used as a storage room	0	No	Yes	N/A	1 sq. feet	N/A	O & M

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Room 114-16, 206-13, inner halls	Spray-on insulation	ALL	Gray	1400	SF	In rooms, along walls & above windows: minor debris.	2	Yes	Yes	Throughout	1400 SF	Air Erosion	Repair/Remove
Room 129	Cementitious countertop surface	ALL	Gray	75	SF	Still present	5	No	No	N/A	N/A	N/A	O & M
Shop 1	TSI-vibration damper					Under renovation-inaccessible	5	No	No	N/A	N/A	N/A	O & M
Throughout - Above Ceiling Tiles	Black Mastic on Fiberglass insulated pipes	ALL	Black	ALL	ALL	Good condition	5	No	No	N/A	N/A	N/A	O & M

PROPOSAL REGISTRATION

Office#	01	Start	03/01/2010	Dept/Team	6/
Proposal/Rev	33584 /	Complete	03/30/2010	Assigned to	BES
Registered	03/01/2010	Signed No	Estimate 1,250.00	Registered by	BES
Project Name	John Adams Elementary School Ltd Asbestos Survey			Principal Engr	WRL
Address	5651 RayburnAvenue			Market SubSect	19
City	Alexandria	State VA Zip 22311-		ECS Function	17
County		Miles	Tvl Time	Estimate Type	1
Map Book	Page	Grid	Lat 38.8327112 Long -77.121658	Report Type	6
				Skill Profile	

PROPOSED CLIENT

Client # (& Type)	Name & Address	Contact Name & Phone Numbers
GENERAL CONTRACTOR 01:0618-03 (32)	HITT Contracting 2900 Fairview Park Drive Falls Church, VA 22042	Mr. Nick Tose Voice (703)846-9000 Direct (703)846-9075 ← Cell Fax (703)846-9110

Email: ntose@hitt-gc.com

H.H Supt. - Ralph 703-929-7333

Notes:

Spray on Fire Proof 5 48 hr TAT

3

CTs

Pipe Mastic 3

Pipe Insul 3

6

FT

Cove base 6

Wednesday Evening

Pipe 3 per

** - Actual Mileage/Travel Time from Project Data Sheet

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 303/0JAE-1A - 303/0JAE-8C **Total Samples #:** 28

Relinquished: _____ **Date:** 3/3/10 **Time:** _____

Received: _____ **Date:** _____ **Time:** _____

Relinquished: _____ **Date:** _____ **Time:** _____

Received: _____ **Date:** _____ **Time:** _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
303/0JAE-1A	FIRE PROOFING Ceiling Tile South	
1B	South Wall	
1C	WEST	
1D	WEST	
1E	WEST	
1F	EAST	
1G	EAST	
2A	Ceiling Board SOUTH	
2B	SOUTH	
2C	WEST	
3A	Ceiling Tile SOUTH	
3B	WEST	
3C	EAST	
4A	Pipe Insulation/Mastic SOUTH	

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Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Company:	ECS Mid-Atlantic, LLC	***Bill To:***	ECS Mid-Atlantic, LLC
Address1:	915 Maple Grove Drive	*Address1:*	915 Maple Grove Drive
Address2:	Suite 206	*Address2:*	Suite 206
City, State:	Fredericksburg, VA	*City, State:*	Fredericksburg, VA
Zip/Post Code:	22407	*Zip/Post Code:*	22407
Country:	USA	*Country:*	USA
Contact Name:	~~Beverly Sedon~~ Douglas Brown	*Attn:*	~~Beverly Sedon~~ Douglas Brown
Phone:	540-785-6100	*Phone:*	540-785-6100
Fax:	540-785-3577	*Fax:*	540-785-3577
Email:	~~bsedon@ecslimited.com~~	*Email:*	~~bsedon@ecslimited.com~~
EMSL Rep:	Sherl Steinman	***P.O. Number:***	~~[illegible]~~ 10977-A
Project Name/Number:	Josh Dolan, ES	10977-A	

MATRIX			TURNAROUND			
Air	**Soil**	**Micro-Vac**	**3 Hours**	**6 Hours**	**Same Day or 12 Hours***	**24 Hours (1 day)**
Bulk	**Drinking Water**		**48 Hours (2 days)**	**72 Hours (3 days)**	**96 Hours (4 days)**	**~~120~~ Hours (5 days)**
Wipe	**Wastewater**		**~~144~~ hours (6-10 days)**			

TEM AIR, 3 hours, 6 hours. Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

12 hours (must arrive by 11:00a.m. Mon -Fri.). Please Refer to Price Quote

PCM - Air	**TEM Air**	**TEM WATER**
NIOSH 7400(A) Issue 2: August 1994	AHERA 40 CFR, Part 763 Subpart E	EPA 100.1
OSHA w/TWA	NIOSH 7402	EPA 100.2
Other:	EPA Level II	NYS 198.2
PLM - Bulk	**TEM BULK**	**TEM Microvac/Wipe**
EPA 600/R-93/116	Drop Mount (Qualitative)	ASTM D 5755-95 (quantative method)
EPA Point Count	Chatfield SOP - 1988-02	Wipe Qualitative
NY Stratified Point Count	TEM NOB (Gravimetric) NYS 198.4	
PLM NOB (Gravimetric) NYS 198.1	EMSL Standard Addition:	**XRD**
NIOSH 9002:		Asbestos
EMSL Standard Addition:	**PLM Soil**	Silica NIOSH 7500
SEM Air or Bulk	EPA Protocol Qualitative	
Qualitative	EPA Protocol Quantitative	**OTHER**
Quantitative	EMSL MSD 9000 Method (fibers count	

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 303GJAE -1A - 303GJAE - EC **Total Samples #:** 25

Relinquished: _____ **Date:** 3/3/10 **Time:** 7:00 AM

Received: _____ **Date:** _____ **Time:** _____

Relinquished: _____ **Date:** _____ **Time:** _____

Received: _____ **Date:** _____ **Time:** _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
303GJAE -4B	Pipe Insulation Behind MIRROR EAST WALL	
4C	"	WEST WALL
5A	Pipe Elbow insul.	WEST
5B	"	WEST
5C	"	East
6A	Window Caulk	SOUTH
6B	"	SOUTH
6C	"	WEST
7A	Yellow 12" x 12" FLOOR TILE + MASTIC	SOUTH
7B	"	WEST
7C	"	East
8A	9" Gray Floor TILE + MASTIC	East
8B	"	North
8C	"	East

ECS LLC
MID-ATLANTIC
CALCULATION SHEET

PROJECT:			FIGURE NO.
TITLE: John Adams			JOB NO.
			SCALE:
BY:	DATE:	APPROVED BY:	DATE

30310 JAE - 1A ~~1A~~ fireproofing 1F EAST wall
1B South wall 1G "
1C "
1D + 1E - west wall

30310-JAE 2A Upper cieling board South wall
2B south wall
2C west wall

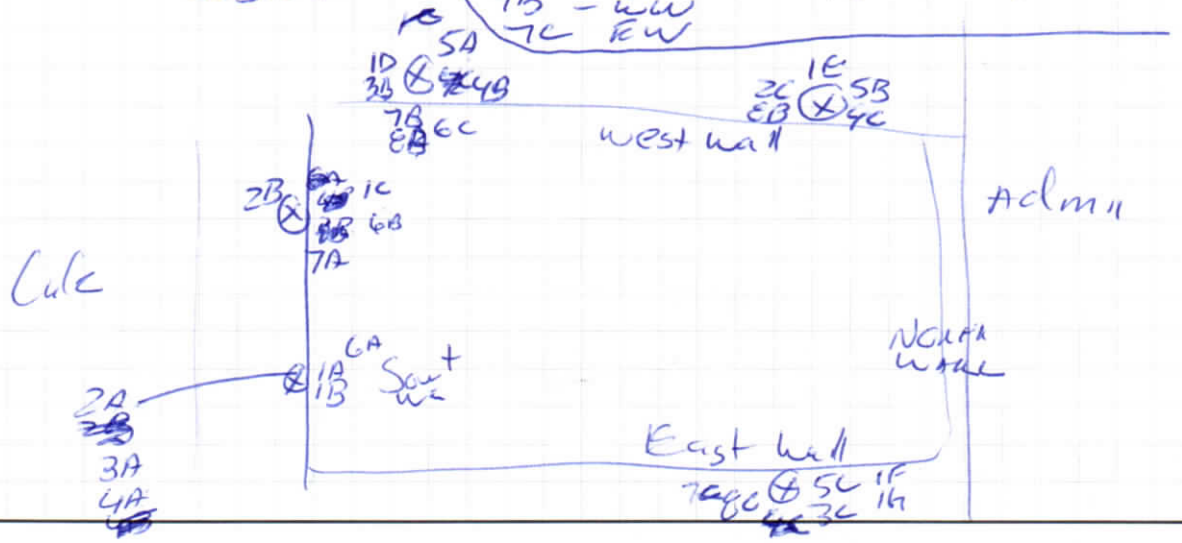
30310JAE 3A CT Pinhole Patch 2'x4' SW
3B " " WW
3C " " EW

30310JAE 4A Pipe insulation with BLACK MASTIC - SW
4B ~~B~~ wall E. WALL
4C W.W all

30310JAE 5A PIPE ELBOW BLACK MASTIC west wall
5B west wall
5C EAST WALL

30310JAE 6A-6C A Window Caulking S + western 6A 6B SW 6C WW

30310JAE ~~7A-7C~~ 7A Yellow 12x12 FT SW
7B - WW
7C EW



ECS LLC
MID-ATLANTIC
CALCULATION SHEET

PROJECT:			FIGURE NO.
TITLE:			JOB NO.
			SCALE:
BY:	DATE:	APPROVED BY:	DATE

30310 JAK EA-~~2~~ - Gray 4" Cove Bases
EB
EC



LIMITED ASBESTOS-CONTAINING MATERIALS SURVEY
JOHN ADAMS ELEMENTARY SCHOOL
5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA

ECS PROJECT NO. 01:10977-A

FOR

HITT CONTRACTING

MARCH 15, 2010

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

March 15, 2010

Mr. Joe Zanone
Hitt Contracting
2900 Fairview Park Drive
Falls Church, Virginia 22042

ECS Project No. 01:10977-A

Reference: Limited Asbestos Containing Materials Survey, John Adams Elementary School, 5651 Rayburn Avenue, Alexandria, Virginia.

Dear Mr. Zanone:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Hitt Contracting with the results of the Limited Asbestos-Containing Materials Survey for the above referenced property. The survey was performed in general conformance with ECS Proposal No. 01:33584-EP, dated March 1, 2010. The following is a summary of our survey, testing procedures, and recommendations.

The purpose of this survey was to determine the presence and general location of asbestos-containing materials (ACM) within the hallway corridors at the courtyard area. ECS personnel performed the survey on March 3, 2010.

STRUCTURE DESCRIPTION

The survey was limited to the interior of the hallways along the existing courtyard adjacent to the office area. The hallways are reportedly proposed for renovations to allow access to the courtyard area for the addition of a modular classroom. The survey was performed to assist Hitt Contracting with the evaluation of building materials for presence of asbestos during renovation operations.

During the survey, the building was occupied and in use. ECS attempted to access all building materials within the areas surveyed. However, due to the destructive means required to access all materials, certain areas in (i.e., sub-grade sealants, behind walls and ceilings, pipe chases, flooring located below underlayments, etc.) were deemed inaccessible and were not inspected. The survey was limited to the hallway areas surrounding the courtyard. The exterior roof is not proposed to be disturbed.

The interior of the hallways consist of structural steel, concrete and masonry walls, ceiling plaster, gypsum wallboards, fireproofing, fiberglass pipe insulation, floor tile and mastic, cove bases, and a concrete slab-on-grade. The exterior finishes consisted of concrete and masonry walls, sealants, metal window and door frames, and roofing materials.

SAMPLING METHODS AND RESULTS

Asbestos Survey and Laboratory Procedures

A survey of the above referenced portions of the building to identify ACMs was performed by EPA Accredited Asbestos Building Inspector Mr. Douglas Finch (VA Asbestos Inspector No. 3303-3186) on March 3, 2010. The survey consisted of walking through the assigned areas to observe accessible areas for the presence of suspect materials that may contain asbestos and collecting bulk samples of those materials.

The asbestos survey involved sampling both friable materials (materials which can be pulverized or reduced to a powder by hand pressure when dry) and non-friable materials. The collected samples were submitted to Scientific Analytical Institute, Inc (SAI) of Greensboro, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) (Method No. EPA 600/R-93/116). Sample sets of more than one sample were submitted for analysis utilizing "stop-positive" methods. If any of the samples in a set are determined to contain greater than or equal to one percent (1%) asbestos, the remainder of that set are assumed to be asbestos containing, and therefore are not analyzed. Materials consisting of multiple layers or components are separated and each layer or component is analyzed individually by the laboratory. The materials sampled, the approximate quantities, and the laboratory results are included in the attachments and attached table.

A total of 34 suspect materials were collected for analysis. Several of the samples contained multiple layers. A summary of materials reported to contain asbestos, is listed below in Table 1. A complete list of all materials sampled is summarized in Table 2 attached to this report. The laboratory analysis and chain of custody are also attached to this report.

Table 1: Asbestos-Containing Materials

Location	Material	Friability
Hallways Above Ceiling Tile (Typical)	Fireproofing	Friable
Hallways Above Ceiling Tile (Typical)	Pipe and Elbow Insulation Black Sealant	Category II Non-Friable
Hallway Windows (Typical)	Window Caulk	Category II Non-Friable

Asbestos-containing sprayed-on fireproofing was found on the structural steel members within the hallways. The black sealant on the fiberglass pipe insulation and pipe insulation elbows were also found to have asbestos-containing material. These materials were also listed on the three-year re-inspection asbestos-containing materials report performed by MasiMax Resources, Inc., dated August 10, 2007 that was provided to ECS. The hallway

window caulking was also found to have asbestos-containing material and was not listed in the re-inspection report. The asbestos containing materials were observed to be in good condition.

RECOMMENDATIONS

Asbestos

The ACMs listed in Table 1 consist of friable and non-friable materials. Prior to any future reconstruction/remodeling of the structure that would affect the identified ACM, proper abatement would be required. All ACMs identified that will be disturbed should be removed by a Virginia licensed asbestos abatement contractor prior to their disturbance by renovation/restoration activities.

During asbestos abatement, an industrial hygienist should monitor the asbestos abatement work daily. This involves collecting air samples from within and outside abatement work areas to ensure the abatement contractor's work practices are sufficient to prevent asbestos fiber release from within the work area. The industrial hygienist should ensure the building owner that the asbestos abatement contractor is performing his work in accordance with all project specifications, state and local regulations as well as 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 which, in part, requires the contractor to perform personal exposure monitoring for all workers abating and disposing of asbestos containing materials. The industrial hygienist can assist the contractor in conducting the personal exposure monitoring for abatement workers. Per VA asbestos regulations, an industrial hygienist must collect final clearance air samples following the completion of asbestos abatement to ensure the asbestos work areas are safe to reoccupy. Per these regulations, final clearance samples must be collected in accordance with EPA 40CFR Part 763, Subpart E. In short, this regulation requires air samples to be analyzed by transmission electron microscopy (TEM) methodology.

Closing

This report summarizes our evaluation of the conditions observed at the site. The findings prepared by ECS are based upon our observations in the building and analysis of the samples collected at the time of this survey. Additional hazardous materials may exist in other portions of the building that were in accessible such as behind walls and permanent ceilings and in areas not included in the survey. Our recommendations are based on the guidelines presented by the EPA, Commonwealth of Virginia, and OSHA. Any conditions discovered which deviate from the data contained in this report should be presented to us for our evaluation.

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

All 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 other 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 Hitt Contracting. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties. The use of this report by any undesignated third party or parties will be at such party's sole risk and ECS disclaims liability for any such third party use or reliance.

ECS appreciates the opportunity to provide our asbestos services for this project. If you have any questions or need additional information, please contact us at (703) 471-8400.

Sincerely,

ECS MID-ATLANTIC, LLC

Douglas J. Finch
Senior Environmental Scientist

William R. Leonard, C.P.G.
Environmental Group Manager

Enclosures:

Table 2: Asbestos Bulk Sampling List
Photographs
Laboratory Analysis and Chain of Custody

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TABLE 2
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS

Sample Number	Sample Location	Material/Description	Analytical Results
30310JAE-1A	South Hallway	Gray Fireproofing	15% Chrysotile
30310JAE-1B	South Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1C	West Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1D	West Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1E	West Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1F	East Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1G	East Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-2A	South Hallway	Ceiling Plaster	NAD
30310JAE-2B	South Hallway	Ceiling Plaster	NAD
30310JAE-2C	West Hallway	Ceiling Plaster	NAD
30310JAE-3A	South Hallway	2' x 4' Ceiling Tile	NAD
30310JAE-3B	West Hallway	2' x 4' Ceiling Tile	NAD
30310JAE-3C	East Hallway	2' x 4' Ceiling Tile	NAD
30310JAE-4A	South Hallway	Black Pipe Insulation Sealant	5% Chrysotile
30310JAE-4B	East Hallway	Black Pipe Insulation Sealant	Positive Stop (Not analyzed)
30310JAE-4C	West Hallway	Black Pipe Insulation Sealant	Positive Stop (Not analyzed)
30310JAE-5A	West Hallway	Black Pipe Elbow Insulation Sealant	8% Chrysotile
30310JAE-5B	West Hallway	Black Pipe Elbow Insulation Sealant	Positive Stop (Not analyzed)
30310JAE-5C	East Hallway	Black Pipe Elbow Insulation Sealant	Positive Stop (Not analyzed)

TABLE 2
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS

Sample Number	Sample Location	Material/Description	Analytical Results
30310JAE-6A	South Hallway	Window Caulk	8% Chrysotile
30310JAE-6B	South Hallway	Window Caulk	Positive Stop (Not analyzed)
30310JAE-6C	West Hallway	Window Caulk	Positive Stop (Not analyzed)
30310JAE-7A	South Hallway	Yellow 12" x 12" Floor Tile and Mastic	Tile: NAD Mastic: NAD
30310JAE-7B	West Hallway	Yellow 12" x 12" Floor Tile and Mastic	Tile: NAD Mastic: NAD
30310JAE-7C	East Hallway	Yellow 12" x 12" Floor Tile and Mastic	Tile: NAD Mastic: NAD
30310JAE-8A	West Hallway	4" Gray Cove Base with Tan Mastic	Base: NAD Mastic: NAD
30310JAE-8B	West Hallway	4" Gray Cove Base with Tan Mastic	Base: NAD Mastic: NAD
30310JAE-8C	East Hallway	4" Gray Cove Base with Tan Mastic	Base: NAD Mastic: NAD

Notes: NAD – No Asbestos Detected

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontaslab@EMSL.com

Attn: **Doug Finch**
ECS Mid-Atlantic, LLC (VA)
915 Maple Grove Drive
Suite 206
Fredericksburg, VA 22407

Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-1A *041004455-0001*	SOUTH WALL	Gray Fibrous Heterogeneous		85% Non-fibrous (other)	**15% Chrysotile**
30310JAE-1B *041004455-0002*	SOUTH WALL				**Stop Positive (Not Analyzed)**
30310JAE-1C *041004455-0003*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1D *041004455-0004*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1E *041004455-0005*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1F *041004455-0006*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1G *041004455-0007*	EAST WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

Chris Little (22)

Stephen Siegel

Stephen Siegel,C IH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherenti n PLM,a sbestos fibers in dimensions below the resolution capability ofP LM may not be detected.T he limito fde tection as stated in the method is 1%. The above testr eportr elates only to the items tested and may notbe reproduced in any form without the express written approval ofE MSL Analytical,I nc. EMSL's liability is limited to the costo fan alysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of testr esults are the responsibility of the client.S amples received in good condition unless otherwise noted. This reportm ustno tbe used to claim producten dorsementb y NVLAP or any agency of the U.S.G overnment.T he testr esults meeta ll NELAC requirements unless otherwise specified.
Samples analyzed by EMSL Analytical,I nc.10 7 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0,A IHA-LAP,LL C-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Doug Finch**
ECS Mid-Atlantic, LLC (VA)
915 Maple Grove Drive
Suite 206
Fredericksburg, VA 22407

Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-2A *041004455-0008*	SOUTH WALL	Gray Fibrous Heterogeneous	50% 40%	Cellulose Min.W ool	10% Non-fibrous (other)	**None Detected**
30310JAE-2B *041004455-0009*	SOUTH WALL	Gray Fibrous Heterogeneous	50% 40%	Cellulose Min.W ool	10% Non-fibrous (other)	**None Detected**
30310JAE-2C *041004455-0010*	WEST WALL	Gray Fibrous Heterogeneous	50% 40%	Cellulose Min.W ool	10% Non-fibrous (other)	**None Detected**
30310JAE-3A *041004455-0011*	SOUTH WALL	Gray/White Fibrous Heterogeneous	60% 30%	Cellulose Min.W ool	10% Non-fibrous (other)	**None Detected**
30310JAE-3B *041004455-0012*	WEST WALL	Gray/White Fibrous Heterogeneous	60% 30%	Cellulose Min.W ool	10% Non-fibrous (other)	**None Detected**
30310JAE-3C *041004455-0013*	EAST WALL	Gray Fibrous Heterogeneous	60% 30%	Cellulose Min.W ool	10% Non-fibrous (other)	**None Detected**
30310JAE-4A *041004455-0014*	SOUTH WALL	Black Fibrous Heterogeneous			95% Non-fibrous (other)	**5% Chrysotile**

Analyst(s)

Chris Little (22)

Stephen Siegel,C IH, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical,I nc.10 7 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0,A IHA-LAP,LL C-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Doug Finch**
ECS Mid-Atlantic, LLC (VA)
915 Maple Grove Drive
Suite 206
Fredericksburg, VA 22407

Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-4B *041004455-0015*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-4C *041004455-0016*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5A *041004455-0017*	WEST WALL	Black Fibrous Heterogeneous		92% Non-fibrous (other)	**8% Chrysotile**
30310JAE-5B *041004455-0018*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5C *041004455-0019*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-6A *041004455-0020*	SOUTH WALL	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**
30310JAE-6B *041004455-0021*	SOUTH WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

Chris Little (22)

Stephen Siegel,C IH, Laboratory Manager
or other approved signatory

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-6C *041004455-0022*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-7A-TILE *041004455-0023*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7A-MASTIC *041004455-0023A*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-TILE *041004455-0024*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-MASTIC *041004455-0024A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7C-TILE *041004455-0025*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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or other approved signatory

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-7C-MASTIC *041004455-0025A*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-COVEBASE *041004455-0026*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-MASTIC *041004455-0026A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-COVEBASE *041004455-0027*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-MASTIC *041004455-0027A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8C-COVEBASE *041004455-0028*	EAST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-8C-MASTIC *041004455-0028A*	EAST WALL	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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Stephen Siegel,C IH, Laboratory Manager
or other approved signatory

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THIS IS THE LAST PAGE OF THE REPORT.

041004455

041004455

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Company:	ECS Mid-Atlantic, LLC	***Bill To:***	ECS Mid-Atlantic, LLC
Address1:	915 Maple Grove Drive	*Address1:*	915 Maple Grove Drive
Address2:	Suite 206	*Address2:*	Suite 206
City, State:	Fredericksburg, VA	*City, State:*	Fredericksburg, VA
Zip/Post Code:	22407	*Zip/Post Code:*	22407
Country:	USA	*Country:*	USA
Contact Name:	~~Beverly Sedon~~ Douglas Finch	*Attn:*	~~Beverly Sedon~~ Douglas Finch
Phone:	540-785-6100	*Phone:*	540-785-6100
Fax:	540-785-3577	*Fax:*	540-785-3577
Email:	~~bsedon@ecslimited.com~~ dfinch@ecslimited.com	*Email:*	~~bsedon@ecslimited.com~~ dfinch@ecslimited.com
EMSL Rep:	Sheri Steinman	***P.O. Number:***	~~SCOPE~~ 10977-A
Project Name/Number:	John Dolans ES	10977-A	

MATRIX			TURNAROUND			
Air	**Soil**	**Micro-Vac**	**3 Hours**	**6 Hours**	**Same Day or 12 Hours***	**24 Hours (1 day)**
Bulk	**Drinking Water**		**48 Hours (2 days)**	**72 Hours (3 days)**	**96 Hours (4 days)**	**~~120~~ Hours (5 days)**
Wipe	**Wastewater**		**144+ hours (6-10 days)**			

TEM AIR. 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

"12 hours (must arrive by 11:00a.m. Mon.-Fri.), Please Refer to Price Quote

* Positive Stop

PCM - Air	**TEM Air**	**TEM WATER**
NIOSH 7400(A) Issue 2: August 1994	AHERA 40 CFR, Part 763 Subpart E	EPA 100.1
OSHA w/TWA	NIOSH 7402	EPA 100.2
Other:	EPA Level II	NYS 198.2
PLM - Bulk	**TEM BULK**	**TEM Microvac/Wipe**
X EPA 600/R-93/116	Drop Mount (Qualitative)	ASTM D 5755-95 (quantative method)
EPA Point Count	Chatfield SOP - 1988-02	Wipe Qualitative
NY Stratified Point Count	TEM NOB (Gravimetric) NYS 198.4	
PLM NOB (Gravimetric) NYS 198.1	EMSL Standard Addition:	**XRD**
NIOSH 9002:		Asbestos
EMSL Standard Addition:	**PLM Soil**	Silica NIOSH 7500
SEM Air or Bulk	EPA Protocol Qualitative	
Qualitative	EPA Protocol Quantitative	**OTHER**
Quantitative	EMSL MSD 9000 Method fibers gram	

RECEIVED
EMSL
WESTMONT, NJ
10 MAR -5 AM 11: 26

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

041004455 Page 2 of 3

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 30310JAE-1A - 30310JAE-8C Total Samples #: 28

Relinquished: [signature] Date: 3/3/10 Time: 7:00 AM

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: [signature] FX-10301 Date: 3-5-10 Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION		VOLUME (if applicable)
30310JAE-1A	FIREPROOFING	SERVICE ELEVATOR SHAFT	
1B		SOUTH WALL	
1C		WEST	
1D		WEST	
1E		WEST ~~EAST~~	
1F		EAST	
1G		EAST	
2A	UPPER Ceiling Board	SOUTH	
2B		SOUTH	
2C		WEST	
3A	Ceiling Tile	SOUTH	
3B		WEST	
3C		EAST	
4A	Pipe Insulation Mastic	SOUTH	

RECEIVED EMSL BELTSMT, MD MAR 05 2010

SAMPLE ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

041004455

041004455

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly

Client Sample # (s): 303403AE-1A - 303403AE-6C

Total Samples #: 32

Relinquished: _____ Date: 3/3/10 Time: 7 [illegible]

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: _____ Date: _____ Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
303403AE-4B	Pipe Insulation Block Mastic East Wall	
4C	" " West	
5A	Pipe Elbow Insulation West	
5B	" " West	
5C	" " East	
6A	Window Caulk South	
6B	" " South	
6C	" " West	
7A	Yellow 12"x12" Floor Tile + mastic South	
7B	" " West	
7C	" " East	
8A	9" Gray Floor Tile + mastic East	
8B	" " West	
8C	" " East	

SAMPLES ACCEPTED BY [illegible] EMSL



Photograph No. 1:ACM Fireproofing on beams (typical).



Photograph No. 2:ACM Window Caulk (typical)



Photograph No. 3 ACM Black Pipe Sealant (typical).:



Photograph No. 4:ACM Black Pipe Elbow Sealant (typical).

ACM SURVEY

John Adams Elementary School
Alexandria, Virginia

PHOTOGRAPHS

ECS Project 01-10977-A
March 2010

ASBESTOS ABATEMENT SUMMARY LETTER

JOHN ADAMS ELEMENTARY SCHOOL

5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA 22311

ECS PROJECT NO. 47:11652-C

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

MAY 4, 2021

May 4, 2021

Mr. John Finnigan
Alexandria City Public Schools
1340 Braddock Place
Suite 620
Alexandria, Virginia 22314
john.finnigan@acps.k12.va.us

ECS Project No. 47:11652-C

Reference: Asbestos Abatement Summary Letter, John Adams Elementary School, 5651 Rayburn Avenue, Alexandria, Virginia

Dear Mr. Finnigan:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with this summary report of the asbestos abatement work performed during the above-referenced project. ECS performed visual assessments, evaluations, and air monitoring and sampling during the removal of asbestos-containing materials (ACMs). This report includes a project description, a summary of the asbestos abatement activities observed by ECS, and a summary of the work conducted by ECS including laboratory results.

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





Catey Bourne
Assistant Staff Project Manager
cbourne@ecslimited.com
703-471-8400

Michael Hamill, CIH
Senior Project Manager
MHamill@ecslimited.com
703-471-8400

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2.0 ECS SCOPE OF WORK 1

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6.0 LIMITATIONS 2

TABLE OF APPENDICES

Appendix I: Daily Field Reports with PCM Air Sample Results

Appendix II: Certifications/Licenses

1.0 PROJECT DESCRIPTION

The asbestos abatement work was performed by Waco, Inc., in general from April 16-19, 2021 and included the removal of asbestos-containing floor tile and black floor mastic in the 1st floor hallway by the cafeteria and by rooms 146-160. No other materials or areas of the school building were included in this asbestos abatement. Please note that the above-referenced asbestos-containing materials (ACMs), other identified ACMs, and/or assumed ACMs are most likely present in other areas of the school building.

2.0 ECS SCOPE OF WORK

ECS was tasked with performing visual assessments and evaluations, monitoring and air sampling during and after the removal of the above-identified asbestos-containing materials (ACMs) within the above-referenced subject building.

3.0 ASBESTOS ABATEMENT ACTIVITIES

3.1 Asbestos Removal

Asbestos abatement was performed by Waco, Inc. within a regulated work area. The regulated work area within the subject building consisted of an enclosure placed under negative pressure constructed of 6-mil polyethylene sheeting.

3.2 Daily Air Sampling

During the asbestos abatement project, ECS collected and analyzed air samples using Phase Contrast Microscopy (PCM) in general accordance with applicable federal and Commonwealth of Virginia regulations. Samples were collected during the project outside the work area to monitor airborne fiber concentrations. In general, the air sampling found the engineering controls (i.e., polyethylene sheeting, negative air pressure, High Efficiency Particulate Air (HEPA) filtration adequate to keep fiber concentrations on air samples collected outside the regulated work area below the Commonwealth of Virginia PCM re-occupancy limit of <0.01 fibers per cubic centimeter (f/cc). Air sample results are included within the technicians' daily field notes.

3.3 ECS Observations

ECS reviewed the asbestos credentials of the abatement workers. The credential documentation reviewed was noted to be current at the time presented to ECS.

ECS observed abatement workers utilizing personal protective equipment deemed necessary for asbestos abatement work by applicable OSHA and Virginia regulations (respirators, disposable protective clothing, eye protection, hard hats, gloves, etc.).

4.0 FINAL CLEARANCE AIR SAMPLING

After Waco, Inc. had removed the specified asbestos-containing materials (ACMs) and related waste from the work area, ECS performed a final clearance visual assessment to survey the work area and evaluate if the ACMs had been removed and if dust and/or debris remained in the work area. Following the completion of the final clearance visual assessments, ECS reported the results to Waco, Inc. .

Final clearance air samples were collected from work area in accordance with aggressive sampling protocol described in Unit III.B.7.d of 40 CFR 763 Subpart E Appendix A and analyzed via Transmission Electron Microscopy (TEM) in accordance with federal and Virginia regulations. The results of the TEM final clearance air samples collected from the work area were found to be below the Commonwealth of Virginia re-occupancy limit of 70 structures per square millimeter (70 s/mm^2).

5.0 CLOSING

Copies of ECS's daily monitoring field reports are enclosed along with copies of laboratory reports. If we can be of further assistance to you, please do not hesitate to contact us at (703) 471-8400.

The results of the above referenced abatement activities should be added to this school building's AHERA management plan and this summary letter should be included in the building's management plan for reference.

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.

The client agrees to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, information that may be necessary to prevent any danger to public health, safety, or the environment.

Appendix I: Daily Field Reports with PCM Air Sample Results

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

April 19, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC:

ENCL: Field Report # 1 4/16/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C**
Report No.	**1**
Day & Date	**Friday 4/16/2021**
Weather	**45 °/ Clear**
On-Site Time	**8.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**8.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**3:30P**	**11:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials specified to be removed today are floor tile and black floor mastic from the 1st floor hallway by cafeteria (rooms 146-160).

Prior to starting the removal of the specified materials, the abatement contractor employees were asked to provide their asbestos abatement licenses for review. No workers were found to be without valid asbestos abatement licenses.

1ST FLOOR HALLWAY BY CAFETERIA

The abatement contractor requested a pre-abatement survey of the regulated work area. The Pre-Abatement Checklist was completed and is attached to this report.

Between 8:00 and 8:04 pm, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 5.0 liters per minute.

Abatement workers removed the 12"x12" floor tile with associated black floor mastic.

The regulated work area was surveyed to evaluate general compliance applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

Between 10:00 and 10:04 pm, the sampling pumps were checked using a rotameter. The flow rate was 5.0 liters per minute. The PCM air samples were stopped and gathered for analysis.

GENERAL

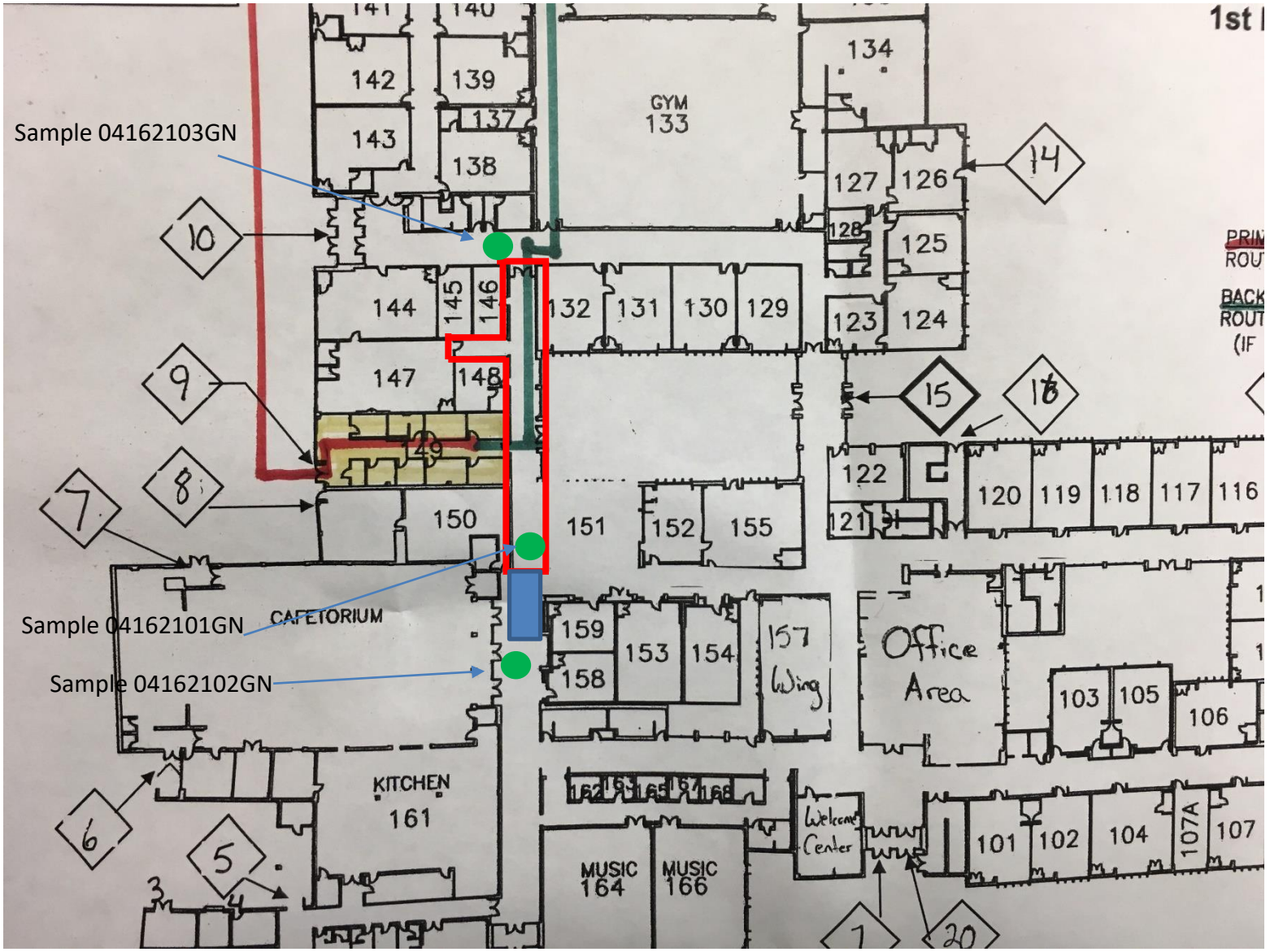
The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in

general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and the Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below the re-occupancy limit.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags were labeled and placed in a temporary waste storage area.

The sample results reflect the conditions where the air samples were collected at the time and date of collection.



PCM Air Sample Location IWA/OWA

Work Area-Abatement workers removed floor tile and black floor mastic.

Three stage decontamination Unit

John Adams ES
5651 Rayburn Avenue,
Alexandria VA22311

WORK AREA SKETCH

Scale: NTS

Project No.

4/16/21

Attachments



Photo-View of 1st floor hallway by cafeteria work area critical barrier.

Figure 1

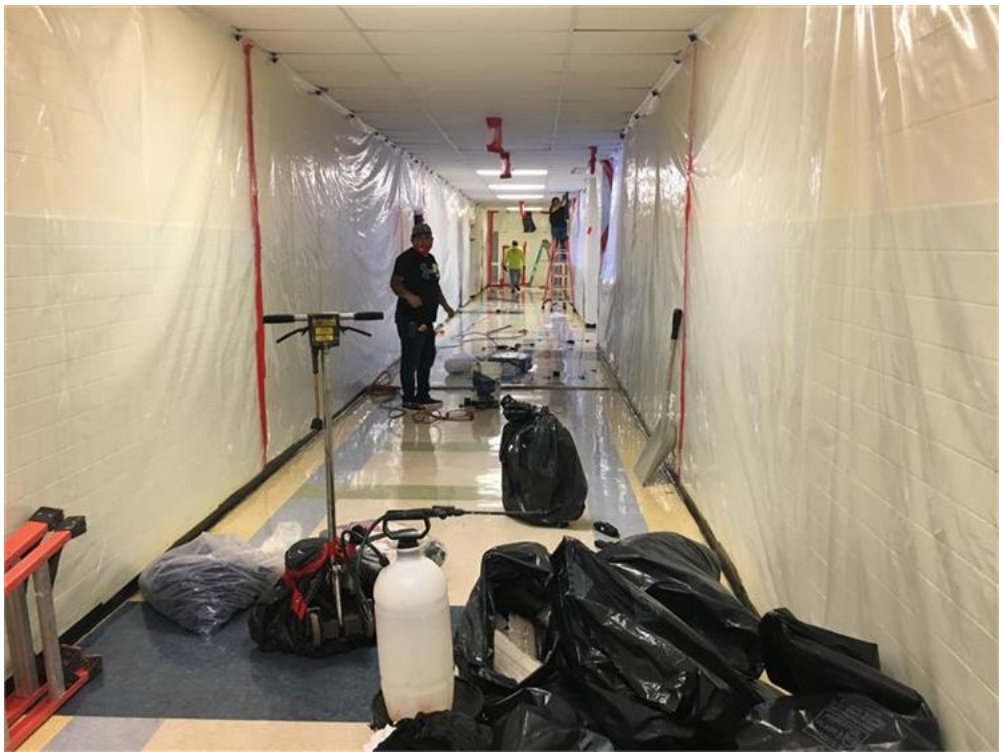


Photo-View of 1st floor hallway by cafeteria work area during the pre-abatement walk-through

Figure 2

Attachments



Photo-View of where the floor tile was removed from the 1st floor hallway by cafeteria work area

Figure 3

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 4/17/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
04162101GN	IWA,1st Floor Hallway by Cafeteria Work Area	8:00 PM	10:00 PM	5.0	5.0	5.0	120	600.0	11.5	100	0.009
04162102GN	OWA,1st Floor Hallway by Cafeteria Work Area at Decontamination Unit	8:02 PM	10:02 PM	5.0	5.0	5.0	120	600.0	1.0	100	0.001
04162103GN	OWA,1st Floor Hallway by Cafeteria Work Area at Critical Barrier	8:04 PM	10:04 PM	5.0	5.0	5.0	120	600.0	0.0	100	0.000
041621FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
041621FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes:

ECS Technician: JP Nuique

Date: 4/17/2021

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-C **Date:** 4/17/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Hallway by Cafeteria

	Work Area Location/Description	Hallway by Cafeteria
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	3
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half Face
	Type of Filters Used	P100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes:

ECS Technician: Catey Bourne **Date:** 4/17/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C **Date:** 4/17/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Hallway by Cafeteria

	Work Area Location/Description	Hallway by Cafeteria
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	3
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Catey Bourne **Date:** 4/17/2021

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

April 19, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC:

ENCL: Field Report # 2 4/17/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Catherine Bourne
Assistant Staff Project Manager

Disclaimer

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C**
Report No.	**2**
Day & Date	**Saturday 4/17/2021**
Weather	**60 °/ Sunny**
On-Site Time	**8.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**8.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**2:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials specified to be removed today are floor tile and black floor mastic from the 1st floor hallway by cafeteria (rooms 146-160).

Prior to starting the removal of the specified materials, the abatement contractor employees were asked to provide their asbestos abatement licenses for review. No workers were found to be without valid asbestos abatement licenses.

1ST FLOOR HALLWAY BY CAFETERIA

Between 7:00 and 7:04 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 3.0 liters per minute.

Abatement workers removed the black floor mastic and performed final cleaning inside the work area.

The regulated work area was surveyed to evaluate general compliance applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

Between 10:00 and 10:04 am, the sampling pumps were checked using a rotameter. The flow rate was 3.0 liters per minute. The PCM air samples were stopped and gathered for analysis.

Between 10:00 and 10:04 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 3.0 liters per minute.

Between 1:45 and 1:49 pm, the sampling pumps were checked using a rotameter. The flow rate was 3.0 liters per minute. The PCM air samples were stopped and gathered for analysis.

By JP Nuique 1825

69303

The abatement contractor stated the specified materials have been removed from the regulated work area and requested a visual survey to confirm compliance. The Final Clearance Visual Survey Checklist was completed and is attached to this report.

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area.

ECS is scheduled to collect the final clearance TEM air samples on the next working shift.

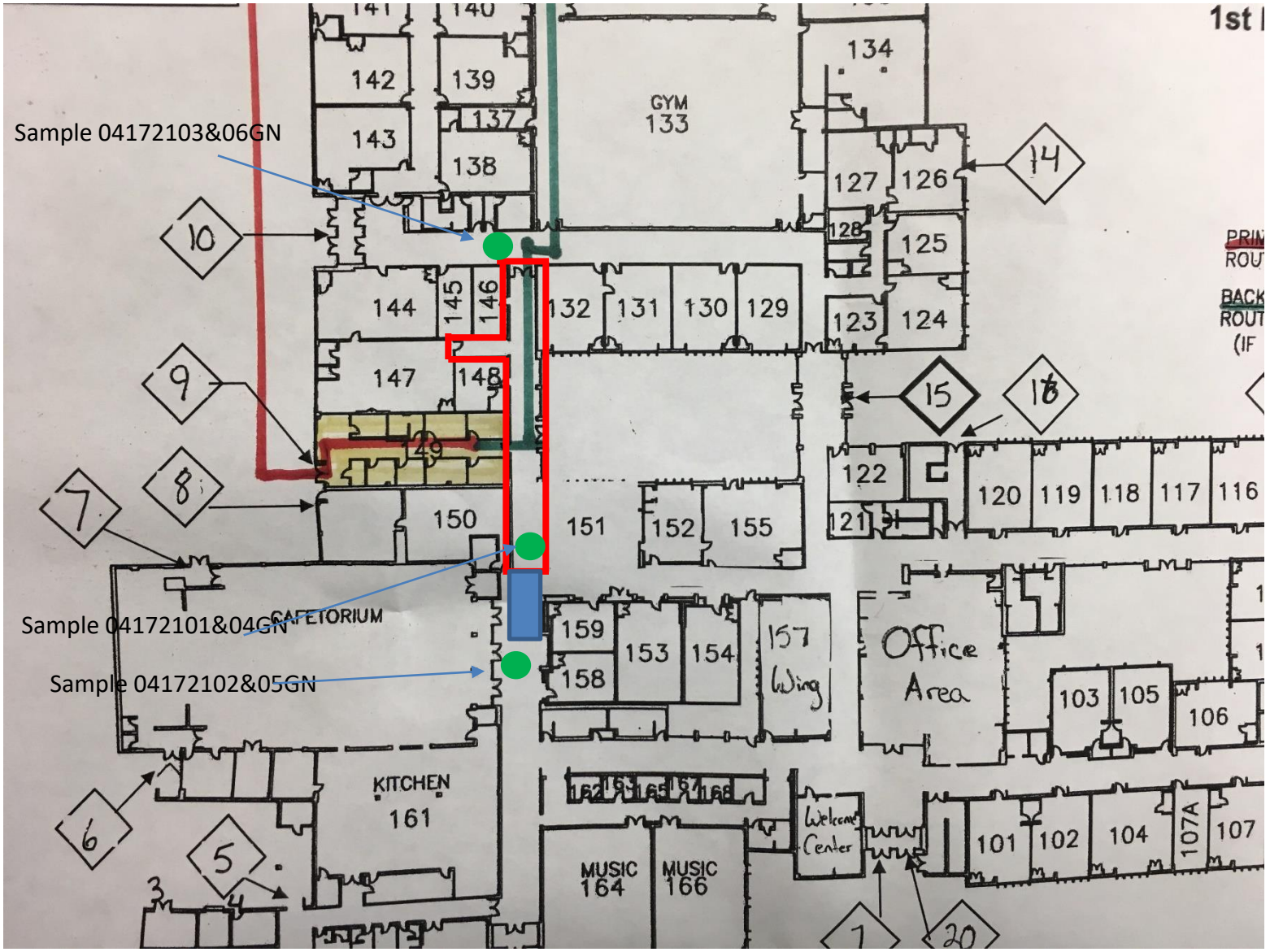
GENERAL

The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below the re-occupancy limit.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The sample results reflect the conditions where the air samples were collected at the time and date of collection.



PCM Air Sample Location IWA/OWA

Work Area-Abatement workers removed floor tile and black floor mastic.

Three stage decontamination Unit

John Adams ES
5651 Rayburn Avenue,
Alexandria VA22311

WORK AREA SKETCH

Scale: NTS

Project No.

4/17/21

Attachments



Photo-View of where the floor tile and associated mastic was removed from the 1st floor hallway by cafeteria work area (2)

Figure 1



Photo-View of where the floor tile and associated mastic was removed from the 1st floor hallway by cafeteria work area

Figure 2

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 4/18/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
04172101GN	IWA,1st Floor Hallway by Cafeteria Work Area	7:00 AM	10:00 AM	3.0	3.0	3.0	180	540.0	8.5	100	0.008
04172102GN	OWA,1st Floor Hallway by Cafeteria Work Area at Decontamination Unit	7:02 AM	10:02 AM	3.0	3.0	3.0	180	540.0	3.0	100	0.003
04172103GN	OWA,1st Floor Hallway by Cafeteria Work Area at Critical Barrier	7:04 AM	10:04 AM	3.0	3.0	3.0	180	540.0	1.0	100	0.001
04172104GN	IWA,1st Floor Hallway by Cafeteria Work Area	10:00 AM	1:45 PM	3.0	3.0	3.0	225	675.0	10.5	100	0.008
04172105GN	OWA,1st Floor Hallway by Cafeteria Work Area at Decontamination Unit	10:02 AM	1:47 PM	3.0	3.0	3.0	225	675.0	2.0	100	0.001
04172106GN	OWA,1st Floor Hallway by Cafeteria Work Area at Critical Barrier	10:04 AM	1:49 PM	3.0	3.0	3.0	225	675.0	0.0	100	0.000
041721FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
041721FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes:

ECS Technician: JP Nuique

Date: 4/18/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C **Date:** 4/18/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Hallway by Cafeteria

	Work Area Location/Description	Hallway by Cafeteria
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	6
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Catey Bourne **Date:** 4/18/2021

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-C **Date:** 4/18/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: Hallway by Cafeteria

	Work Area Location/Description	Hallway by Cafeteria
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	N/A
	Mechanical Equipment	N/A
	Ducts	N/A
	Pipes	N/A
	Lighting	Satisfactory
	Other Surfaces	N/A
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	N/A
	Number of Samples Collected	0
	Sample Volume (liters)	0
	Work Area Acceptable	Yes

Notes: ECS will collect the final clearance TEM air samples on the next working shift.

ECS Technician: Catey Bourne **Date:** 4/18/2021

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

April 27, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC:

ENCL: Field Report # 3 4/19/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Catherine Bourne
Assistant Staff Project Manager

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4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C**
Report No.	**3**
Day & Date	**Monday 4/19/2021**
Weather	**60 °/ Sunny**
On-Site Time	**4.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**4.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**10:00A**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform final clearance TEM sampling following the removal of floor tile and black floor mastic from the 1st floor hallway by the cafeteria (rooms 146-160).

1ST FLOOR HALLWAY BY CAFETERIA

Last shift, following the successful completion of the Final Clearance Visual Survey, the abatement contractor applied an encapsulant to the work area. Today, at approximately 6:30 am, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 9.5 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

At 10:40 am, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 130 minutes at 9.5 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL, Beltsville MD for analysis. A copy of the chain of custody has been attached.

The US EPA and Commonwealth of Virginia TEM re-occupancy limit is 70 structures per cubic centimeter. The analytical results of the TEM final clearance air samples collected from the work area were reported to be less than the re-occupancy limits. The client and abatement contractor were notified.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.

By Catey Bourne 1302

69401

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192103606
Customer ID: ECMA78
Customer PO:
Project ID:

Attention: Catey Bourne
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151

Project: 47: 11652-C/ ACPS JOHN ADAMS

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 04/19/2021 09:45 AM
Analysis Date: 04/19/2021
Collected Date: 04/19/2021

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5µ < 5µ	#Structures ≥5µ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
04192101CB	IWA - NORTHEAST HALLWAY	1235.00	0.0650	0	None Detected	0	0	0.0048	<15.00	<0.0048
192103606-0001										
04192102CB	IWA - NORTHEAST HALLWAY	1235.00	0.0650	0	None Detected	0	0	0.0048	<15.00	<0.0048
192103606-0002										
04192103CB	IWA - NORTHEAST HALLWAY	1235.00	0.0650	0	None Detected	0	0	0.0048	<15.00	<0.0048
192103606-0003										
04192104CB	IWA - NORTHEAST HALLWAY	1235.00	0.0650	0	None Detected	0	0	0.0048	<15.00	<0.0048
192103606-0004										
04192105CB	IWA - NORTHEAST HALLWAY	1235.00	0.0650	0	None Detected	0	0	0.0048	<15.00	<0.0048
192103606-0005										

Analyst(s)

Joe Centifonti (5)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Measurement of uncertainty available upon request.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from: 04/19/2021 15:30 PM

OrderID: 192103606

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(lab use only)*: 192103606

PHONE:
FAX:

Company Name: ECS Mid-Atlantic		**EMSL Customer ID:**	
Street: 14026 Thunderbolt Pl		**City:** Chantilly	**State or Province:** VA
Zip/Postal Code: 20151	**Country:** USA	**Telephone #:** 703 471 8400	**Fax #:**
Report To (Name): Catey Bourne		**Please Provide Results via:** ☐ Fax ☑ Email	
email Address: CbourneCecslimited.com		**Purchase Order Number:**	
Client Project ID: 47:11652-C / @ACPS John Adams		**EMSL Project ID** *(internal use only)*:	
State or Province Collected: VA		**CT only** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☑ Same ☐ Different - *If bill to is different note instructions in comment. Third party billing requires written authorization from third party*

Turnaround Time (TAT) Options Please Check

☐ 3 Hr[1] | ☐ 4-4.5Hr[1] AHERA Only | ☑ 6 Hr[1] | ☐ 24 Hr | ☐ 32 Hr[2] | ☐ 48 Hr | ☐ 72 Hr | ☐ 96 Hr | ☐ 1 Week | ☐ 2 Week

[1]*Premium Service Charge applies for 3 Hour TEM AHERA or EPA Level II TAT – you will be asked to sign an authorization form. TEM Air 3-6 Hour, please call ahead to schedule*
[2] *32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable - NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NYS 198.8 SOF-V
- ☐ NIOSH 9002 (<1%)

TEM – Air[1]
- ☑ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Settled Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil – Rock – Vermiculite (reporting limit)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep
- ☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM

Lower reporting limits avaialble on request

Other test (please specify):

☐ **Stop At First Positive** *(clearly identify homogenous areas below)*

Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Sampler's Name:

Sampler's Signature:

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
041921 01 CB	Inside work Area-Northeast Hallway	1235 L	4/19/21
04192102 CB	Inside work Area-Northeast Hallway	1235 L	4/19/21
041921 03 CB	Inside work Area-Northeast Hallway	1235 L	4/19/21
041921 04 CB	Inside work Area-Northeast hallway	1235 L	4/19/21
041921 05 CB	Inside work Area-Northeast Hallway	1235L	4/19/21

Client Sample # (s): 041921 01 CB - 041921 13 CB **Total # of Samples:** 13

Relinquished by (Client): C Bourne **Date:** 4/19/21 **Time:** 9:45 am

Received by (Lab): Maren Myles **Date:** 4/19/21 **Time:** 9:45 am

Comments/Special Instructions:
only analyze inside work area samples (01-05)
aggressive sampling permit #

EMSL Analytical, Inc.'s (DBA: LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

OrderID: 192103606

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

192103606

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
041921 06 CB	Outside work area - Northeast hallway	1235 L	4/19/21
041921 07 CB	Outside work area - Northeast hallway	1235 L	4/19/21
041921 08 CB	Outside work area - Northeast hallway	1235 L	4/19/21
041921 09 CB	Outside work area - Northeast hallway	1235 L	4/19/21
041921 10 CB	Outside work area - Northeast hallway	1235 L	4/19/21
041921 11 CB	field blank	-	4/19/21
041921 12 CB	field blank	-	4/19/21
041921 13 CB	sealed blank	-	4/19/21

***Comments/Special Instructions:**

Sample Instructions

Controlled Document – COC-05 Asbestos – R12.1 – 11/01/2019

EMSL Analytical, Inc.'s (DBA: LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

Appendix II: Certifications/ Licenses

DPOR License Lookup License Number 3309001288

License Details

Name	NUIQUE, GALLARDO SEDILLO
License Number	3309001288
License Description	Asbestos Project Monitor License
Rank	Asbestos Project Monitor
Address	SILVER SPRING, MD 20901
Initial Certification Date	2004-07-13
Expiration Date	2020-07-31

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DPOR License Lookup build 1,254 (built 2019-12-05 12:06:03).

DPOR License Lookup License Number 3309001881

License Details

Name	BOURNE, CATHERINE GRACE
License Number	3309001881
License Description	Asbestos Project Monitor License
Rank	Asbestos Project Monitor
Address	ALEXANDRIA, VA 22304
Initial Certification Date	2017-03-27
Expiration Date	2021-03-31

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DPOR License Lookup build 1,426 (built 2020-10-01 09:09:15).

LIMITED ASBESTOS-CONTAINING MATERIALS SURVEY

JOHN ADAMS ELEMENTARY SCHOOL KITCHEN RENOVATION PROJECT

5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA 22311

ECS PROJECT NO. 47:1519-F4

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

DECEMBER 02, 2019

December 02, 2019

Ms. Azjargal Bartlett
Alexandria City Public Schools
1340 Braddock Place
6th Floor
Alexandria, Virginia 22314

ECS Project No. 47:1519-F4

Reference: Limited Asbestos-Containing Materials Survey, John Adams Elementary School Kitchen Renovation Project, 5651 Rayburn Avenue, Alexandria, Virginia

Dear Ms. Bartlett:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the above referenced Limited Asbestos-Containing Materials Survey performed at John Adams Elementary School located at 5651 Rayburn Avenue 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 47:12590-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

Catey Bourne
Assistant Staff Project Manager
cbourne@ecslimted.com
703-471-8400

Diana Krass
Senior Project Manager
dkrass@ecslimited.com
703-471-8400

EXECUTIVE SUMMARY

The subject property consists of John Adams Elementary School located at 5651 Rayburn Avenue in Alexandria, Virginia. The purpose of the survey was to determine if asbestos-containing materials (ACMs) are present in the cafeteria, kitchen, and associated storage rooms, bathrooms, and hallway of the subject property which may be impacted during proposed renovations. ECS was informed that the cafeteria stage is excluded from the proposed renovation project. As requested by the client, no other materials or areas were included in this survey.

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

- Black Mastic on Fiberglass Pipe Insulation Wrap;
- Black Mastic associated with 12" x 12" Beige Feathered Floor Tile;
- 12" x 12" Green-Yellow Floor Tile and associated Black Mastic; and,
- Dark Green Floor Tile (unknown size) and associated Black Mastic (Second Layer).

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 John Adams Elementary School located at 5651 Rayburn Avenue in Alexandria, Virginia. Based on the information available, the building contains approximately 104,000 square feet and was reportedly constructed in 1966. This survey was limited to materials and areas in the cafeteria, kitchen, and associated storage rooms, bathrooms, and hallways that may be impacted during the proposed renovations. ECS was informed that the cafeteria stage is excluded from the proposed renovation project. As requested by the client, no other materials or areas were included in this survey.

2.0 PURPOSE

The purpose of the Limited Asbestos-Containing Materials Survey was to identify asbestos-containing materials (ACMs) which may require special handling and/or disposal if removed or distrubed during construction activities.

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-destructive asbestos survey was performed by an asbestos inspector who has received EPA accredited training and is 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. 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. Due to the high height of the ceiling tiles located in the cafeteria and current occupancy, ECS was not able to access these ceiling tiles in the cafeteria, or the ceiling plenums in the cafeteria and kitchen. 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 A, Subpart F, 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.

Scientific Analytical Institute, Inc. submitted a signed final laboratory report to ECS on November 22, 2019. Eight of the bulk samples submitted for analysis were reported to contain asbestos in detectable concentrations. These materials are summarized below. In total, 57 bulk samples were submitted to the laboratory of which 78 layers were analyzed. 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.

Summary of Asbestos-Containing Materials Identified

Sample Location	Material Description	Analytical Results	Category
Storage Room 161A	Black Mastic on Fiberglass Pipe Insulation Wrap	5% Chrysotile	Category II Non-Friable
Hallway behind Kitchen	Black Mastic associated with 12" x 12" Beige Feathered Floor Tile	6% Chrysotile	Category I Non-Friable
Storage Room 160E	12" x 12" Green-Yellow Floor Tile and associated Black Mastic	Tile: 4% Chrysotile Mastic: 8% Chrysotile	Category I Non-Friable
Storage Room 160E and Cafeteria	Dark Green Floor Tile and associated Black Mastic (Unknown Size, Second Layer)	Tile: 3% Chrysotile Mastic: 4-6% Chrysotile	Category I Non-Friable

Flooring

Multiple colors of vinyl floor tile were observed throughout the surveyed areas. 12" x 12" beige feathered floor tile with asbestos-containing black mastic was observed in the hallway to the south of the kitchen. An asbestos-containing 12" x 12" green-yellow floor tile and associated asbestos-containing black mastic was observed throughout Storage Room 160E.

In the cafeteria, ECS observed green, purple, white, dark blue, light blue, and yellow vinyl floor tiles. None of these vinyl floor tiles were reported to contain asbestos; however, ECS observed an asbestos-containing dark green floor tile and associated black mastic (unknown size, second layer) underneath the above-referenced floor tiles in the cafeteria . This second layer of asbestos-containing dark green tile and associated black mastic was observed throughout the cafeteria and it was also observed at the threshold to Storage Room 160E.

Any black floor mastic observed in the cafeteria, kitchen, and associated bathrooms, storage rooms, and hallway should be considered asbestos-containing. The identified asbestos-containing floor tiles and associated mastics may be located under other flooring systems, partition walls, fixtures, cabinets, furniture, etc.

Pipe Insulation Mastic

An asbestos-containing black mastic was observed on fiberglass insulation on several pipes above the ceiling in Storage Room 161A. These pipe runs appeared to continue into the kitchen and to the adjacent Storage Room 160E and are most likely located above hard ceilings or in wall chases in other areas of the school building. ECS recommends any black mastic associated with pipe insulation be assumed asbestos-containing.

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 cafeteria, kitchen, and associated bathrooms, storage rooms, and hallway:

- **Fire Door Insulation** in doors and associated casing;
- **Thermal System Insulation** in refrigerator/freezer units;
- **Vermiculite Filler** associated with Concrete Masonry Units (CMU);
- T**hermal System Pipe Insulation/Fittings and associated Mastics** (not already identified) behind solid walls and ceilings, and/or below sub-grade;
- **Pipe Flange Gaskets** associated with heating and plumbing systems;
- **Mastics** associated with ceramic wall and floor tiles (not already identified);
- **Spray or Troweled on Fireproofing** above ceilings, along structural components, over-spray, etc.;
- **Water Fountain Components** in water fountains (pipe wrap); and,
- **Mastic/Felt Papers** associated with wood flooring, mirrors, bulletin boards, countertops, and casework.

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the Limited 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.

Asbestos-containing materials to be disturbed as part of the renovations must be properly removed by a Virginia-licensed asbestos abatement contractor prior to disturbance by construction activities. The Commonwealth of Virginia requires 20 calendar-days notice prior to the removal of friable ACM. Notification requirements in general will be dependent on the means/methods used by the contractor to abate these materials.

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.

Should any identified ACM remain in place, ECS recommends the development and implementation of a site-specific Asbestos Operations and Maintenance Plan detailing routine maintenance and repair operations, contractor notification procedures, and all other requirements under OSHA – reference 29 CFR 1926.1101.

6.0 LIMITATIONS

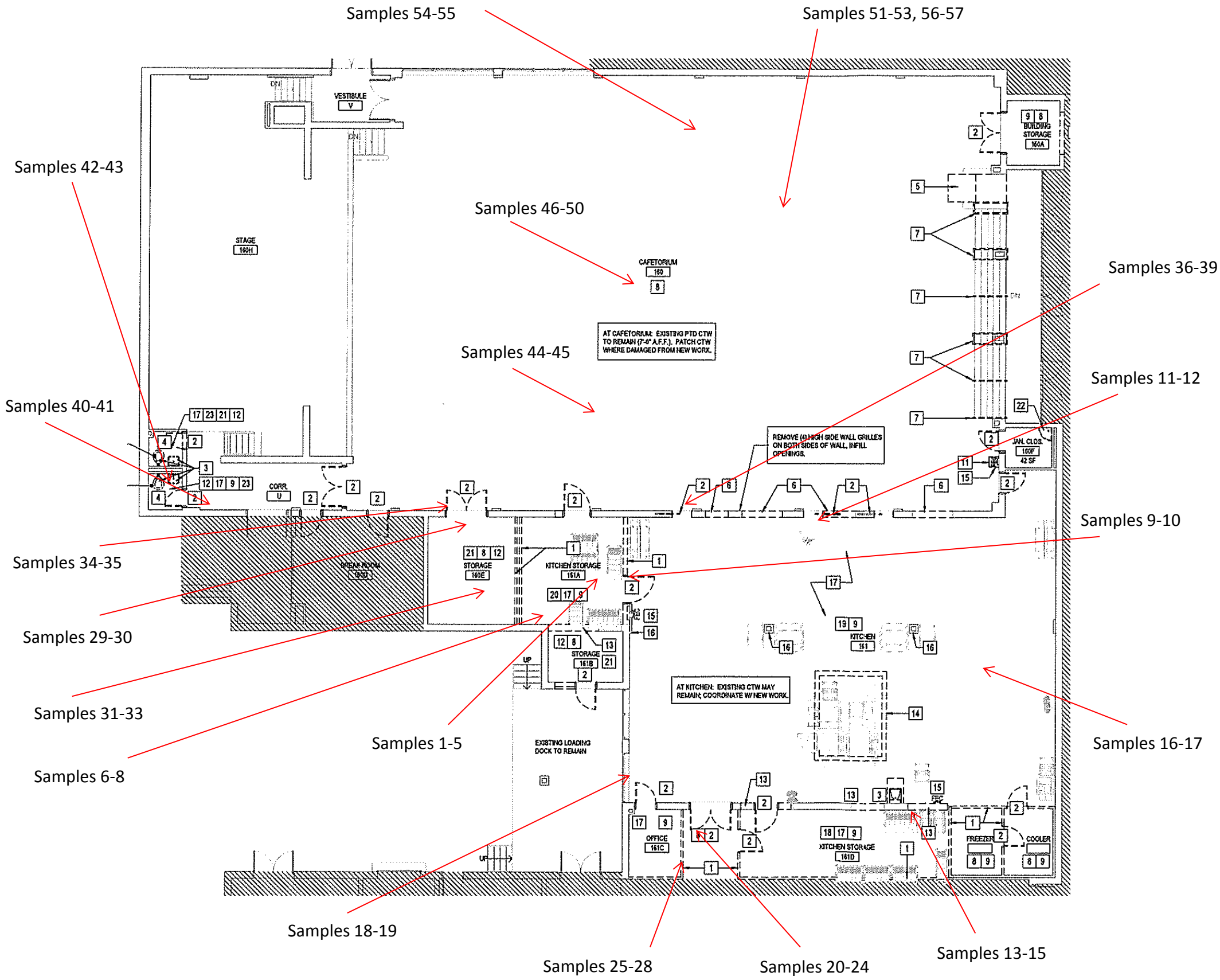
The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards 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: Drawings



John Adams Elementary School
Cafeteria and Kitchen Renovation
5651 Rayburn Avenue
Alexandria, VA 22311

SAMPLING LOCATIONS

Alexandria City Public Schools

SCALE: NTS

Project No.: 47:1519-F4

Site Visit: 11/14/19

Appendix II: Site Photographs



1 - Asbestos-containing pipe insulation mastic in Storage Room 161A. Sample No. 1.



2 - Asbestos-containing black floor mastic associated with 12" x 12" beige feathered floor tile in the hallway behind the kitchen. Sample No. 25-B.



3 - Asbestos-containing dark green floor tile and black mastic under other floor tiles in the cafeteria. Sample Nos. 29-A and 29-B.

Appendix III: Asbestos Bulk Sample Results

TABLE 1

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

Sample #	Sampling Location	Material/Description	Analytical Results
1	**Storage Room 161A**	**Black Mastic on Fiberglass Pipe Wrap**	**5% Chrysotile**
2	**Storage Room 161A**	**Black Mastic on Fiberglass Pipe Wrap**	**N/A**
3	**Storage Room 161A**	**Black Mastic on Fiberglass Pipe Wrap**	**N/A**
4	Storage Room 161A	2' x 4' Drywall Ceiling Tile	NAD
5	Storage Room 161A	2' x 4' Drywall Ceiling Tile	NAD
6	Storage Room 161A	Yellow Fiberglass Pipe Wrap	NAD
7	Storage Room 161A	Yellow Fiberglass Pipe Wrap	NAD
8	Storage Room 161A	Yellow Fiberglass Pipe Wrap	NAD
9	Storage Room 161A	Yellow Mastic on 4" White Ceramic Wall Tile	NAD
10	Storage Room 161A	Yellow Mastic on 4" White Ceramic Wall Tile	NAD
11	Kitchen	White Door Caulk	NAD
12	Kitchen	White Door Caulk	NAD
13	Kitchen Storage Room 161D	Brown/Black Foil-Backed Pipe Wrap	NAD
14	Kitchen Storage Room 161D	Brown/Black Foil-Backed Pipe Wrap	NAD
15	Kitchen Storage Room 161D	Brown/Black Foil-Backed Pipe Wrap	NAD
16 - A	Kitchen	6" Brown Ceramic Floor Tile	NAD
16 - B	Kitchen	Gray Thinset associated with 6" Brown Ceramic Floor Tile	NAD
17 - A	Kitchen	6" Brown Ceramic Floor Tile	NAD
17 - B	Kitchen	Gray Thinset associated with 6" Brown Ceramic Floor Tile	NAD
18	Kitchen	Gray Window Caulk	NAD
19	Kitchen	Gray Window Caulk	NAD
20	Hallway behind Kitchen	2' x 4' Pinhole Punch Ceiling Tile	NAD
21	Hallway behind Kitchen	2' x 4' Pinhole Punch Ceiling Tile	NAD
22 - A	Hallway behind Kitchen	Plaster Ceiling Finish (above 2' x 4' Pinhole Punch Ceiling Tile)	NAD
22 - B	Hallway behind Kitchen	Plaster Ceiling Base (above 2' x 4' Pinhole Punch Ceiling Tile)	NAD
23 - A	Hallway behind Kitchen	Plaster Ceiling Finish (above 2' x 4' Pinhole Punch Ceiling Tile)	NAD

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

TABLE 1

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

Sample #	Sampling Location	Material/Description	Analytical Results
23 - B	Hallway behind Kitchen	Plaster Ceiling Base (above 2' x 4' Pinhole Punch Ceiling Tile)	NAD
24 - A	Hallway behind Kitchen	Plaster Ceiling Finish (above 2' x 4' Pinhole Punch Ceiling Tile)	NAD
24 - B	Hallway behind Kitchen	Plaster Ceiling Base (above 2' x 4' Pinhole Punch Ceiling Tile)	NAD
25 - A	Hallway behind Kitchen	12" x 12" Beige Feathered Floor Tile	NAD
25 - B	**Hallway behind Kitchen**	**Black Mastic associated with 12" x 12" Beige Feathered Floor Tile**	**6% Chrysotile**
26 - A	Hallway behind Kitchen	12" x 12" Beige Feathered Floor Tile	NAD
26 - B	**Hallway behind Kitchen**	**Black Mastic associated with 12" x 12" Beige Feathered Floor Tile**	**N/A**
27 - A	Hallway behind Kitchen	4" Gray Cove Base	NAD
27 - B	Hallway behind Kitchen	White Mastic associated with 4" Gray Cove Base	NAD
28 - A	Hallway behind Kitchen	4" Gray Cove Base	NAD
28 - B	Hallway behind Kitchen	White Mastic associated with 4" Gray Cove Base	NAD
29 - A	**Storage Room 160E**	**12" x 12" Green-Yellow Floor Tile**	**4% Chrysotile**
29 - B	**Storage Room 160E**	**Black Mastic associated with 12" x 12" Green-Yellow Floor Tile**	**8% Chrysotile**
30 - A	**Storage Room 160E**	**12" x 12" Green-Yellow Floor Tile**	**N/A**
30 - B	**Storage Room 160E**	**Black Mastic associated with 12" x 12" Green-Yellow Floor Tile**	**N/A**
31 - A	Storage Room 160E	Plaster Ceiling Surfacing (Damaged)	NAD
31 - B	Storage Room 160E	Plaster Ceiling Finish (Damaged)	NAD
31 - C	Storage Room 160E	Plaster Ceiling Base (Damaged)	NAD
32 - A	Storage Room 160E	Plaster Ceiling Surfacing (Damaged)	NAD
32 - B	Storage Room 160E	Plaster Ceiling Finish (Damaged)	NAD
32 - C	Storage Room 160E	Plaster Ceiling Base (Damaged)	NAD
33 - A	Storage Room 160E	Plaster Ceiling Surfacing (Damaged)	NAD
33 - B	Storage Room 160E	Plaster Ceiling Finish (Damaged)	NAD
33 - C	Storage Room 160E	Plaster Ceiling Base (Damaged)	NAD
34 - A	**Storage Room 160E**	**Unknown Sized Dark Green Floor Tile (Second Layer)**	**3% Chrysotile**
34 - B	**Storage Room 160E**	**Black Mastic associated with Unknown Sized Dark Green Floor Tile (Second Layer)**	**4% Chrysotile**

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

TABLE 1

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

Sample #	Sampling Location	Material/Description	Analytical Results
35 - A	**Storage Room 160E**	**Unknown Sized Dark Green Floor Tile (Second Layer)**	**N/A**
35 - B	**Storage Room 160E**	**Black Mastic associated with Unknown Sized Dark Green Floor Tile (Second Layer)**	**N/A**
36	Cafeteria Door B	Beige Mastic associated with 4" Blue Ceramic Wall Tile	NAD
37	Cafeteria Door B	Beige Mastic associated with 4" Blue Ceramic Wall Tile	NAD
38 - A	Cafeteria Door B	6" Black Cove Base	NAD
38 - B	Cafeteria Door B	White Mastic associated with 6" Black Cove Base	NAD
39 - A	Cafeteria Door B	6" Black Cove Base	NAD
39 - B	Cafeteria Door B	White Mastic associated with 6" Black Cove Base	NAD
40 - A	Women's Bathroom 160C	4" White Ceramic Wall Tile	NAD
40 - B	Women's Bathroom 160C	Beige Mastic associated with 4" White Ceramic Wall Tile	NAD
41 - A	Women's Bathroom 160C	4" White Ceramic Wall Tile	NAD
41 - B	Women's Bathroom 160C	Beige Mastic associated with 4" White Ceramic Wall Tile	NAD
42	Women's Bathroom 160C	2' x 2' Pinhole with Small Fissures Ceiling Tile	NAD
43	Women's Bathroom 160C	2' x 2' Pinhole with Small Fissures Ceiling Tile	NAD
44	Cafeteria	12" x 12" Dark Blue Feathered Floor Tile	NAD
45	Cafeteria	12" x 12" Dark Blue Feathered Floor Tile	NAD
46	Cafeteria	12" x 12" Green Feathered Floor Tile	NAD
47	Cafeteria	12" x 12" Green Feathered Floor Tile	NAD
48	Cafeteria	12" x 12" Yellow Feathered Floor Tile	NAD
49 - A	Cafeteria	12" x 12" Yellow Feathered Floor Tile	NAD
49 - B	Cafeteria	Brown Mastic associated with 12" x 12" Yellow Feathered Floor Tile	NAD
50 - A	Cafeteria	12" x 12" White Feathered Floor Tile	NAD
50 - B	Cafeteria	Yellow Mastic associated with 12" x 12" White Feathered Floor Tile	NAD
51	Cafeteria	12" x 12" White Feathered Floor Tile	NAD
52 - A	Cafeteria	12" x 12" Purple Feathered Floor Tile	NAD
52 - B	Cafeteria	Brown Mastic associated with 12" x 12" Purple Feathered Floor Tile	NAD

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

TABLE 1

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

Sample #	Sampling Location	Material/Description	Analytical Results
53	Cafeteria	12" x 12" Purple Feathered Floor Tile	NAD
54 - A	Cafeteria	12" x 12" Light Blue Feathered Floor Tile	NAD
54 - B	Cafeteria	Yellow Mastic associated with 12" x 12" Light Blue Feathered Floor Tile	NAD
55 - A	Cafeteria	12" x 12" Light Blue Feathered Floor Tile	NAD
55 - B	Cafeteria	Yellow Mastic associated with 12" x 12" Light Blue Feathered Floor Tile	NAD
56 - A	**Cafeteria**	**Unknown Sized Dark Green Floor Tile (Second Layer)**	**3% Chrysotile**
56 - B	**Cafeteria**	**Black Mastic associated with Unknown Sized Dark Green Floor Tile (Second Layer)**	**6% Chrysotile**
57 - A	**Cafeteria**	**Unknown Sized Dark Green Floor Tile (Second Layer)**	**N/A**
57 - B	**Cafeteria**	**Black Mastic associated with Unknown Sized Dark Green Floor Tile (Second Layer)**	**N/A**

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

Appendix IV: 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 LAB CODE 200644-0

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

Attn: Catey Bourne

Project: 47:1519-F4/ John Adams Kitchen

Lab Order ID: 71929361
Analysis ID: 71929361_PLM
Date Received: 11/19/2019
Date Reported: 11/22/2019

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
1 *71929361PLM_1*	Black Mastic on Fiberglass Pipe Wrap	**5% Chrysotile**		**95% Other**	Black Non Fibrous Homogeneous Dissolved
2 *71929361PLM_2*	Black Mastic on Fiberglass Pipe Wrap	**Not Analyzed**			
3 *71929361PLM_3*	Black Mastic on Fiberglass Pipe Wrap	**Not Analyzed**			
4 *71929361PLM_4*	2' x 4' Drywall Ceiling Tile	**None Detected**	**10% Cellulose**	**90% Other**	Brown, White Non Fibrous Homogeneous Teased
5 *71929361PLM_5*	2' x 4' Drywall Ceiling Tile	**None Detected**	**10% Cellulose**	**90% Other**	Brown, White Non Fibrous Homogeneous Teased
6 *71929361PLM_6*	Yellow Fiberglass Pipe Wrap	**None Detected**	**60% Cellulose**	**40% Other**	White, Yellow Fibrous Heterogeneous Teased, Dissolved
7 *71929361PLM_7*	Yellow Fiberglass Pipe Wrap	**None Detected**	**60% Cellulose**	**40% Other**	White, Yellow Fibrous Heterogeneous Teased, Dissolved
8 *71929361PLM_8*	Yellow Fiberglass Pipe Wrap	**None Detected**	**60% Cellulose**	**40% Other**	White, Yellow Fibrous Heterogeneous Teased, Dissolved

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Byron Stroble (87)

Analyst

Approved Signatory

Bulk Asbestos Analysis

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

NVLAP LAB CODE 200644-0

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

Attn: Catey Bourne

Project: 47:1519-F4/ John Adams Kitchen

Lab Order ID: 71929361
Analysis ID: 71929361_PLM
Date Received: 11/19/2019
Date Reported: 11/22/2019

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
9 *71929361PLM_9*	Yellow Mastic on 4" White Ceramic Wall Tile	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved
10 *71929361PLM_10*	Yellow Mastic on 4" White Ceramic Wall Tile	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved
11 *71929361PLM_11*	White Door Caulk	None Detected		100% Other	White Non Fibrous Homogeneous Ashed
12 *71929361PLM_12*	White Door Caulk	None Detected		100% Other	White Non Fibrous Homogeneous Ashed
13 *71929361PLM_13*	Foil-Backed Pipe Wrap	None Detected	60% Cellulose	40% Other	Brown, Black Fibrous Heterogeneous Teased, Dissolved
14 *71929361PLM_14*	Foil-Backed Pipe Wrap	None Detected	60% Cellulose	40% Other	Brown, Black Fibrous Heterogeneous Teased, Dissolved
15 *71929361PLM_15*	Foil-Backed Pipe Wrap	None Detected	60% Cellulose	40% Other	Brown, Black Fibrous Heterogeneous Teased, Dissolved
16 - A *71929361PLM_16*	6" Ceramic Floor Tile and Thin Set *ceramic tile*	None Detected		100% Other	Brown Non Fibrous Homogeneous Crushed

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
16 - B *71929361PLM_58*	6" Ceramic Floor Tile and Thin Set *thin set*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Crushed
17 - A *71929361PLM_17*	6" Ceramic Floor Tile and Thin Set *ceramic tile*	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous Crushed
17 - B *71929361PLM_59*	6" Ceramic Floor Tile and Thin Set *thin set*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Crushed
18 *71929361PLM_18*	Gray Window Caulk	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed
19 *71929361PLM_19*	Gray Window Caulk	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed
20 *71929361PLM_20*	2' x 4' Pinhole Punch Ceiling Tile	**None Detected**	**45% Cellulose** **45% Mineral Wool**	**10% Other**	Gray Fibrous Homogeneous Teased, Ashed
21 *71929361PLM_21*	2' x 4' Pinhole Punch Ceiling Tile	**None Detected**	**45% Cellulose** **45% Mineral Wool**	**10% Other**	Gray Fibrous Homogeneous Teased, Ashed
22 - A *71929361PLM_22*	Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile *finish*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
22 - B *71929361PLM_60*	Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile *base*	None Detected		100% Other	Gray Non Fibrous Homogeneous Crushed
23 - A *71929361PLM_23*	Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile *finish*	None Detected		100% Other	White Non Fibrous Homogeneous Teased
23 - B *71929361PLM_61*	Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile *base*	None Detected		100% Other	Gray Non Fibrous Homogeneous Crushed
24 - A *71929361PLM_24*	Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile *finish*	None Detected		100% Other	White Non Fibrous Homogeneous Teased
24 - B *71929361PLM_62*	Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile *base*	None Detected		100% Other	Gray Non Fibrous Homogeneous Crushed
25 - A *71929361PLM_25*	12" x 12" Beige Feathered Floor Tile with Black Mastic *floor tile*	None Detected		100% Other	Beige Non Fibrous Homogeneous Dissolved
25 - B *71929361PLM_63*	12" x 12" Beige Feathered Floor Tile with Black Mastic *mastic*	6% Chrysotile		94% Other	Black Non Fibrous Homogeneous Dissolved
26 - A *71929361PLM_26*	12" x 12" Beige Feathered Floor Tile with Black Mastic *floor tile*	None Detected		100% Other	Beige Non Fibrous Homogeneous Dissolved

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
26 - B *71929361PLM_64*	12" x 12" Beige Feathered Floor Tile with Black Mastic	**Not Analyzed**			
27 - A *71929361PLM_27*	4" Gray Cove Base with White Mastic *covebase*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed
27 - B *71929361PLM_65*	4" Gray Cove Base with White Mastic *mastic*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Dissolved
28 - A *71929361PLM_28*	4" Gray Cove Base with White Mastic *covebase*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Ashed
28 - B *71929361PLM_66*	4" Gray Cove Base with White Mastic *mastic*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Dissolved
29 - A *71929361PLM_29*	12" x 12" Green/Yellow Floor Tile and Brown Leveling Compound *floor tile*	**4% Chrysotile**		**96% Other**	Green Non Fibrous Homogeneous Dissolved
29 - B *71929361PLM_67*	12" x 12" Green/Yellow Floor Tile and Brown Leveling Compound *mastic*	**8% Chrysotile**		**92% Other**	Black Non Fibrous Homogeneous Dissolved
30 - A *71929361PLM_30*	12" x 12" Green/Yellow Floor Tile and Brown Leveling Compound *floor tile*	**Not Analyzed**			

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
30 - B *71929361PLM_68*	12" x 12" Green/Yellow Floor Tile and Brown Leveling Compound *mastic*	**Not Analyzed**			
31 - A *71929361PLM_31*	Plaster Ceiling (Damaged) *surfacing*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased
31 - B *71929361PLM_69*	Plaster Ceiling (Damaged) *finish*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased
31 - C *71929361PLM_70*	Plaster Ceiling (Damaged) *base*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Crushed
32 - A *71929361PLM_32*	Plaster Ceiling (Damaged) *surfacing*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased
32 - B *71929361PLM_71*	Plaster Ceiling (Damaged) *finish*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased
32 - C *71929361PLM_72*	Plaster Ceiling (Damaged) *base*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Crushed
33 - A *71929361PLM_33*	Plaster Ceiling (Damaged) *surfacing*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
33 - B *71929361PLM_73*	Plaster Ceiling (Damaged) *finish*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Teased
33 - C *71929361PLM_74*	Plaster Ceiling (Damaged) *base*	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous Crushed
34 - A *71929361PLM_34*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *floor tile*	**3% Chrysotile**		**97% Other**	Green Non Fibrous Homogeneous Dissolved
34 - B *71929361PLM_75*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *mastic*	**4% Chrysotile**		**96% Other**	Black Non Fibrous Homogeneous Dissolved
35 - A *71929361PLM_35*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *floor tile*	**Not Analyzed**			
35 - B *71929361PLM_76*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *mastic*	**Not Analyzed**			
36 *71929361PLM_36*	Mastic associated with 4" Blue Ceramic Wall Tile	**None Detected**		**100% Other**	Beige Non Fibrous Homogeneous Dissolved
37 *71929361PLM_37*	Mastic associated with 4" Blue Ceramic Wall Tile	**None Detected**		**100% Other**	Beige Non Fibrous Homogeneous Dissolved

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
38 - A *71929361PLM_38*	6" Black Cove Base with White Mastic *covebase*	None Detected		100% Other	Black Non Fibrous Homogeneous Ashed
38 - B *71929361PLM_77*	6" Black Cove Base with White Mastic *mastic*	None Detected		100% Other	White Non Fibrous Homogeneous Dissolved
39 - A *71929361PLM_39*	6" Black Cove Base with White Mastic *covebase*	None Detected		100% Other	Black Non Fibrous Homogeneous Ashed
39 - B *71929361PLM_78*	6" Black Cove Base with White Mastic *mastic*	None Detected		100% Other	White Non Fibrous Homogeneous Dissolved
40 - A *71929361PLM_40*	4" White Ceramic Wall Tile and Mastic *ceramic tile*	None Detected		100% Other	White Non Fibrous Homogeneous Crushed
40 - B *71929361PLM_79*	4" White Ceramic Wall Tile and Mastic *mastic*	None Detected		100% Other	Beige Non Fibrous Homogeneous Dissolved
41 - A *71929361PLM_41*	4" White Ceramic Wall Tile and Mastic *ceramic tile*	None Detected		100% Other	White Non Fibrous Homogeneous Crushed
41 - B *71929361PLM_80*	4" White Ceramic Wall Tile and Mastic *mastic*	None Detected		100% Other	Beige Non Fibrous Homogeneous Dissolved

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
42 *71929361PLM_42*	2' x 2' Pinhole with Small Fissures Ceiling Tile	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Gray Fibrous Homogeneous Teased, Ashed
43 *71929361PLM_43*	2' x 2' Pinhole with Small Fissures Ceiling Tile	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Gray Fibrous Homogeneous Teased, Ashed
44 *71929361PLM_44*	12" x 12" Dark Blue Feathered Floor Tile	None Detected		100% Other	Blue Non Fibrous Homogeneous Dissolved
45 *71929361PLM_45*	12" x 12" Dark Blue Feathered Floor Tile	None Detected		100% Other	Blue Non Fibrous Homogeneous Dissolved
46 *71929361PLM_46*	12" x 12" Green Feathered Floor Tile	None Detected		100% Other	Green Non Fibrous Homogeneous Dissolved
47 *71929361PLM_47*	12" x 12" Green Feathered Floor Tile	None Detected		100% Other	Green Non Fibrous Homogeneous Dissolved
48 *71929361PLM_48*	12" x 12" Yellow Feathered Floor Tile	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved
49 - A *71929361PLM_49*	12" x 12" Yellow Feathered Floor Tile *floor tile*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved

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49 - B *71929361PLM_81*	12" x 12" Yellow Feathered Floor Tile *mastic - small sample*	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous Dissolved
50 - A *71929361PLM_50*	12" x 12" White Feathered Floor Tile *floor tile*	**None Detected**		**100% Other**	White Non Fibrous Homogeneous Dissolved
50 - B *71929361PLM_82*	12" x 12" White Feathered Floor Tile *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
51 *71929361PLM_51*	12" x 12" White Feathered Floor Tile	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
52 - A *71929361PLM_52*	12" x 12" Purple Feathered Floor Tile *floor tile*	**None Detected**		**100% Other**	Purple Non Fibrous Homogeneous Dissolved
52 - B *71929361PLM_83*	12" x 12" Purple Feathered Floor Tile *mastic - small sample*	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous Dissolved
53 *71929361PLM_53*	12" x 12" Purple Feathered Floor Tile	**None Detected**		**100% Other**	Purple Non Fibrous Homogeneous Dissolved
54 - A *71929361PLM_54*	12" x 12" Light Blue Feathered Floor Tile *floor tile*	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous Dissolved

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54 - B *71929361PLM_84*	12" x 12" Light Blue Feathered Floor Tile *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
55 - A *71929361PLM_55*	12" x 12" Light Blue Feathered Floor Tile *floor tile*	**None Detected**		**100% Other**	Blue Non Fibrous Homogeneous Dissolved
55 - B *71929361PLM_85*	12" x 12" Light Blue Feathered Floor Tile *mastic*	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous Dissolved
56 - A *71929361PLM_56*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *floor tile*	**3% Chrysotile**		**97% Other**	Green Non Fibrous Homogeneous Dissolved
56 - B *71929361PLM_86*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *mastic*	**6% Chrysotile**		**94% Other**	Black Non Fibrous Homogeneous Dissolved
57 - A *71929361PLM_57*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *floor tile*	**Not Analyzed**			
57 - B *71929361PLM_87*	Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer) *mastic*	**Not Analyzed**			

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%.

Byron Stroble (87)

Analyst

Approved Signatory

71929361

Client:	Ecs Mid Atlantic
Contact:	Catey Bourne
Address:	14026 Thunderbolt Place
Phone:	(703)-471-8400
Fax:	
Email:	cbourne@ecslimited.com
Project:	47:1519-F4/ John Adams Kitchen
Client Notes:	Positive Stop
P.O. #:	47:1519-F4
Date Submitted:	11/15/2019
Analysis:	PLM EPA 600/R-93/116
Turnaround Time:	3 Day

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.

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		Black Mastic on Fiberglass Pipe Wrap	Storage Room 161A
2		Black Mastic on Fiberglass Pipe Wrap	Storage Room 161A
3		Black Mastic on Fiberglass Pipe Wrap	Storage Room 161A
4		2' x 4' Drywall Ceiling Tile	Storage Room 161A
5		2' x 4' Drywall Ceiling Tile	Storage Room 161A
6		Yellow Fiberglass Pipe Wrap	Storage Room 161A
7		Yellow Fiberglass Pipe Wrap	Storage Room 161A
8		Yellow Fiberglass Pipe Wrap	Storage Room 161A
9		Yellow Mastic on 4" White Ceramic Wall Tile	Storage Room 161A
10		Yellow Mastic on 4" White Ceramic Wall Tile	Storage Room 161A
11		White Door Caulk	Kitchen
12		White Door Caulk	Kitchen
13		Foil-Backed Pipe Wrap	Kitchen Storage Room 161D
14		Foil-Backed Pipe Wrap	Kitchen Storage Room 161D
15		Foil-Backed Pipe Wrap	Kitchen Storage Room 161D
16		6" Ceramic Floor Tile and Thin Set	Kitchen
17		6" Ceramic Floor Tile and Thin Set	Kitchen
18		Gray Window Caulk	Kitchen
19		Gray Window Caulk	Kitchen
20		2' x 4' Pinhole Punch Ceiling Tile	Hallway behind Kitchen
21		2' x 4' Pinhole Punch Ceiling Tile	Hallway behind Kitchen
22		Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile	Hallway behind Kitchen
23		Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile	Hallway behind Kitchen
24		Plaster Ceiling above 2' x 4' Pinhole Punch Ceiling Tile	Hallway behind Kitchen
25		12" x 12" Beige Feathered Floor Tile with Black Mastic	Hallway behind Kitchen
26		12" x 12" Beige Feathered Floor Tile with Black Mastic	Hallway behind Kitchen
27		4" Gray Cove Base with White Mastic	Hallway behind Kitchen
28		4" Gray Cove Base with White Mastic	Hallway behind Kitchen
29		12" x 12" Green/Yellow Floor Tile and Brown Leveling Compound	Storage Room 160E
30		12" x 12" Green/Yellow Floor Tile and Brown Leveling Compound	Storage Room 160E
31		Plaster Ceiling (Damaged)	Storage Room 160E
32		Plaster Ceiling (Damaged)	Storage Room 160E
33		Plaster Ceiling (Damaged)	Storage Room 160E
34		Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer)	Storage Room 160E
35		Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer)	Storage Room 160E
36		Mastic associated with 4" Blue Ceramic Wall Tile	Cafeteria Door B
37		Mastic associated with 4" Blue Ceramic Wall Tile	Cafeteria Door B
38		6" Black Cove Base with White Mastic	Cafeteria Door B
39		6" Black Cove Base with White Mastic	Cafeteria Door B
40		4" White Ceramic Wall Tile and Mastic	Women's Bathroom 160C
41		4" White Ceramic Wall Tile and Mastic	Women's Bathroom 160C
42		2' x 2' Pinhole with Small Fissures Ceiling Tile	Women's Bathroom 160C
43		2' x 2' Pinhole with Small Fissures Ceiling Tile	Women's Bathroom 160C
44		12" x 12" Dark Blue Feathered Floor Tile	Cafeteria
45		12" x 12" Dark Blue Feathered Floor Tile	Cafeteria
46		12" x 12" Green Feathered Floor Tile	Cafeteria
47		12" x 12" Green Feathered Floor Tile	Cafeteria
48		12" x 12" Yellow Feathered Floor Tile	Cafeteria
49		12" x 12" Yellow Feathered Floor Tile	Cafeteria
50		12" x 12" White Feathered Floor Tile	Cafeteria
51		12" x 12" White Feathered Floor Tile	Cafeteria
52		12" x 12" Purple Feathered Floor Tile	Cafeteria
53		12" x 12" Purple Feathered Floor Tile	Cafeteria
54		12" x 12" Light Blue Feathered Floor Tile	Cafeteria
55		12" x 12" Light Blue Feathered Floor Tile	Cafeteria
56		Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer)	Cafeteria
57		Unknown Sized Dark Green Floor Tile with Black Mastic (Second Layer)	Cafeteria

Accepted ☒
Rejected ☐

Relinquished By

Received By

Appendix V: Certifications/ Licenses

DPOR License Lookup License Number 3303004293

License Details

Name	BOURNE, CATHERINE GRACE
License Number	3303004293
License Description	Asbestos Inspector License
Rank	Asbestos Inspector
Address	ALEXANDRIA, VA 22304
Initial Certification Date	2017-07-18
Expiration Date	2020-07-31

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DPOR License Lookup build 1,198 (built 2017-07-13 02:34:41).

April 7, 2017

Mr. Derrick Fulcher
Alexandria City Public Schools
1340 Braddock Place
Alexandria, Virginia 22314

ECS Project No. 47:1519-D

Reference: AHERA Three-Year Re-Inspection Report, John Adams Elementary School, 5651 Rayburn Avenue, Alexandria, VA

Dear Mr. Fulcher:

ECS Mid-Atlantic, LLC (ECS), is pleased to provide Alexandria City Public Schools with the results of the above referenced non-invasive AHERA Three-Year Re-Inspection Report for the John Adams Elementary School. This work was performed in general conformance with ECS Proposal No. 47:1750-EP2, dated October 19, 2016 and ACPS Purchase Order Number 17003633. The following is a summary of results of the above referenced onsite work performed, in general, on January 10, 2017.

ECS appreciates this opportunity to provide these services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS MID-ATLANTIC, LLC

Beverly Sedon
Asbestos Inspector
3303003186
Virginia License Number

Diana Krass
Asbestos Management Planner
3304001626
Virginia License Number

Attachments:

ACPS Asbestos-Containing Materials (ACMs) Summary
3-Year Re-Inspection ACM Summary Form
Table 1: Bulk Sampling of Suspect Asbestos Containing Materials
Photographs
Laboratory Results and Chain of Custody

I:_e-projects\1501-1600\1519-D ACPS 3 YR AHERA - O&M Plans\John Adams\1519-D John Adams Elementary School 3-Yr Survey Report.doc

SITE DESCRIPTION

The subject property is improved with John Adams Elementary School and is located at 5651 Rayburn Avenue in Alexandria, Virginia. The building appears to have various renovations in the past. Most general classrooms and common areas were accessible during the survey although some areas were not accessible due to occupancy, on-going maintenance work, or the rooms were locked.

PURPOSE

In general accordance with Title II, the Asbestos Hazard Emergency Response Act (AHERA) of the Toxic Substance Control ACT (TSCA), this school was re-inspected by an EPA and State of Virginia Accredited Asbestos Inspector and Management Planner. Under this law the local education agency (LEA) for each school system found to contain asbestos-containing materials (ACMs) must have those school buildings re-inspected once every three years.

Prior to renovation and/or demolition of ACMs, facility owners must also comply with the US EPA Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations. ECS was requested to perform an AHERA Three-Year Re-Inspection Survey for the school building to identify ACMs which may require repair, special handling, and/or removal.

PHYSICAL ASSESSMENT

ECS performed a physical assessment of the asbestos-containing materials (ACMs) that have been previously reported for the school building. A copy of the ACMs identified for the school building is attached to this report. The physical condition of each ACM observed by ECS during our survey is referenced in the attached summary table.

Based on our observations of the accessible ACMs, the materials appeared to be generally in good/intact condition with the exception of the white vibration dampener cloth located in the electrical room on the first floor. This white vibration dampener appeared to be damaged. The HVAC unit appeared to no longer be in operation and the cloth is located above the drop ceiling.

Various flooring materials were observed to have layering throughout the floor systems of the building. Newer floor tiles and/or carpeting were observed. It is expected that older flooring materials are present beneath newer flooring materials and are likely present under cabinets, partition walls, etc.

METHODS AND RESULTS

The asbestos survey was performed by a Commonwealth of Virginia licensed asbestos inspector who has received EPA accredited training (VA License No. 3303003186). The survey was performed 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.

During our survey on January 10, 2017, nine (9) bulk samples of suspect-asbestos containing materials were collected and submitted to the laboratory for analysis. Based on the analytical results, the white dampener vibration cloth that was previously assumed as asbestos-containing was reported to contain 70% Chrysotile asbestos. None of the remaining materials sampled were reported as asbestos-containing. The sampling results are summarized in Table 1 attached to this report.

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 solid walls and/or ceilings, and/or sub-grade materials) and were not surveyed for suspect ACMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

FINDINGS AND RECOMMENDATIONS

During our survey, newly identified asbestos-containing materials (ACMs) were not revealed. The white vibration dampener cloth, a friable material, was sampled for verification from the first floor electrical room. The cloth was reported as asbestos and appeared to be damaged. At the time of our survey, the HVAC unit appeared to no longer be in operation and the cloth is located above the drop ceiling.

ECS recommends the findings of this report should be implemented into the Asbestos Operations and Maintenance Plan (O&M Plan) for the school building and the materials continued to be managed within the O&M Plan. No additional training or notification is required as a result of adding these materials to the O&M Plan other than informing maintenance staff and outside contractors not to disturb these materials.

Based on our findings during this re-inspection, ECS recommends the following:

1. The above-mentioned damaged ACMs and other associated contaminated materials be repaired or abated as soon as feasible.

2. ECS recommends that access to the white vibration dampener cloth located in the first floor electrical room should be restricted to authorized personnel if possible (until the material is properly removed from the area).

3. Warning labels should be posted within the first floor electrical room in regards to the observed damaged white vibration dampener cloth until this material is addressed.

4. Notification of the existence and availability of the O&M Plan, which includes information on known and suspect ACMs, should be made available to the school staff, PTA, and parents of children attending the school on an annual basis.

5. Any contractors (electrical, mechanical, etc.) who are to perform a service at the building shall be notified of known and suspect ACMs at the building as identified in the O&M Plan, and be instructed not to disturb these materials in any way.

Federal and local regulations require ACMs be removed prior to disturbance by renovation and/or demolition. ECS recommends the identified ACMs reported to be present within the school building be removed prior to construction activities and disposed of by a licensed Commonwealth of Virginia asbestos abatement contractor if the ACMs are to be impacted.

Suspect ACMs not observed due to inaccessibility during the survey may be encountered during future construction activities and should be tested for asbestos or assumed as asbestos-containing. If any portions of the building outside of the areas surveyed for this study are to be impacted by construction activities, it is recommended that they also be surveyed for ACMs by a licensed Commonwealth of Virginia asbestos inspector prior to disturbance.

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.

During this study, suspect asbestos samples were submitted for analysis at an NVLAP-accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which suspect asbestos 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 other warranty, expressed or implied, is made.

Our recommendations are in part based on federal 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.

The client agrees to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, information that may be necessary to prevent any danger to public health, safety, or the environment.

ATTACHMENT

ACPS ASBESTOS-CONTAINING MATERIALS (ACMS) SUMMARY

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

Updated as of January 10, 2017

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS								
White Vibration Damper	Electrical Room G-1 on 1st Floor	F	Damaged	Reported in other areas	1/10/17	Repair or Remove ASAP; Maintain in O & M Plan		Material Sampled on 1/10/2017 - 70% Chrysotile
6" TSI-Elbows	Gym at Exit 10 on 1st Floor (above Ceiling Tiles)	F	Intact	Reported as removed in 2010. Assumed above drop ceiling tiles in other areas	1/10/17	Maintain in O & M Plan		Verify Analytical Results
Black Mastic on Fiberglass Pipe Insulation	Gym at Exit 10 on 1st Floor	NF	Intact	Reported as removed in 2010. On 2" and 4" Pipe Line above Ceiling Tile. Assumed above drop ceiling tiles in other areas	1/10/17	Maintain in O & M Plan		Verify Analytical Results
Fire Doors	Hallways	F	Intact	None	1/10/17	Maintain in O & M Plan		Verify Analytical Results
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS IN NOVEMBER 19, 2013 SURVEY								
Grey Ceiling Tiles	Incinerator Room	NF	N/A	Reported as 50% Remaining, raw edges need encapsulation. Could not locate	1/10/17	Maintain in O & M Plan; Attempt to locate mislabel area		There is no incinerator room according to the building engineer
Mastic on Drain Line	Incinerator Room	NF	N/A	PACM Material reported as removed in 2010. Could not locate	1/10/17	Maintain in O & M Plan; Attempt to locate mislabel area		There is no incinerator room according to the building engineer
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN MARCH 3, 2010 SURVEY								
Gray Spray Applied Fireproofing	South Hallway	F	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 15% Chrysotile
Black Pipe Insulation Sealant	South Hallway	NF	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 5% Chrysotile
Interior Window Caulk	South Hallway	NF	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 8% Chrysotile
Black Pipe Elbow (Fitting) Insulation Sealant	West Hallway	F	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 8% Chrysotile
MATERIALS REPORTED AS PREVIOUSLY REMOVED IN 2010 ON PRIOR SURVEYS								
9" x 9" Green Floor Tiles	Hallway Outside Room 8	NF	N/A	Material may be covered by 12" x 12" floor tile	19-Nov-13	Maintain in O & M Plan	N/A	Reported as removed in 2010
9" x 9" Black Floor Tiles	Hallway Outside Room 9	NF	N/A	Material may be covered by 12" x 12" floor tile	19-Nov-13	Maintain in O & M Plan	N/A	Reported as removed in 2011

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Spray-on Insulations	1st Floor Entire Perimeter, Rooms 114-116; 206-213 and Inner Halls	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-Boiler Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI- Tank Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-All Elbows Joints	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Grey Pipe Fitting Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Breeching Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-Vibration Dampers and Elbows	Gym	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
White TSI	Gym Men Locker/Old Bathroom Area /Book Storage	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Cement Countertop Surface	Room 129	NF	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-Vibration Dampers	Shop 1	F	Removed 2010	Could not locate shop 1	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Plaster Ceiling	Restrooms	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 19, 2013 SURVEY								
12" x 12" Green with White Flecks Floor Tile and associated Black Mastic	Stage on 1st Floor	NF	Intact	This material was not observed in this location but is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile Mastic - 5% Chrysotile
12" x 12" Light Green Flecked Floor Tile and associated Black Mastic	Closet in the Hallway	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 3% Chrysotile
Black Sink Undercoat	Art Classroom 152	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile
12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic	Storage Room in Office 229	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 3% Chrysotile
Greenish Gray Floor Tile and associated Black Mastic	Supply/Copy Room in Office 229	NF	Intact	This material is under carpet and may be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
12" x 12" Beige Flecked Floor Tile and associated Black Mastic	Storage Closet in Hallway by Stairwell B	NF	Intact	This material is under carpet	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile
Off-White Floor Tile and associated Black Mastic	Hallway on 2nd Floor (under Water Fountain)	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN Jan. 10, 2017 SURVEY								
White Vibration Damper Cloth	1st Floor G1 Electric Room	F	Frayed	Unit was not observed to be in use	10-Jan-17	Remain in O&M Plan		Abate/Repair
MATERIALS ASSUMED TO CONTAIN ASBESTOS								
Hardwood Floor Underlayment and associated Mastic	Gym	NF	Intact	PACM until tested; Reported as removed in 2010	1/10/17	Maintain in O & M Plan		Sample if proposed to be disturbed
Plaster Ceiling	Boiler Room	F	Removed 2010	Reported as removed in 2010	1/10/17	Remove from O & M Plan		None
Fountain Coil Wrap	Hallways	F	Removed 2011	Reported as removed in 2011	1/10/17	Remove from O & M Plan		Sample if proposed to be disturbed
Boards above Windows and Drop Ceiling Tiles	Classrooms	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Tectum Boards and associated Mastic	Cafeteria (160) on 1st Floor	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Gypsum Roof Boards	Throughout the Building	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Pipe Flange Gaskets	Throughout the Building	Unknown	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Electrical Panels: Transite Components	Mechanical Rooms	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Thermal System Insulation (TSI)	Pipes within Chases behind Walls and above Ceiling throughout Building	F	Not Observed	PACM Until Tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Mirror Mastic	Bathrooms	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Boards and associated Mastics	Classrooms and Hallways	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Interior Pipe Wrap associated with Water Fountains and Radiators	Throughout the Building	F	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Waterproofing Membranes/Mastics	Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and Under Ceramic Flooring	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Asphalt-Based Roofing Material and Caulks/Sealants	Roof	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN MARCH 3, 2010 SURVEY								
Ceiling Plaster	South & West Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
2' x 4' Ceiling Tile	South, East, & West Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
12" x 12" Yellow Floor Tile and Mastic	South, East, & West Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
4" Gray Cove Base with Tan Mastic	West and East Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 19, 2013 SURVEY								
Drywall	Girl Restroom in Cafeteria by the Stage, Office 149E, and Hallway on 2nd Floor by Elevator	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Joint Compound	Hallway at Exit Door 12, Office 149E, and Hallway on 2nd Floor by Elevator	N/A	N/A	N/A	N/A	N/A	N/A	NAD
4" Black Cove Base and associated Brown Mastic	Stage	N/A	N/A	N/A	N/A	N/A	N/A	Cove base - NAD Mastic - NAD
Blue Fire Rate Curtain	Stage	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Beige Fire Rate Curtain	Stage	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Plaster Ceiling	Custodial Office in Kitchen and Stairwell at Exit Doors 5-6	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Light Gray Interior Door Caulk	Exit Door 10 (Gymnasium) and Exit Door by Room 154	N/A	N/A	N/A	N/A	N/A	N/A	NAD
2' x 4' White Pinhole Punch Ceiling Tile	Hallway on 1st Floor by Gymnasium	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Gray Mastic on Metal Duct	Hallway on 1st Floor by Gymnasium	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Spray-on Ceiling Insulation	Classroom 112, 115, 120, 155, and 201	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Solid Drywall Ceiling Tile	Girl Restroom on 1st Floor	N/A	N/A	N/A	N/A	N/A	N/A	Cove base - NAD Mastic - NAD

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Gray Interior Window Caulk	Classroom 129 & 155 and Hallway on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	Floor Tile - NAD Mastic - NAD
Black Pipe Wrap	Classroom 155	N/A	N/A	N/A	N/A	N/A	N/A	Floor Tile - NAD Mastic - NAD
Grey Sink Undercoat	Art Classroom 151 and Classroom 154	N/A	N/A	N/A	N/A	N/A	N/A	Mastic - NAD Leveling - NAD
White Sink Undercoat	Classroom 153	N/A	N/A	N/A	N/A	N/A	N/A	NAD
4" Brown Cove Base and associated Brown Mastic	Storage Closet in Hallway by Stairwell B	N/A	N/A	N/A	N/A	N/A	N/A	NAD
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN JANUARY 10, 2017 SURVEY								
4" Gray Cove Base with White Mastic	1st FL, Hall at G1 Electric Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Bridging Mastic on Fiberglass of Hot Water Tank	Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	Boiler Room	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, N/A = Not Applicable.

ATTACHMENT

3-YEAR RE-INSPECTION ACM SUMMARY FORM

John Adams Elementary School 3-Year AHERA Re-Inspection Survey
Asbestos-Containing Materials Summary

Date: January 10, 2017

Address: 5651 Rayburn Avenue, Alexandria, Virginia

Room	Material	Condition	Abated
Electrical Room G-1 on 1st Floor	White Vibration Damper	Frayed	No
Gym at Exit 10 on 1st Floor (above Ceiling Tiles)	6" TSI-Elbows	Above Drop Ceilings	No
Gym at Exit 10 on 1st Floor	Black Mastic on Fiberglass Pipe Insulation	Above Drop Ceilings	No
Hallways	Fire Doors	Intact	No
Incinerator Room	Grey Ceiling Tiles	Not Observed	Unknown[1]
Incinerator Room	Mastic on Drain Line	Not Observed	Unknown[1]
South Hallway	Gray Spray Applied Fireproofing	Not Observed	Unknown[2]
South Hallway	Black Pipe Insulation Sealant	Not Observed	Unknown[2]
South Hallway	Interior Window Caulk	Possibly Covered by Newer Caulking	Unknown[2]
West Hallway	Black Pipe Elbow (Fitting) Insulation Sealant	Intact	No
Stage on 1st Floor	12" x 12" Green with White Flecks Floor Tile and associated Black Mastic	Not Observed	Unknown
Closet in the Hallway	12" x 12" Light Green Flecked Floor Tile and associated Black Mastic	Intact	No
Art Classroom 152	Black Sink Undercoat	No Access	No

Room	Material	Condition	Abated
Storage Room in Office 229	12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic	Intact	No

Room	Material	Condition	Abated
Supply/Copy Room in Office 229	Greenish Gray Floor Tile and associated Black Mastic	Intact	No
Storage Closet in Hallway by Stairwell B	12" x 12" Beige Flecked Floor Tile and associated Black Mastic	Intact	No
Hallway on 2nd Floor (under Water Fountain)	Off-White Floor Tile and associated Black Mastic	Intact	No

Comments

1. Incinerator room is no longer present.
2. Various items were abated in 2010. Although these materials were not observed in this area, they may be located in other areas of the building.

AHERA Inspector: Beverly Sedon **License No:** 3303003186

Signature of Inspector: 

ATTACHMENT

TABLE 1
BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

TABLE 1

BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

Sample #	Sampling Location	Material/Description	Analytical Results
JA 74	1st FL, Hall at G1 Electric Room	4" Gray Cove Base with White Mastic	Base - NAD Mastic - NAD
JA 75	1st FL, Hall at G1 Electric Room	4" Gray Cove Base with White Mastic	Base - NAD Mastic - NAD
JA 76	**1st FL, G1 Electric Room**	**White Vibration Dampener Cloth**	**Asbestos: 70% Chrysotile**
JA 77	1st FL, G1 Electric Room	White Vibration Dampener Cloth	N/A
JA 78	Boiler Room	White Bridging Mastic on Fiberglass of Hot Water Tank	NAD
JA 79	Boiler Room	White Bridging Mastic on Fiberglass of Hot Water Tank	NAD
JA 80	Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD
JA 81	Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD
JA 82	Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD

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

ATTACHMENT

PHOTOGRAPHS



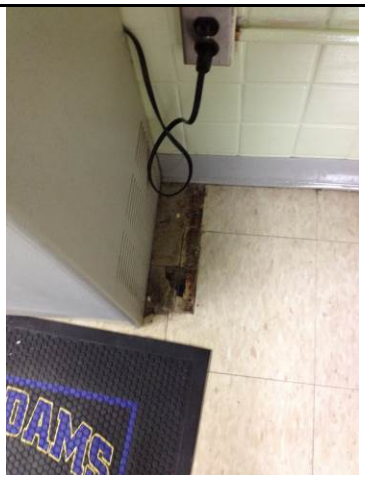
1. View of the boiler units.



2. View of older asbestos flooring in the closets.



3. Typical view of multiple colored flooring over older flooring.



4. View of older asbestos flooring beneath newer flooring.



5. View of the white damper vibration cloth (ACM).

ATTACHMENT

LABORATORY RESULTS AND CHAIN OF CUSTODY

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 John Adams

Lab Order ID: 1700661
Analysis ID: 1700661_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
JA 74 - A	4" Gray Cove Base with White Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1700661PLM_1	*covebase*				Ashed
JA 74 - B	4" Gray Cove Base with White Mastic	**None Detected**		**100% Other**	Yellow Non Fibrous Homogeneous
1700661PLM_10	*mastic*				Ashed
JA 75	4" Gray Cove Base with White Mastic	**None Detected**		**100% Other**	Gray Non Fibrous Homogeneous
1700661PLM_2	*covebase only*				Ashed
JA 76	White Vibration Dampner Cloth	**70% Chrysotile**		**30% Other**	Gray Fibrous Homogeneous
1700661PLM_3					Teased
JA 77	White Vibration Dampner Cloth	**Not Analyzed**			
1700661PLM_4					
JA 78	White Bridging Mastic on Fiberglass of Hot Water Tank	**None Detected**	**30% Cellulose** **5% Wollastonite**	**65% Other**	White Fibrous Homogeneous
1700661PLM_5					Dissolved
JA 79	White Bridging Mastic on Fiberglass of Hot Water Tank	**None Detected**	**5% Wollastonite**	**95% Other**	White Non Fibrous Homogeneous
1700661PLM_6					Dissolved
JA 80	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	**None Detected**	**50% Cellulose** **10% Fiber Glass**	**40% Other**	White, Silver Fibrous Heterogeneous
1700661PLM_7	*wrap on fiberglass*				Dissolved

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%.

Megan Javonovich (10)

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 Lab Code: 200664-0

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

Attn: Beverly Sedon

Project: 47:1519-D John Adams

Lab Order ID: 1700661
Analysis ID: 1700661_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
JA 81 *1700661PLM_8*	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank *wrap only*	**None Detected**	**50% Cellulose** **10% Fiber Glass**	**40% Other**	White, Silver Fibrous Heterogeneous Dissolved
JA 82 *1700661PLM_9*	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank *wrap only*	**None Detected**	**50% Cellulose** **10% Fiber Glass**	**40% Other**	White, Silver Fibrous Heterogeneous Dissolved

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%.

Megan Javonovich (10)

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 John Adams
Client Notes:	**Positive Stop**
P.O. #.	47:1519-D John Adams
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.

1700661

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
<<			
JA 74	HA1	4" Gray Cove Base with White Mastic	1st FL, Hall at G1 Elec.
JA 75	HA1	4" Gray Cove Base with White Mastic	1st FL, Hall at G1 Elec.
JA 76	HA2	White Vibration Dampner Cloth	1st FL, G1 Elec
JA 77	HA2	White Vibration Dampner Cloth	1st FL, G1 Elec
JA 78	HA3	White Bridging Mastic on Fiberglass of Hot Water Tank	Boiler Room
JA 79	HA3	White Bridging Mastic on Fiberglass of Hot Water Tank	Boiler Room
JA 80	HA4	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Wate	Boiler Room
JA 81	HA4	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Wate	Boiler Room
JA 82	HA4	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Wate	Boiler Room
>>			

Accepted ☑

Rejected ☐

M. Ives Poblete
1-12 10:30 am

ASBESTOS ABATEMENT PROJECT MONITORING REPORT

JOHN ADAMS ELEMENTARY SCHOOL

5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA 22311

ECS PROJECT NO. 47:11652-C1

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

AUGUST 12, 2021

August 12, 2021

Mr. John Finnigan
Alexandria City Public Schools
1340 Braddock Place
6th Floor
Alexandria, Virginia 22314
john.finnigan@acps.k12.va.us

ECS Project No. 47:11652-C1

Reference: Asbestos Abatement Project Monitoring Report, John Adams Elementary School, 5651 Rayburn Avenue, Alexandria, Virginia

Dear Mr. Finnigan:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with this summary report of the asbestos abatement work performed during the above-referenced project. ECS performed visual assessments, evaluations, and air monitoring and sampling during the removal of asbestos-containing materials (ACMs). This report includes a project description, a summary of the asbestos abatement activities observed by ECS, and a summary of the work conducted by ECS including laboratory results.

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

John O'Neil
Staff Project Manager
joneil@ecslimited.com
703-471-8400

Michael Hamill, CIH
Environmental Senior Project Manager
MHamill@ecslimited.com
703-471-8400

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1.0 PROJECT DESCRIPTION

The subject property consists of John Adams Elementary School located at 5651 Rayburn Avenue in Alexandria, Virginia. Based on the information available, the building contains approximately 104,000 square feet and was reportedly constructed in 1966. The asbestos abatement work was performed by Waco, Inc., in general from July 2 through July 24, 2021.

2.0 ECS SCOPE OF WORK

ECS was tasked with performing visual assessments and evaluations, monitoring and air sampling during and after the removal of the identified asbestos-containing materials (ACMs) which are referenced below, within the subject building. The services were provided in general accordance with ECS proposal 47:18959-EP.

3.0 ASBESTOS ABATEMENT ACTIVITIES

3.1 Asbestos Removal

The abatement activities included the removal of the following asbestos-containing materials (ACMs) from the subject property:

- Floor tile and associated black mastic - Phase 1 - Rooms 201, 202, 204, 206, 207, 208, 218, 219, 220, 221, 222, 223, 224, 225, 226, and 227
- Floor tile and associated black mastic - Phase 2 - Rooms 209, 210, 211, 212, 213, 214, 215, 216, and 217.

No other materials or areas of the school building were included in this asbestos abatement. Please note that the above-referenced asbestos-containing materials (ACMs), other identified ACMs, and/or assumed ACMs are most likely present in other areas of the school building.

Prior to the start of the abatement activities, Waco, Inc. and Alexandria City Public Schools informed ECS that Rooms 203 and 205 were excluded from the scope of work because no asbestos containing floor tile and associated black mastic were identified in the rooms.

Waco, Inc. and Alexandria City Public Schools informed ECS that Rooms 228 and 229 were excluded from the scope of work and abatement of these two rooms will take place at a later date.

3.2 Daily Air Sampling

During the asbestos abatement, the ECS licensed project monitor collected and analyzed air samples using Phase Contrast Microscopy (PCM) in general accordance with applicable federal and Commonwealth of Virginia regulations. Samples were collected during the project outside the work areas to monitor airborne fiber concentrations. In general, the air sampling found the engineering controls (i.e., polyethylene sheeting, negative air pressure, High Efficiency Particulate Air (HEPA) filtration adequate to keep fiber concentrations on air samples collected outside the regulated work areas below the Commonwealth of Virginia PCM re-occupancy limit of <0.01 fibers per cubic centimeter (f/cc). Air sample results are included within the technicians' daily field notes.

3.3 ECS Observations

Asbestos abatement was performed by Waco, Inc. within regulated work areas. The regulated work areas within the subject building consisted of enclosures constructed of 6-mil polyethylene sheeting which were placed under negative pressure through the use of HEPA air filtration units. ECS observed the abatement contractor utilize wet methods to control the fiber concentrations within the work area.

ECS reviewed the asbestos credentials of the abatement workers. The credential documentation provided was reviewed and noted to be current.

ECS observed abatement workers utilizing personal protective equipment deemed necessary for asbestos abatement work by applicable OSHA and Virginia regulations (respirators, disposable protective clothing, eye protection, hard hats, gloves, etc.).

ECS observed the abatement contractor seal the asbestos waste in 6-mil waste bags prior to removal from the work area for disposal. ECS observed that the waste was collected by the abatement contractor in sealed shipping containers for transport to an EPA accredited landfill authorized to accept asbestos waste. ECS recommends that the property owner obtain a copy of the waste transport and disposal manifests from the abatement contractor, if not already provided.

4.0 FINAL CLEARANCE AIR SAMPLING

After Waco, Inc. had removed the specified asbestos-containing materials (ACMs) and related waste from the work areas, ECS performed final clearance visual assessments to survey each work area and evaluate if the ACMs had been removed and if dust and/or debris remained in the work areas. Following the completion of the final clearance visual assessments, ECS reported the results to the client and Waco, Inc..

Final clearance air samples were collected from work areas in accordance with aggressive sampling protocol described in Unit III.B.7.d of 40 CFR 763 Subpart E Appendix A and analyzed via Transmission Electron Microscopy (TEM) in accordance with federal and Virginia regulations. The results of the TEM final clearance air samples collected from each work area were found to be below the Virginia re-occupancy limit of 70 structures per square millimeter (70 s/mm^2).

5.0 CLOSING

Copies of ECS's daily monitoring field reports are enclosed along with copies of laboratory reports. If we can be of further assistance to you, please do not hesitate to contact us at (703) 471-8400.

Note that this summary letter is limited to the areas referenced above which were included in the scope of work. Additional quantities or other ACMs may be located in other areas of the building which were not included in the scope of work.

The results of the above referenced abatement activities should be included in the buildings operations and maintenance programs.

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.

The client agrees to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, information that may be necessary to prevent any danger to public health, safety, or the environment.

Appendix I: Daily Field Reports with PCM Air Sample Results

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 7, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports X For your use X As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 1 7/2/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**1**
Day & Date	**Friday 7/2/2021**
Weather	**80 °/ Cloudy**
On-Site Time	**3.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**3.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**11:30A**	**3:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways and classrooms 201, 202, 204, 206, and 207 on the 2nd floor. Photographs and the sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 201, 202, 204, 206, AND 207 WORK AREA MONITORING

The abatement contractor requested a pre-abatement survey of the regulated work area. The Pre-Abatement Checklist was completed and is attached to this report.

Between 12:00 and 12:02 pm, PCM air samples were started outside the work area at the decontamination unit entry and critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 3.0 liters per minute.

Abatement workers were removing floor tile using a scraper machine. Water sprayers were utilized during abatement activities. Abatement workers placed removed debris inside waste drums.

Between 3:00 pm and 3:02 pm, the sampling pumps were checked using a rotameter. The flow rate was 3.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil

polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags/drums were temporary placed inside the work area.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/2/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07022101GN	OWA,2nd Floor Work Area at Decontamination Unit	12:00 PM	3:00 PM	3.0	3.0	3.0	180	540.0	0.0	100	0.000
07022102GN	OWA,2nd Floor Work Area at Decontamination Unit	12:02 PM	3:02 PM	3.0	3.0	3.0	180	540.0	1.0	100	0.001
07022103GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07022104GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: JP Nuique **Date:** 7/2/2021

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/3/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, and 207 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	6
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half Face
	Type of Filters Used	P100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/3/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/3/2021

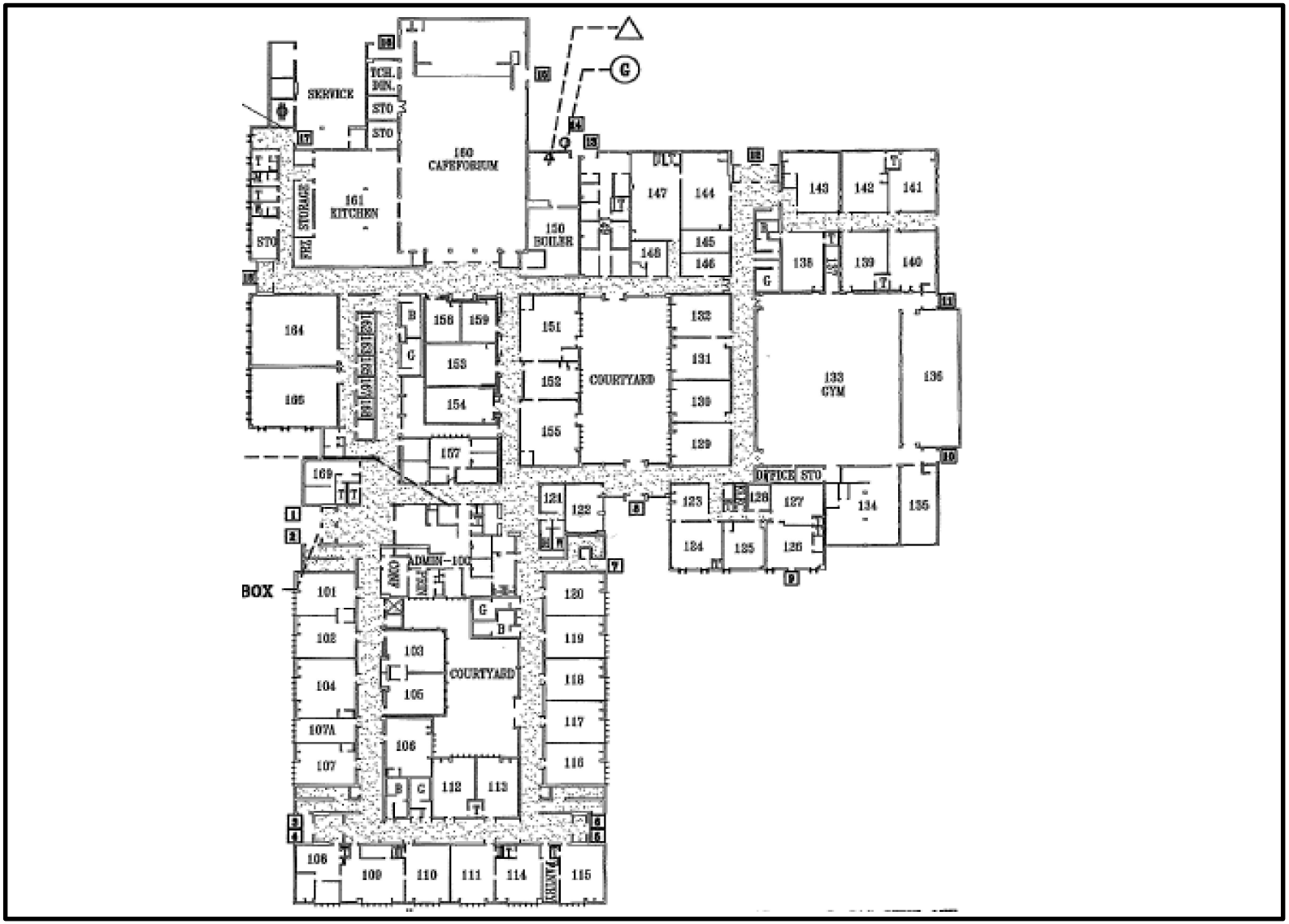
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, and 207 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/3/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

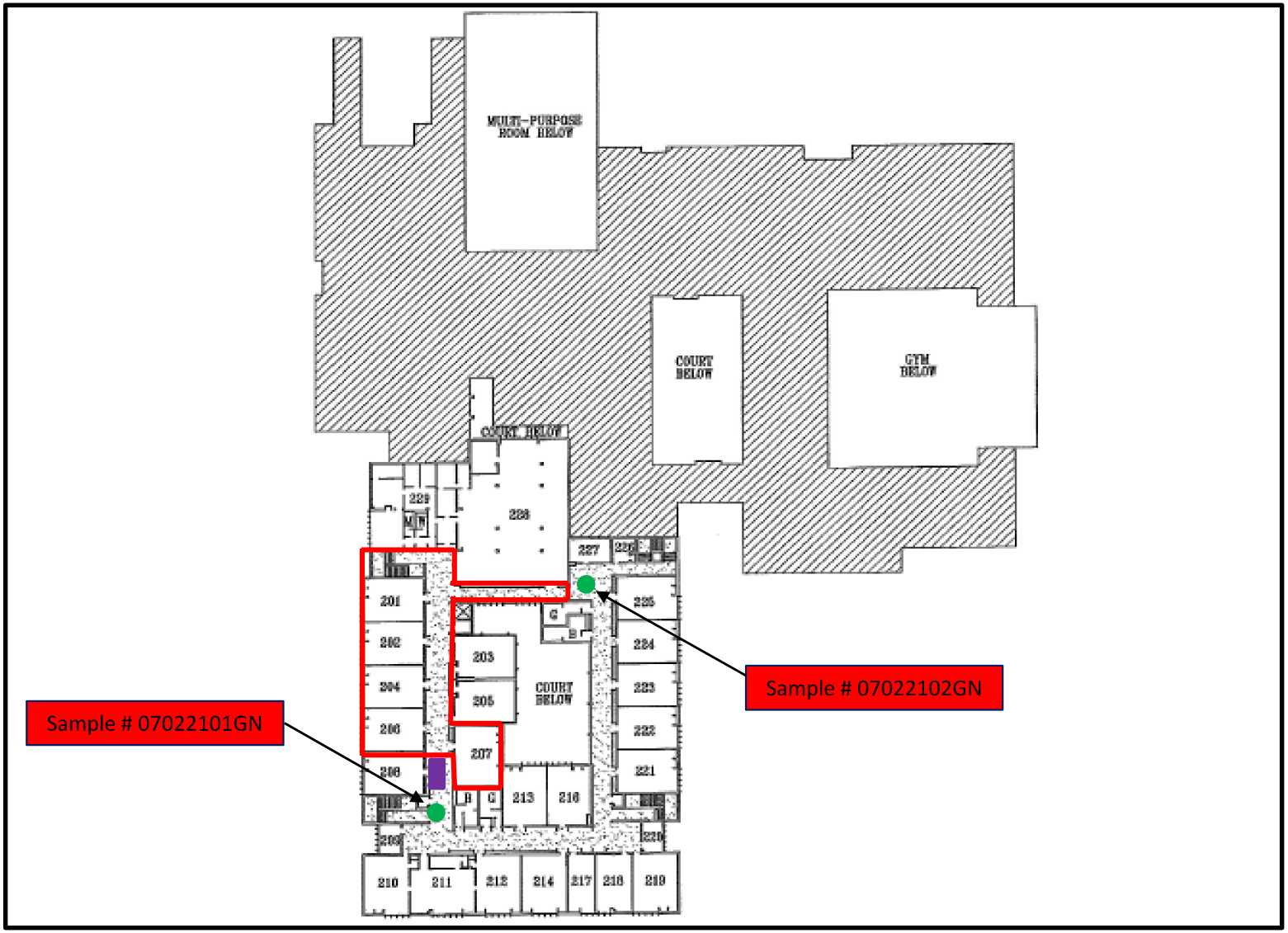
John Adams and ECC
5651 Rayburn Ave, Alexandria, VA
22311

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/2/21



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 8/10

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/2/21

Attachments



View of 2nd floor during the pre-abatement walk-through

Figure 1



View of 2nd floor during the pre-abatement walk-through (2)

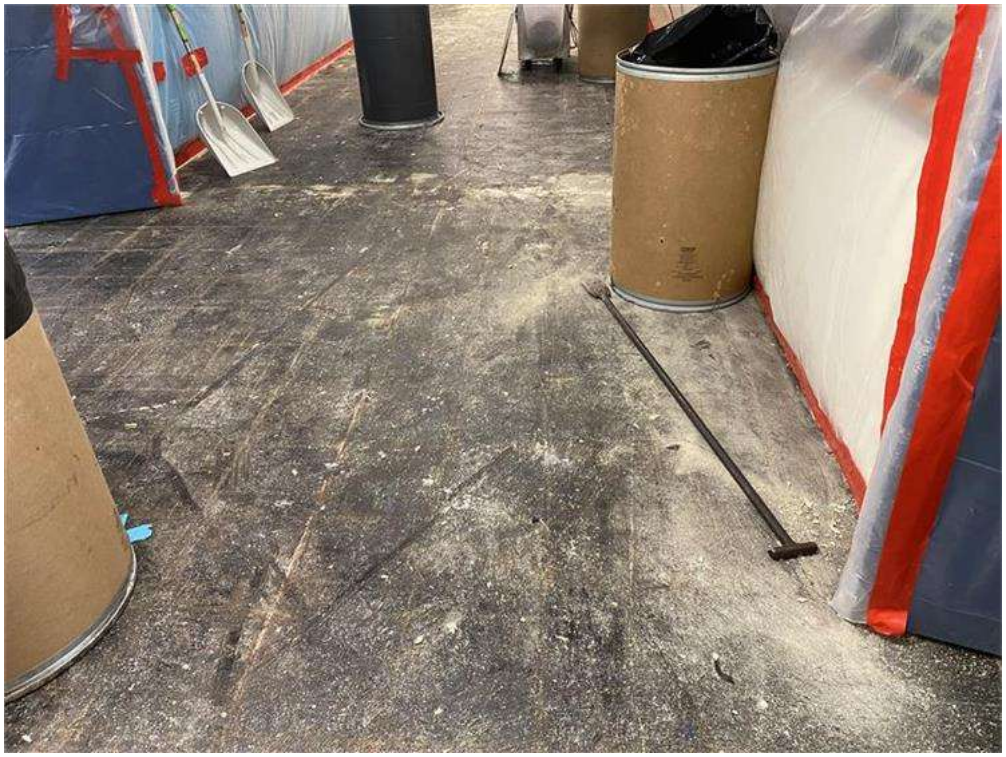
Figure 2

Attachments



View of abatement activities in the 2nd floor

Figure 3



View of abatement activities in the 2nd floor (2)

Figure 4

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 7, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 2 7/3/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**2**
Day & Date	**Saturday 7/3/2021**
Weather	**80 °/ Sunny**
On-Site Time	**3.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**3.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**6:30A**
				2:00P	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways and classrooms 201, 202, 204, 206, and 207 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 201, 202, 204, 206, AND 207 WORK AREA MONITORING

Between 6:30 am and 6:32 am, PCM air samples were started outside the work area at the decontamination unit entry and critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were removing floor tile with associated black mastic using scraper machine. Water sprayers were utilized during abatement activities.

Between 3:30 pm and 3:32 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags/drums were placed in hauling container.

By JP Nuique 1825

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/3/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07032101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:30 AM	3:30 PM	2.0	2.0	2.0	540	1080.0	2.0	100	0.001
07032102GN	OWA,2nd Floor Work Area at Critical Barrier Hallway	6:32 AM	3:32 PM	2.0	2.0	2.0	540	1080.0	8.5	100	0.004
070321FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
070321FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: JP Nuique **Date:** 7/3/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/3/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, and 207 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/3/2021

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



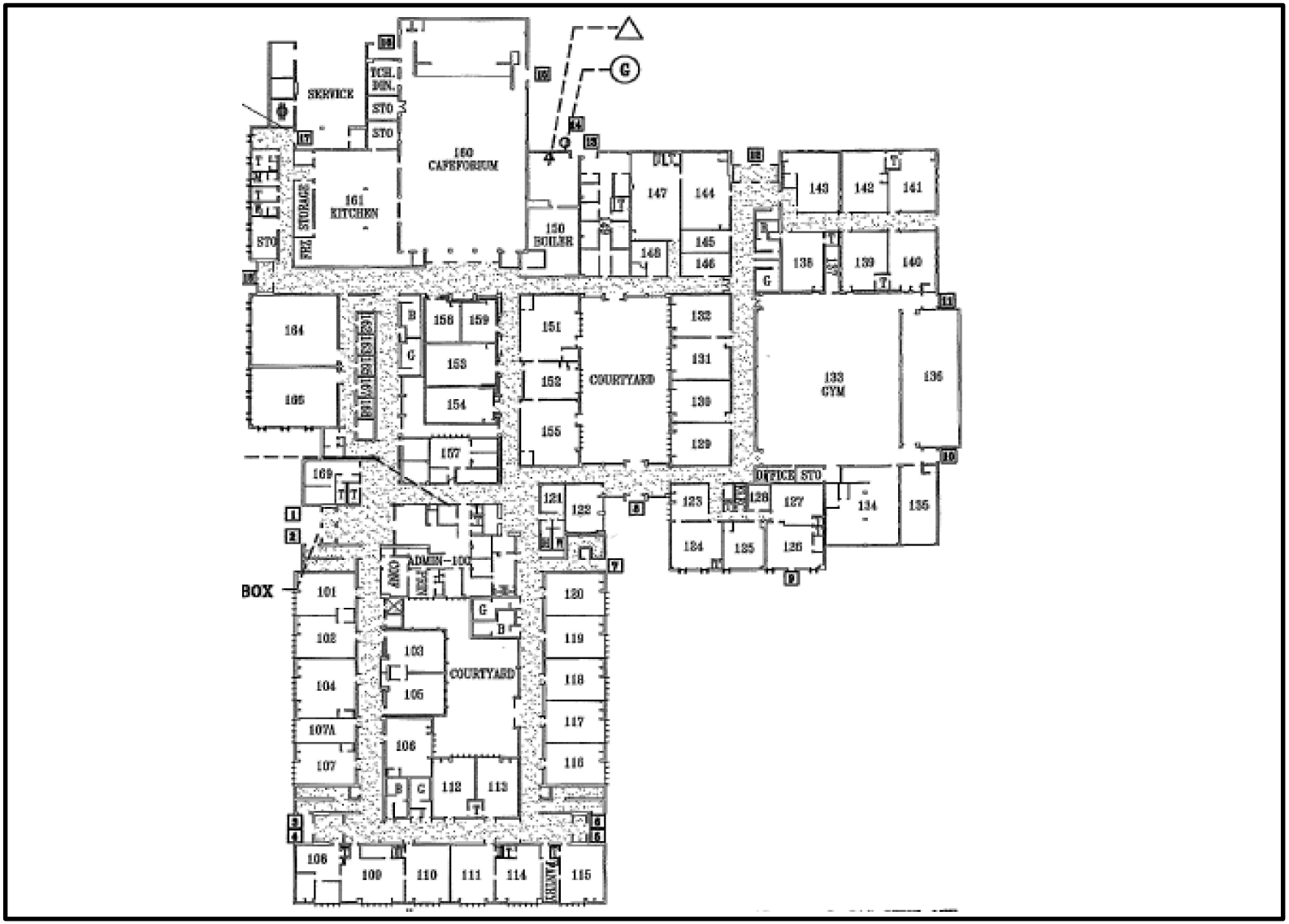
View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

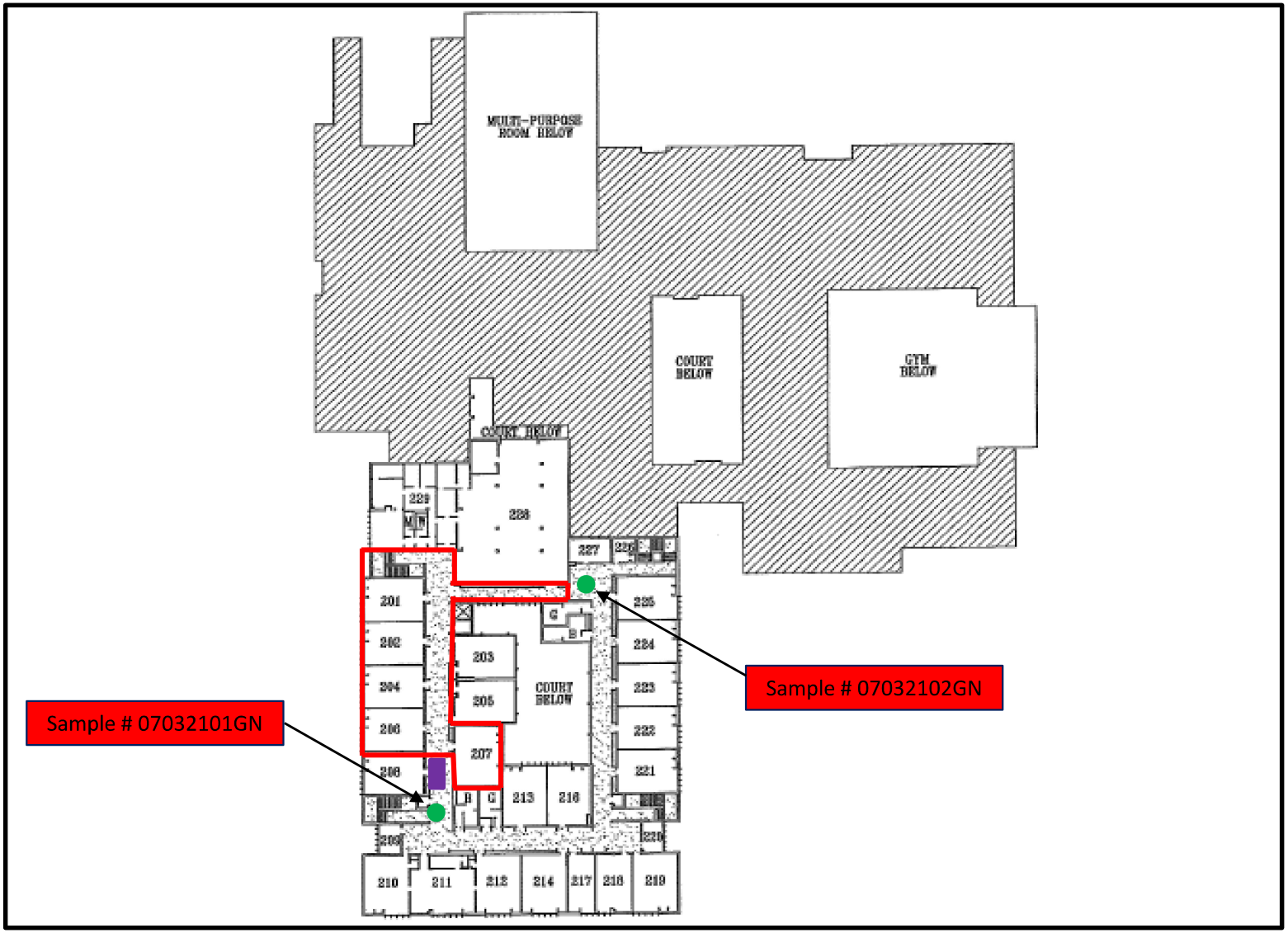
John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/3/21



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 9/9

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/3/21

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 7, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 3 7/4/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**3**
Day & Date	**Sunday 7/4/2021**
Weather	**81 °/ Sunny**
On-Site Time	**6.25**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**6.25**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**7:30A**	**8:30A**
				11:15A	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways and classrooms 201, 202, 204, 206, and 207 on the 2nd floor. Photographs and the sketch for today's regulated work area are attached to this report.

GENERAL OBSERVATION

ECS observed the abatement contractor workers preparing additional classrooms and hallways for abatement. These work areas will be integrated with the current containment.

2ND FLOOR HALLWAYS AND CLASSROOMS 201, 202, 204, 206, AND 207 WORK AREA MONITORING

Between 7:35 am and 7:37 am, PCM air samples were started outside the work area at the decontamination unit entry and critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were removing floor tile using a motorized floor scraper machine and black mastic using an edge grinder. Water sprayers were utilized during abatement activities. Abatement workers placed removed debris inside waste drums.

Between 2:50 pm and 2:51 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

By Suhel Shafaat 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags/drums were temporary placed inside the work area.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/4/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07042101SS	OWA/2nd Floor Work Area, At Decontamination Unit Entry	7:35 AM	2:50 PM	2.0	2.0	2.0	435	870.0	1.5	100	0.001
07042102SS	OWA/2nd Floor Work Area, Outside the Critical Barrier	7:37 AM	2:51 PM	2.0	2.0	2.0	434	868.0	3.0	100	0.002
07042103SS	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07042104SS	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: Suhel Shafaat **Date:** 7/4/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/4/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, and 207 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	N/A
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes: Bucket of water was provided by the contractor.

ECS Technician: John A. O'Neil **Date:** 7/4/2021

Attachments



View of where the floor tile and associated black mastic was removed from the hallway work area

Figure 1



View of where the floor tile and associated black mastic was removed from the classroom work area

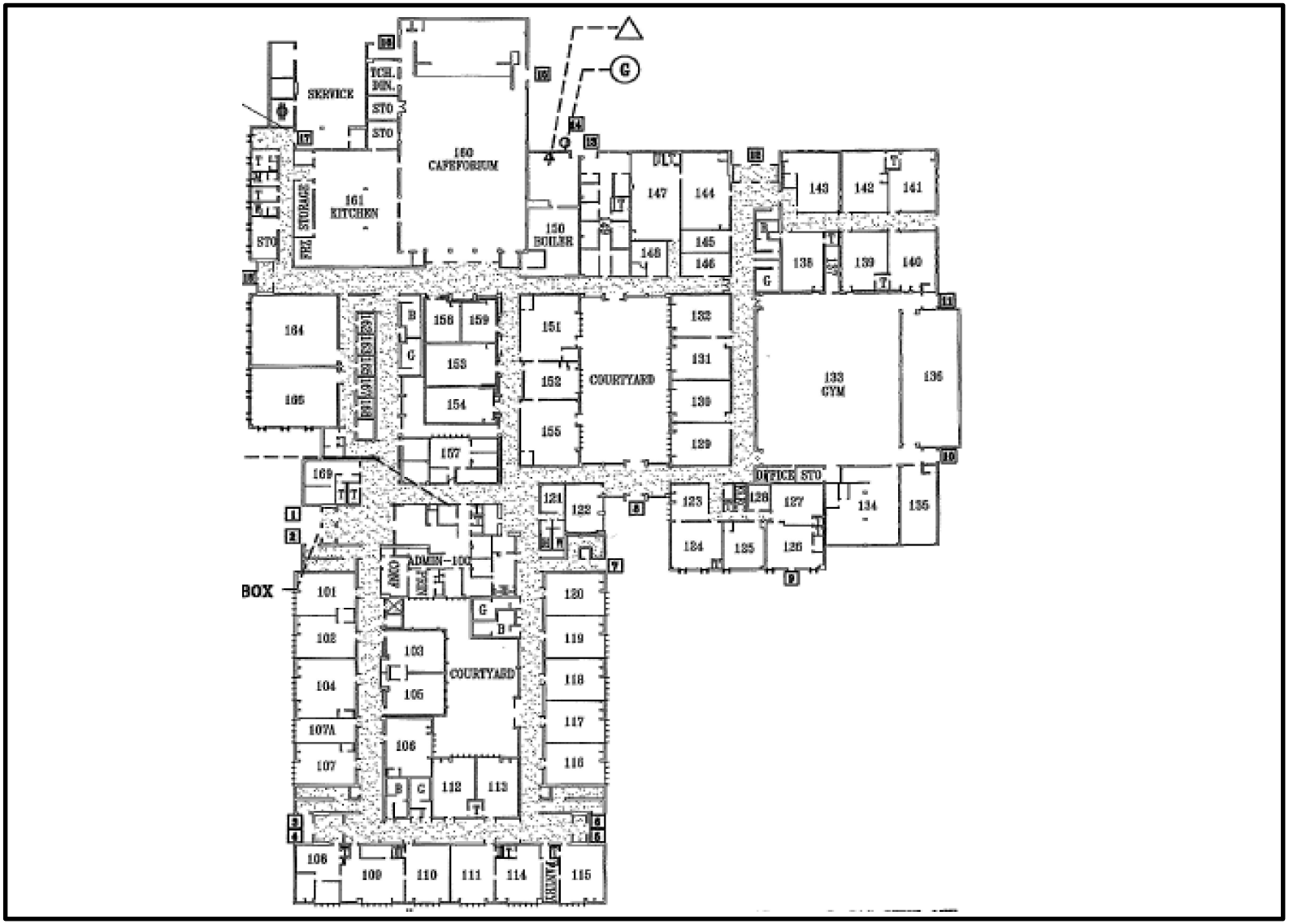
Figure 2

Attachments



View of the abatement activities within the work area

Figure 3



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

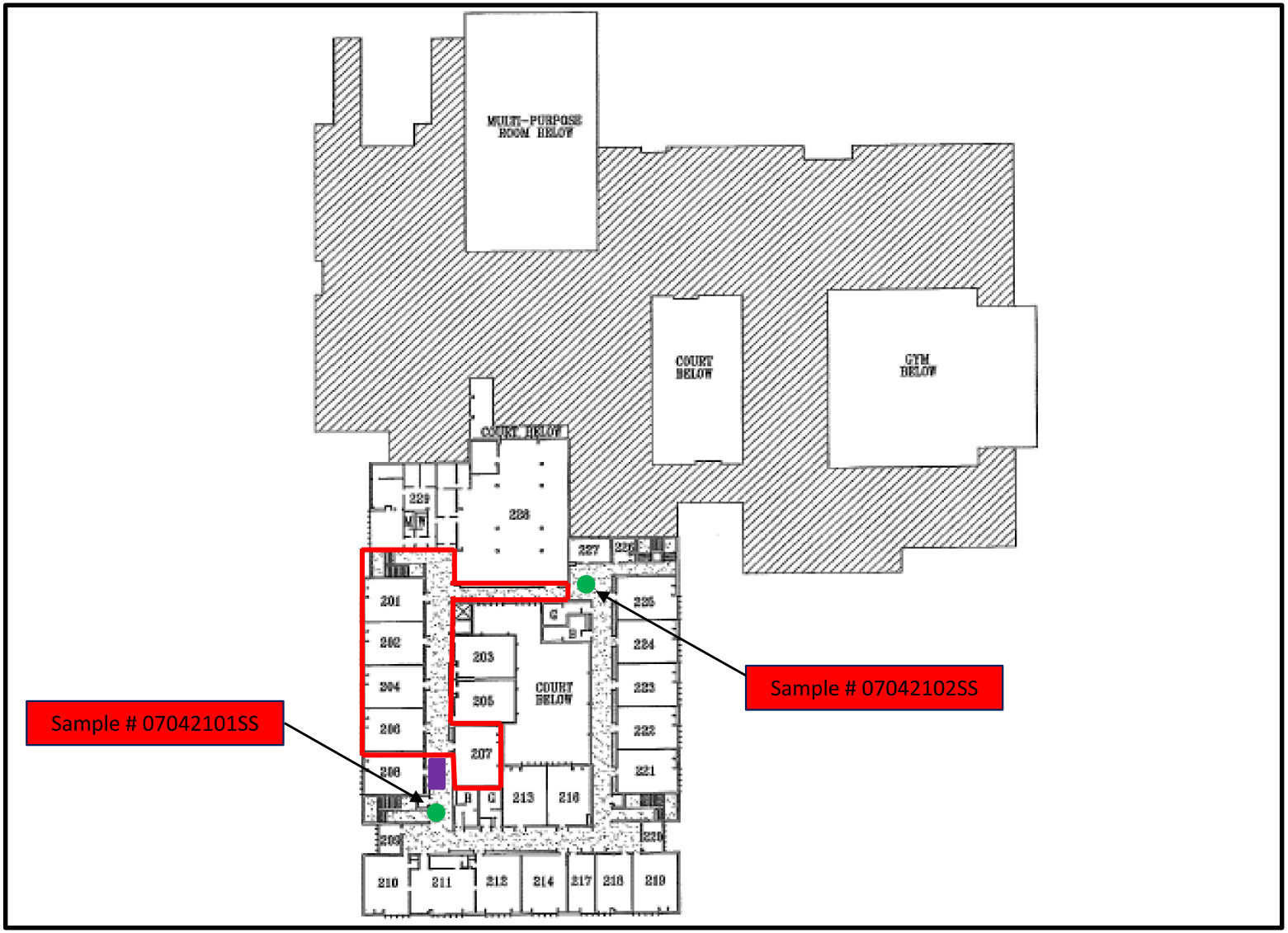
John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/4/21



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 9/9

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/4/21

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 7, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 4 7/5/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**4**
Day & Date	**Monday 7/5/2021**
Weather	**80 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways and classrooms 201, 202, 204, 206, and 207 on the 2nd floor. Photographs and the sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 201, 202, 204, 206, AND 207 WORK AREA MONITORING

Between 6:45 and 6:47 am, PCM air samples were started outside the work area at the decontamination unit entry and the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute. Abatement workers were removing floor tile and black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during abatement activities.

Between 11:30 and 11:32 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:30 and 11:32 am, PCM air samples were started outside the work area at the decontamination unit entry and the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 3:30 pm and 3:32 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The

Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags/drums were placed in hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/5/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07052101GN	OWA,2nd Floor Work Area at Decontamination Unit	6:45 AM	11:30 AM	2.5	2.5	2.5	285	712.5	2.0	100	0.001
07052102GN	OWA,2nd Floor Work Area at Decontamination Unit	6:47 AM	11:32 AM	2.5	2.5	2.5	285	712.5	1.0	100	0.001
07052103GN	OWA,2nd Floor Work Area at Decontamination Unit	11:30 AM	3:30 PM	2.5	2.5	2.5	240	600.0	1.0	100	0.001
07052104GN	OWA,2nd Floor Work Area at Decontamination Unit	11:32 AM	3:32 PM	2.5	2.5	2.5	240	600.0	0.0	100	0.000
07052105GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07052106GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: JP Nuique **Date:** 7/5/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/6/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, and 207 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/6/2021

Attachments



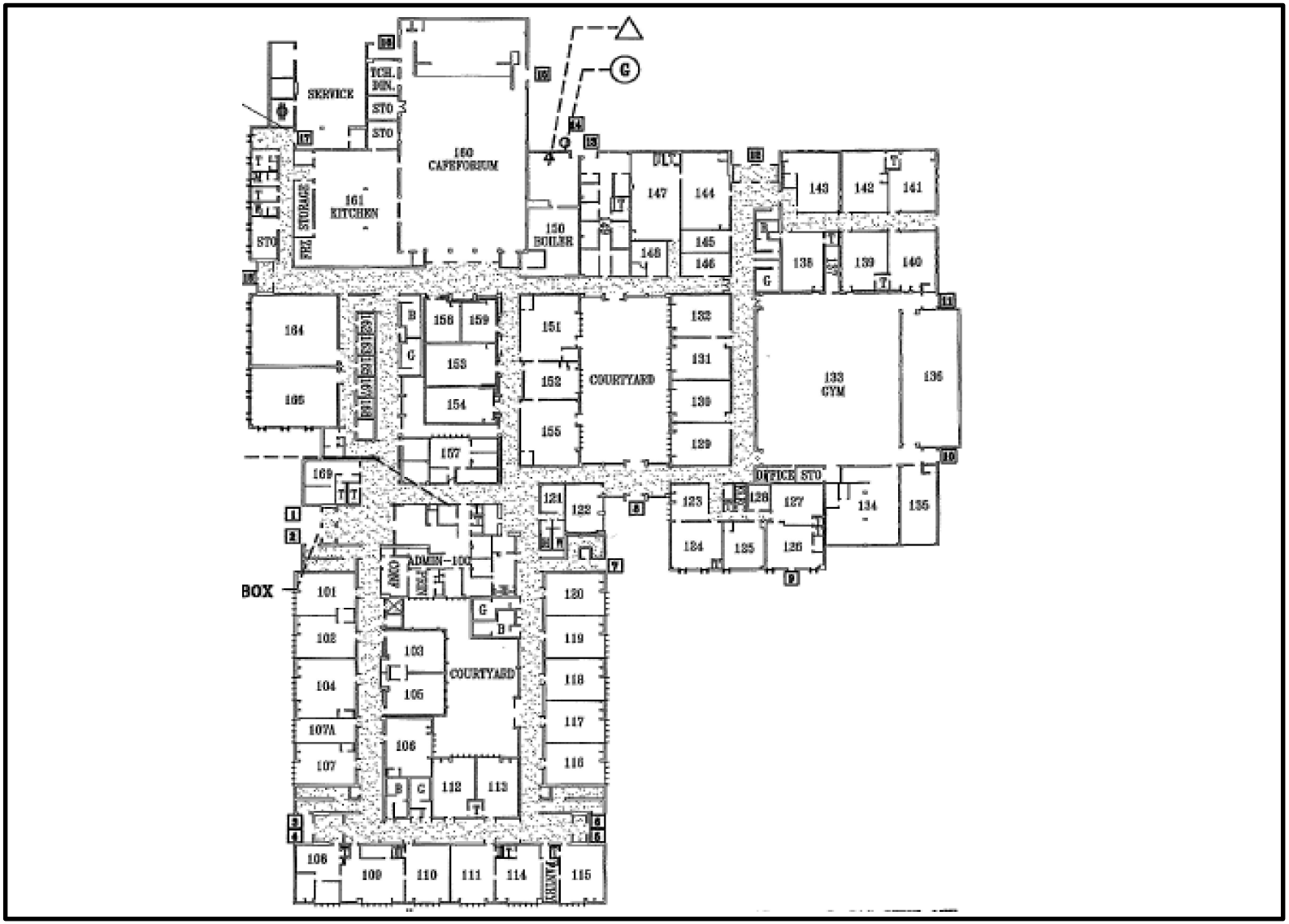
View of abatement activities in the 2nd floor (1)

Figure 1



View of abatement activities in the 2nd floor (2)

Figure 2



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

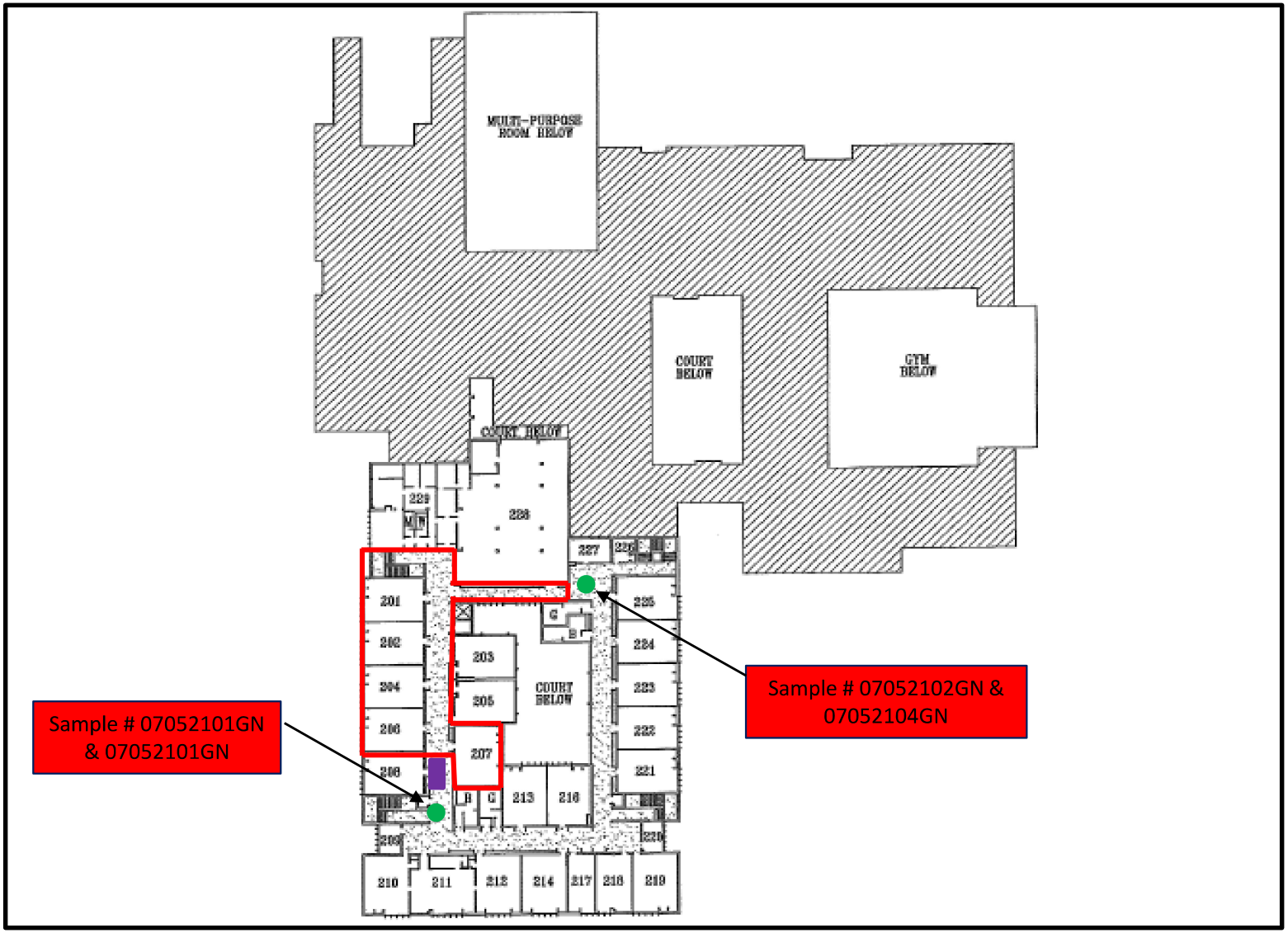
John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/5/21



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 8/8

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/5/21

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 9, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports X For your use X As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 5 7/6/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**5**
Day & Date	**Tuesday 7/6/2021**
Weather	**91 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways and classrooms 201, 202, 204, 206, 207, and 218 - 227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 201, 202, 204, 206, 207, AND 218-227 WORK AREA MONITORING

The abatement contractor requested a pre-abatement survey of the regulated work area for classrooms 218 – 227 and associated hallways. The Pre-Abatement Checklist was completed and is attached to this report. The abatement contractor is scheduled to continue removing asbestos-containing floor tile and associated black floor mastic. Classrooms 218-227 and associated hallways were incorporated into the existing containment.

Between 6:35 and 6:37 am, PCM air samples were started outside the work area at the decontamination unit entry and critical barrier wall in the hallway. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Abatement workers were removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 11:00 and 11:02 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:00 and 11:02 am, PCM air samples were started outside the work area at the decontamination unit entry and the critical barrier wall in the hallway. The sampling pumps were calibrated

using a rotameter to 2.5 liters per minute.

Between 3:30 pm and 3:32 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/6/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07062101GN	OWA,2nd Floor Work Area at Decontamination Unit	6:35 AM	11:00 AM	2.5	2.5	2.5	265	662.5	3.0	100	0.002
07062102GN	OWA,2nd Floor Work Area at Critical Barrier Hallway	6:37 AM	11:02 AM	2.5	2.5	2.5	265	662.5	3.0	100	0.002
07062103GN	OWA,2nd Floor Work Area at Decontamination Unit	11:00 AM	3:30 PM	2.5	2.5	2.5	270	675.0	4.0	100	0.003
07062104GN	OWA,2nd Floor Work Area at Critical Barrier Hallway	11:02 AM	3:32 PM	2.5	2.5	2.5	270	675.0	1.0	100	0.001
070621FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
070621FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: JP Nuique **Date:** 7/6/2021

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/7/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	6
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half-Face
	Type of Filters Used	P100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes: Classrooms 218-227 and associated hallways were incorporated into the existing containment.

ECS Technician: John A. O'Neil **Date:** 7/7/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/7/2021

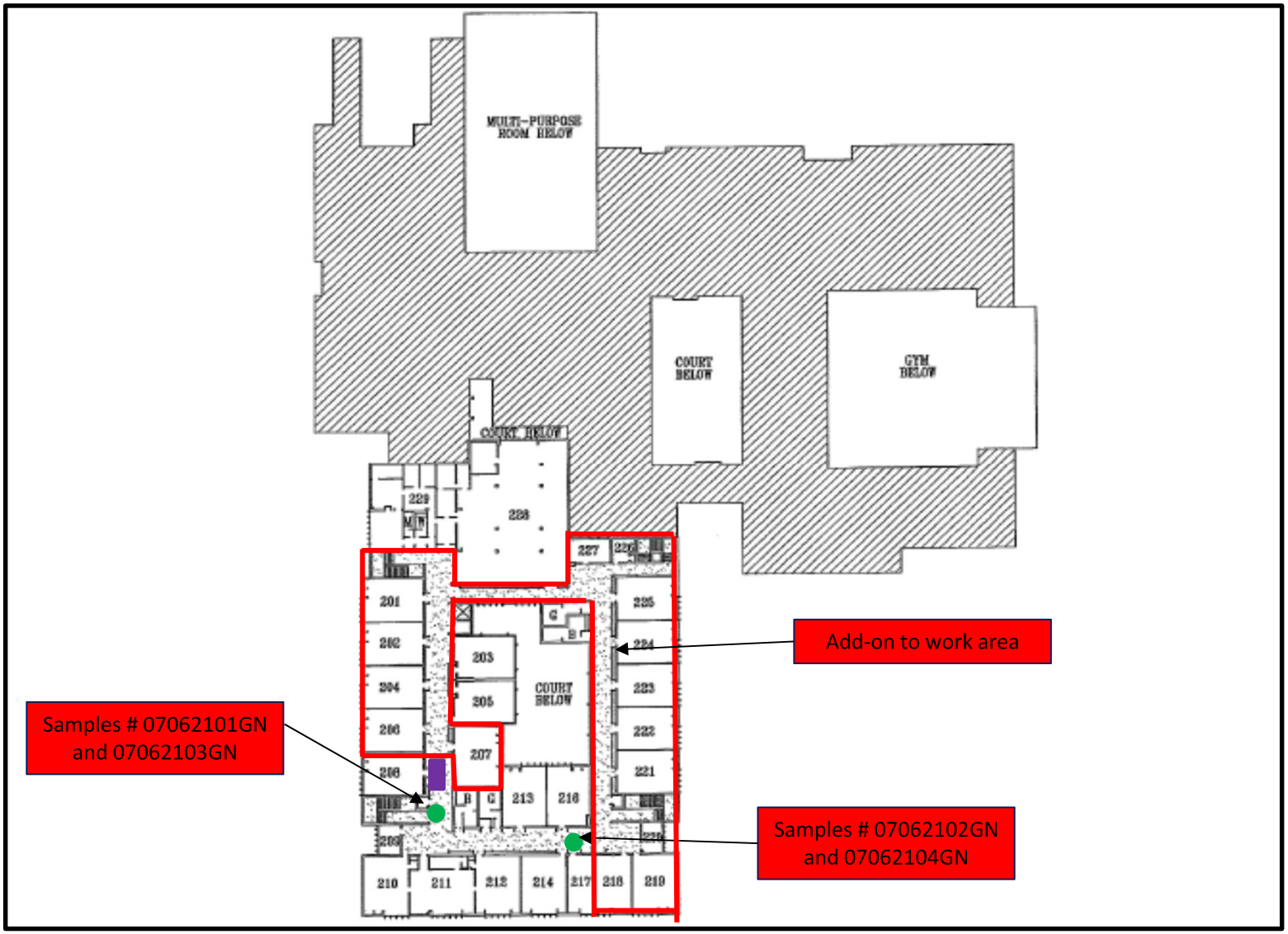
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes: Classrooms 218-227 and associated hallways were incorporated into the existing containment.

ECS Technician: John A. O'Neil **Date:** 7/7/2021



John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/6/21

Attachments



View of abatement activities in the 2nd floor work area

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 9, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 6 7/7/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**6**
Day & Date	**Wednesday 7/7/2021**
Weather	**90 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report. Note that the stairwell was added to the work area.

2ND FLOOR WORK AREA MONITORING

Between 6:42 and 6:44 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Abatement workers were removing floor tile and black floor mastic using scraper machine and grinder machine with HEPA vacuum attachment. An airless water sprayer was utilized during abatement activities.

Between 11:00 and 11:02 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:00 and 11:02 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 3:34 and 3:36 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The

Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/7/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07072101GN	OWA,2nd Floor Work Area at Decontamination Unit	6:42 AM	11:00 AM	2.5	2.5	2.5	258	645.0	1.0	100	0.001
07072102GN	OWA,2nd Floor Work Area at Critical Barrier Hallway	6:44 AM	11:02 AM	2.5	2.5	2.5	258	645.0	0.0	100	0.000
07072103GN	OWA,2nd Floor Work Area at Decontamination Unit	11:00 AM	3:34 PM	2.5	2.5	2.5	274	685.0	2.0	100	0.001
07072104GN	OWA,2nd Floor Work Area at Critical Barrier Hallway	11:02 AM	3:36 PM	2.5	2.5	2.5	274	685.0	2.0	100	0.001
07072105GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07072106GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: JP Nuique **Date:** 7/7/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/8/2021

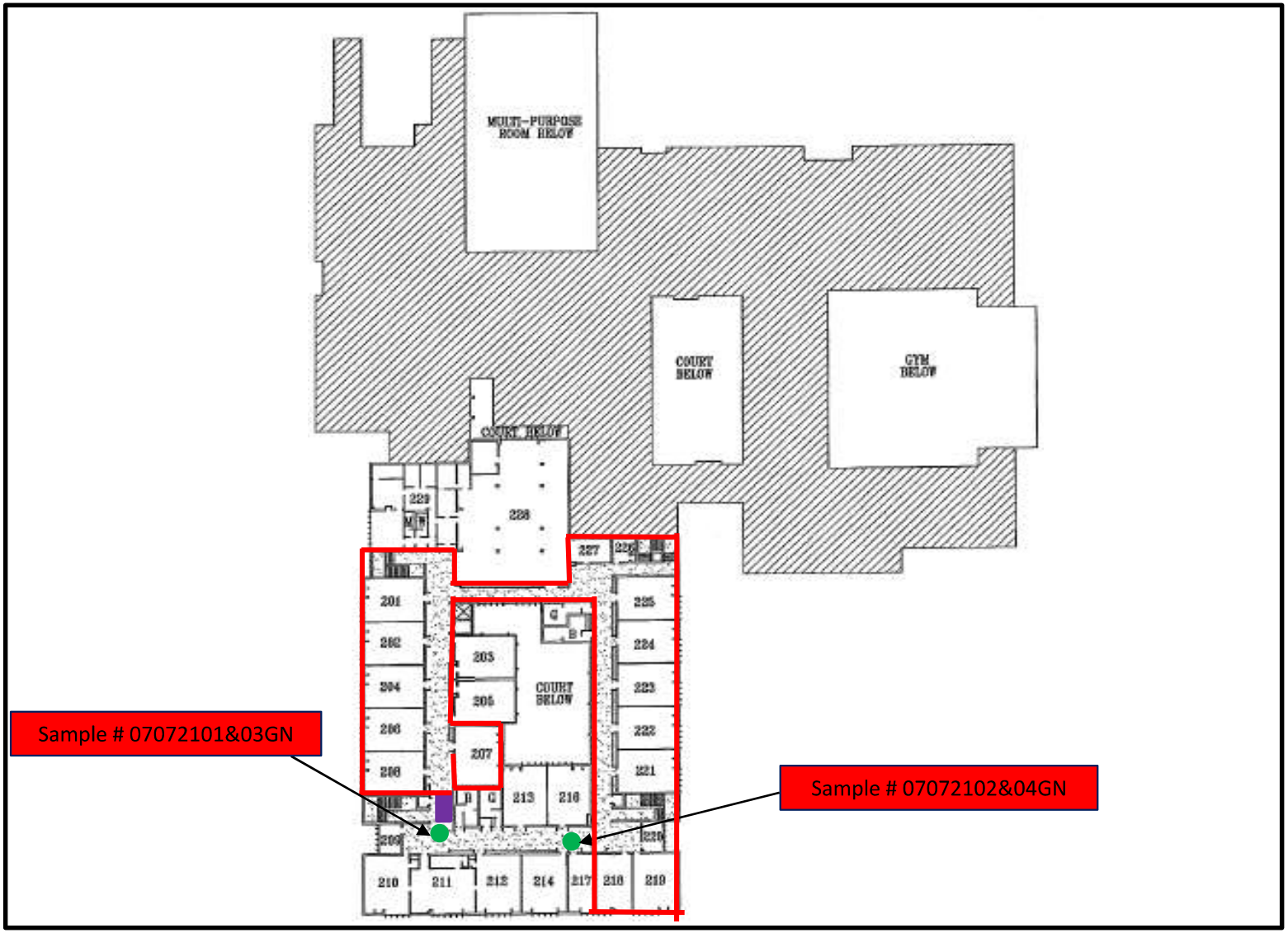
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/8/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/9

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/7/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

Attachments



View of abatement activities in the 2nd floor work area (5)

Figure 5

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 12, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 7 7/8/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**7**
Day & Date	**Thursday 7/8/2021**
Weather	**90 °/ Cloudy**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:45 and 7:05 am, PCM air samples were started outside the work area at the decontamination unit entry, the critical barrier in the hallway on 2nd floor, and the critical barrier at stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 11:30 and 11:36 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:30 and 11:36 am, PCM air samples were started outside the work area at t the decontamination unit entry, the critical barrier in the hallway on 2nd floor, and the critical barrier at stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 3:40 pm and 3:48 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

By JP Nuique 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/8/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07082101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:45 AM	11:30 AM	2.5	2.5	2.5	285	712.5	1.0	100	0.001
07082102GN	OWA,2nd Floor Work Area at Critical Barrier Hallway 2nd Floor	6:47 AM	11:32 AM	2.5	2.5	2.5	285	712.5	2.0	100	0.001
07082103GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	7:00 AM	11:34 AM	2.5	2.5	2.5	274	685.0	1.0	100	0.001
07082104GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	7:05 AM	11:36 AM	2.5	2.5	2.5	271	677.5	3.5	100	0.003
07082105GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	11:30 AM	3:40 PM	2.5	2.5	2.5	250	625.0	1.0	100	0.001
07082106GN	OWA,2nd Floor Work Area at Critical Barrier at 2nd Floor Hallway	11:32 AM	3:42 PM	2.5	2.5	2.5	250	625.0	2.0	100	0.002
07082107GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	11:34 AM	3:46 PM	2.5	2.5	2.5	252	630.0	3.0	100	0.002
07082108GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	11:36 AM	3:48 PM	2.5	2.5	2.5	252	630.0	0.0	100	0.000
07082109GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07082110GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/8/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/9/2021

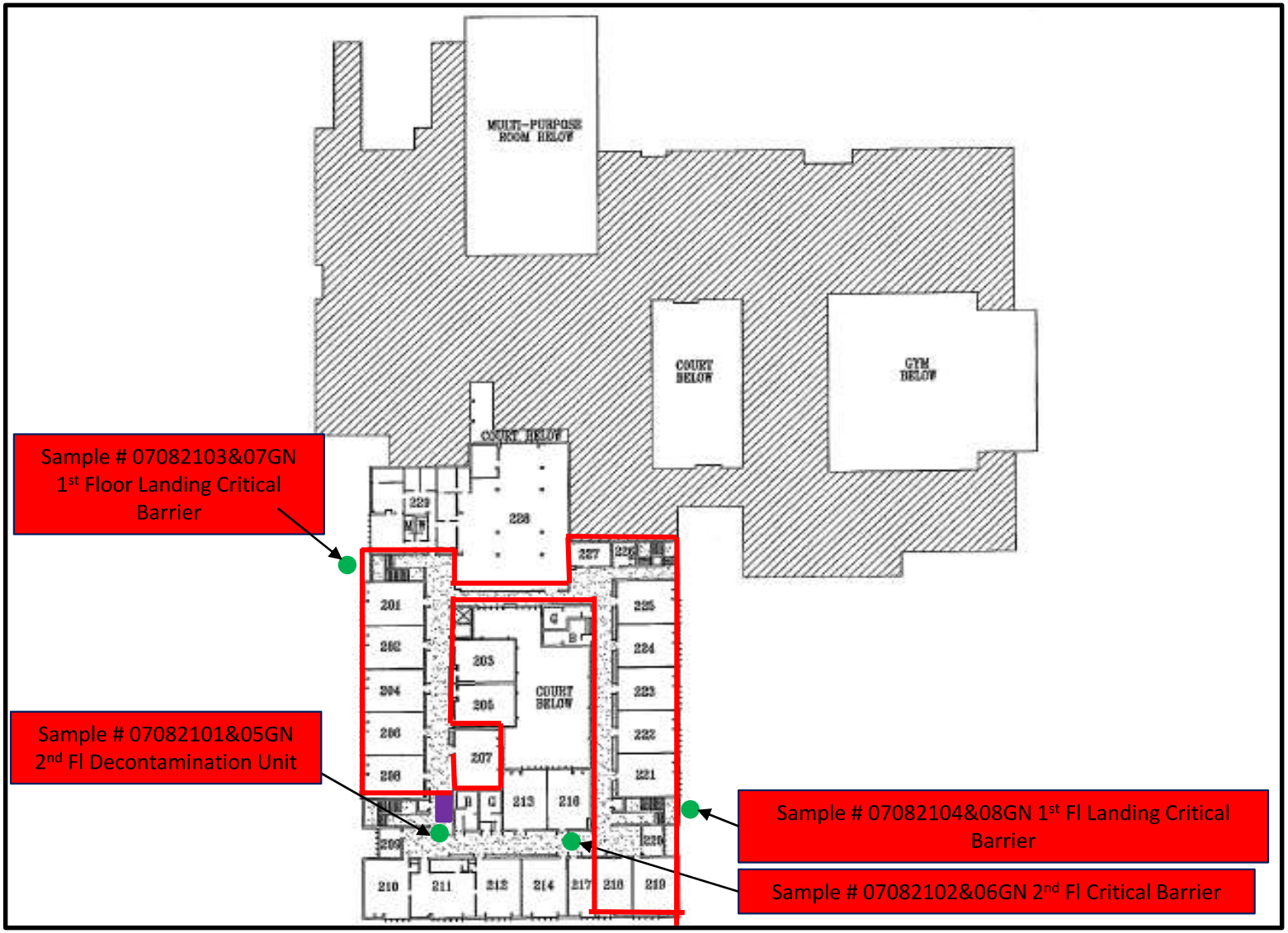
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	8
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/9/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/7

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/8/21

Attachments



View abatement activities in the 2nd floor work area (1)

Figure 1



View abatement activities in the 2nd floor work area (2)

Figure 2

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 13, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 8 7/9/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**8**
Day & Date	**Friday 7/9/2021**
Weather	**89 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and the sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:46 and 6:54 am, PCM air samples were started outside the work area at the decontamination unit entry, the critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 11:04 and 11:12 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:04 and 11:12 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 3:45 pm and 3:53 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

By JP Nuique 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/9/2021
Page: 1 of 2

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07092101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:46 AM	11:04 AM	2.5	2.5	2.5	258	645.0	2.0	100	0.002
07092102GN	OWA,2nd Floor Work Area at Critical Barrier 2nd floor Hallway	6:48 AM	11:06 AM	2.5	2.5	2.5	258	645.0	2.0	100	0.002
07092103GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:50 AM	11:08 AM	2.5	2.5	2.5	258	645.0	1.0	100	0.001
07092104GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:52 AM	11:10 AM	2.5	2.5	2.5	258	645.0	0.0	100	0.000
07092105GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:54 AM	11:12 AM	2.5	2.5	2.5	258	645.0	1.0	100	0.001
07092106GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	11:04 AM	3:45 PM	2.5	2.5	2.5	281	702.5	3.0	100	0.002
07092107GN	OWA,2nd Floor Work Area at Critical Barrier 2nd floor Hallway	11:06 AM	3:47 PM	2.5	2.5	2.5	281	702.5	3.0	100	0.002
07092108GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	11:08 AM	3:49 PM	2.5	2.5	2.5	281	702.5	0.0	100	0.000
07092109GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	11:10 AM	3:51 PM	2.5	2.5	2.5	281	702.5	0.0	100	0.000
07092110GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	11:12 AM	3:53 PM	2.5	2.5	2.5	281	702.5	1.0	100	0.001
07092111GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07092112GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

ECS Technician: JP Nuique

Date: 7/9/2021

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/9/2021
Page: 2 of 2

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique

Date: 7/9/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/10/2021

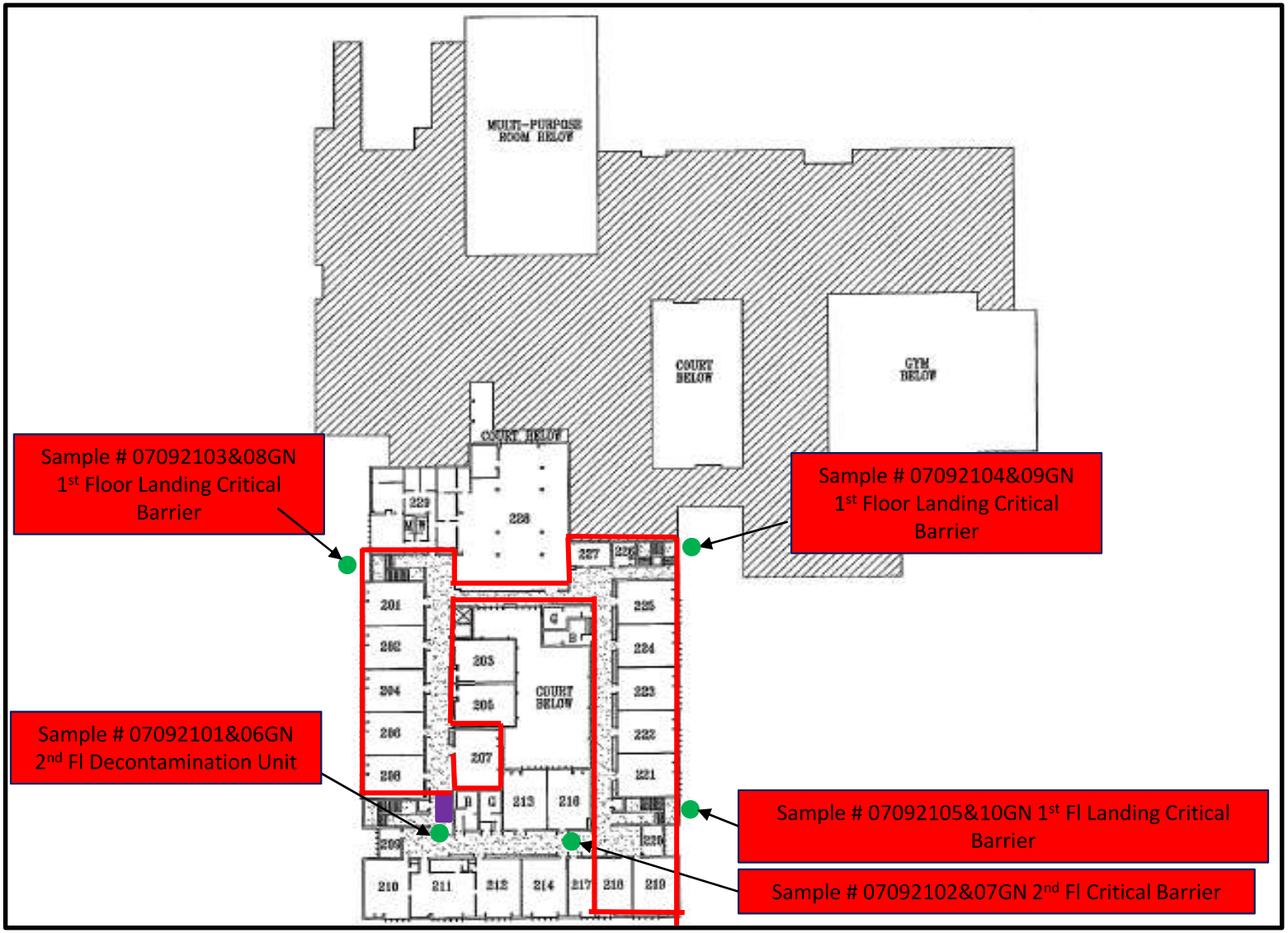
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	10
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/10/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 7/10

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/9/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

Attachments



View of abatement activities in the 2nd floor work area (5)

Figure 5



View of abatement activities in the 2nd floor work area (6)

Figure 6

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 13, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 9 7/10/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**9**
Day & Date	**Saturday 7/10/2021**
Weather	**84 °/ Sunny**
On-Site Time	**2.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**2.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**7:00A**
				3:30P	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:46 and 6:54 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 3:30 pm and 3:38 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable

regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/10/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07102101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:46 AM	3:30 PM	2.0	2.0	2.0	524	1048.0	3.0	100	0.001
07102102GN	OWA,2nd Floor Work Area at Critical Barrier Hallway 2nd Floor	6:48 AM	3:32 PM	2.0	2.0	2.0	524	1048.0	2.0	100	0.001
07102103GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:50 AM	3:34 PM	2.0	2.0	2.0	524	1048.0	2.0	100	0.001
07102104GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:52 AM	3:36 PM	2.0	2.0	2.0	524	1048.0	1.0	100	0.000
07102105GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:54 AM	3:38 PM	2.0	2.0	2.0	524	1048.0	1.0	100	0.000
07102106GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07102107GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/10/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/11/2021

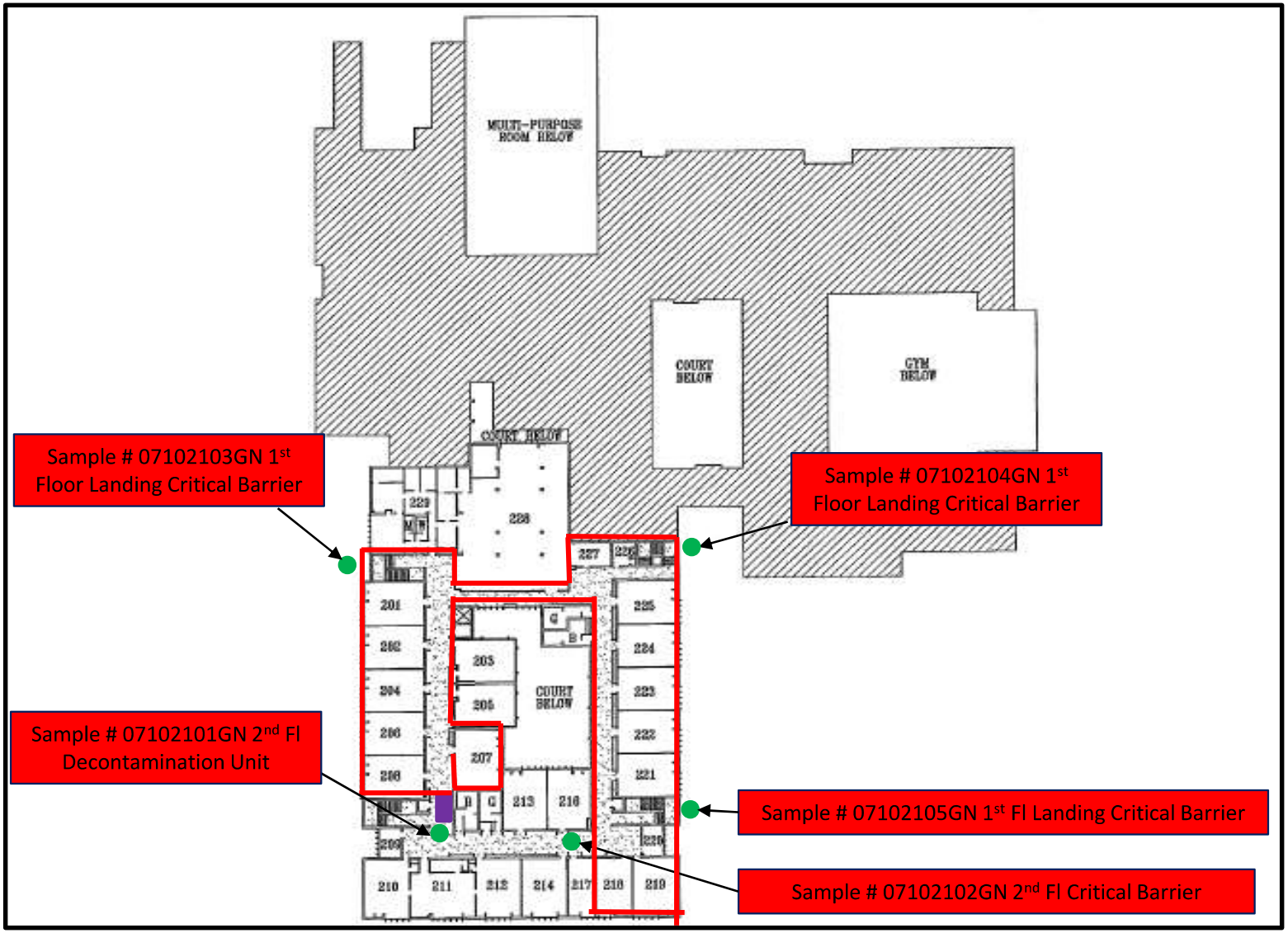
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	5
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/11/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/7

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA
22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/10/21

Attachments



View of abatement activities in the 2nd floor work area

Figure 1

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 13, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 10 7/11/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**10**
Day & Date	**Sunday 7/11/2021**
Weather	**85 °/ Sunny**
On-Site Time	**6.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**6.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**7:00A**
				10:00A	**12:00P**
				1:30P	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:52 and 6:58 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 3:38 pm and 3:45 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil

polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/11/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07112101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:52 AM	3:38 PM	2.0	2.0	2.0	526	1052.0	4.0	100	0.002
07112102GN	OWA,2nd Floor Work Area at Critical Barrier 2nd Floor Hallway	6:53 AM	3:39 PM	2.0	2.0	2.0	526	1052.0	1.0	100	0.000
07112103GN	OWA,2nd Floor Work Area at Critical Barrier 1st Floor Stairwell Landing	6:54 AM	3:41 PM	2.0	2.0	2.0	527	1054.0	1.0	100	0.000
07112104GN	OWA,2nd Floor Work Area at Critical Barrier 1st Floor Stairwell Landing	6:56 AM	3:43 PM	2.0	2.0	2.0	527	1054.0	1.0	100	0.000
07112105GN	OWA,2nd Floor Work Area at Critical Barrier 1st Floor Stairwell Landing	6:58 AM	3:45 PM	2.0	2.0	2.0	527	1054.0	1.0	100	0.000
07112106GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07112107GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/11/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/12/2021

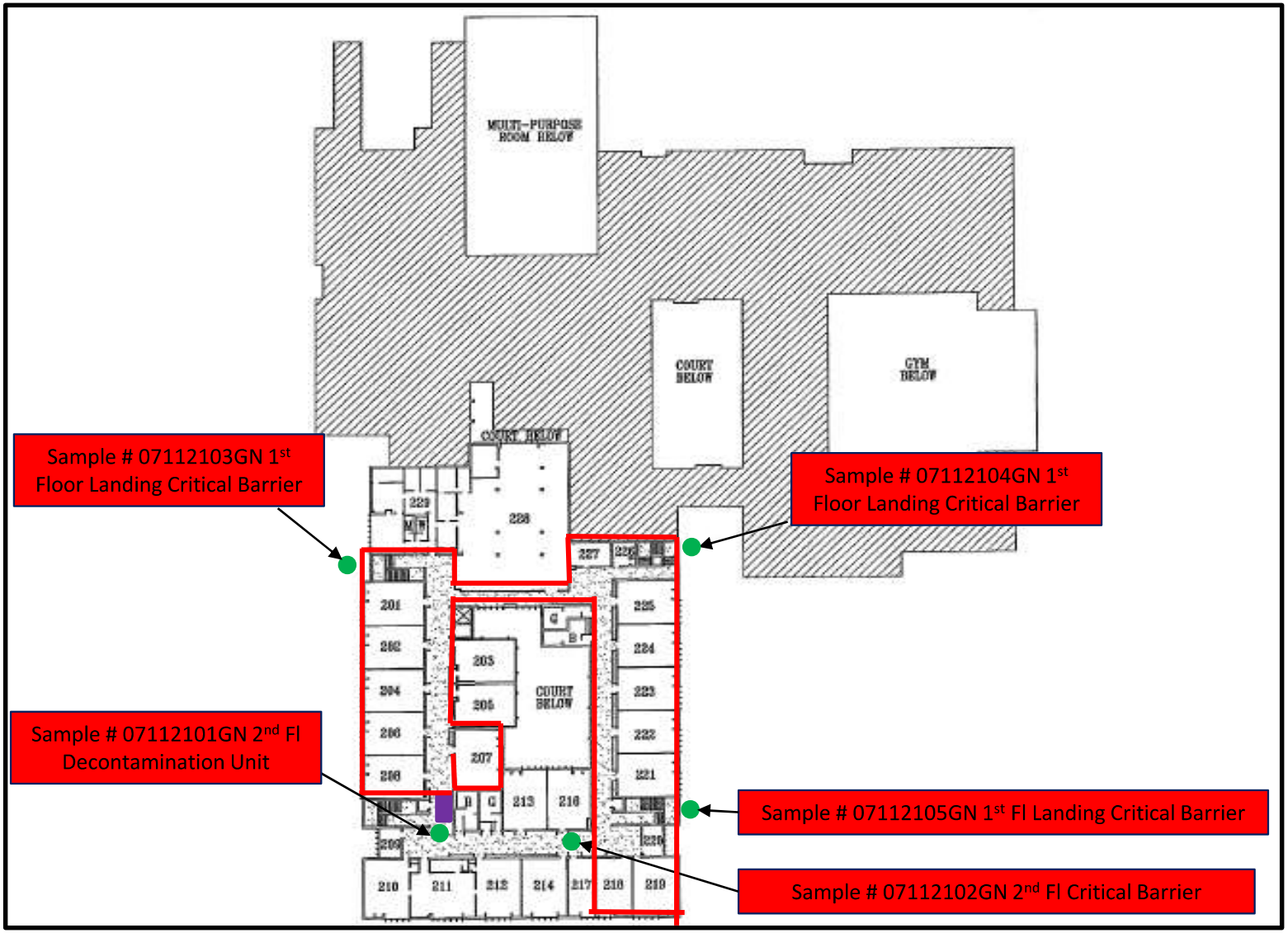
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	5
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/12/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/8

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA
22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/11/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 15, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 11 7/13/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**11**
Day & Date	**Tuesday 7/13/2021**
Weather	**89 °/ Sunny**
On-Site Time	**9.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**9.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**7:00A**	**4:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

At 7:30 am, PCM air samples were started outside the work area at the decontamination unit entry and the critical barrier in the hallway on the 2nd floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

At 11:00 am, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

At 11:00 am, PCM air samples were started outside the work area at the decontamination unit entry and the critical barrier in the hallway on the 2nd floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

At 4:00 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

By Brittany Felts 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/13/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07122101BF	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07122102BF	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07122103BF	OWA- Decontamination unit entry	7:30 AM	11:00 AM	2.0	2.0	2.0	210	420.0	0.0	100	0.000
07122104BF	IWA- Critical barrier in the hallway	7:30 AM	11:00 AM	2.0	2.0	2.0	210	420.0	2.0	100	0.002
07122105BF	OWA- Decontamination unit entry	11:00 AM	4:00 PM	2.0	2.0	2.0	300	600.0	0.0	100	0.000
07122106BF	IWA- Critical barrier in the hallway	11:00 AM	4:00 PM	2.0	2.0	2.0	300	600.0	0.0	100	0.000

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: Brittany Felts **Date:** 7/13/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/13/2021

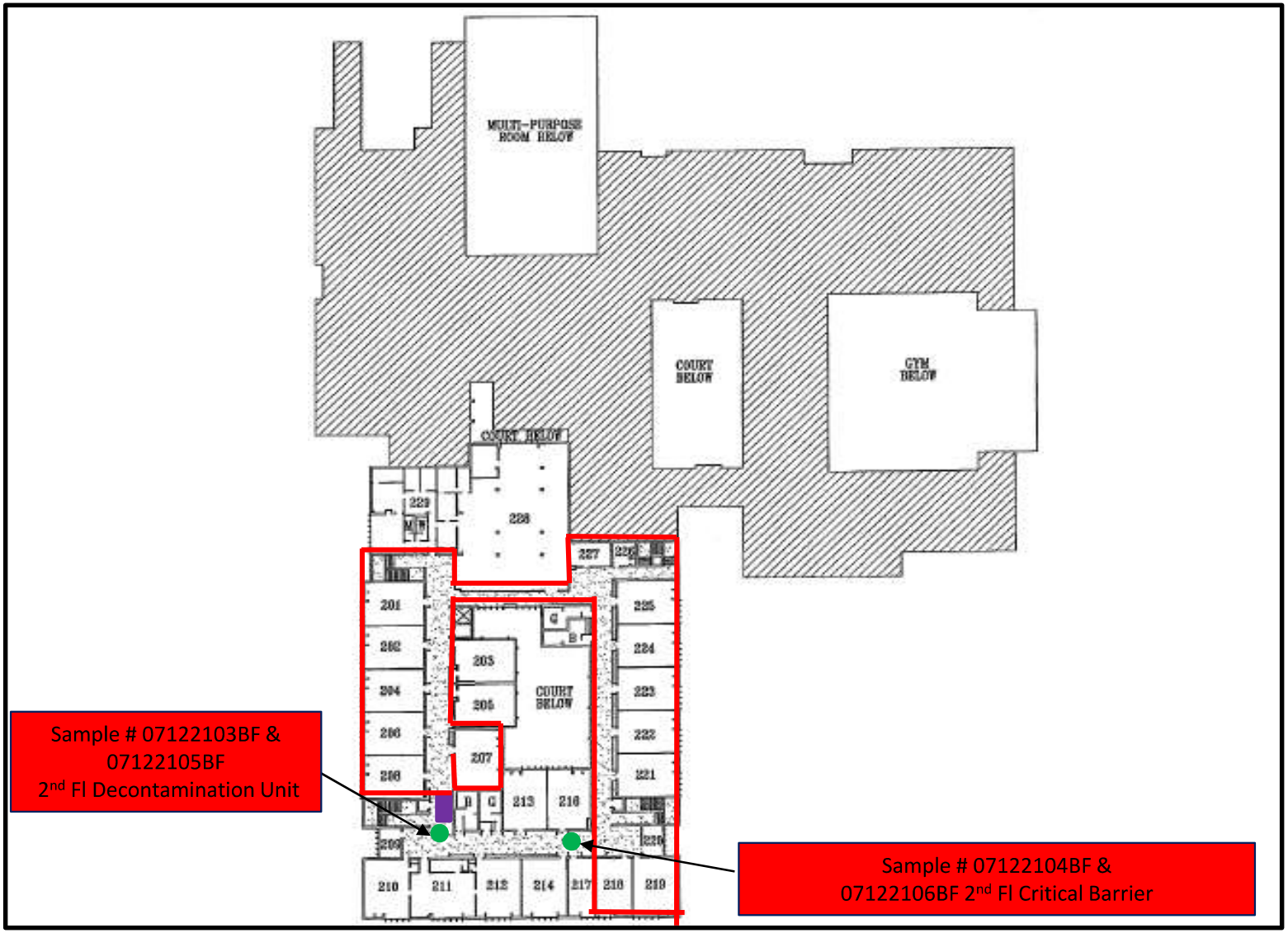
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/13/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/7

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/12/21

Attachments



View of abatment workers removing black floor mastic using scraper machine and grinder machine with HEPA vacuum attachment.

Figure 1



View of abatment workers removing black floor mastic using scraper machine and grinder machine with HEPA vacuum attachment.

Figure 2

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 15, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 12 7/13/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**12**
Day & Date	**Tuesday 7/13/2021**
Weather	**90 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:49 and 6:55 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on the 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 11:04 and 11:10 am, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:04 and 11:10 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on the 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 3:31 pm and 3:37 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

By JP Nuique 1825

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/13/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07132101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:49 AM	11:04 AM	2.0	2.0	2.0	255	510.0	3.0	100	0.003
07132102GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	6:51 AM	11:06 AM	2.0	2.0	2.0	255	510.0	0.0	100	0.000
07132103GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	6:53 AM	11:08 AM	2.0	2.0	2.0	255	510.0	1.0	100	0.001
07132104GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	6:55 AM	11:10 AM	2.0	2.0	2.0	255	510.0	2.0	100	0.002
07132105GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	11:04 AM	3:31 PM	2.0	2.0	2.0	267	534.0	2.0	100	0.002
07132106GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	11:06 AM	3:33 PM	2.0	2.0	2.0	267	534.0	1.0	100	0.001
07132107GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	11:08 AM	3:35 PM	2.0	2.0	2.0	267	534.0	1.0	100	0.001
07132108GN	OWA,2nd Floor Work Area at Critical Barrier at 1st Floor Stairwell Landing	11:10 AM	3:37 PM	2.0	2.0	2.0	267	534.0	1.0	100	0.001
071321FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
071321FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The EPA and Virginia re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter. The results of the samples collected from outside the regulated work area were below this level.

ECS Technician: JP Nuique **Date:** 7/13/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/14/2021

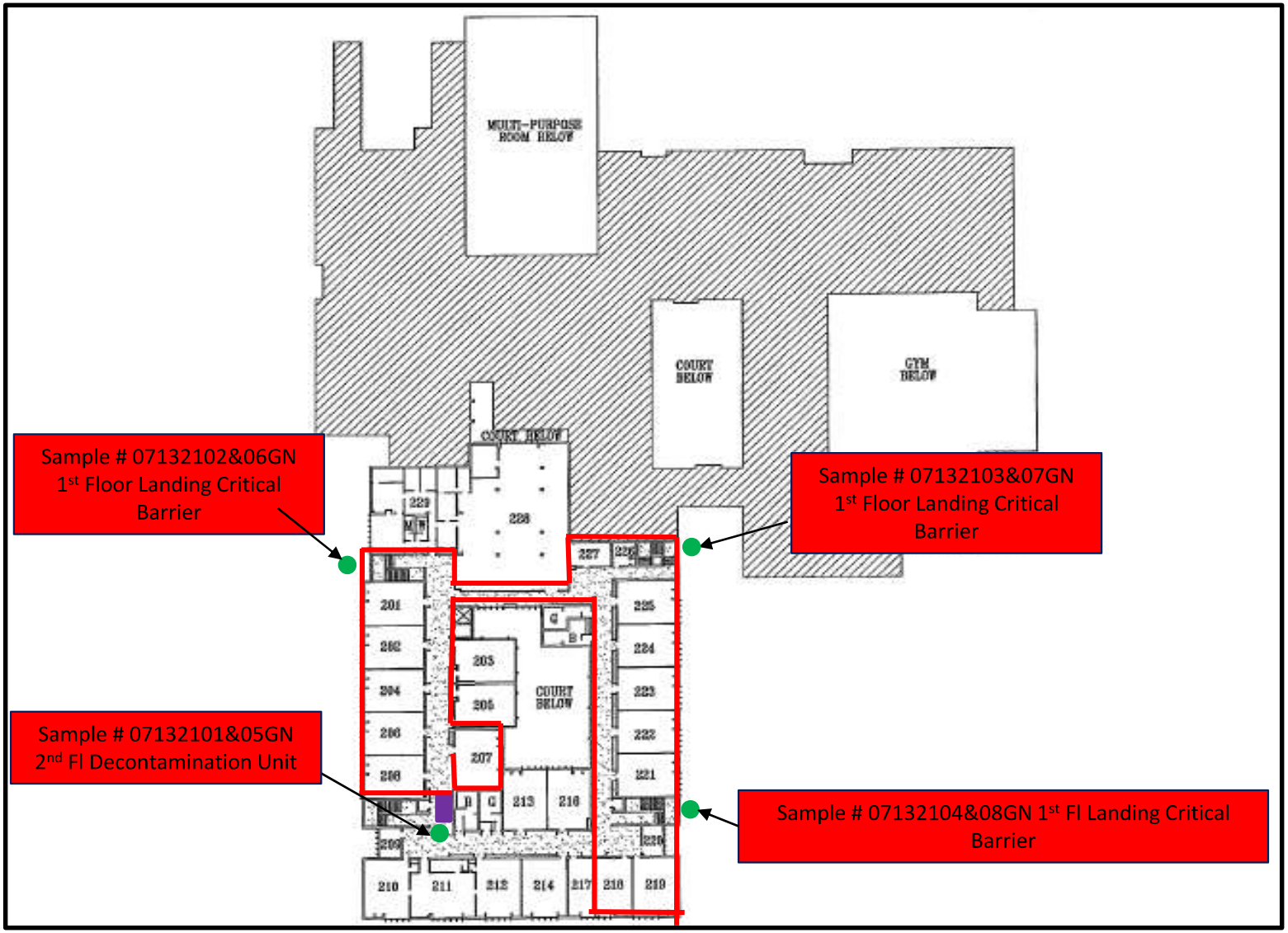
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	8
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/14/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/8

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/13/21

Attachments



View of abatement activities in the 2nd floor work area

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 15, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 13 7/14/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**13**
Day & Date	**Wednesday 7/14/2021**
Weather	**91 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:59 and 7:05 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 11:14 and 11:20 am, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:14 and 11:20 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 3:32 pm and 3:38 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

By JP Nuique 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/14/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07142101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:59 AM	11:14 AM	2.0	2.0	2.0	255	510.0	0.0	100	0.000
07142102GN	OWA,2nd Floor Work Area at 1st Floor Stairwell Landing	7:01 AM	11:16 AM	2.0	2.0	2.0	255	510.0	1.0	100	0.001
07142103GN	OWA,2nd Floor Work Area at 1st Floor Stairwell Landing	7:03 AM	11:18 AM	2.0	2.0	2.0	255	510.0	2.0	100	0.002
07142104GN	OWA,2nd Floor Work Area at 1st Floor Stairwell Landing	7:05 AM	11:20 AM	2.0	2.0	2.0	255	510.0	3.0	100	0.003
07142105GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	11:14 AM	3:32 PM	2.0	2.0	2.0	258	516.0	1.0	100	0.001
07142106GN	OWA,2nd Floor Work Area at 1st Floor Stairwell Landing	11:16 AM	3:34 PM	2.0	2.0	2.0	258	516.0	1.0	100	0.001
07142107GN	OWA,2nd Floor Work Area at 1st Floor Stairwell Landing	11:18 AM	3:36 PM	2.0	2.0	2.0	258	516.0	2.0	100	0.002
07142108GN	OWA,2nd Floor Work Area at 1st Floor Stairwell Landing	11:20 AM	3:38 PM	2.0	2.0	2.0	258	516.0	2.0	100	0.002
071421FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
071421FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/14/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/15/2021

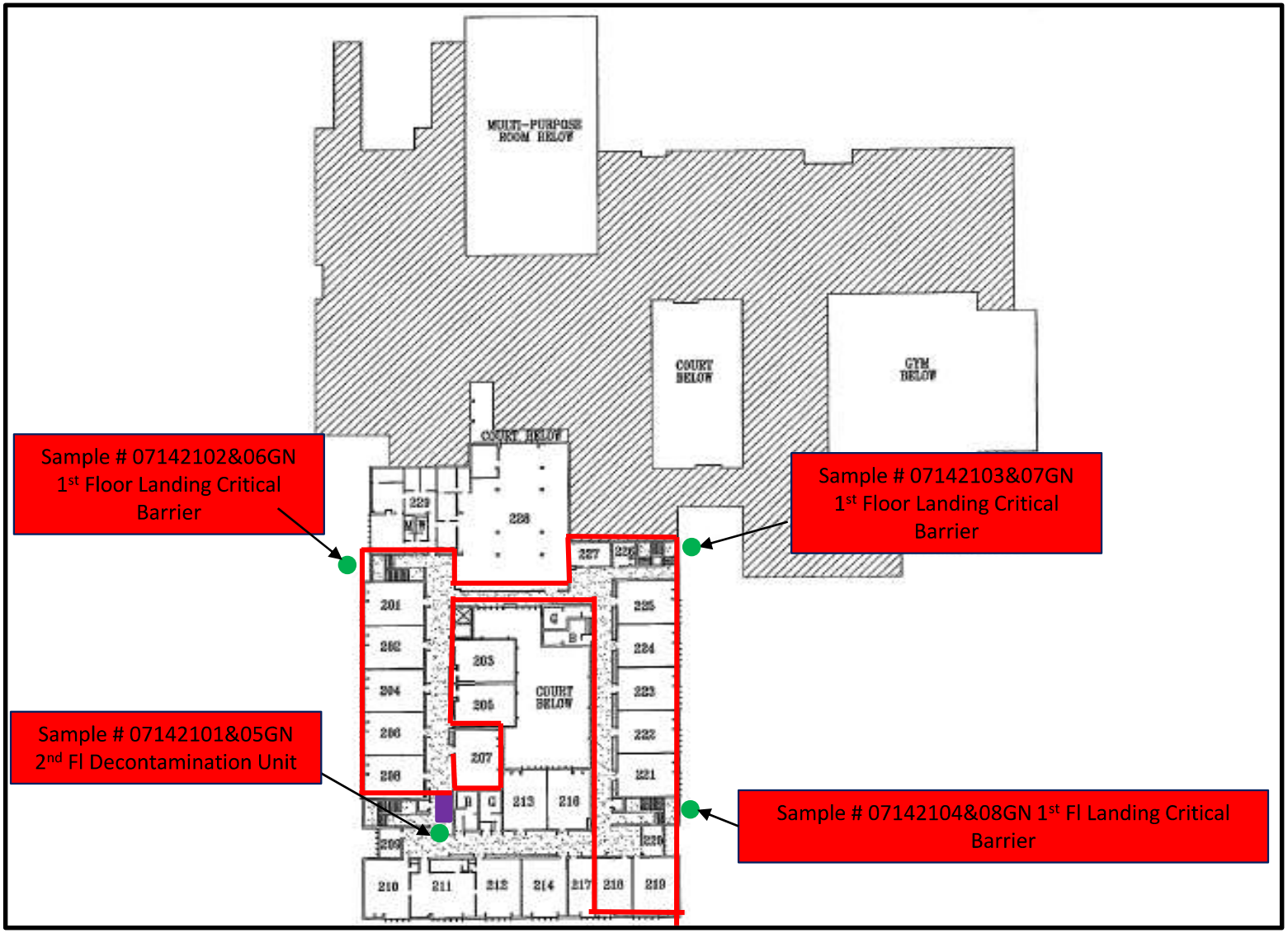
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	8
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/15/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/9

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/14/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

Attachments



View of abatement activities in the 2nd floor work area (5)

Figure 5

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 19, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports X For your use X As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 14 7/15/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**14**
Day & Date	**Thursday 7/15/2021**
Weather	**90 °/ Sunny**
On-Site Time	**9.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**9.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:30A**	**4:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and the sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:23 and 6:29 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor tile and associated black mastic using a scraper machine and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 3:15 pm and 3:21 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

By JP Nuique 1825

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/15/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07152101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:23 AM	3:15 PM	2.0	2.0	2.0	532	1064.0	4.0	100	0.002
07152102GN	OWA,2nd Floor Work Area at 1st Floor Critical Barrier Stairwell Landing	6:25 AM	3:17 PM	2.0	2.0	2.0	532	1064.0	2.0	100	0.001
07152103GN	OWA,2nd Floor Work Area at 1st Floor Critical Barrier Stairwell Landing	6:27 AM	3:19 PM	2.0	2.0	2.0	532	1064.0	3.0	100	0.001
07152104GN	OWA,2nd Floor Work Area at 1st Floor Critical Barrier Stairwell Landing	6:29 AM	3:21 PM	2.0	2.0	2.0	532	1064.0	1.0	100	0.000
07152105GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07152106GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/15/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/16/2021

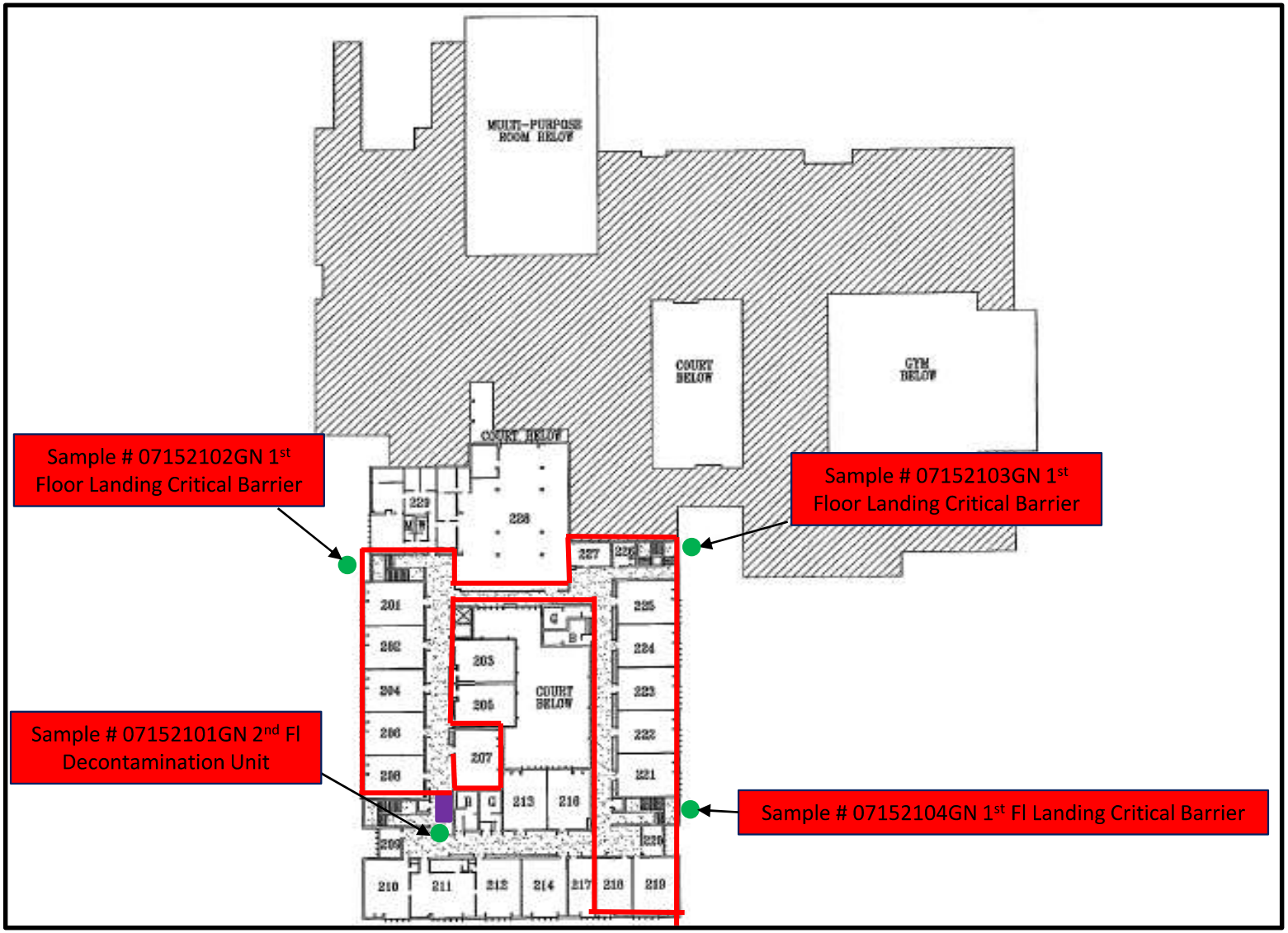
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/16/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/10

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/15/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

Attachments



View of abatement activities in the 2nd floor work area (5)

Figure 5



View of abatement activities in the 2nd floor work area (6)

Figure 6

Attachments



View of abatement activities in the 2nd floor work area (7)

Figure 7



View of abatement activities in the 2nd floor work area (8)

Figure 8

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 19, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - CIP Invoices
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 15 7/16/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

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3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**15**
Day & Date	**Friday 7/16/2021**
Weather	**94 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

Between 6:39 and 6:45 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor mastic using blast track machine, scraper machine, and grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 11:00 am and 11:06 am, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:00 am and 11:06 am, PCM air samples were started outside the work area at the decontamination unit entry, critical barrier in the hallway on 2nd floor, and the critical barrier at the stairwell landing on the 1st floor.

Between 3:15 pm and 3:21 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

By JP Nuique 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/16/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07162101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:39 AM	11:00 AM	2.0	2.0	2.0	261	522.0	0.0	100	0.000
07162102GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:41 AM	11:02 AM	2.0	2.0	2.0	261	522.0	1.0	100	0.001
07162103GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:43 AM	11:04 AM	2.0	2.0	2.0	261	522.0	0.0	100	0.000
07162104GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	6:45 AM	11:06 AM	2.0	2.0	2.0	261	522.0	1.0	100	0.001
07162105GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	11:00 AM	3:15 PM	2.0	2.0	2.0	255	510.0	0.0	100	0.000
07162106GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	11:02 AM	3:17 PM	2.0	2.0	2.0	255	510.0	1.0	100	0.001
07162107GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	11:04 AM	3:19 PM	2.0	2.0	2.0	255	510.0	0.0	100	0.000
07162108GN	OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing 1st Floor	11:06 AM	3:21 PM	2.0	2.0	2.0	255	510.0	0.0	100	0.000
071621FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
071621FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/16/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/16/2021

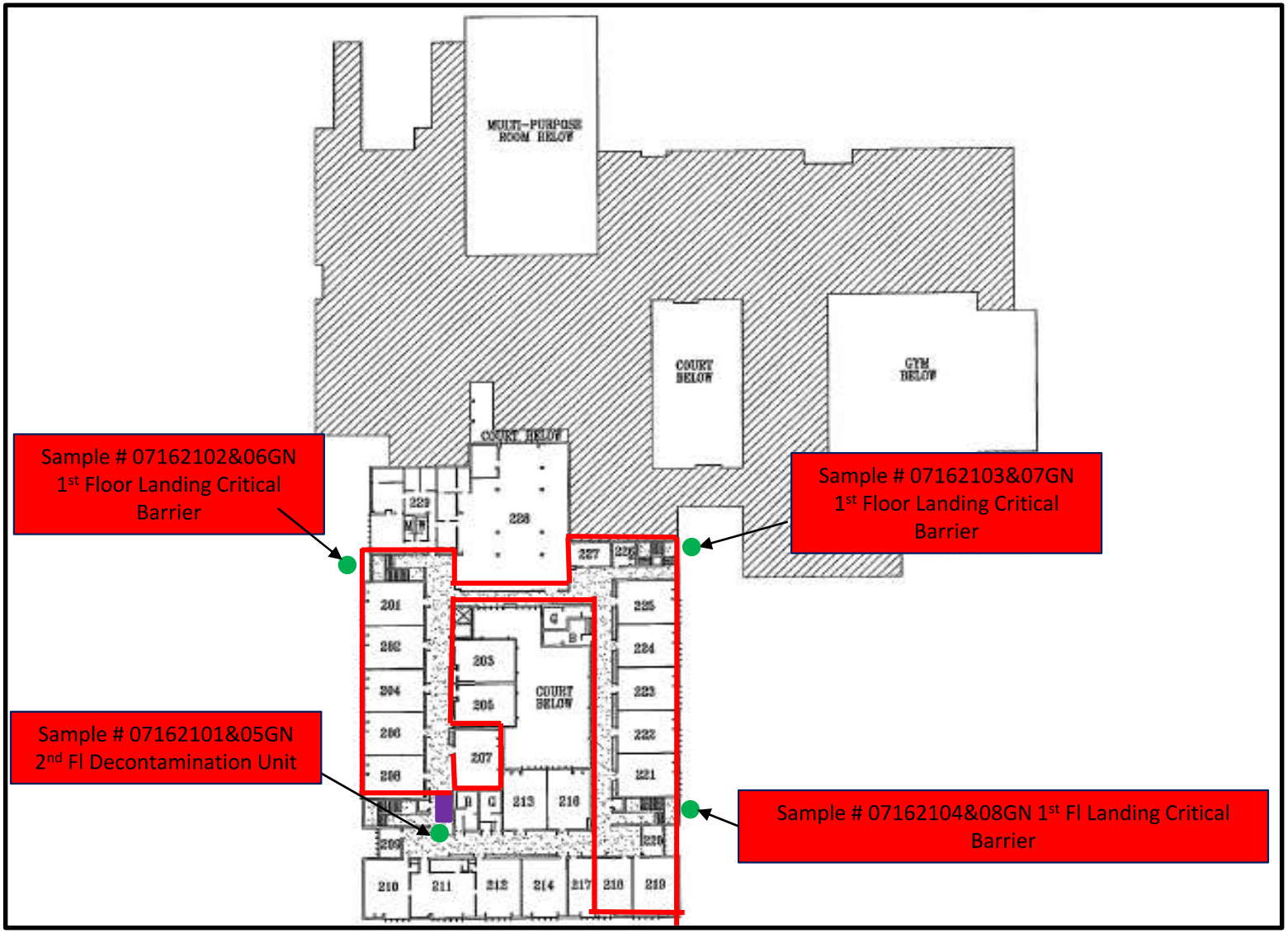
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	8
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/16/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/9

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/16/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

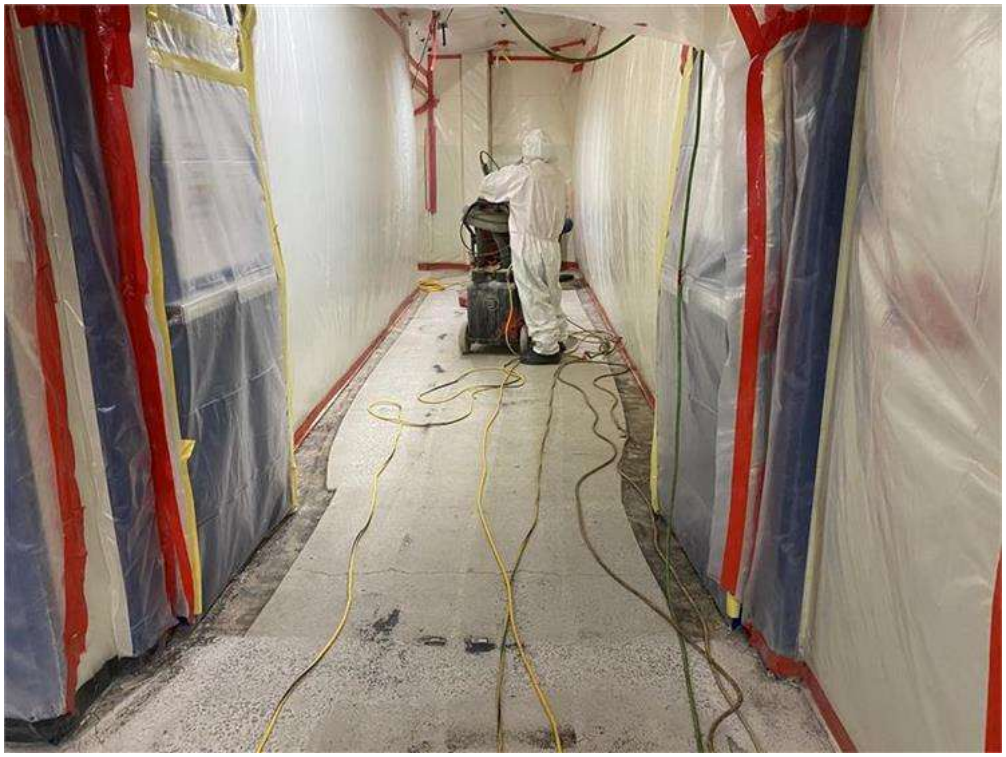
Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

Attachments



View of abatement activities in the 2nd floor work area (5)

Figure 5

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 19, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 16 7/17/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**16**
Day & Date	**Saturday 7/17/2021**
Weather	**96 °/ Sunny**
On-Site Time	**4.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**4.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:30A**	**8:30A**
				12:00P	**12:30P**
				2:00P	**4:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black floor mastic from the hallways, stairwells, and classrooms 201, 202, 204, 206, 207, and 218-227 on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

At 7:00 am, PCM air samples were started outside the work area at the decontamination unit entry and the critical barrier on the second floor. The sampling pumps were calibrated using a rotameter to 1.0 liters per minute.
Abatement workers were observed removing floor mastic using a blast track machine, scraper machine, and a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

At 4:00 pm, the sampling pumps were checked using a rotameter. The flow rate was 1.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable

By Brittany Felts 1825

regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/17/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07172101BF	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07172102BF	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07172103BF	OWA-decontamination unit entry	7:00 AM	4:00 PM	1.0	1.0	1.0	540	540.0	0.0	100	0.000
07172104BF	OWA- 2nd Floor Critical Barrier	7:00 AM	4:00 PM	1.0	1.0	1.0	540	540.0	0.0	100	0.000

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

ECS Technician: Brittany Felts **Date:** 7/17/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/18/2021

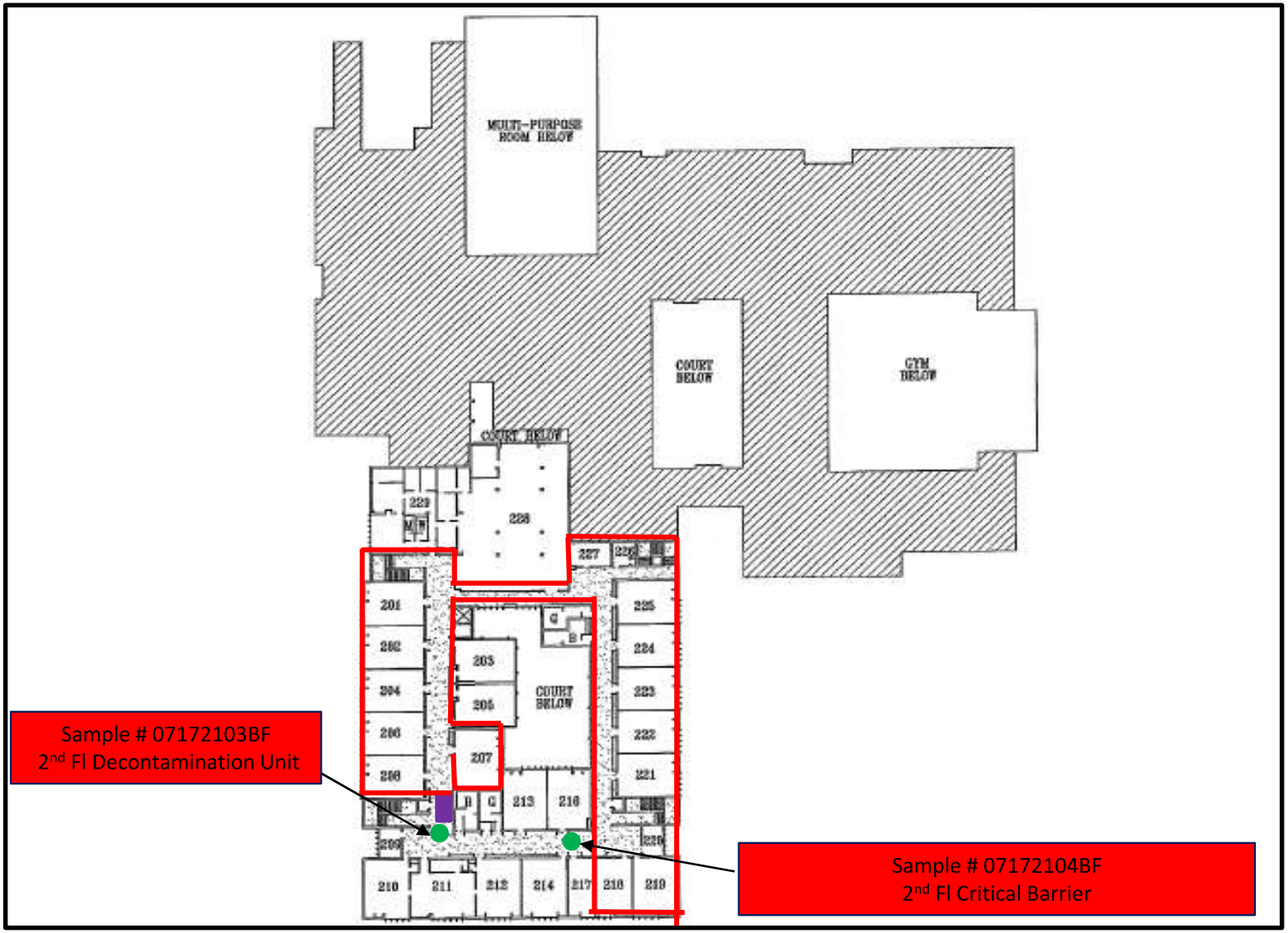
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallways, Stairwells, and Classrooms 201, 202, 204, 206, 207, and 218 - 227 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallways, Stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/18/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/7

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/17/21

Attachments



View of abatement activities in the second floor work area

Figure 1



View of abatement activities in the second floor work area (2)

Figure 2

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 19, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 17 7/18/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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Chantilly, VA 20151-3232
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FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**17**
Day & Date	**Sunday 7/18/2021**
Weather	**68 °/ Sunny**
On-Site Time	**8.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**8.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**7:00A**
				8:00A	**1:45P**
				2:15P	**4:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS, STAIRWELLS, AND CLASSROOMS 201, 202, 204, 206, 207, AND 218 - 227 WORK AREA MONITORING

The abatement contractor stated the specified material had been removed from the regulated work area and requested a visual survey to confirm compliance. The Final Clearance Visual Survey Checklist was completed and is attached to this report. Note that ACM floor tile and/or mastic is assumed to be present under partition walls and casework.

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area.

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area. After waiting for the encapsulant to dry, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

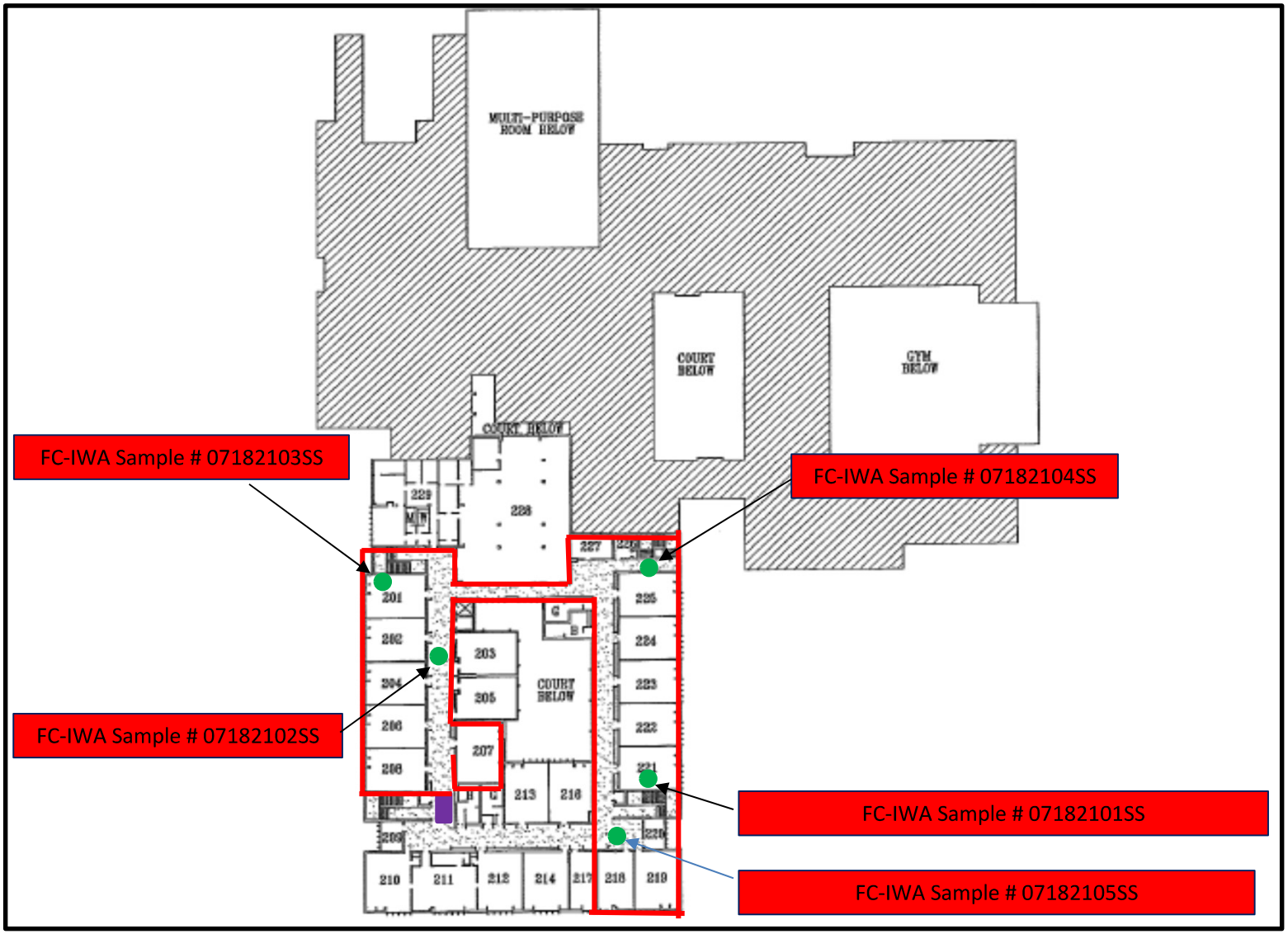
At 2:23 pm and 2:25 pm, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 120 minutes at 10.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. located in Beltsville, Maryland for analysis.

By Suhel Shafaat 1825

The EPA and DC maximum allowable airborne asbestos concentration from within the work area is 70 structures per millimeter squared (s/mm2). In order to be deemed acceptable, the average of the interior samples analyzed must have asbestos concentrations of 70 s/mm2 or less. SAI informed ECS that the analytical results of the TEM final clearance air samples collected from the second-floor work area found the airborne asbestos fiber concentrations to be less than the maximum allowable limits. The client and abatement contractor supervisor were informed of the results. A copy of the laboratory report is attached.

2ND FLOOR HALLWAYS AND CLASSROOMS 209, 210, 211, 212, 213, 214, 216 and 217 WORK AREA MONITORING

Abatement workers started preparing the 2nd floor work area which consists of the hallway and classrooms 209, 210, 211, 212, 213, 214, 216 and 217.



Legend

= Regulated Work Area

= Decontamination Unit

= FC-IWA Sample Location

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA
22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/18/21

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705
Tel/Fax: (301) 937-5700 / (301) 937-5701
http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192106845
Customer ID: ECMA78
Customer PO:
Project ID:

Attention: JOHN ONEIL
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
Project: ACPS John Adams ES/ 47:11652-21

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 07/19/2021 08:30 AM
Analysis Date: 07/19/2021
Collected Date: 07/18/2021

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5µ < 5µ	#Structures ≥5µ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
07182101SS	Final Clearance-IWA- 2nd Fl, Hallways, Stairwells, and Classrooms 201,202,209,206,207,218-227	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192106845-0001										
07182102SS	Final Clearance-IWA- 2nd Fl, Hallways, Stairwells, and Classrooms 201,202,209,206,207,218-227	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192106845-0002										
07182103SS	Final Clearance-IWA- 2nd Fl, Hallways, Stairwells, and Classrooms 201,202,209,206,207,218-227	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192106845-0003										
07182104SS	Final Clearance-IWA- 2nd Fl, Hallways, Stairwells, and Classrooms 201,202,209,206,207,218-227	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192106845-0004										
07182105Ss	Final Clearance-IWA- 2nd Fl, Hallways, Stairwells, and Classrooms 201,202,209,206,207,218-227	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192106845-0005										

Analyst(s)

Joe Centifonti (5)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in structures/cm3 are not covered by the laboratory's NVLAP accreditation. Measurement of uncertainty available upon request.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from: 07/19/2021 14:31 PM

OrderID: 192106845

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*): 192106845

EMSL ANALYTICAL, INC
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE (800) 220-3675
FAX: (856) 786-5974

Company Name: ECS MidAtlantic, LLC		**EMSL Customer ID:**	
Street: 14026 Thunderbolt Place, Suite 100	**City:** Chantilly	**State/Province:** VA	
Zip/Postal Code: 20151	**Country:** USA	**Telephone #:** 571-510-5595	**Fax #:**
Report To (Name): John A O'Neil		**Please Provide Results:** ☐ Fax ☒ Email	
Email Address: JONeil@ecslimited.com		**Purchase Order:**	
Project Name/Number: ACPS John Adams ES/41116241		**EMSL Project ID** (*Internal Use Only*):	
U.S. State Samples Taken: VA		**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt	

EMSL-Bill to: ☒ Same ☐ Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour | ☒ 6 Hour | ☒ 24 Hour | ☐ 48 Hour | ☐ 72 Hour | ☐ 96 Hour | ☐ 1 Week | ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air ☐ Check if samples are from NY
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NYS 198.8 SOF-V
- ☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
- ☒ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Analysis-EPA 600 sec 2.5

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☐ PLM EPA 600/R-93/116 with milling prep (<0 25%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0 1%)
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep
- ☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM (BC only)

Other:
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Filter Pore Size (Air Samples): ☐ 0.8µm ☒ 0.45µm

Samplers Name: Suhel Shafaat **Samplers Signature:**

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
071821015S	Final Clearance-TWA 2nd Floor Hallways, stairwells and classrooms 201, 207, 209, 214, 217, 218-227	1200 liters	7/18/21
025S			
035S			
045S			
055S			

Client Sample # (s): 071821015S - 071821135S **Total # of Samples:** 13

Relinquished (Client): **Date:** 7/18/21 **Time:**

Received (Lab): **Date:** 7-19-21 **Time:** 8:30

Comments/Special Instructions: Please only analyze TWA samples. Aggressive Sampling Performed.

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
071821065S	Final Clearance-DWA 201 Floor Hallways, Stairwells and classrooms 201, 202, 204, 206, 207	1200 Liters	7/18/21
0755	And 218-227		
0855			
0955			
1055			
1155	Field Blank (opened 30 secs before entrance)	N/A	
1255	Field Blank (opened 30 secs before ambient)		
1355	Sealed Blank (Not opened)		

*Comments/Special Instructions:

Controlled Document – Asbestos COC – R10 – 05/09/2016

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-C1 **Date:** 7/18/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd floor hallways, stairwells, and classooms 201, 202, 204, 206, 207, and 218 - 227

	Work Area Location/Description	2nd floor hallways, stairwells, and
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	N/A
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	N/A
	Mechanical Equipment	N/A
	Ducts	N/A
	Pipes	N/A
	Lighting	N/A
	Other Surfaces	Satisfactory
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	TEM
	Number of Samples Collected	13
	Sample Volume (liters)	1200
	Work Area Acceptable	Yes

Notes: Note that ACM floor tile and/or mastic is assumed to be present under partition walls and casework.

ECS Technician: John A. O'Neil **Date:** 7/18/2021

Attachments



View of where the floor tile and associated mastic was removed from the second floor work area (1)

Figure 1



View of where the floor tile and associated mastic was removed from the second floor work area (2)

Figure 2

Attachments



View of where the floor tile and associated mastic was removed from the second floor work area (3)

Figure 3



View of where the floor tile and associated mastic was removed from the second floor work area (4)

Figure 4

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 23, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 18 7/19/2021

Stephen Geraci, P.E., CHMM
Vice President, Principal Engineer

John A. O'Neil
Environmental Staff Project Manager

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Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**18**
Day & Date	**Monday 7/19/2021**
Weather	**90 °/ Sunny**
On-Site Time	**4.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**4.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**6:30A**
				12:00P	**3:00P**
				3:30P	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and floor mastic on the 2nd floor work area 2. Photographs and sketch for today's regulated work area are attached to this report.

2ND FLOOR WORK AREA 2 MONITORING

The abatement contractor requested a pre-abatement survey of the regulated work area. The Pre-Abatement Checklist was completed and is attached to this report.

Between 12:45 and 12:48 pm, PCM air samples were started outside the work area at the decontamination unit entry and at the first floor stairwell landing. The sampling pumps were calibrated using a rotameter to 3.0 liters per minute. Abatement workers were removing floor tile using hand scrapers and a scraper machine. Water sprayers were utilized during the abatement activities.

Between 4:00 pm and 4:02 pm, the sampling pumps were checked using a rotameter. The flow rate was 3.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

By JP Nuique 1825

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/19/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07192101GN	OWA,2nd Floor Work Area 2 at Decontamination Unit Entry	12:45 PM	4:00 PM	3.0	3.0	3.0	195	585.0	1.0	100	0.001
07192102GN	OWA,2nd Floor Work Area 2 at Stairwell landing 1st floor	12:48 PM	4:02 PM	3.0	3.0	3.0	194	582.0	1.0	100	0.001
071921FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
071921FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/19/2021

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/20/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Administrative	Training Certificates/Licenses	Satisfactory
	Permits	Satisfactory
	EPA/State/Local Notification	Satisfactory
Work Area	Public Access Restricted	Satisfactory
	Warning Signs/Tape Posted	Satisfactory
Negative Air Filtration	Number of Units	9
	Pre-Filters In-Use/Available	Satisfactory
	Exhausted from Work Area	Satisfactory
	Pressure Differential Monometer Operating	Satisfactory
Equipment	HEPA Vacuum Available	Satisfactory
	Amended Water Sprayers	Satisfactory
Decontamination Enclosure	Clean Room	Satisfactory
	Shower Water Available	Satisfactory
	Waste Water Filtration In-Use	Satisfactory
	Disposable Towels	Satisfactory
	Soap	Satisfactory
	Equipment Room	Satisfactory
Personal Protective Equipment	Type of Respirator	Half Face
	Type of Filters Used	P100
	Disposable Protective Clothing	Satisfactory
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/20/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/20/2021

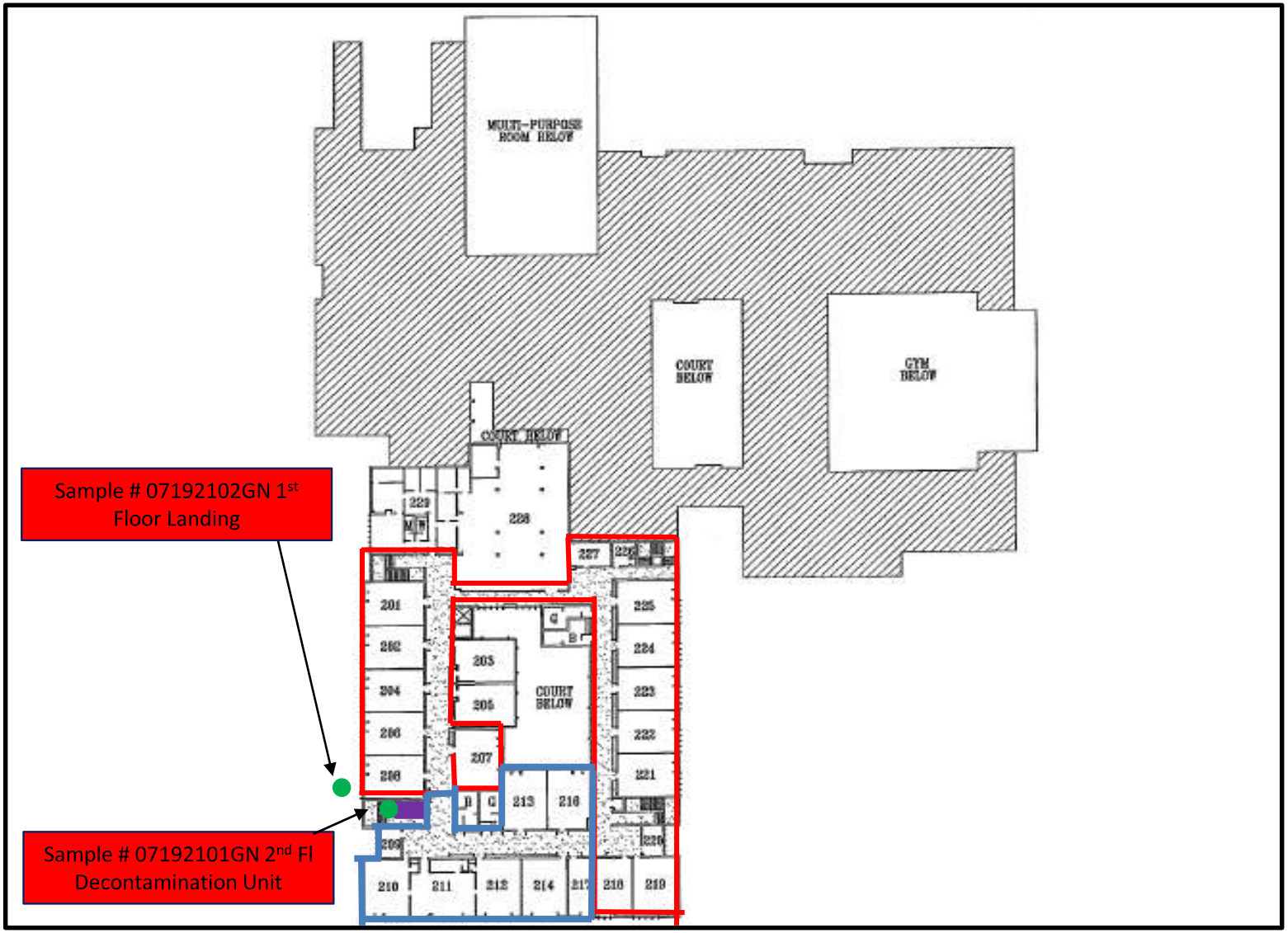
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/20/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Regulated Work Area waiting for TEM clearance results

Transmittal Page 7/10

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/19/21

Attachments



View of abatement activities in the 2nd floor work area

Figure 1



View of abatement activities in the 2nd floor work area (2)

Figure 2

Attachments



View of the 2nd floor work area during the pre abatement walk through

Figure 3



View of the 2nd floor work area during the pre abatement walk through (2)

Figure 4

Attachments



View of the 2nd floor work area during the pre abatement walk through (3)

Figure 5



View of the 2nd floor work area during the pre abatement walk through (4)

Figure 6

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 23, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 19 7/20/2021

Stephen Geraci, P.E., CHMM
Vice President, Principal Engineer

John A. O'Neil
Environmental Staff Project Manager

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3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**19**
Day & Date	**Tuesday 7/20/2021**
Weather	**91 °/ Sunny**
On-Site Time	**2.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**2.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**7:30A**
				3:30P	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and floor mastic on the 2nd floor work area 2. Photographs and sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 209, 210, 211, 212, 213, 214, 216 and 217 WORK AREA MONITORING

Between 6:42 and 6:42 am, PCM air samples were started outside the work area at decontamination unit entry and at the critical barrier first floor stairwell landing. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute. Abatement workers were removing floor tile and floor mastic using hand scrapers, a floor scraper machine, and a grinder with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 3:45 pm and 3:47 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in

general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/20/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07202101GN	OWA,2nd Floor Work Area #2 at Decontamination Unit Entry	6:42 AM	3:45 PM	2.0	2.0	2.0	543	1086.0	8.0	100	0.004
07202102GN	OWA,2nd Floor Work Area #2 at Critical Barrier on 1st Floor Stairwell Landing	6:44 AM	3:47 PM	2.0	2.0	2.0	543	1086.0	1.0	100	0.000
072021FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072021FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/20/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/21/2021

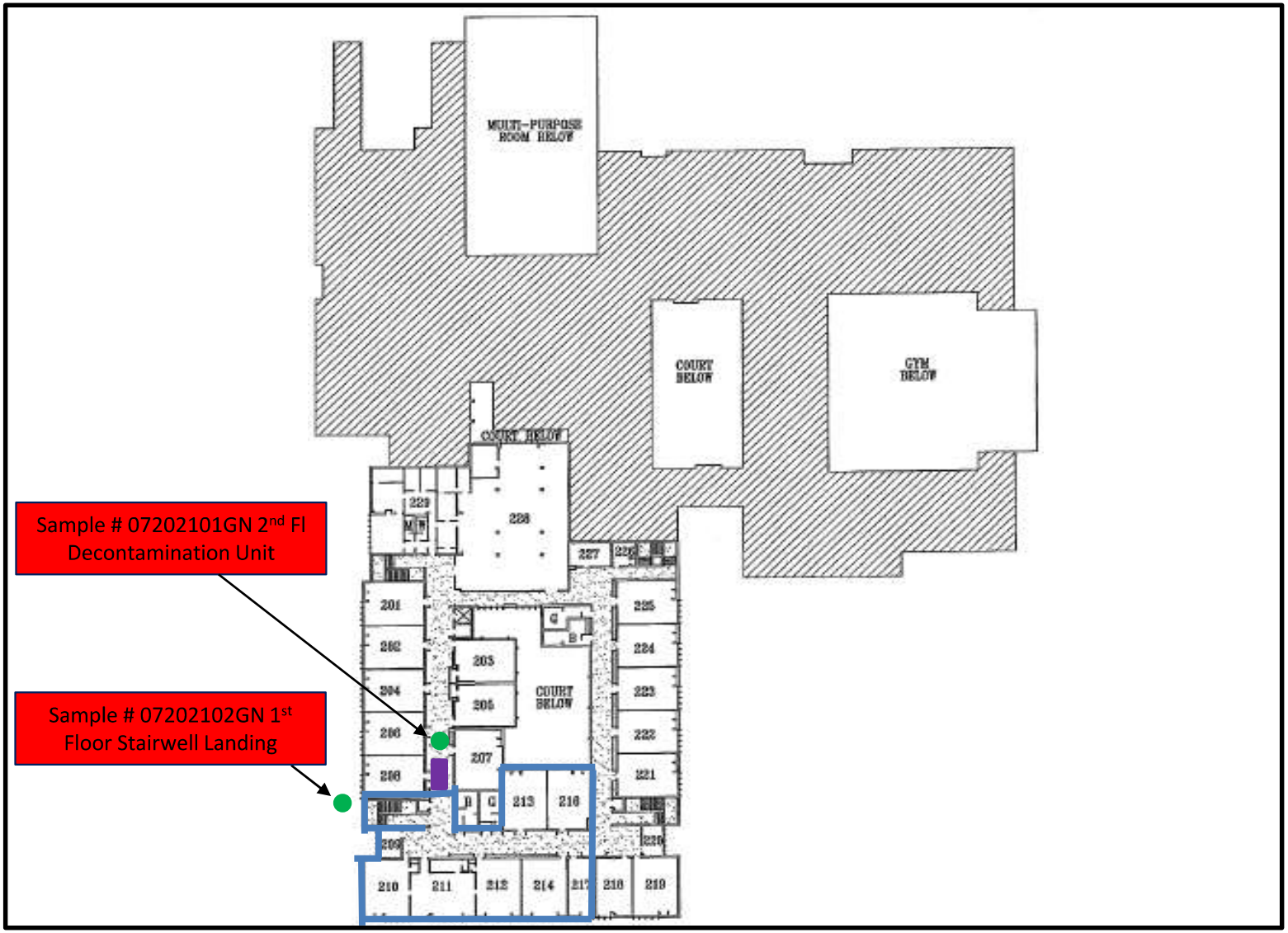
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/21/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/20/21

Attachments



View of abatement activities in the 2nd floor work area (1)

Figure 1



View of abatement activities in the 2nd floor work area (2)

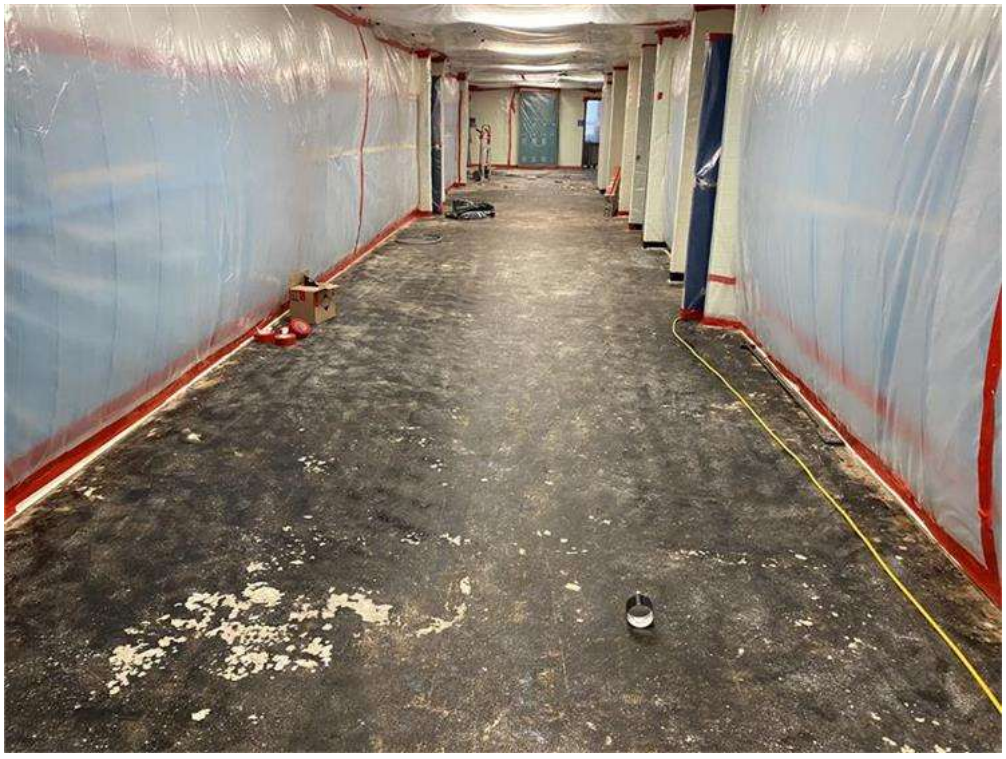
Figure 2

Attachments



View of abatement activities in the 2nd floor work area (3)

Figure 3



View of abatement activities in the 2nd floor work area (4)

Figure 4

Attachments



View of abatement activities in the 2nd floor work area (5)

Figure 5

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 23, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 20 7/21/2021

Stephen Geraci, P.E., CHMM
Vice President, Principal Engineer

John A. O'Neil
Environmental Staff Project Manager

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4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**20**
Day & Date	**Wednesday 7/21/2021**
Weather	**91 °/ Sunny**
On-Site Time	**3.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**3.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**7:00A**
				2:00P	**4:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and floor mastic on the 2nd floor work area. Photographs and sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 209, 210, 211, 212, 213, 214, 216 and 217 WORK AREA MONITORING

Between 6:39 and 6:41 pm, PCM air samples were started outside the work area at decontamination unit entry and at the critical barrier first floor stairwell landing. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute. Abatement workers were removing floor mastic using a blast track machine and grinders with HEPA vacuum attachments. Water sprayers were utilized during the abatement activities.

Between 3:45 pm and 3:47 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in

general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/21/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07212101GN	OWA,2nd Floor Work Area #2 at Decontamination Unit Entry	6:41 AM	3:45 PM	2.0	2.0	2.0	544	1088.0	3.0	100	0.001
07212102GN	OWA,2nd Floor Work Area #2 at Critical Barrier Stairwell Landing 1st Floor	6:39 AM	3:47 PM	2.0	2.0	2.0	548	1096.0	1.0	100	0.000
072121FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072121FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

ECS Technician: JP Nuique **Date:** 7/21/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/22/2021

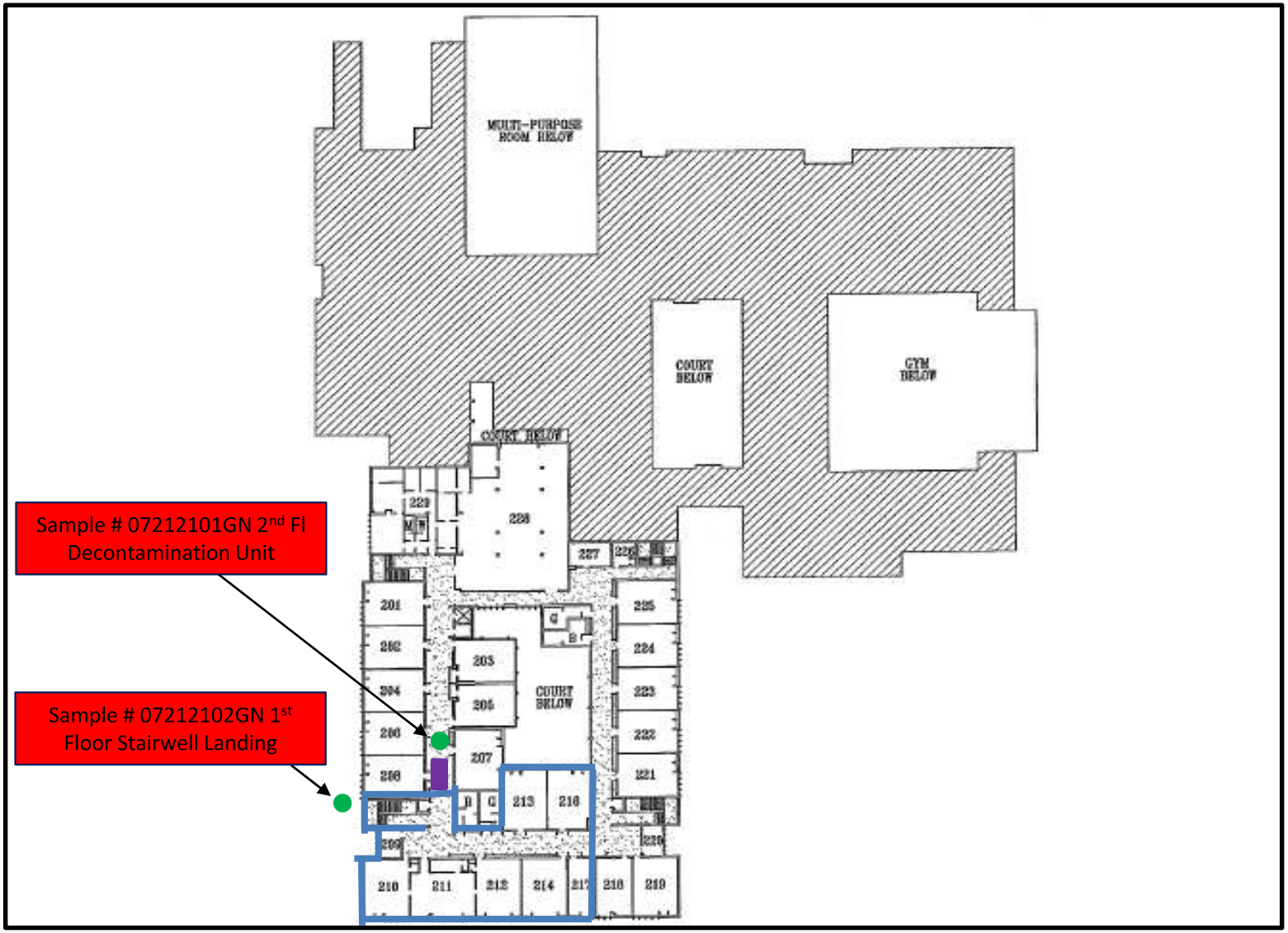
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/22/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/7

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/21/21

Attachments



View of abatement activities in the 2n floor work area #2. (2)

Figure 1



View of abatement activities in the 2n floor work area #2.

Figure 2

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 23, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports X For your use X As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 21 7/22/2021

Stephen Geraci, P.E., CHMM
Vice President, Principal Engineer

John A. O'Neil
Environmental Staff Project Manager

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ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**21**
Day & Date	**Thursday 7/22/2021**
Weather	**84 °/ Sunny**
On-Site Time	**2.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**2.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**7:00A**	**8:30A**
				3:30P	**4:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and floor mastic on the 2nd floor work area. Photographs and sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 209, 210, 211, 212, 213, 214, 216 and 217 WORK AREA MONITORING

Between 7:05 and 7:10 am, PCM air samples were started outside the work area at decontamination unit entry and at the critical barrier first floor stairwell landing. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute. Abatement workers were removing floor mastic using a blast track machine and grinders with HEPA vacuum attachments. Water sprayers were utilized during the abatement activities.

Between 3:45 pm and 3:47 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in

general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/22/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07222101GN	OWA,2nd Floor Work Area #2 at Decontamination Unit Entry	7:05 AM	3:45 PM	2.0	2.0	2.0	520	1040.0	4.0	100	0.002
07222102GN	OWA,2nd Floor Work Area #2 at Critical Barrier 1st Floor Stairwell Landing	7:10 AM	3:47 PM	2.0	2.0	2.0	517	1034.0	2.0	100	0.001
072221FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072221FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

ECS Technician: JP Nuique **Date:** 7/22/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/23/2021

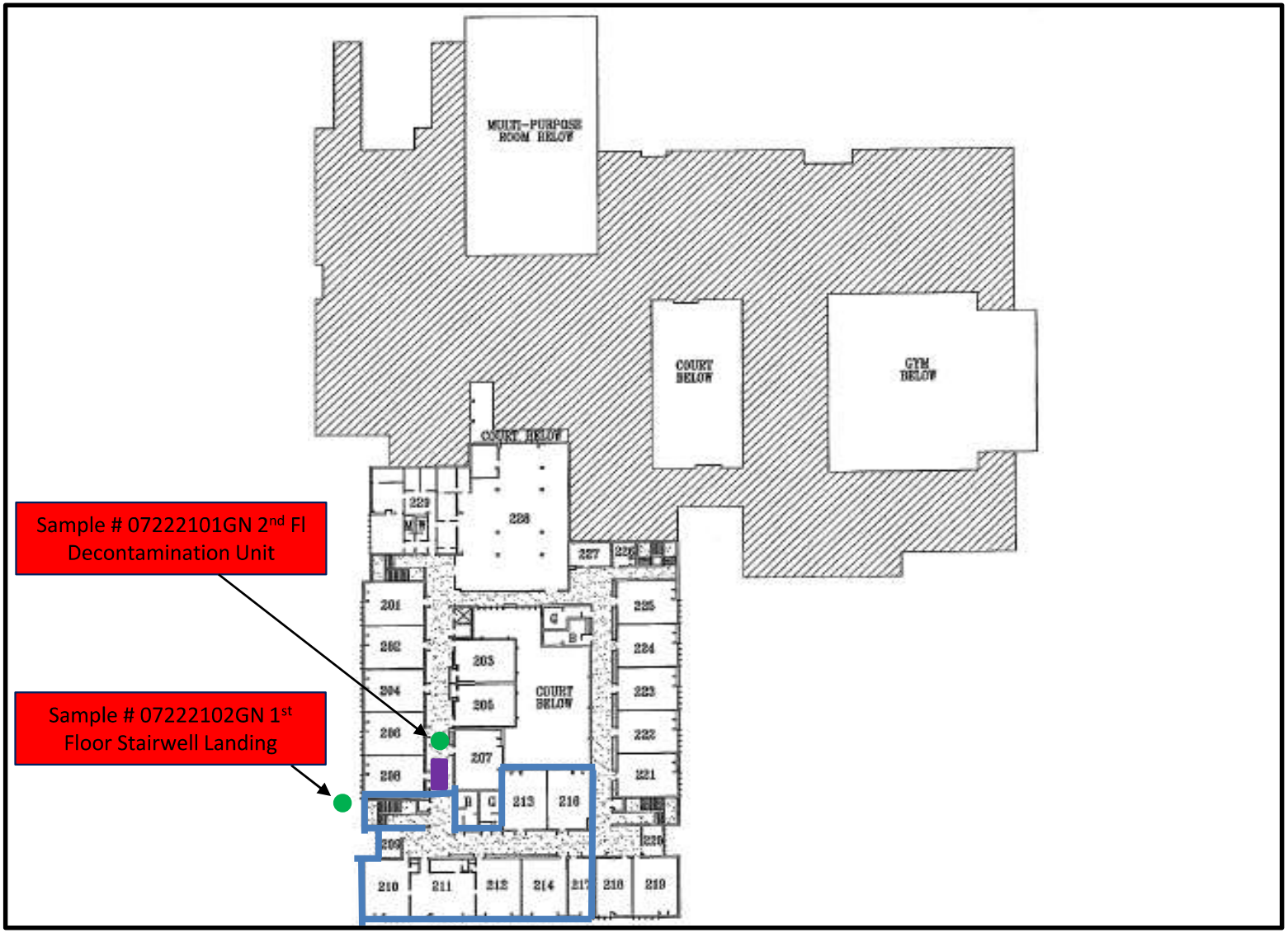
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/23/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

Transmittal Page 6/7

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/22/21

Attachments



View of abatement activities in the 2nd floor work area #2

Figure 1

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 28, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X Field Reports **X** For your use **X** As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 22 7/23/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

Disclaimer

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**22**
Day & Date	**Friday 7/23/2021**
Weather	**84 °/ Sunny**
On-Site Time	**8.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**8.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**12:00P**
				1:00P	**3:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor mastic in the 2nd floor work area. Photographs and sketch for today's regulated work area are attached to this report.

2ND FLOOR HALLWAYS AND CLASSROOMS 209, 210, 211, 212, 213, 214, 216 and 217 WORK AREA MONITORING

Between 6:52 and 6:54 am, PCM air samples were started outside the work area at decontamination unit entry and at the critical barrier first floor stairwell landing. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing floor mastic using grinders with HEPA vacuum attachments and final cleaning of the work area. Water sprayers were utilized during the abatement activities.

Between 2:00 pm and 2:05 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

The abatement contractor stated the specified materials have been removed from the regulated work area and requested a visual survey to confirm compliance. The Final Clearance Visual Survey Checklist was completed and is attached to this report.

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area. ECS will collect the final clearance TEM air samples during the next working shift.

GENERAL

By JP Nuique 1825

The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags were labeled and placed in a waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-C1
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Date: 7/23/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07232101GN	OWA,2nd Floor Work Area #2 at Decontamination Unit Entry	6:52 AM	2:00 PM	2.0	2.0	2.0	428	856.0	4.0	100	0.002
07232102GN	OWA,2nd Floor Work Area #2 at Critical Barrier 1st Floor Stairwell Landing	6:54 AM	2:05 PM	2.0	2.0	2.0	431	862.0	1.0	100	0.001
072321FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072321FB02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD

Notes: NFD = None Fibers Detected OWA = Outside Work Area IWA = Inside Work Area

Notes: The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the level.

ECS Technician: JP Nuique **Date:** 7/23/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-C1 **Date:** 7/24/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	All Critical Barriers Intact	Satisfactory
	Wet Methods In-Use	Satisfactory
	Prompt Clean-Up	Satisfactory
	Adequate Lighting	Satisfactory
	Respiratory Protection	Satisfactory
	Disposable Clothing Worn Properly	Satisfactory
	No Respirators Stored in Work Area	Satisfactory
	Negative Air Filtration In-Use	Satisfactory
	Pre-Filters Clean	Satisfactory
	Exhaust Properly Vented	Satisfactory
	No Eating/Drinking/Smoking in Work Area	Satisfactory
End of Shift Checklist	Negative Air Filtration Machines Operating	Satisfactory
	Debris Bagged/Sealed	Satisfactory
	Work Area Secured from Public Access	Satisfactory
Air Samples Collected	Number of PCM Air Samples	2
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/24/2021

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-C1 **Date:** 7/24/2021

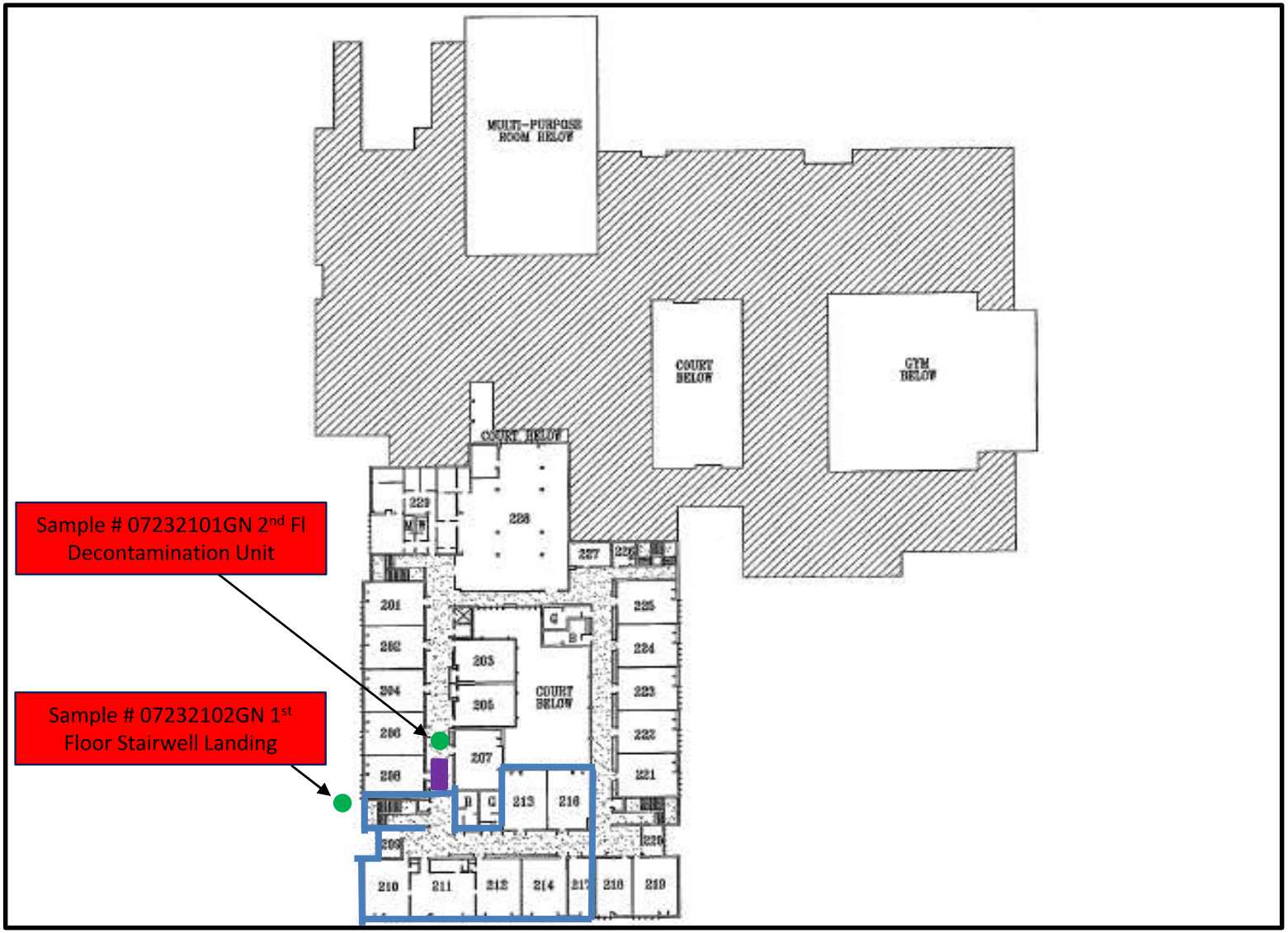
Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	N/A
	Mechanical Equipment	N/A
	Ducts	N/A
	Pipes	N/A
	Lighting	N/A
	Other Surfaces	N/A
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	N/A
	Number of Samples Collected	0
	Sample Volume (liters)	0
	Work Area Acceptable	Yes

Notes: ECS will collect the final clearance TEM air samples on the next working shift.

ECS Technician: John A. O'Neil **Date:** 7/24/2021



Legend

= Regulated Work Area

= Decontamination Unit

= Sample Location

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/23/21

Attachments



View of where the floor tile and associated mastic was removed from the 2nd floor work area (1)

Figure 1



View of where the floor tile and associated mastic was removed from the 2nd floor work area (2)

Figure 2

Attachments



View of where the floor tile and associated mastic was removed from the 2nd floor work area (3)

Figure 3



View of where the floor tile and associated mastic was removed from the 2nd floor work area (4)

Figure 4

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
7034718400
7038345527

LETTER OF TRANSMITTAL

July 28, 2021

Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **ACPS John Adams ES Asbestos Abatement Monitoring**
ECS Job # **47:11652-C1**

Permits:
Location: **5651 Rayburn Avenue Alexandria, VA 22311**

X	Field Reports	**X**	For your use	**X**	As requested

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - Norman Wiebusch
Waco, Inc - Chris Lanham

ENCL: Field Report # 23 7/24/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

ECS Mid-Atlantic, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS John Adams ES Asbestos Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-C1**
Report No.	**23**
Day & Date	**Saturday 7/24/2021**
Weather	**86 °/ Sunny**
On-Site Time	**3.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**3.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**9:30A**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to collect final TEM air clearance samples inside and outside the second-floor work area.

2ND FLOOR HALLWAYS AND CLASSROOMS 209, 210, 211, 212, 213, 214, 216 and 217 WORK AREA MONITORING

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area during the previous work shift. After waiting for the encapsulant to dry overnight, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds. One field blank left unopened.

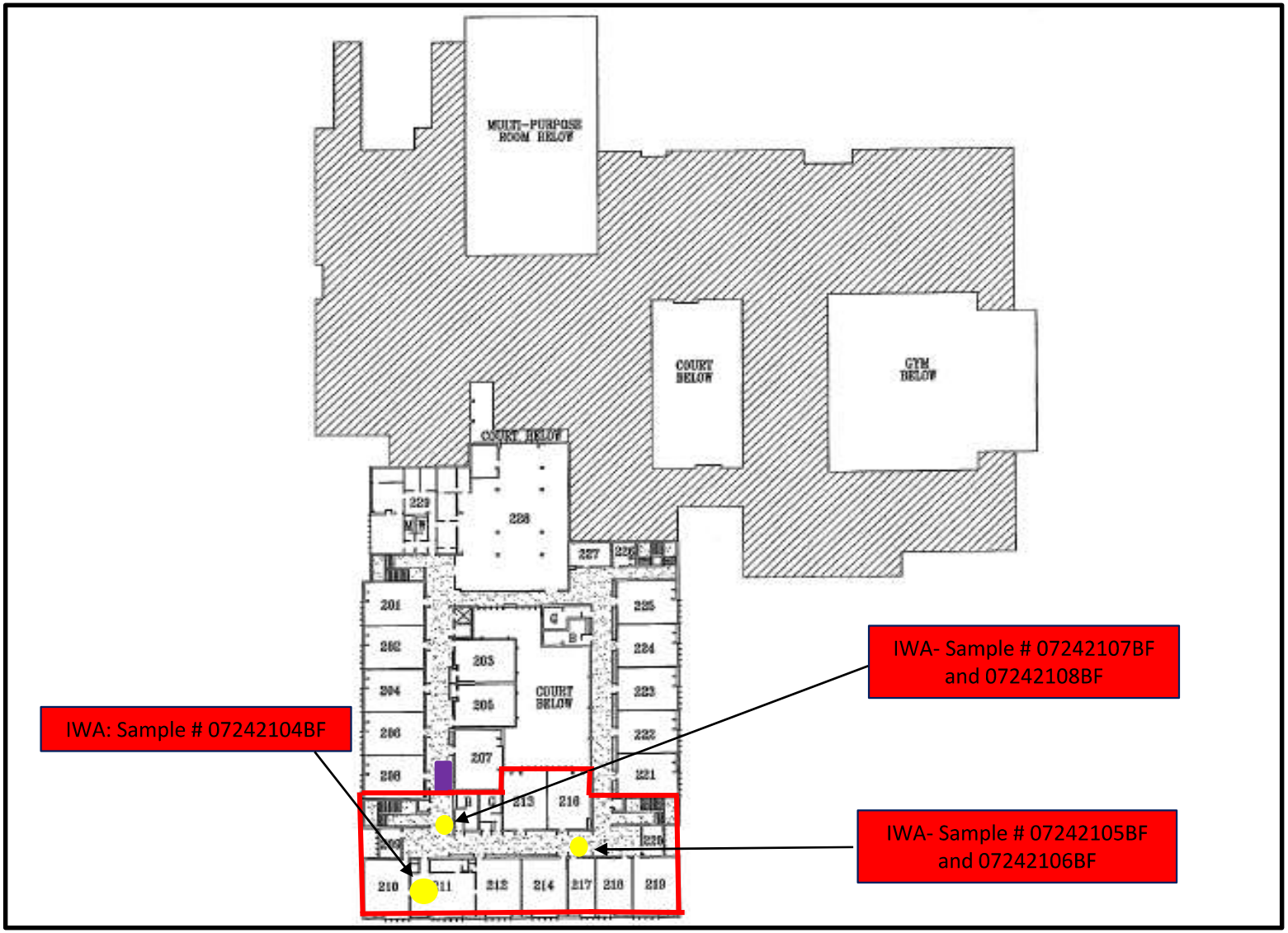
At 9:00 am, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 120 minutes at 10.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, INC. in Beltsville, MD for analysis. (A copy of the chain of custody has been attached).

The US EPA and Commonwealth of Virginia maximum allowable airborne asbestos concentration from within the work area is 70 structures per millimeter squared (s/mm2). In order to be deemed acceptable, the average of the interior samples analyzed must have asbestos concentrations of 70 s/mm2 or less. EMSL Analytical, INC. informed ECS that the analytical results of the TEM final clearance air samples collected from second floor work area found the airborne asbestos fiber concentrations to be less than the maximum allowable concentration. The client and abatement contractor supervisor, Ingrid Chan, were informed of the results. A copy of the laboratory report is attached.

By Brittany Felts 1825

GENERAL

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.



Legend

= Regulated Work Area

= Decontamination Unit

=Final IWA TEM Sample Location

Transmittal Page 4/8

John Adams and ECC
5651 Rayburn Ave, Alexandria, VA 22311

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 07/24/21

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192107084
Customer ID: ECMA78
Customer PO:
Project ID:

Attention: JOHN ONEIL
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
Project: 47:11652-C1 John Adams

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 07/24/2021 17:00 PM
Analysis Date: 07/26/2021
Collected Date: 07/24/2021

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5µ < 5µ	#Structures ≥5µ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
072421 04 BF *192107084-0001*	FC, IWA- Second Fl. Hallway #2	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072421 05 BF *192107084-0002*	FC, IWA- Second Fl. Hallway #2	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072421 06 BF *192107084-0003*	FC, IWA- Second Fl. Hallway #2	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072421 07 BF *192107084-0004*	FC, IWA- Second Fl. Hallway #2	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072421 08 BF *192107084-0005*	FC, IWA- Second Fl. Hallway #2	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049

Analyst(s)

Joe Centifonti (5)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in structures/cm3 are not covered by the laboratory's NVLAP accreditation. Measurement of uncertainty available upon request.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from: 07/26/2021 15:47 PM

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 192107084

PHONE:
FAX:

Company Name: ECS Mid-Atlantic, LLC		**EMSL Customer ID:**	
Street: 14026 Thunderbolt Place, Suite 100		**City:** Chantilly	**State/Province:** VA
Zip/Postal Code: 20151	**Country:** USA	**Telephone #:**	**Fax #:**
Report To (Name): John O'Neil		**Please Provide Results:** ☐ Fax ☑ Email	
Email Address: JONeil@ecslimited.com		**Purchase Order:**	
Project Name/Number: 47.11652-C1 John Adams		**EMSL Project ID** *(Internal Use Only)*:	
U.S. State Samples Taken: VA		**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt	

EMSL-Bill to: ☐ Same ☐ Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☑ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.*

PCM - Air ☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☐ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NYS 198.8 SOF-V
☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
☑ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)
☐ TEM Qualitative via Filtration Prep
☐ TEM Qualitative via Drop Mount Prep
☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM (BC only)

Other:
☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group**

Filter Pore Size (Air Samples): ☐ 0.8µm ☑ 0.45µm

Samplers Name: Brittany Felts **Samplers Signature:** Brittany Felts

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
072421 01 BF	Field Blank (open by entrance for 30 seconds)	N/A	07/24/21
02	Field Blank (open by ambient for 30 seconds)	N/A	
03	Sealed Field Blank (Not opened)	N/A	
072421 04 BF	FC, IWA- Second floor hallway #2	1200L	
05	FC, IWA- Second floor hallway #2	↓	↓

Client Sample # (s): 01BF - 13BF **Total # of Samples:** 13

Relinquished (Client): Brittany Felts **Date:** 07/24/21 **Time:**

Received (Lab): **Date:** 7/24/21 **Time:** 1700

Comments/Special Instructions:
~~Analysis for Permit number~~
Analysis IWA Samples Only Project # = 47.11652-C1

EMSL ANALYTICAL, INC
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
06	FC, IWA- Second floor hallway #2	1200L	07/24/21
07	FC, IWA- Second floor hallway #2	↓	↓
08	FC, IWA- Second floor hallway #2	↓	↓
072421 09 BF	FC, OWA- Second Floor #2	↓	↓
10	FC, OWA- Second Floor #2	↓	↓
11	FC, OWA- Second Floor #2	↓	↓
12	FC, OWA- Second Floor #2	↓	↓
13	FC, OWA- Second Floor #2	↓	↓

***Comments/Special Instructions:**

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-C1 **Date:** 7/26/2021

Project Address: 5651 Rayburn Avenue
Alexandria, VA-22311

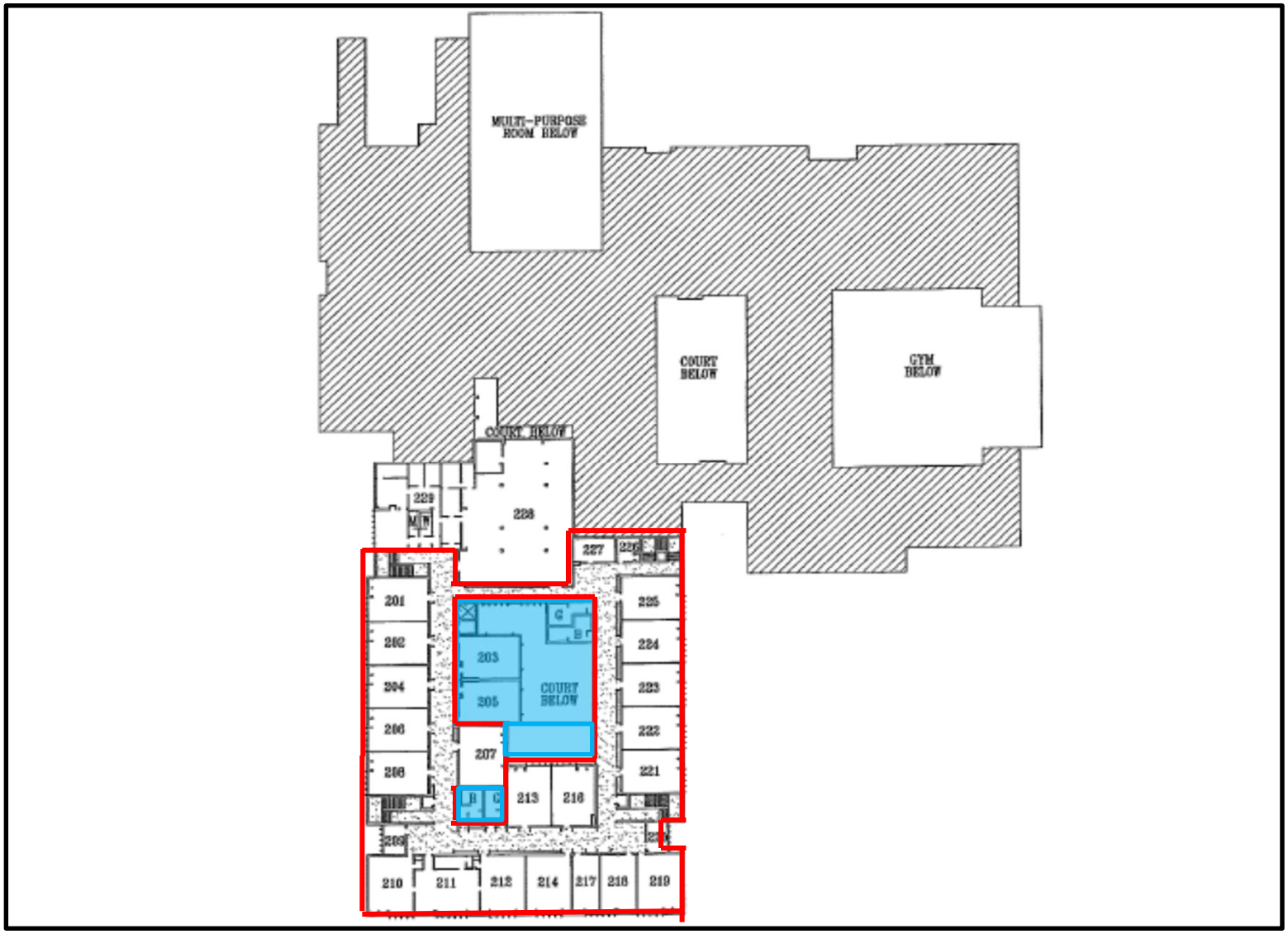
Work Area Location/Description: 2nd Floor Hallway and Classrooms 209, 210, 211, 212, 213, 214, 216 and 217 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	2nd Floor Hallway and Classrooms
Decontamination Enclosure	Floors and Walls Clean	Satisfactory
	No Debris Present	Satisfactory
	Signage Intact	Satisfactory
	Shower Functioning	Satisfactory
	Used Suits/Towels in Waste Bag	Satisfactory
Interior of Work Area	Floors	Satisfactory
	Walls	Satisfactory
	Ceiling	Satisfactory
	Windows	Satisfactory
	Mechanical Equipment	Satisfactory
	Ducts	Satisfactory
	Pipes	Satisfactory
	Lighting	Satisfactory
	Other Surfaces	Satisfactory
	Specified ACM Removed	Satisfactory
	Work Area Encapsulated	Satisfactory
	Negative Air Filtration Functioning	Satisfactory
	Waste Bags Removed	Satisfactory
	Final Clearance Air Sample Type	TEM
	Number of Samples Collected	13
	Sample Volume (liters)	1200
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/26/2021

Appendix II: Drawings



Legend

= Regulated Work Area

= Outside Work Area

John Adams
5651 Rayburn Ave, Alexandria, VA 22311

Abatement Area
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-C1

Date 08/11/21

Appendix III: Certifications/ Licenses

DPOR License Lookup License Number 3309001288

License Details

Name	NUIQUE, GALLARDO SEDILLO
License Number	3309001288
License Description	Asbestos Project Monitor License
Rank	Asbestos Project Monitor
Address	ROCKVILLE, MD 20851
Initial Certification Date	2004-07-13
Expiration Date	2022-07-31

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April 11, 2017

Mr. Derrick Fulcher
Alexandria City Public Schools
1340 Braddock Place
Alexandria, Virginia 22314

ECS Project No. 47:1519-D

Reference: AHERA Management Plan, John Adams Elementary School, 5651 Rayburn Avenue, Alexandria, Virginia

Dear Mr. Fulcher:

ECS Mid-Atlantic, LLC (ECS), is pleased to provide Alexandria City Public Schools (ACPS) with an AHERA Management Plan for the John Adams Elementary School. This work was performed in general conformance with ECS Proposal No. 47:1750-EP2, dated October 19, 2016 and ACPS Purchase Order Number 17003633. This Management Plan contains the asbestos survey results, procedures for managing the asbestos-containing materials in place, procedures for asbestos removal, and other documentation regarding asbestos-containing materials located within the school building. It is our understanding that asbestos removal and replacement procedures will be performed by asbestos abatement contractors rather than training in-house personnel to perform these tasks. The Management Plan has been modified to these conditions.

ECS appreciates this opportunity to provide these services. If we can be of further assistance to you, please do not hesitate to contact us.

Respectfully,

ECS MID-ATLANTIC, LLC

Beverly Sedon
Senior Environmental Project Manager

Diana Krass-Hofmann
Senior Industrial Hygiene Manger

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DISCLOSURE

All information contained in or disclosed by this document is considered confidential and proprietary information by ECS Mid-Atlantic, LLC (ECS). This document was prepared exclusively for the use of Alexandria City Public Schools, for the educational building located at 5651 Rayburn Avenue in Alexandria, Virginia, and shall not be reproduced in whole or in part by any other parties without permission in writing from ECS.

Recommendations within this Management Plan are based on our information and data provided to ECS, survey data and information previously performed by ECS for the subject school building, and on the application of generally accepted technology for reducing human asbestos exposure. This Management Plan may require future revisions if asbestos detection, abatement technologies, or applicable regulations change in the future, or if additional materials are discovered or exiting materials abated. This information contained in this management plan shall not replace the requirements for asbestos assessments for renovations and/or demolition as required by regulation under 40 CFR 61 subpart M.

ORGANIZATION

The sections in this Manual are organized into three general groups:

- Sections 1.0 through 7.0 provide an orientation to the Management Plan program, present a regulatory framework, and define the affected personnel and activities. Particular attention should be given to Section 6.0, which outlines the duties and responsibilities of the personnel who will be individually and corporately responsible for implementing this Management Plan.

- Sections 8.0 through 14.0 describe how the various required Management Plan program elements are to be implemented. The Activity Reference Guide on the following page is intended as a quick reference to those elements.

- Sections 15.0 through 17.0 provide a detailed discussion of the issues, philosophy, and duties associated with removal of asbestos-containing materials.

ACTIVITY REFERENCE GUIDE

NOTE: THIS LIST IS NOT ALL-INCLUSIVE.

Activity Requiring Action	Action Required	Section	Responsible Person
Employee designated to perform asbestos related work.	Determine if employee's work will contact/disturb asbestos-containing materials (ACM)	7.0	Coordinator
	Obtain & file a signed Employee Notice	13.1	" "
	Provide Initial/Annual Training	12.0	" "
	Determine if Worker Protection is required	16.0	
Maintenance or engineering work in areas where asbestos-containing materials are present.	Determine OSHA Work Class	5.0	Competent Person
	If ACM will be disturbed: Check for Negative Exposure Assessment	15.2	" "
	Specify/verify proper work practices	App. L	
	Obtain and file a signed O&M Worker Form	13.1	" "
	Issue Work Control/Permit	App. H	" "
	Determine need for Air Monitoring	15.3, 15.4	" "
			" "
New outside contractor on-site to do maintenance or repair work in areas where asbestos-containing materials are present.	Obtain and file signed Contractor Notice	13.1	Coordinator
	Determine OSHA Work Class	5.0	Competent Person
	Verify that proper Work Practices are followed	App. I	" "
	Issue Work Control/Permit	App. H	" "

ACTIVITY REFERENCE GUIDE (CONTINUED)

New department or teacher occupies space containing asbestos-containing materials	Annual Notice	13.1	Coordinator
New custodial firm doing housekeeping in areas where asbestos-containing materials are present.	Obtain and file signed Contractor Notice Ensure proper work practices	13.1 8.0	Coordinator Competent Person
Renovation or demolition project.	Determine whether asbestos-containing materials are present within project limits Determine Response Action – If asbestos present have abatement plan/specification prepared by licensed project designer as a response action Determine OSHA Work Class Issue Work/Control Permit Determine need for Air Monitoring Ensure proper work practices Provide notifications as appropriate Keep project records	10.1 10.4 5.0 App. H 15.3,15.4 17.0 13.2 14.0	Competent Person " " " " " " " " Coordinator Coordinator
Emergency involving disturbance of asbestos-containing materials.	Implement Emergency Response	9.0	Competent Person

Periodic asbestos-containing material assessment.	Perform periodic surveillance Perform Hazard Assessment Determine need for Air Monitoring Determine Response Actions Determine need for signs/labels and verify posting where needed	10.2 10.3 15.0 10.4 11.0	Competent Person " " " " " " " "
O&M worker ends employment.	Obtain and file a signed Exit Exam Acknowledgement	App. K	Coordinator

DIRECTORY
BUILDING REPRESENTATIVES

Asbestos Coordinator

Mr. Derrick Fulcher
Facilities Occupational Health, Safety Specialist
Alexandria City Public Schools
116 South Quaker Lane
Alexandria, Virginia 22314

Competent Person

Project Specific Asbestos Removal Contractor
Commonwealth of Virginia Licensed Asbestos Supervisor

Asbestos Consultant

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Chantilly, Virginia 20151
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Asbestos Removal Contractor

To be determined as necessary.

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1.0 OVERVIEW

1.1 BACKGROUND

John Adams Elementary School is located at 5651 Rayburn Avenue in Alexandria, Virginia. The facility encompasses approximately 141,364 square feet and was reportedly built in 1975. The school consists of two floor levels and appears to have had various renovations in the past.

Alexandria City Public Schools (ACPS) currently maintains an asbestos Operations and Maintenance Plan for the school, prepared by A.F. Meyer and Associates, Inc., dated April 1989. ECS was retained by ACPS to develop a newly prepared comprehensive plan to manage the identified asbestos-containing materials (ACMs) in place until such time as building renovation, demolition or other disturbances necessitate their removal. The newly prepared plan includes information and data collected at the facility by ECS or others. This Management Plan was prepared by a Commonwealth of Virginia licensed Asbestos Management Planners (Nos. 3304001593; 3304001626).

1.2 INTRODUCTION TO ASBESTOS

Asbestos is a naturally occurring mineral. It is distinguished from other minerals because its crystals form long, thin fibers. Deposits of asbestos are found throughout the world. Asbestos minerals are divided into two groups — ***serpentine*** and ***amphibole***. The distinction between groups is based upon crystalline structure. The six recognized categories of asbestos are: chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite.

Airborne microscopic asbestos fibers pose a health hazard to humans. Certain activities can release asbestos fibers into the air. Friable asbestos is more likely to release fiber than non-friable material. A material is friable when it is capable of being crumbled, pulverized or reduced to powder by hand pressure. ACM usually becomes more friable with age. Damage caused by natural or human activity could result in increased friability and may be cause for facility management to re-evaluate the potential hazard and take further corrective actions. A glossary of technical terms is provided in Appendix D.

1.3 PURPOSE OF THE MANAGEMENT PLAN

This Management Plan is a document developed to outline how the Local Education Agency (LEA) plans to manage ACM within the school. The mere presence of ACM in good condition does not constitute an exposure risk to students, teachers, employees, visitors, or contractors. ACM presents an exposure risk when asbestos fibers become airborne. This Management Plan establishes protocols to minimize fiber release.

People, who may come in contact with ACM, particularly custodial or maintenance personnel, must be informed of the presence of ACM. Disturbing the ACM should be

avoided unless proper precautions and personnel protection are provided. Remodeling and renovation plans should be carefully reviewed with respect to disturbing the ACM.

ACM in the building could be impacted or disturbed during activities related to housekeeping, maintenance, repair or renovation. These activities may include routine tasks, pre-planned situations such as a renovation project, or unscheduled emergencies that could potentially require ACM abatement.

The objective of this Management Plan is to maintain a safe and healthy building environment for students, teachers, employees, visitors, and contractors through adherence to the following:

- Accurate identification of ACM at the school;
- Proper worker training for all individuals who may contact or disturb ACM;
- Notifications to parents, teachers, employees, and contractors of the presence and location of ACM;
- A record keeping system to maintain asbestos-related information;
- Proper work practices to minimize fiber releases;
- A work control/permit process to review activities that may contact or disturb ACM;
- Periodic surveillance to assess, evaluate and respond to changes in the condition of ACM; and
- Worker protection programs (as applicable).

2.0 HEALTH EFFECTS OF ASBESTOS EXPOSURE

The United States Environmental Protection Agency's (EPA) Model Accreditation Plan (40 CFR 763) includes the requirement to discuss the potential health effects of asbestos exposure. This information is not established as scientific fact, but merely represents EPA's current viewpoint, and is presented herein to facilitate an understanding of EPA guidance.

Most of the information on the health effects of exposure to asbestos has been derived from studies of workers exposed to asbestos in the course of their work. Asbestos fiber concentrations for such workers are many times higher than those encountered by the general public, or by most workers in buildings with ACM. Because their exposure was much higher, asbestos workers will have a much higher incidence of asbestos-related diseases than people who live or work in buildings with ACM. This is known as the dose-response effect. However, people in buildings with ACM are still likely to experience higher risks than the public at large. Unfortunately, available data do not allow us to reliably estimate the actual risk.

Because asbestos fibers appear to be ubiquitous, virtually everyone is exposed to some extent. During autopsy, asbestos fibers have been detected in the lungs of most urban residents. Exposure of the general public is troublesome, because a large population includes unhealthy as well as healthy persons. Moreover, exposure may begin during childhood, leaving a long period for the manifestation of asbestos-related disease. Furthermore, asbestos may enhance the carcinogenic effects of other materials. Thus, additional exposure to asbestos caused by living or working in buildings with ACM should be avoided.

2.1 THE RESPIRATORY SYSTEM

The body has several mechanisms by which it filters the air it breathes. The tiny hairs in the nose filter out dust and airborne particles. Like the nose, the trachea and the bronchi are lined with small fine hairs called cilia. Together with mucous secreted by cells lining the airways, cilia trap particles and help prevent respiratory infections. The cilia beat in an upward direction sweeping foreign particles up the back of the mouth from where they are expelled or swallowed.

Cigarette smoking temporarily paralyzes the cilia. If smoking continues long enough, the cilia wither and die. They are never replaced. The efficiency of the cilia is replaced by the smoker's inefficient cough, which attempts to rid the respiratory tract of foreign particles and excess mucous.

Dirty contaminated air presents the greatest challenge to the respiratory system. Some of the particles entering the airways reach the alveoli. When this occurs, white blood cells called macrophages attempt to engulf and digest the particles. In the case of asbestos, we are dealing with a mineral fiber, a substance that macrophages can often not successfully attack. As a means of secondary defense, the macrophages deposit a coating on the fibers that are then deposited in small passages in the lungs. Here they clog airways and scar surrounding tissues. The walls of the alveoli lose their elasticity and useful function in respiration. Coated asbestos fibers (asbestos bodies) are often seen during autopsy.

Asbestos is known to be hazardous based on studies of asbestos workers and laboratory animals. However, the risks associated with low-level non-occupational exposure (for example, as a student or teacher occupying a building containing ACM) are not well established. Attempts have been made to estimate low-level risks by extrapolation from occupational exposure data; however, this is not a straightforward process and its validity is questionable.

Based on a thorough review of the health effects literature, the EPA concludes: there is no level of exposure below which the risk of contracting an asbestos-related disease is zero. That is, there is no safe threshold level of exposure.

A 1984 survey sponsored by EPA attempted to assess exposure to ACM in public and commercial buildings. According to the data, a lower percentage of public and commercial buildings contain friable ACM than do school buildings (20 percent vs. 35 percent). However, limitations in the data prevent firm conclusions regarding the number of persons exposed, exposure levels or the exposure levels of service/maintenance workers in comparison with the public.

Asbestos fibers accumulate in the lungs. As exposure increases, the risk of disease likewise increases. Measures to minimize exposure and consequently minimize the accumulation of fibers reduce the risk of adverse health effects.

2.2 ASSOCIATED DISEASES

Modern knowledge concerning asbestos and a lung disease called **asbestosis** dates to 1900. Autopsy reports from 1938 to 1949 indicated that a large number of persons who died with asbestosis also had **lung cancer**. In the 1960s, the link between asbestos and a rare form of cancer called **mesothelioma** was established. These diseases are discussed below:

> **Asbestosis** is a scarring (fibrosis) of the lung. The scarring impairs the lung tissue's elasticity and hampers its ability to exchange gases. This leads to inadequate oxygen transfer to the blood. The disease restricts breathing and leads to decreased lung volume, and it increases resistance in the airways. Those last two impairments make breathing difficult. It is a slowly progressive disease with a latency period of 15 to 30 years. Asbestosis is irreversible and may progress even after exposure to asbestos has ceased.

Lung cancer is a malignant tumor of the bronchi covering. The tumor grows through surrounding tissue, invading and often obstructing the air passages. The earliest symptom is often a persistent cough; a physical exam may attribute the symptoms to chronic bronchitis. Chest x-rays sometimes show shadows that indicate tumors and enlarged lymph nodes. However, the definitive diagnosis of lung cancer is based upon microscopic examination of lung tissue. The time between exposure to asbestos and the occurrence of lung cancer is 20 to 30 years. Although there are many causes of lung cancer, a clear increase in risk has been found among people who work with asbestos. Moreover, there is no threshold or limit of exposure below which the risk of lung cancer is not increased.

Mesothelioma is a cancer of the mesothelium — the lining of the chest or abdominal wall. It is considered a marker disease for asbestos exposure. Early stages are associated with few symptoms. By the time it is diagnosed, it is almost always fatal. Effective therapy does not exist. There is no exposure threshold for mesothelioma. Mesothelioma has an extended latency period of 30 to 40 years.

Other diseases and adverse health effects have been noted among those exposed to asbestos fibers. Increased incidence of non-respiratory cancers has been observed in some recent epidemiological studies. Cancers of the larynx, esophagus, stomach, colon-rectum, kidney and pancreas are present at slightly higher than predicted levels. An abnormality found on x-rays of persons exposed to asbestos is pleural plaque, a fibrous thickening of the lining of the chest cavity.

2.3 RELATIONSHIP BETWEEN ASBESTOS AND SMOKING

Cigarette smoking is the single most important known cause of lung cancer in humans. People who smoke 20 cigarettes per day increase their risk of developing lung cancer by ten-fold when compared to a non-smoker. Workers exposed to the same level of asbestos as insulation workers historically increase their risk of developing lung cancer by five-fold. These two factors working together have a synergistic effect; the smoker exposed to asbestos fibers is at least fifty times more likely to develop lung cancer than the general public.

Accordingly, the Occupational Safety & Health Administration (OSHA) regulations require that asbestos training session attendees be encouraged to quit smoking. Many local agencies conduct smoking cessation programs.

3.0 FEDERAL AND STATE REGULATIONS

A directory of appropriate regulatory agencies is provided in Appendix N. The listing of federal and Commonwealth of Virginia asbestos regulations and guidance documents is provided in Appendix O.

There are currently two federal government agencies responsible for the regulations regarding exposure to asbestos at the school: the EPA and OSHA. The occasionally referenced National Institute for Occupational Safety and Health (NIOSH) is an independent entity which is the research arm of OSHA.

3.1 EPA

In *Guidance for Controlling Asbestos-Containing Materials in Buildings* (EPA Document 560/5-85-024, the "Purple Book," June 1985), the EPA states: "*The presence of asbestos in a building does not mean that the health of building occupants is necessarily endangered. As long as asbestos-containing material (ACM) remains in good condition and is not disturbed, exposure is unlikely. When building maintenance, repair, renovation or other activities disturb ACM, or if it is damaged, asbestos fibers may be released creating a potential hazard. Although not required to do so by federal law, the prudent building Owner will take steps to limit building occupants' exposure to airborne asbestos."*

In *Managing Asbestos In Place* (EPA Document 20T 2003 the "Green Book," July 1990), where ACM has been identified and is not to be removed immediately, the EPA recommends that a proactive O&M Program be implemented.

The EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subpart M, dated November 10, 1990, states that "*the Owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos and requires asbestos to be properly handled during renovation, demolition and disposal*." For an abstract of the rules and the text of the EPA NESHAP regulation, refer to Appendix P.

The EPA Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 733, Subpart E, requires LEAs to identify friable and non-friable asbestos-containing materials in schools. It requires the use of accredited persons to conduct inspections, develop management plans or to design and perform response actions. In addition, the rule specifies final clearance criteria to all response actions and includes recordkeeping requirements.

3.2 OSHA

The current OSHA regulations take a risk-based approach to classify the activities more likely to create elevated airborne asbestos concentrations. As part of that assessment, OSHA has identified facilities built before 1981 to have a greater potential for ACM to be present.

The OSHA asbestos regulations were first issued in 1971, and were amended in 1976, 1986, 1988, 1994 and 1995. They specify airborne exposure standards, engineering controls, work practices, medical surveillance and worker protection requirements. The current OSHA asbestos rules are divided into three sets of regulations:

- The Construction Industry Standard, 29 CFR 1926.1101, which applies to individuals engaged in building maintenance, repair, renovation (including remodeling and decoration) and demolition, or in asbestos control (ACM enclosure, encapsulation or removal);

- The Shipyard Industry Standard, 29 CFR 1915.1001, which includes all work performed on ships or vessels; and,

- The General Industry Standard 29 CFR 1910.1001, which applies to facilities where ACM is present.

Both the Construction Industry and General Industry regulations can apply to workers in a building with ACM. For example, both teachers and custodial personnel (housekeeping and maintenance staff) are covered by the General Industry regulations since asbestos is present in the school. Custodial and maintenance personnel are also covered by the Construction Industry regulations when they perform maintenance, repair, renovation or asbestos abatement tasks. Outside contractors (e.g., electricians, plumbers, carpenters, asbestos contractors) are covered by the Construction Industry regulations.

OSHA's Respiratory Protection Standard, 29 CFR 1910.134, establishes how employers are to ensure proper training, selection, use and maintenance of respirators for employees who are required to wear them.

The text of the OSHA General Industry, Construction Industry and Respiratory Protection regulations is provided in Appendix Q.

3.3 COMMONWEALTH OF VIRGINIA

The Commonwealth of Virginia agency responsible for asbestos abatement operations is the Department of Labor and Industry. The Department's Asbestos Notification and Permit Program was established in 1992 as part of a larger state program requiring licensing and certification of asbestos contractors and workers by the Department of Professional and Occupational Regulation.

4.0 ASBESTOS RESPONSE ACTIONS

The four commonly accepted approaches to controlling asbestos exposure in buildings are as follows:

Removal: Asbestos material is removed and properly disposed.

Encapsulation: Asbestos material is coated with a bonding agent called a sealant or an encapsulant.

Enclosure: Asbestos material is isolated from the building environment by an airtight barrier.

O&M Program: No immediate removal action is taken. An O&M Program is instituted and designed to reduce the risk of generating airborne fibers through disturbance of the materials by those individuals present within the facility.

4.1 REMOVAL

Proper removal is the most effective solution to problems created by ACM in buildings. Removal eliminates the asbestos source and the need for subsequent special operations and maintenance procedures. However, due to the physical constraints and location of materials, complete removal of ACM in a building is sometimes impractical. Removal often requires replacement of the removed materials with non-asbestos-containing materials.

4.2 ENCAPSULATION

Encapsulation consists of spraying ACM with a sealant to bind asbestos fibers and other components together to reduce the risk of fiber release and increase the material's resistance to damage. With encapsulation, the source of the hazard remains in the building and must be considered when planning renovation, demolition or extensive maintenance activities. In some cases the encapsulant can cause separation of ACM from building surfaces, increasing the potential for fiber release. In addition, encapsulation can make subsequent removal more difficult and hazardous since some of these products create a hard and impermeable surface that cannot be wetted easily to reduce fiber releases.

4.3 ENCLOSURE

Enclosure involves the construction of an air-tight barrier around the ACM. Carefully constructed airtight enclosures can reduce or even eliminate release of airborne fibers into the building environment. Enclosure is impractical in certain instances, particularly where the existence of or need for access to other building components in close proximity to the ACM exists. This alternative does not require replacement of the ACM and usually exhibits

a lower initial cost than removal. However, since the ACM remain in the building, special procedures are required for controlling access to the enclosure, performing maintenance activities or conducting renovations in the enclosure area.

4.4 OPERATIONS AND MAINTENANCE PROGRAM

When the existing ACM in a school or other building is in good condition, the implementation of an O&M Program is widely accepted as an interim provision prior to removal. Whenever ACM is known to exist in a building, O&M procedures should be established to maintain a minimal level of airborne fibers and limit exposure to them. Use of this O&M Program should continue as long as ACM remain present in the building.

Periodic inspections to monitor changes in the exposure potential of ACM are an integral part of this Program. Removing damaged ACM and cleaning up debris are O&M Program requirements. To be effective, an O&M Program requires thoughtful input and participation by building management. A good O&M Program is proactive in nature, and requires an ongoing commitment.

5.0 OSHA WORK CLASSIFICATIONS

5.1 CLASSES OF WORK

The OSHA Construction Industry regulations correlate work classifications to the type of material being removed or the intent of the work. OSHA specifies minimum work practices and engineering controls, training requirements and respirator protection for each class of work. The work classifications are:

Class I: Renovation or demolition activities that involve the removal of Thermal System Insulation (TSI) and surfacing materials (e.g., plaster and spray-applied fire proofing);

Class II: Removal of all other ACM present with the building, that includes, but is not limited to, the removal of ACM and Presumed Asbestos-Containing Materials (PACM) floor tile and mastics;

Class III: Repair or maintenance operations where ACM or PACM are likely to be disturbed;

Class IV: Maintenance and custodial activities where employees contact ACM or PACM and activities to clean-up dust, waste or debris containing ACM or PACM generated by Class I, II or III work.

5.2 CLASS I AND CLASS II ASBESTOS WORK

The Asbestos Coordinator must select an appropriate abatement strategy before Class I and Class II activities are performed. Personnel must be trained and licensed by the Commonwealth of Virginia as abatement workers to perform Class I and Class II activities or an abatement contractor may perform this work. Site-specific procedures, including appropriate plans and abatement specifications for the abatement activity, should be developed by a Commonwealth of Virginia licensed asbestos Project Designer.

5.3 CLASS III ASBESTOS WORK

OSHA defines Class III asbestos work as repair or maintenance operations where any ACM is likely to be disturbed. Personnel must have completed 16-hour O&M Worker Training to do this work. Typical Class III activities include:

- Installing, removing or repairing pipe supports, valves, flanges or fittings that may cause the disturbance of ACM insulation;
- Repairing portions of insulated equipment or accidentally damaged insulation that may cause the disturbance of ACM insulation;

- Coring, drilling or sawing through ACM or PACM floor tile and mastic;

- Installing new flooring that may cause the disturbance of ACM or PACM floor tile and mastic; and,

- Coring floor slabs to create penetrations that may cause the disturbance of ACM or PACM floor tile and mastic.

OSHA defines Class III asbestos work as disturbance of less than 10 square feet or 25 linear feet of ACM where the debris can all be placed into one standard (60" x 60") waste bag. Disturbance of ACM in quantities greater than this should only be undertaken as Class I or II work.

OSHA regulations allow persons who are trained as O&M workers and who participate in a Respiratory Protection and a Medical Surveillance Program to perform Class III asbestos activities. Management should make equipment available if its employees perform Class III asbestos work. If trained employees and equipment are not available to perform Class III work, an abatement contractor should be retained.

Prior to any Class III work, the Asbestos Coordinator shall prepare a general description of the maintenance activity to be performed, along with the size and location of the project area. The Asbestos Coordinator shall determine that the work is not Class I or II work.

5.4 CLASS IV ASBESTOS WORK

OSHA defines Class IV asbestos work as maintenance and custodial activities during which employees contact ACM and activities to clean-up dust, waste or debris containing asbestos generated from Class I, II or III work. Building employees must have satisfactorily completed two-hour “Awareness Training” to do this work. Contract workers must be properly trained and notified by their employers (see Section 13.1). Typical Class IV activities or conditions include:

- Water leakage or activities that are likely to cause damage or abrasion to ACM insulation;

- Maintaining ACM or PACM floor tile and associated mastic;

- Housekeeping activities in areas where damaged ACM or PACM are present.

- Water damage, or installing or renovating electrical or telecommunication lines, lighting fixtures, vents diffusers, or alarms that requires the temporary removal of ceilings where damaged ACM thermal system insulation is present above; and,

- Housekeeping activities in areas where damaged ACM is present.

6.0 PROGRAM ORGANIZATION

6.1 ASBESTOS COORDINATOR

An Asbestos Coordinator shall be assigned to implement, or arrange for the implementation of, the procedures of this O&M Program. The duties of the Asbestos Coordinator include:

a. Program Administration

- Schedule required training **(Section 12.0)** for appropriate employees.
- Establish a system and location within the school and facilities office for retaining the records specified herein **(Section 14.0)**.
- Notify parents, teachers, employees and contractors about the presence and location of ACM in the building and the requirements of this Management Plan **(Section 13.1)**.
- Determine the need for, and ensure adherence to, medical surveillance and respirator fit-testing programs **(Section 16.0)**.
- Purchase and maintain equipment as recommended in **Appendix L** if in-house staff will perform Class III activities.

b. Replacement Construction Materials

The EPA has banned the use of asbestos in spray-applied insulation and select paper products. Other building materials may still contain asbestos. Therefore, the Asbestos Coordinator shall ensure that all new construction materials and products used at the building are sampled and analyzed via Polarized Light Microscopy (PLM) for asbestos content. This documentation shall be maintained for each construction project at the school.

6.2 COMPETENT PERSON

OSHA regulations require that a Competent Person oversee asbestos work at each work site. The competent person must be capable of identifying asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and is someone who has the authority to take prompt corrective measures to eliminate them.

The Competent Person therefore should be able to determine:

- The Class of work involved in specific situations;
- Whether regulated areas are required;

- The hazard ranking for specific materials; and,

- Appropriate response actions.

Typically, an abatement contractor's supervisor is the Competent Person for Class I, II or III work. OSHA mandates that competent persons overseeing Class III or IV work satisfactorily complete 16-hour O&M Worker Training, with annual updates. If properly trained in the 16-hour O&M Worker Class, the Asbestos Coordinator can also fill the roll of the Competent Person for Class III or IV work performed in the building. The duties of the Competent Person can be grouped into the following general categories:

a. Ongoing Assessment

- Coring, drilling or sawing through ACM floor tile/sheet vinyl flooring and mastic;

- Scheduling and coordinating periodic ACM condition surveys **(Section 10.2)**, hazard assessments **(Section 10.3)**.

- Determining appropriate response actions and evaluating whether areas may require special cleaning to remove ACM dust, waste or debris **(Section 10.4)**.

- Determining whether a Negative Exposure Assessment can be made for specific asbestos-associated activities **(Section 15.2)**.

- Arranging for appropriate air monitoring before, during and after abatement activities. See **Sections 15.3 & 15.4** for detailed air monitoring recommendations.

- Determining the need for, and monitoring both placement and condition of, warning labels and signs **(Section 11.0)**.

b. Routine Maintenance

- Monitoring housekeeping, custodial and building engineering activities that are likely to contact ACM, and ensure compliance with appropriate work practices **(Section 8.0)**.

- Ensuring that Class III maintenance and related activities likely to disturb ACM comply with recommended procedures **(Section 17.0)**.

c. Coordinating Renovation/Construction Activity

- Reviewing and approving all planned maintenance, renovation or installation activities that may contact or disturb ACM. Completing a Work Control/Permit Form **(Appendix H)** before any such work in the facility begins. Reviewing the completed form and the applicable work practices with the affected workers.

- Reviewing available asbestos surveys and previous abatement project reports well in advance of any Renovation/Construction activity. Additionally, visually assessing

the planned affected area. Conclude that all potentially affected materials that could be ACM have been rebutted as non-ACM, or arrange for a qualified consultant to perform a survey of the area as outlined in **Section 10.1**.

- Coordinating work between asbestos abatement contractor(s) and non-abatement contractor(s). Refer to **Section 17.0** for a discussion of the issues, decisions and typical sequence for managing Class I or II asbestos abatement projects.

- Heading the Emergency Response Team and determining and coordinating the response to fiber releases **(Section 9.0)**.

7.0 ASBESTOS-CONTAINING MATERIALS AT THE SCHOOL

While it is often possible to suspect that a material or product is, or contains asbestos, by visual determination, actual determinations can only be made by microscopic analysis. To prove that a material is not an ACM, the EPA requires that the asbestos content of the suspect material be determined by collecting bulk samples and analyzing them by Polarized Light Microscopy (PLM). The PLM technique determines both the percent and type of asbestos in the bulk material.

ACM is defined by EPA and OSHA as any material or product containing asbestiform minerals in concentrations greater than or equal to one percent. Asbestos-containing building material (ACBM) is defined by EPA as surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building. For the purpose of this management plan, ACBMs will be referred to as ACMS.

Current OSHA regulations designate surfacing materials and TSI found in buildings constructed prior to 1981 as ACM. Resilient flooring installed prior to 1981 must be treated as ACM. Sampling of these materials is required to rebut this designation. If the designation is not rebutted, the materials must be treated as ACM (refer to Section 10.1). LEAs are to exercise due diligence in determining whether miscellaneous materials are ACM. In this document, the term ACM shall be understood to also include presumed asbestos-containing materials (PACM) and assumed asbestos-containing materials.

7.1 IDENTIFIED ACM

A copy of the asbestos summary tables for the subject building that document the below listed materials and associated locations and conditions of ACM are attached in Appendix C. These materials will be maintained by Alexandria City Public Schools for reference by the staff, public, and contractors and appropriate inspection agencies including the OSHA and the EPA.

The following materials have been reported as asbestos-containing materials:

- 12" x 12" Beige Flecked Floor Tile and associated Black Mastic
- 12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic
- 12" x 12" Green with White Flecks Floor Tile and associated Black Mastic
- 12" x 12" Light Green Flecked Floor Tile and associated Black Mastic
- 6" TSI-Elbows
- Black Mastic on Fiberglass Pipe Insulation
- Black Pipe Elbow (Fitting) Insulation Sealant
- Black Pipe Insulation Sealant
- Black Sink Undercoat
- Fire Doors
- Gray Spray Applied Fireproofing
- Greenish Gray Floor Tile and associated Black Mastic
- Grey Ceiling Tiles

- Interior Window Caulk
- Mastic on Drain Line
- Off-White Floor Tile and associated Black Mastic
- White Vibration Damper

The following materials were assumed or presumed to be asbestos-containing materials:

- Asphalt-Based Roofing Material and Caulks/Sealants
- Boards above Windows and Drop Ceiling Tiles
- Boards and associated Mastics
- Electrical Panels: Transite Components
- Fountain Coil Wrap
- Gypsum Roof Boards
- Hardwood Floor Underlayment and associated Mastic
- Interior Pipe Wrap associated with Water Fountains and Radiators
- Mirror Mastic
- Pipe Flange Gaskets
- Plaster Ceiling
- Tectum Boards and associated Mastic
- Thermal System Insulation (TSI)
- Waterproofing Membranes/Mastics

Materials identified as asbestos-containing by bulk sample analysis and materials presumed or assumed to be asbestos-containing are listed in the ACPS Summary Table and the Asbestos Summary Table in Appendix C. If these materials are observed at locations in the building other than those noted in this inventory, please notify the Asbestos Coordinator immediately. If other suspect ACM is observed, contact the Asbestos Coordinator to have them evaluated and added to the asbestos inventory, if appropriate.

This information is presented based on provided data from ACPS and assessments performed by ECS. Should additional data be presented, it should be included in this management plan. Please note, renovations and/or modifications that have occurred at the school may have altered materials present within visible locations. ACMs may be present within enclosed areas, hard ceilings, walls, floors, beneath fixed furniture, shelves, carpeting or other floor overlayments, partition walls, etc.

8.0 CUSTODIAL/HOUSEKEEPING WORK PRACTICES

All custodial and maintenance personnel are required to successfully complete an annual two-hour Awareness Training program.

The following prevention measures require implementation to reduce the potential disturbance of asbestos during all Class IV asbestos work. A Regulated Area (Section 16.2) is required to be created only when airborne concentrations of asbestos within the work area exceed, or may exceed, the Permissible Exposure Limit (PEL). If the following prevention measures are taken, a Regulated Area typically will not be needed:

- Assuming dust, waste and debris in areas where friable thermal system insulation, or surfacing material is present, contains asbestos.
- Using only vacuum cleaners equipped with High Efficiency Particulate Air (HEPA) filters to collect all debris and dust containing asbestos.
- Using wet methods or wetting agents when cleaning or disturbing ACM dust, waste or debris. Do not dry mop or sweep.
- Cleaning up waste and debris contaminated with asbestos and dispose of in leak-tight containers promptly.
- Stripping of ACM floors shall be performed using wet methods and low abrasion pads at speeds lower than 300 rounds per minute.
- Burnishing or dry buffing may only be performed over ACM flooring that has a finish sufficient to prevent pads from contacting the flooring.
- Sanding or grinding of ACM flooring is prohibited.
- Using compressed air is prohibited.

9.0 EMERGENCY SITUATIONS

An emergency situation is an occurrence that would cause an immediate increase in airborne fiber levels (a fiber release) due to disturbance of friable ACM or contamination of the building environment by unprotected ACM. Special procedures are required to properly respond to a fiber release episode. These procedures will vary depending upon the friability, quantity and location of the asbestos. For example, a minor response would likely be required if one asbestos ceiling tile was crumbled in a storage area, whereas a full containment and clean-up by an abatement contractor would likely be required if several feet of asbestos pipe insulation delaminated in an air-handling room.

9.1 TYPICAL OCCURRENCES

Typical occurrences that might create a fiber release are:

- Fire;
- Water damage from roof leakage, pipe rupture or other sources;
- Construction procedures causing excessive vibrations such as coring, jackhammering or vibrations from other mechanical constructive devices;
- Improperly planned or executed renovation or remodeling activities that subject ACM to sanding, cutting, grinding or abrasion; and
- Earthquakes, structural failures or other catastrophic building movements.

A small fiber release involves up to three square or linear feet of ACM. A large fiber release involves over three square or linear feet of ACM. The Competent Person shall determine the extent of the response to fiber release episodes.

9.2 IMMEDIATE PROCEDURES TO BE IMPLEMENTED

The personnel assigned to an Asbestos Emergency Response Team (see Appendix G) shall be notified in case of an emergency situation affecting ACM. They shall immediately implement the following procedures when a large fiber release occurs:

- Turn off air handling system in affected area;
- Vacate contaminated area of all non-essential occupants;
- Without hampering life-safety activities and within the scope of the Team's authority, ensure that personnel in the potentially contaminated area are aware of the asbestos hazard and that they are properly protected;

- Isolate affected areas by closing all doors. This should be performed by trained staff while wearing appropriate worker protection (e.g., respirators and protective clothing).

- Immediately notify the Asbestos Coordinator and the designated consultant's representative;

- Arrange for the construction of airtight sealed door spaces, window spaces and other openings in the area with plastic sheeting;

- Additional procedures, as required, shall be developed by a qualified consultant in conjunction with the Asbestos Coordinator. These shall also be reviewed more in-depth with required awareness training for asbestos with all staff.

9.3 SECONDARY PROCEDURES TO BE IMPLEMENTED

The Asbestos Coordinator should do the following when an emergency situation affects ACM:

- Secure the affected area of the building from unauthorized entry;

- Establish written procedures for authorization and access to affected area;

- Keep security team informed of the status of the emergency situation;

- Providing security in the work area to protect property during remediation;

- Arrange for specialty consultants if required; and

- Consider the effect of emergency situation on utilities, Heating, Ventilating and Air Conditioning (HVAC) systems, and the building structure.

9.4 GENERAL INFORMATION

- Fire can significantly disperse asbestos fibers.

- After an incident, treat the environment as contaminated until proven otherwise.

- Collect as much data about the situation as possible, as quickly as possible.

- Stairwells are first on the critical path of restoration.

10.0 SURVEYS AND SURVEILLANCE

10.1 BUILDING SURVEY

An asbestos inspection has been conducted at the school. The inspection identified ACM as described in Appendix A and formed the basis for this Management Plan. If renovation or construction activities are planned that may disturb ACM or assumed ACM, those materials should be further surveyed according to OSHA regulations unless:

- A survey in compliance with current OSHA standards is on file; or
- Documentation is on file that the space is "asbestos free" as the result of abatement; or
- There is a certification that all existing installed materials are "non-asbestos."

10.2 PERIODIC SURVEILLANCE

To detect deterioration that, in addition to disturbance, may lead to fiber release, surveillance of ACM by knowledgeable personnel is required. Recommended procedures for detection of deterioration are as follows:

- Visually assess exposed ACM semi-annually for water damage, maintenance damage or deterioration, utilizing the condition assessment and potential for disturbance factors explained in Section 10.3 and 10.4 below.

10.3 ASBESTOS HAZARD ASSESSMENT

There are various recognized schemes for ranking asbestos hazards and prioritizing response actions. The most common is the decision tree described in AHERA, which the EPA promulgated for use in schools (refer to Appendix E). The "Classifications for Material Conditions and their Potential for Disturbance" is defined below:

a. Surfacing Materials

Poor Condition (Significantly Damaged, as defined in AHERA)

ACM means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

Fair Condition (Damaged, as defined in AHERA)

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.

Good Condition (Undamaged, as defined by AHERA)

Material with no visible damage or deterioration, or showing only very limited damage or deterioration (less than definition of damaged)

b. Thermal System Insulation (TSI)

Poor Condition (Significantly Damaged, as defined in AHERA)

Material with one or more of the following characteristics: missing jackets on at least one tenth of the piping or equipment; crushed, heavily gouged or punctured insulation on at least one tenth of pipe runs, risers, boilers, tank, duct, etc., if the damage is evenly distributed (one quarter if localized).

Accumulation of powder, dust or debris similar in appearance to the suspect material on surfaces beneath the pipe, boiler, tank, duct, etc., can be used as confirmatory evidence.

Fair Condition (Damaged, as defined in AHERA)

Material with one or more of the following characteristics: a few water stains or less than one tenth of insulation with missing jackets; crushed insulation or water stains, gouges, punctures or mars on up to one tenth of the insulation if the damage is evenly distributed (up to one quarter if localized).

Good Condition (Undamaged, as defined by AHERA)

Material with no visible damage or deterioration, or showing only very limited damage or deterioration (less than definition of damaged)

c. Miscellaneous Materials

Poor Condition (Significantly Damaged, as defined in AHERA)

Material with one or more of the following characteristics: the surface is crumbling or blistered over at least one tenth of the surface if the damage is evenly distributed (one quarter if localized).

Fair Condition (Damaged, as defined in AHERA)

Material with the following characteristics: the surface is crumbling, blistered, water-stained, gouged, marred or otherwise abraded over less than one tenth of the surface if the damage is evenly distributed (one quarter if localized).

Good Condition (No Damage, as defined by AHERA)

Material with no visible damage or deterioration, or showing only very limited damage or deterioration (less than the definition of damaged).

10.4 POTENTIAL FOR DISTURBANCE FACTORS

a. Potential for Contact with Material

HIGH	Custodial or maintenance personnel work in the vicinity of the material more than once per week, or The material is in a public area such as a hallway, corridor or auditorium and accessible to building occupants.
MODERATE	Service workers work in the vicinity of the material once per month to once per week.
LOW	Service workers work in the vicinity of the material less than once per month, or The material is visible but not within reach of occupants.

b. Potential for Vibration to Affect Material

HIGH	Loud motors or engines present (e.g., some fan rooms), or intrusive noises or easily sensed vibrations (e.g., major airports, a major highway).
MODERATE	Motors or engines present but not obtrusive (e.g., ducts vibrating but no fan in the area), or Occasional loud sounds.
LOW	None of the above.

c. Potential for Air Erosion to Affect Material

HIGH	High velocity air (e.g., fan room).
MODERATE	Noticeable movement of air (e.g., ventilator air stream).
LOW	None of the above.

10.5 APPROPRIATE RESPONSE ACTIONS

Based upon the condition assessment and potential for disturbance factors, use the decision tree in Appendix E to determine the material's current Hazard Rank. Note that over time, hazard assessment factors can change. After determining Hazard Rank, assign a Response as follows:

Hazard Rank	Condition	Response
7	Significantly Damaged	Isolate area and restrict access. Remove or enclose the material as soon as possible.
6,5,4	Damaged	Include material in an O&M Program. Repair or remove material as soon as possible, or eliminate material's potential for disturbance.
3,2	Good	Include material in an O&M Program. Schedule removal of material when practical and cost-effective, or reduce material's potential for disturbance.
1	Good	Include material in an O&M Program. Continue O&M until major renovation or demolition would disturb the material, thereby requiring removal under NESHAP.

11.0 WARNING SIGNS AND LABELS

The OSHA regulations require that Building Owners and employers ensure that workers in and adjacent to Regulated Areas comprehend warning signs and labels. Further routine maintenance areas such as boiler rooms are also required to pose warning signs.

Where feasible, the Asbestos Coordinator shall arrange for labels to be placed on identified ACM within routine maintenance areas. Where it is not feasible to directly label the materials (i.e., flooring or ceilings), informational signs can be placed in nearby areas frequented by persons likely to disturb the subject materials. Additionally, "Non-Asbestos" labels can be placed on infill replacement sections of insulation in locations where ACM is prevalent. The Asbestos Coordinator should post labels to be positioned with an orientation and frequency to minimize the unknowing disturbance of ACM. Labels shall read as follows:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

The Asbestos Coordinator shall arrange for signs to be posted at the entries to mechanical areas where PACM/ACM is present to notify employees of the material, its location and the appropriate work practices that, if followed, will minimize disturbance to ACM. The signs shall read:

CAUTION
ASBESTOS HAZARD
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT
(insert: the material, its location, and appropriate work practices)

The employer shall also attach similar signs at all entries to each regulated area so they will clearly be noticed by employees who are likely to be exposed. Since the Regulated Areas will normally only be created by a licensed abatement contractor, they would be responsible for placing these signs.

Where use of respirators and protective clothing is required in the regulated area, the warning signs shall also include the following text:

RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

12.0 TRAINING OF BUILDING STAFF

An annual two-hour (minimum) Awareness Training Session must be conducted for all management, maintenance and housekeeping employees reasonably expected to contact ACM as part of their work, or who may perform Class IV asbestos work. The Competent Person or Asbestos Consultant can conduct this training. A record of each person attending should be kept, along with a signed certificate indicating that the employee understood the material presented (see Appendix H).

A training program is required to meet the General Industry Standard for housekeeping or maintenance employees who work in areas where asbestos is present. Information contained in this Management Plan can be used as the textbook for this Awareness Training as outlined below.

Topic	*Manual Section Number*
• Introduction to asbestos	1.2
• Purpose of the O&M Program	1.3
• The health risks associated with asbestos exposure	2.0
• The relationship between smoking and asbestos exposure	2.3
• Basic understanding of OSHA work classifications	5.1
• Role and identity of the Competent Person	6.2
• Recognition of ACM in the facility	7.0
• Appropriate custodial and housekeeping work procedures	8.0
• Emergency response procedures to fiber release episodes	9.0
• Asbestos hazard assessment	10.3
• Understanding warning signs and labels	11.0

In addition, any person who performs Class III asbestos work must annually attend a state agency-accredited course equivalent in curriculum and training to the 16-hour course developed by the EPA for maintenance and custodial workers (O&M Training) who conduct activities that will result in the disturbance of ACM.

Requirements for Competent Person training vary by the work that the Competent Person directly supervises:

- *Class I & II Asbestos Work* – The Competent Person must be trained as "Supervisor." Normally an abatement contractor would provide this competent person.

- *Class III & IV Asbestos Work* – The Competent Person must successfully complete at least the 16-hour O&M course or alternatively, a 16-hour Asbestos Management Planner course. ECS recommends that the Asbestos Coordinator, or other designated employee of the building, obtain this training.

13.0 NOTIFICATIONS

13.1 BUILDING OCCUPANTS

a. General Industry Standard requires Owners to exercise due diligence to notify employers and employees of the presence and location of ACM to prevent the unintentional and improper disturbance of ACM.

1) The Asbestos Coordinator shall inform affected outside contractors who enter the facility of the presence and location of ACM in the areas where they will work, and emphasize the need for these firms to comply with the facility's O&M Program procedures. A signed copy of the **Contractor** Asbestos Notice (Appendix H) should be received from each affected authorized representative.

2) The Asbestos Coordinator shall inform employers of housekeeping employees of the presence and location of ACM present in the work areas of their employees. A signed copy of the **Custodial/Maintenance** Asbestos Notice (Appendix H) should be received from each employee.

b. Before work subject to the OSHA Construction Industry Standard occurs (including Class IV work), the building Owner shall identify the presence, location and quantity of ACM in the affected work site, and shall notify the following:

1) Bidding contractors (including short-term utility, communications, electrical or mechanical installers) whose employees reasonably can be expected to work in or adjacent to areas containing ACM:

- A signed copy of the **Contractor** Asbestos Notice (Appendix H) shall be received from each affected authorized representative.

2) All employers of employees who will perform work within or adjacent to areas containing ACM. This notification also shall extend to short-term workers, to the extent that they are reasonably likely to contact ACM:

- Any such individuals reasonably likely to disturb ACM will be required to be fit-tested for a respirator and to sign an **Outside Worker** Acknowledgement Form (Appendix H).

3) Facility manager/Owner's employees (i.e., management, housekeeping, engineering, security) who will work in or adjacent to areas containing ACM:

- Persons who are reasonably likely to contact ACM during the course of their normal work duties shall be advised of potential asbestos hazards and be asked to sign an **Employee** Asbestos Notice (Appendix H).

- Provide a copy of *Guide for Minimizing Disturbance of Asbestos-Containing Materials* (Appendix I) to all custodial/maintenance employees reasonably likely to contact ACM.

- Individuals reasonably likely to disturb ACM shall be instructed in methods to both reduce fiber release and provide for their personal protection and should be fit-tested semi-annually. They also shall sign an **O&M Worker** Acknowledgement Form (Appendix H).

4) Tenants who will occupy areas containing ACM:

- A signed copy of the **Contractor** Asbestos Notice (Appendix H) shall be received from each affected authorized representative.

13.2 GOVERNMENT AGENCIES

The EPA and the Commonwealth of Virginia's Department of Labor and Industry require notification of demolition/renovation activities involving asbestos. Notification is required to be sent to the following relevant government agencies:

- EPA Region III
  1650 Arch Street
  Philadelphia, PA 19103
  (800) 438-2474

- Department of Labor and Industry
  Powers-Taylor Building
  13 South Thirteenth Street
  Richmond, Virginia
  (804) 371-2327

14.0 RECORD KEEPING

ECS recommends establishing and maintaining special files for permanent records. Additional publication or electronic reproduction for security or safety is also recommended. Pursuant to 29 CFR Section 1910.1001 (General Industry Standard), all employee exposure records and medical records pertaining to employees exposed to toxic substances or harmful physical agents must be preserved and maintained by the employer for 30 years.

Whenever an employee or his designated representative requests access to a record, the employer must assure that such access is provided in a reasonable time, place and manner. This provision does not require the employer to post such records. However, specific OSHA asbestos regulations have been interpreted to require that within 15 working days after the receipt of the results of any monitoring performed under the standard that the employer notifies the affected employees of the results in writing either individually or by posting the results in an appropriate location accessible to affected employees.

The following records shall be maintained:

14.1 SURVEY AND SURVEILLANCE REPORTS

- A copy of all building inspection reports documenting the location and condition of ACM must be maintained as long as relied upon, and shall be transferred to subsequent Owners.
- Reports of re-inspections performed to monitor subsequent conditions of affected materials.
- Log of warning sign and label locations.
- 6-Month Surveillance Reports

14.2 WORK CONTROL/PERMITS

- Work Control/Permit forms should be maintained chronologically associated documentation, such as sketches and contractor proposals, should be attached to the forms to identify the work.

14.3 COPIES OF NOTIFICATIONS

- Employee Asbestos Notice
- Contractor Asbestos Notice
- Annual Notification to Parents, PTA, and teachers/staff

- Housekeeping Employer Asbestos Notice
- Outside Worker Acknowledgement

14.4 FLOOR PLANS

ECS recommends that floor plans, including the following information, at a minimum, be maintained and updated as required. Floor plans for the building are included in Appendix B.

- Location of known ACM
- Clear identification of removed ACM and replacement material location
- Date of each abatement activity and contractor's name

14.5 TRAINING RECORDS

The following training records must be maintained for a period of one year beyond the last date of employment:

- A list of attendees at each training program
- The agenda of each training program
- The signed acknowledgement of training
- Copies of certificates for employees who complete EPA-accredited training.

14.6 ASBESTOS ABATEMENT PROJECT DOCUMENTATION

Specific records of each Class I or II asbestos project should include:

- Contractor correspondence
- Consultant correspondence
- Abatement Plans and Specifications
- Abatement Project Reports
- All EPA "Notification of Demolition or Renovation" forms
- Exact locations of the work site within the building
- Type and Scope of asbestos work conducted
- All ACM left within work site boundaries
- Type of replacement material used (if applicable)
- Dates of Work
- Abatement Contractor's Name and address
- Contractor's Insurance Certificate

- Landfill receipts and Asbestos Waste Shipment Records
- Tabulation of all air sampling results
- "In/Out" Log to document all persons who entered the work area
- For Each Abatement Worker:

    1. *Name*
    2. *Training Certifications*
    3. *Licenses*
    4. *Physician's Opinion Letter*
    5. *Fit Test Records*

The Asbestos Coordinator shall maintain all asbestos-free certifications and documentation related to replacement material or new construction activities at the building.

14.7 AIR MONITORING REPORTS

Reports indicating the following shall be maintained for future reference:

- Documentation of Negative Exposure Assessments
- Any employee personal air sampling results
- Airborne fiber concentrations collected for abatement activities
- Airborne fiber concentrations during or following emergency situations

In addition, 29 CFR Section 1926.1101 (Construction Industry Standard) requires that an employer notify affected employees of the monitoring results that represent that employee's exposure as soon as possible following receipt either in writing individually or by posting at a central location that is accessible to affected employees.

14.8 MEDICAL RECORDS

Medical records for any of the building Owner's employees required to wear respirators must be retained for a period of at least 30 years. A copy of each employee's medical record should be placed in the employee's personnel file. Records to be maintained shall include:

- All medical examinations
- All fit tests
- Worker Acknowledgement

15.0 AIR MONITORING

Air sample analysis must be performed by Transmission Electron Microscopy (TEM), in accordance with AHERA protocols per 40 CFR Part 763. TEM is mandated under AHERA for clearance sampling of certain asbestos abatement projects in primary and secondary schools.

The various categories of air monitoring and the purpose of each are discussed in the following four sections:

15.1 NEGATIVE EXPOSURE ASSESSMENT

A Negative Exposure Assessment (NEA) is only made by a "Competent Person" (see Section 6.1). An NEA utilizes an evaluation of air monitoring data, work practices and engineering controls to determine "with a high degree of certainty" that a specific activity will not generate airborne asbestos fiber concentrations above OSHA exposure limits.

ECS recommends that an NEA should not be made for activities found to generate airborne asbestos fiber concentrations above prevalent (background) levels. Unless an NEA is made, activities that may disturb ACM are to be treated as asbestos O&M or abatement work.

The following guidelines must be followed in making an NEA:

- Sampling must be performed on the same individuals, or individuals who have the same level of OSHA-specified training as those individuals who will perform the work being assessed.

- Sampling can be done during the initial phase of a project to conclude that an NEA can be made for that project.

- Data from a recent previous project (within the last 12 months) that closely resembles a proposed job can be used to make an NEA for a proposed project. However, all of the following must be similar:

    1. level of worker training;

    2. type of material being disturbed;

    3. work practices; and

    4. engineering controls (i.e., work area isolation procedures).

- An NEA cannot be made when untrained workers will be involved.

15.2 AIR MONITORING DURING CLASS I OR II ASBESTOS WORK

Air monitoring should be performed during all abatement activities to document airborne fiber concentrations both inside and outside the regulated work area. OSHA requires that daily perimeter air monitoring be performed adjacent to regulated areas in occupied buildings. Specific project requirements should be addressed and performed by a qualified consultant. Air monitoring should be performed to obtain both environmental (area) and personal samples. The types and purposes of air monitoring are as follows:

a. Environmental (Area) Air Monitoring

Asbestos fibers that are too small to be seen by the human eye are potentially the most dangerous to one's health. Insight can be gained by collecting air samples and analyzing them by TEM or Phase Contrast Microscopy (PCM). Area air monitoring indicates how well airborne fibers are being contained inside the work areas. Samples should be taken prior to and during the full period of the removal operation.

Air samples should be taken immediately outside of the work area to detect leakage of fibers from the work area. This is especially important in situations where people who are not protected are present in immediately adjacent areas. Areas around entrances and exits to the work area shall be tested.

Area air samples taken within the work area indicate the effectiveness of the contractor's work procedures. Note that area air samples are not a substitute for OSHA-required personal sampling to determine actual worker exposure levels. Only personal air monitoring indicates worker fiber exposure levels, which in turn indicate the type of respirator that the employee should wear. Both sample types should be taken during any major asbestos activity.

The actual number of samples and air volumes required at each work area may change from day-to-day depending on the work activity. Remember that the most important area samples are those taken outside the work area. This data records whether or not asbestos fibers are confined to the work area. Also, maintaining low fiber concentrations during the removal will make the clean-up procedures easier at the end of the job.

As with personal sampling records, the results of all area sampling should be maintained along with other documentation (landfill receipts, medical records, etc.) from each job.

b. Personal Air Monitoring

Personal air monitoring is the method used to determine a maintenance employee's or abatement worker's exposure to airborne fibers. During asbestos removal projects, the abatement contractor is responsible for personal monitoring of its workers. During O&M activities performed by the building staff, it is recommended that periodic personal air sampling be conducted.

Personal air samples [that must include both PEL and Excursion Limit (EL) sampling] are used to verify whether exposure levels exceed those that correspond to the protection afforded by the type of respiratory protection being used. The higher the concentration of fibers detected, the greater the degree of protection that is needed from a respirator. Under the current OSHA asbestos standard, employees have the right to review the results of their personal monitoring and to be informed of measures being taken to protect them. The Asbestos Coordinator is to maintain personal air sampling records that may be generated during typical or test O&M activities by employees of the building.

If properly used, the personal sampling data can indicate what methods of removal and control result in the lowest employee exposure. Air sampling results from past projects shall be kept on file.

c. Final Clearance Air Monitoring

Following abatement or other major activities during which ACM are disturbed; air monitoring should be performed to document airborne fiber concentrations after final cleaning. This will serve to assess the effectiveness of abatement operations and compliance with pre-specified clearance airborne fiber concentrations.

TEM sampling/analysis is mandated under AHERA for clearance sampling of asbestos abatement projects in primary and secondary schools for certain projects. The average concentration of asbestos of five air samples collected at the same time within the affected functional space and analyzed by the TEM method in CFR 40 Part 763 Appendix A of subpart E is below the filter background level of 70 structures per square millimeter (70 s/mm^2).

A local education agency may analyze air monitoring samples collected for clearance purposes by phase contrast microscopy (PCM) to confirm completion of removal, encapsulation, or enclosure of ACM that is greater than small-scale, short-duration and less than or equal to 160 square feet or 260 linear feet. The action shall be considered complete when the results of samples collected in the affected functional space and analyzed by phase contrast microscopy using the National Institute for Occupational Safety and Health (NIOSH) Method 7400, show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantitation for PCM (0.01 fibers per cubic centimeter (0.01 f/cm3) of air).

Sampling:

Per 40 CFR Part 763 Subpart E, a minimum of 13 samples are to be collected for each testing site consisting of the following:

a) A minimum of five samples per abatement area.

b) A minimum of five samples per ambient area positioned at locations representative of the air entering the abatement site.

c) Two field blanks are to be taken by removing the cap for not more than 30 seconds and replacing it at the time of sampling before sampling is initiated at the following places:

    a. Near the entrance to each abatement area.

    b. At one of the ambient sites. (DO NOT leave the field blanks open during the sampling period.)

d) A sealed blank is to be carried with each sample set. This representative cassette is not to be opened in the field.

15.3 AIR MONITORING DURING CLASS III ASBESTOS WORK

Personal air monitoring is recommended during representative maintenance activities where ACM is likely to be disturbed. Repeat sampling annually thereafter to obtain exposure levels that can be expected during similar activities. Generally this sampling will document that respirators and regulated areas are not required and will form part of the basis for a potential NEA.

Class III asbestos activities as defined in Section 17.0 should be monitored periodically by a qualified consultant to determine typical airborne fiber levels that may be generated. Monitoring should include both area and personal sampling as previously defined. Any activities that are likely to generate fiber counts greater than the PEL or EL should only be performed as an abatement activity.

16.0 WORKER PROTECTION

OSHA regulations have established exposure standards for airborne fibers, as measured by PCM, for all asbestos work in all industries, as follows:

- PEL of 0.1 fibers per cubic centimeter (f/cc), as an 8 hour time-weighted average; and,
- EL of 1.0 f/cc, averaged over a sampling period of thirty minutes.

It is not anticipated that these limits will be exceeded in normal operations of education facilities (or for this building). However, if Class I, II, or III asbestos work does occur within the school or there is a possibility of exceeding these limits, the Asbestos Coordinator shall oversee engineering and work practice controls, establishment of regulated areas, respiratory protection, medical surveillance, disposable clothing and decontamination facilities for exposed employees. Refer to Appendix I for Guide for Minimizing Disturbance of ACM.

16.1 RESPIRATORY PROTECTION

OSHA requires that respirators be worn in the following situations:

- During the interval necessary to implement work practices (e.g., exhaust ventilation with filtered dust collection, general ventilation, vacuum cleaners, enclosure and isolation practices, etc.) and engineering controls;
- Work operations (e.g. maintenance and repair activities) or other activities for which engineering controls are not feasible;
- Work situations where feasible engineering controls are not yet sufficient to reduce exposure below the PEL or EL; and,
- In emergencies (refer to Section 9.0).

Refer to Appendix J for Respiratory Protection Program Requirements and Respirator Selection Guidelines. At this time, ECS does not anticipate users of this plan to require respirators.

16.2 REGULATED AREAS

Regulated areas are required to be established at the following locations:

- Areas where Class I, II and III asbestos work is conducted (i.e., where an abatement contractor is working).

- Areas where debris and waste from asbestos work accumulates (i.e., rooms where asbestos is stored).

- Areas within which airborne concentrations of asbestos exceeds, or may exceed, the PEL.

Typically, only an asbestos-containing material that is significantly damaged and friable, with either “moderate” or “high” potential for disturbance would necessitate this action (refer to Section 10.3). If such a condition is detected, the Asbestos Coordinator should arrange for removal, repair or clean-up as discussed in Section 10.5.

Requirements for regulated areas include the following:

- Demarcate in any manner that minimizes the number of persons within the work area and protects persons outside the area from exposure to airborne concentrations of asbestos;

- Specified signs shall be provided and displayed (see Section 11.0);

- Access to regulated areas shall be limited to persons who have received asbestos training appropriate to the work they perform inside the regulated area (at least two hours of Awareness Training since contact with asbestos will occur).

- All persons entering a regulated area are required to wear respirators;

- Employees shall not drink, eat, smoke, chew tobacco or gum, or apply cosmetics;

- All work performed in regulated areas must be supervised by a Competent Person.

16.3 MEDICAL SURVEILLANCE

Medical surveillance is not required for general building occupants or persons involved in only Class IV work. ECS does not anticipate school employees falling under this requirement.

Employers must obtain a respiratory determination for those personnel whose responsibility is to respond to potential emergency situations, or wear respirators only occasionally, or perform Class I, II or III work less than 30 days per year. A physician shall determine whether the individual is able to wear a respirator based upon evaluation of a pulmonary function test of forced expiratory volume at 1 second and forced vital capacity.

Employers must provide comprehensive examinations for personnel who (for more than 30 days per year) will be required to wear respirators or will be exposed to airborne

concentrations of asbestos fibers at or above the PEL or EL, or perform Class I, II or III work. Refer to Appendix K for the requirements of a full Medical Surveillance Program.

17.0 TYPICAL PROCEDURES FOR RENOVATION WORK

This section outlines the recommended operating procedures when planning and executing work that involves: flooring installation or removal, or mechanical system changes.

These projects may or may not affect ACM. It is important that the below-outlined process is followed so that liability is reduced and compliance with regulations occurs without needless expenditure of funds. A re-inspection for asbestos of any areas to be renovated/demolished shall be performed by a licensed asbestos inspector by the Commonwealth of Virginia.

17.1 DETERMINE THE PRESENCE AND EXTENT OF ACM

- Review the proposed construction activity and assess whether any known or suspected ACM will be affected. Refer to Section 7.0.
- Review available asbestos survey reports to determine whether all suspect materials have been sampled and analyzed. If appropriate, perform supplementary sampling per the guidance in Section 10.1.
- Map the extent of materials determined to be ACM. If any ACM is present, continue with the following steps.

17.2 EXAMINE OPTIONS

Response options should be evaluated by a qualified consultant/licensed project designer in conjunction with the Asbestos Coordinator. Abatement alternatives generally include the following:

- Clean dust and debris in the planned construction area
- Clean, repair and/or encapsulate any damaged or friable ACM
- Modify construction plans or details so ACM is not disturbed
- Clean and enclose the ACM from the construction area

If it is determined that asbestos removal is required, follow the general procedures outlined in Appendix M. Long-term cost consequences should be considered, keeping in mind that NESHAP regulations require removal of all friable or potentially friable ACM from a facility before demolition.

17.3 BIDDING

- If ACM will be cleaned up, encapsulated or enclosed (but not removed), provide the renovation bidders with an asbestos notice.

17.4 NOTIFICATIONS AND PERMITS

- Compare the project extent with the notification requirements given in Appendix O. Also be aware of any additional state and local notification and/or permit requirements. Allow time for the agency approval process.

- Obtain copies of accepted notifications before allowing work to start. Ensure that other employers whose workers are likely to contact ACM on this work site have been notified per Section 13.0.

17.5 MAJOR ASBESTOS WORK

Major asbestos work (Class I or II work) requires implementing extensive work area isolation and barriers, the use of sufficient respiratory protective equipment and protective clothing, as well as progress and clearance air monitoring. All major asbestos work must be performed in regulated areas and a Competent Person must supervise the work. The scope of major abatement projects typically limits this work to unoccupied areas where access is restricted and HVAC and electrical systems are shut down.

Procedures for these activities should be addressed in specifications prepared by a qualified consultant who is a licensed project designer. All major activities should be performed solely by qualified asbestos abatement contractors. Air sampling before, during and at the completion of the abatement activities (Section 15.4) should be performed by a qualified consultant retained directly by the LEA. U.S. EPA stipulates that the testing be performed by a qualified consultant who is independent of the abatement contractor.

APPENDIX A

PREVIOUS REPORTS



LIMITED ASBESTOS-CONTAINING MATERIALS SURVEY
JOHN ADAMS ELEMENTARY SCHOOL
5651 RAYBURN AVENUE
ALEXANDRIA, VIRGINIA

ECS PROJECT NO. 01:10977-A

FOR

HITT CONTRACTING

MARCH 15, 2010

March 15, 2010

Mr. Joe Zanone
Hitt Contracting
2900 Fairview Park Drive
Falls Church, Virginia 22042

ECS Project No. 01:10977-A

Reference: Limited Asbestos Containing Materials Survey, John Adams Elementary School, 5651 Rayburn Avenue, Alexandria, Virginia.

Dear Mr. Zanone:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Hitt Contracting with the results of the Limited Asbestos-Containing Materials Survey for the above referenced property. The survey was performed in general conformance with ECS Proposal No. 01:33584-EP, dated March 1, 2010. The following is a summary of our survey, testing procedures, and recommendations.

The purpose of this survey was to determine the presence and general location of asbestos-containing materials (ACM) within the hallway corridors at the courtyard area. ECS personnel performed the survey on March 3, 2010.

STRUCTURE DESCRIPTION

The survey was limited to the interior of the hallways along the existing courtyard adjacent to the office area. The hallways are reportedly proposed for renovations to allow access to the courtyard area for the addition of a modular classroom. The survey was performed to assist Hitt Contracting with the evaluation of building materials for presence of asbestos during renovation operations.

During the survey, the building was occupied and in use. ECS attempted to access all building materials within the areas surveyed. However, due to the destructive means required to access all materials, certain areas in (i.e., sub-grade sealants, behind walls and ceilings, pipe chases, flooring located below underlayments, etc.) were deemed inaccessible and were not inspected. The survey was limited to the hallway areas surrounding the courtyard. The exterior roof is not proposed to be disturbed.

The interior of the hallways consist of structural steel, concrete and masonry walls, ceiling plaster, gypsum wallboards, fireproofing, fiberglass pipe insulation, floor tile and mastic, cove bases, and a concrete slab-on-grade. The exterior finishes consisted of concrete and masonry walls, sealants, metal window and door frames, and roofing materials.

SAMPLING METHODS AND RESULTS

Asbestos Survey and Laboratory Procedures

A survey of the above referenced portions of the building to identify ACMs was performed by EPA Accredited Asbestos Building Inspector Mr. Douglas Finch (VA Asbestos Inspector No. 3303-3186) on March 3, 2010. The survey consisted of walking through the assigned areas to observe accessible areas for the presence of suspect materials that may contain asbestos and collecting bulk samples of those materials.

The asbestos survey involved sampling both friable materials (materials which can be pulverized or reduced to a powder by hand pressure when dry) and non-friable materials. The collected samples were submitted to Scientific Analytical Institute, Inc (SAI) of Greensboro, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) (Method No. EPA 600/R-93/116). Sample sets of more than one sample were submitted for analysis utilizing "stop-positive" methods. If any of the samples in a set are determined to contain greater than or equal to one percent (1%) asbestos, the remainder of that set are assumed to be asbestos containing, and therefore are not analyzed. Materials consisting of multiple layers or components are separated and each layer or component is analyzed individually by the laboratory. The materials sampled, the approximate quantities, and the laboratory results are included in the attachments and attached table.

A total of 34 suspect materials were collected for analysis. Several of the samples contained multiple layers. A summary of materials reported to contain asbestos, is listed below in Table 1. A complete list of all materials sampled is summarized in Table 2 attached to this report. The laboratory analysis and chain of custody are also attached to this report.

Table 1: Asbestos-Containing Materials

Location	Material	Friability
Hallways Above Ceiling Tile (Typical)	Fireproofing	Friable
Hallways Above Ceiling Tile (Typical)	Pipe and Elbow Insulation Black Sealant	Category II Non-Friable
Hallway Windows (Typical)	Window Caulk	Category II Non-Friable

Asbestos-containing sprayed-on fireproofing was found on the structural steel members within the hallways. The black sealant on the fiberglass pipe insulation and pipe insulation elbows were also found to have asbestos-containing material. These materials were also listed on the three-year re-inspection asbestos-containing materials report performed by MasiMax Resources, Inc., dated August 10, 2007 that was provided to ECS. The hallway

window caulking was also found to have asbestos-containing material and was not listed in the re-inspection report. The asbestos containing materials were observed to be in good condition.

RECOMMENDATIONS

Asbestos

The ACMs listed in Table 1 consist of friable and non-friable materials. Prior to any future reconstruction/remodeling of the structure that would affect the identified ACM, proper abatement would be required. All ACMs identified that will be disturbed should be removed by a Virginia licensed asbestos abatement contractor prior to their disturbance by renovation/restoration activities.

During asbestos abatement, an industrial hygienist should monitor the asbestos abatement work daily. This involves collecting air samples from within and outside abatement work areas to ensure the abatement contractor's work practices are sufficient to prevent asbestos fiber release from within the work area. The industrial hygienist should ensure the building owner that the asbestos abatement contractor is performing his work in accordance with all project specifications, state and local regulations as well as 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 which, in part, requires the contractor to perform personal exposure monitoring for all workers abating and disposing of asbestos containing materials. The industrial hygienist can assist the contractor in conducting the personal exposure monitoring for abatement workers. Per VA asbestos regulations, an industrial hygienist must collect final clearance air samples following the completion of asbestos abatement to ensure the asbestos work areas are safe to reoccupy. Per these regulations, final clearance samples must be collected in accordance with EPA 40CFR Part 763, Subpart E. In short, this regulation requires air samples to be analyzed by transmission electron microscopy (TEM) methodology.

Closing

This report summarizes our evaluation of the conditions observed at the site. The findings prepared by ECS are based upon our observations in the building and analysis of the samples collected at the time of this survey. Additional hazardous materials may exist in other portions of the building that were in accessible such as behind walls and permanent ceilings and in areas not included in the survey. Our recommendations are based on the guidelines presented by the EPA, Commonwealth of Virginia, and OSHA. Any conditions discovered which deviate from the data contained in this report should be presented to us for our evaluation.

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

All 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 other 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 Hitt Contracting. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties. The use of this report by any undesignated third party or parties will be at such party's sole risk and ECS disclaims liability for any such third party use or reliance.

ECS appreciates the opportunity to provide our asbestos services for this project. If you have any questions or need additional information, please contact us at (703) 471-8400.

Sincerely,

ECS MID-ATLANTIC, LLC

Douglas J. Finch
Senior Environmental Scientist

William R. Leonard, C.P.G.
Environmental Group Manager

Enclosures:

Table 2: Asbestos Bulk Sampling List
Photographs
Laboratory Analysis and Chain of Custody

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TABLE 2
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS

Sample Number	Sample Location	Material/Description	Analytical Results
30310JAE-1A	South Hallway	Gray Fireproofing	15% Chrysotile
30310JAE-1B	South Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1C	West Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1D	West Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1E	West Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1F	East Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-1G	East Hallway	Gray Fireproofing	Positive Stop (Not analyzed)
30310JAE-2A	South Hallway	Ceiling Plaster	NAD
30310JAE-2B	South Hallway	Ceiling Plaster	NAD
30310JAE-2C	West Hallway	Ceiling Plaster	NAD
30310JAE-3A	South Hallway	2’ x 4’ Ceiling Tile	NAD
30310JAE-3B	West Hallway	2’ x 4’ Ceiling Tile	NAD
30310JAE-3C	East Hallway	2’ x 4’ Ceiling Tile	NAD
30310JAE-4A	South Hallway	Black Pipe Insulation Sealant	5% Chrysotile
30310JAE-4B	East Hallway	Black Pipe Insulation Sealant	Positive Stop (Not analyzed)
30310JAE-4C	West Hallway	Black Pipe Insulation Sealant	Positive Stop (Not analyzed)
30310JAE-5A	West Hallway	Black Pipe Elbow Insulation Sealant	8% Chrysotile
30310JAE-5B	West Hallway	Black Pipe Elbow Insulation Sealant	Positive Stop (Not analyzed)
30310JAE-5C	East Hallway	Black Pipe Elbow Insulation Sealant	Positive Stop (Not analyzed)

TABLE 2
BULK SAMPLING OF SUSPECT ASBESTOS CONTAINING MATERIALS

Sample Number	Sample Location	Material/Description	Analytical Results
30310JAE-6A	South Hallway	Window Caulk	8% Chrysotile
30310JAE-6B	South Hallway	Window Caulk	Positive Stop (Not analyzed)
30310JAE-6C	West Hallway	Window Caulk	Positive Stop (Not analyzed)
30310JAE-7A	South Hallway	Yellow 12” x 12” Floor Tile and Mastic	Tile: NAD Mastic: NAD
30310JAE-7B	West Hallway	Yellow 12” x 12” Floor Tile and Mastic	Tile: NAD Mastic: NAD
30310JAE-7C	East Hallway	Yellow 12” x 12” Floor Tile and Mastic	Tile: NAD Mastic: NAD
30310JAE-8A	West Hallway	4” Gray Cove Base with Tan Mastic	Base: NAD Mastic: NAD
30310JAE-8B	West Hallway	4” Gray Cove Base with Tan Mastic	Base: NAD Mastic: NAD
30310JAE-8C	East Hallway	4” Gray Cove Base with Tan Mastic	Base: NAD Mastic: NAD

Notes: NAD – No Asbestos Detected

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Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-1A *041004455-0001*	SOUTH WALL	Gray Fibrous Heterogeneous		85% Non-fibrous (other)	**15% Chrysotile**
30310JAE-1B *041004455-0002*	SOUTH WALL				**Stop Positive (Not Analyzed)**
30310JAE-1C *041004455-0003*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1D *041004455-0004*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1E *041004455-0005*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1F *041004455-0006*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-1G *041004455-0007*	EAST WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The test results meet all NELAC requirements unless otherwise specified.
Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

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EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
30310JAE-2A *041004455-0008*	SOUTH WALL	Gray Fibrous Heterogeneous	50% 40%	Cellulose Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-2B *041004455-0009*	SOUTH WALL	Gray Fibrous Heterogeneous	50% 40%	Cellulose Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-2C *041004455-0010*	WEST WALL	Gray Fibrous Heterogeneous	50% 40%	Cellulose Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3A *041004455-0011*	SOUTH WALL	Gray/White Fibrous Heterogeneous	60% 30%	Cellulose Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3B *041004455-0012*	WEST WALL	Gray/White Fibrous Heterogeneous	60% 30%	Cellulose Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-3C *041004455-0013*	EAST WALL	Gray Fibrous Heterogeneous	60% 30%	Cellulose Min. Wool	10% Non-fibrous (other)	**None Detected**
30310JAE-4A *041004455-0014*	SOUTH WALL	Black Fibrous Heterogeneous			95% Non-fibrous (other)	**5% Chrysotile**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-4B *041004455-0015*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-4C *041004455-0016*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5A *041004455-0017*	WEST WALL	Black Fibrous Heterogeneous		92% Non-fibrous (other)	**8% Chrysotile**
30310JAE-5B *041004455-0018*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-5C *041004455-0019*	EAST WALL				**Stop Positive (Not Analyzed)**
30310JAE-6A *041004455-0020*	SOUTH WALL	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**
30310JAE-6B *041004455-0021*	SOUTH WALL				**Stop Positive (Not Analyzed)**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

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Attn: **Doug Finch**
ECS Mid-Atlantic, LLC (VA)
915 Maple Grove Drive
Suite 206
Fredericksburg, VA 22407

Fax: (540) 785-3577 Phone: (540) 785-6100
Project: **JOHN DOLANS ES 10977-A**

Customer ID: ECSM78
Customer PO: 10977-A
Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-6C *041004455-0022*	WEST WALL				**Stop Positive (Not Analyzed)**
30310JAE-7A-TILE *041004455-0023*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7A-MASTIC *041004455-0023A*	SOUTH WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-TILE *041004455-0024*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7B-MASTIC *041004455-0024A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-7C-TILE *041004455-0025*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The test results meet all NELAC requirements unless otherwise specified.
Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-7C-MASTIC *041004455-0025A*	EAST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-COVEBASE *041004455-0026*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8A-MASTIC *041004455-0026A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-COVEBASE *041004455-0027*	WEST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8B-MASTIC *041004455-0027A*	WEST WALL	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
30310JAE-8C-COVEBASE *041004455-0028*	EAST WALL	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Received: 03/05/10 10:30 AM
EMSL Order: 041004455

EMSL Proj:
Analysis Date: 3/7/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
30310JAE-8C-MASTIC *041004455-0028A*	EAST WALL	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Chris Little (22)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The test results meet all NELAC requirements unless otherwise specified.

Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006

THIS IS THE LAST PAGE OF THE REPORT.

041004455

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Company:	ECS Mid-Atlantic, LLC	***Bill To:***	ECS Mid-Atlantic, LLC
Address1:	915 Maple Grove Drive	*Address1:*	915 Maple Grove Drive
Address2:	Suite 206	*Address2:*	Suite 206
City, State:	Fredericksburg, VA	*City, State:*	Fredericksburg, VA
Zip/Post Code:	22407	*Zip/Post Code:*	22407
Country:	USA	*Country:*	USA
Contact Name:	~~Beverly Sedon~~ Douglas Finch	***Attn:***	~~Beverly Sedon~~ Douglas Finch
Phone:	540-785-6100	*Phone:*	540-785-6100
Fax:	540-785-3577	*Fax:*	540-785-3577
Email:	~~bsedon@ecslimited.com~~ dfinch@ecslimited.com	*Email:*	~~bsedon@ecslimited.com~~ dfinch@ecslimited.com
EMSL Rep:	Sherl Steinman	***P.O. Number:***	~~5086~~ 10977-A
Project Name/Number:	John Dolans ES 10977-A		

MATRIX			TURNAROUND			
Air	Soil	Micro-Vac	3 Hours	6 Hours	Same Day or 12 Hours*	24 Hours (1 day)
X Bulk	Drinking Water		X 48 Hours (2 days)	72 Hours (3 days)	96 Hours (4 days)	~~120~~ Hours (5 days)
Wipe	Wastewater		144+ hours (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

***12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote**

* Positive Stop

PCM - Air	**TEM Air**	**TEM WATER**
NIOSH 7400(A) Issue 2: August 1994	AHERA 40 CFR, Part 763 Subpart E	EPA 100.1
OSHA w/TWA	NIOSH 7402	EPA 100.2
Other:	EPA Level II	NYS 198.2
PLM - Bulk	**TEM BULK**	**TEM Microvac/Wipe**
X EPA 600/R-93/116	Drop Mount (Qualitative)	ASTM D 5755-95 (quantative method)
EPA Point Count	Chatfield SOP - 1988-02	Wipe Qualitative
NY Stratified Point Count	TEM NOB (Gravimetric) NYS 198.4	
PLM NOB (Gravimetric) NYS 198.1	EMSL Standard Addition:	**XRD**
NIOSH 9002:		Asbestos
EMSL Standard Addition:	**PLM Soil**	Silica NIOSH 7500
SEM Air or Bulk	EPA Protocol Qualitative	
Qualitative	EPA Protocol Quantitative	**OTHER**
Quantitative	EMSL MSD 9000 Method fibers/gram	

RECEIVED
10 MAR -5 AM 11:26
EMSL
WESTMONT, NJ

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

041004455

041004455 Page 2 of 3

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore
Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 30310JAE-1A - 30310JAE-8C Total Samples #: 28

Relinquished: [signature] Date: 3/3/10 Time: 7:40 AM

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: DM-FX-10304 Date: 3-5-10 Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
30310JAE-1A	FIREPROOFING SOUTH WALL	
1B	SOUTH WALL	
1C	WEST	
1D	WEST	
1E	WEST ~~EAST~~	
1F	EAST	
1G	EAST	
2A	UPPER Ceiling Board SOUTH	
2B	SOUTH	
2C	WEST	
3A	Ceiling Tile SOUTH	
3B	WEST	
3C	EAST	
4A	Pipe Insulation Mastic SOUTH	

RECEIVED
EMSL
WESTMONT, NJ
10 MAR 5 AM 11:26

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

041004455

041004455

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
10768 Baltimore Avenue
Beltsville, MD 20705

Phone: (301) 937-5700
Fax: (301) 937-5701
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 303/0JAE-1A - 303/0JAE-EC **Total Samples #:** 25

Relinquished: _____ **Date:** 3/3/10 **Time:** 7:00AM

Received: _____ **Date:** _____ **Time:** _____

Relinquished: _____ **Date:** _____ **Time:** _____

Received: _____ **Date:** _____ **Time:** _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
303/0JAE-4B	Pipe Insulation Black Mastic East Wall	
4C	" " West	
5A	Pipe Elbow insulation West	
5B	" " West	
5C	" " East	
6A	Window Caulk South	
6B	" South	
6C	" West	
7A	Yellow 12"x12" Floor Yellow Tile + mastic South	
7B	" " West	
7C	" " East	
8A	4" Corner Cove Yellow Base + mastic West	
8B	" " " West	
8C	" " " East	

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL, INC.



Photograph No. 1:ACM Fireproofing on beams (typical).



Photograph No. 2:ACM Window Caulk (typical)



Photograph No. 3 ACM Black Pipe Sealant (typical).:



Photograph No. 4:ACM Black Pipe Elbow Sealant (typical).

ACM SURVEY

John Adams Elementary School
Alexandria, Virginia

PHOTOGRAPHS

ECS Project 01-10977-A
March 2010

JOHN ADAMS SCHOOL

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
REPORTED ON PRIOR SURVEYS		
Electrical Room G-1 on 1st Floor (Reported in other Areas)	White Vibration Damper *	Friable
Gym at Exit 10 on 1st Floor (Assumed above Drop Ceiling Tiles in other Areas)	6" TSI-Elbows with Black Mastic ** (above Drop Ceiling Tiles)	Friable
Gym at Exit 10 on 1st Floor (Assumed above Drop Ceiling Tiles in other Areas)	Black Mastic on Fiberglass Pipe Insulation ** (above Drop Ceiling Tiles)	Category II Non-Friable
Hallways (Observed in other Areas)	Fire Doors	Friable
SAMPLED BY ECS ON NOVEMBER 19, 2013		
Stage on 1st Floor (Assumed in other Areas)	12" x 12" Green with White Flecks Floor Tile and associated Black Mastic	Category I Non-Friable
Closet in the Hallway (Assumed in other Areas)	12" x 12" Light Green Flecked Floor Tile and associated Black Mastic	Category I Non-Friable
Art Classroom 152 on 1st Floor (Assumed in other Areas)	Black Sink Undercoat	Friable
Storage Room in Office 229 on 2nd Floor (Assumed in other Areas)	12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic	Category I Non-Friable

Location	Material	Friability
Supply/Copy Room in Office 229 on 2nd Floor (Assumed in other Areas)	Greenish Gray Floor Tile and associated Black Mastic (under Carpet)	Category I Non-Friable
Storage Closet in Hallway by Stairwell B (Assumed in other Areas)	12" x 12" Beige Flecked Floor Tile and associated Black Mastic	Category I Non-Friable
Hallway on 2nd Floor (Assumed under Fixtures, Cabinets and Exiting Flooring Materials in other Areas)	Off-White Floor Tile and associated Black Mastic (under Water Fountain)	Category I Non-Friable
MATERIALS ASSUMED TO CONTAIN ASBESTOS * **		
Gymnasium and Stage on 1st Floor	Wood Floor Underlayment and associated Mastics	Category I Non-Friable
Throughout Building	Interior Pipe Wrap associated with Water Fountains and Radiators	Category II Non-Friable
Classrooms and Hallways	Boards and associated Mastics	Category II Non-Friable
Bathrooms	Mirror Mastics	Category II Non-Friable
Cafeteria (160) on 1st Floor	Tectum Boards and associated Mastic	Category II Non-Friable
Classrooms	Boards above Windows and Drop Ceiling Tiles	Category II Non-Friable
Throughout Building	Gypsum Roof Boards	Category II Non-Friable

Location	Material	Friability
Pipes within chases behind walls and above ceiling throughout the building	Thermal System Insulation (TSI)	Friable
Throughout Building	Pipe Flange Gaskets	Unknown
Mechanical Rooms	Electric Panels: Transite Components	Category II Non-Friable
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 partially removed from the above listed location.
** These materials have been reported to be removed in 2010; however, during this re-inspection, ECS observed these materials above the drop ceiling tiles in the above listed location.
*** 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
Electrical Room G-1 on 1st Floor	White Vibration Damper	4 – Damaged or Significantly Damaged Friable Miscellaneous ACBM
Gym at Exit 10 on 1st Floor	6" TSI-Elbows with Black Mastic	5 – ACBM with Potential for Damage

Location	Material	Physical Assessment Category
Hallways	Fire Doors	7 – Any Remaining Friable ACBM
Art Classroom 152 on 1st Floor	Black Sink Undercoat	5 – ACBM with Potential for Damage

Recommendations

1) The identified friable white vibration damper observed to be partially removed from the electrical room G-1 on 1st floor should be repaired or removed by a Commonwealth of Virginia licensed asbestos abatement contractor.

2) Identified asbestos-containing Thermal System Insulation pipe fitting insulation (TSI-Elbows) and black mastic on fiberglass pipe insulation have been reported to be removed in 2010; however, during this re-inspection, ECS observed these materials above the drop ceiling tiles in the Gymnasium at Exit 10 on 1st Floor. Therefore, these materials should be assumed to be present in other areas throughout the building. If debris from TSI-Elbows is observed on top of the drop ceiling tiles, it should be assumed contaminated with asbestos and be removed by a Commonwealth of Virginia licensed asbestos abatement contractor.

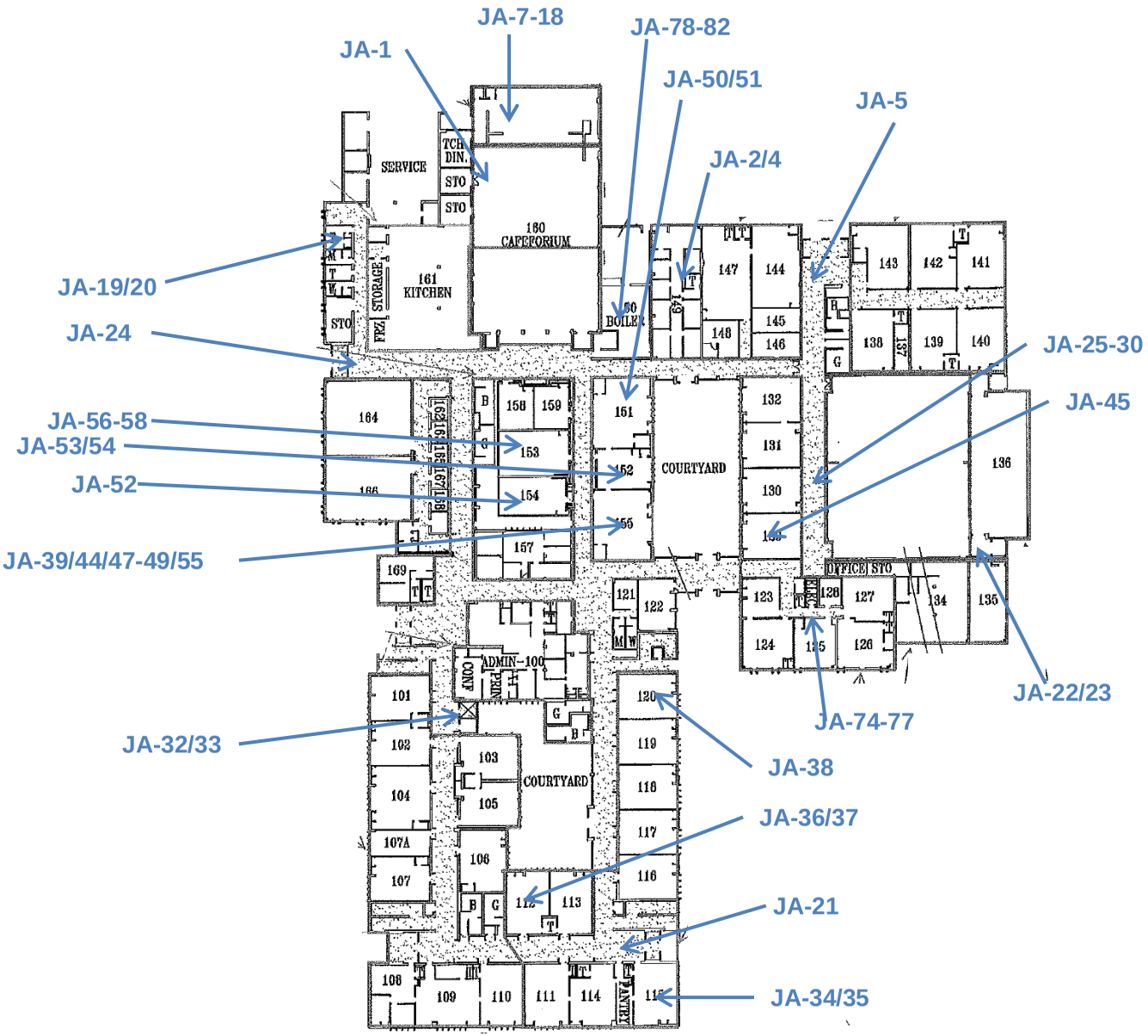
3) Asbestos-containing 9” x 9” green and black floor tiles have been reported to be removed in 2010 from hallway outside the Rooms 8 and 9. These rooms could not be identified during this re-inspection; therefore, it is recommended assuming these materials to be present under existing floor tiles in hallways throughout the building or other areas.

4) Asbestos-containing grey ceiling tiles were reported to be present in the incinerator room, and mastic on drain line was reported to be removed in 2010 from the incinerator room; however, ECS was unable to identified this room during this re-inspection.

APPENDIX B

FLOOR PLANS

1st FL



Legend
- Sample Number

Notes
1. Sample Locations are estimated

JOHN ADAMS
1501 CAMERON STREET
ALEXANDRIA, VIRGINIA

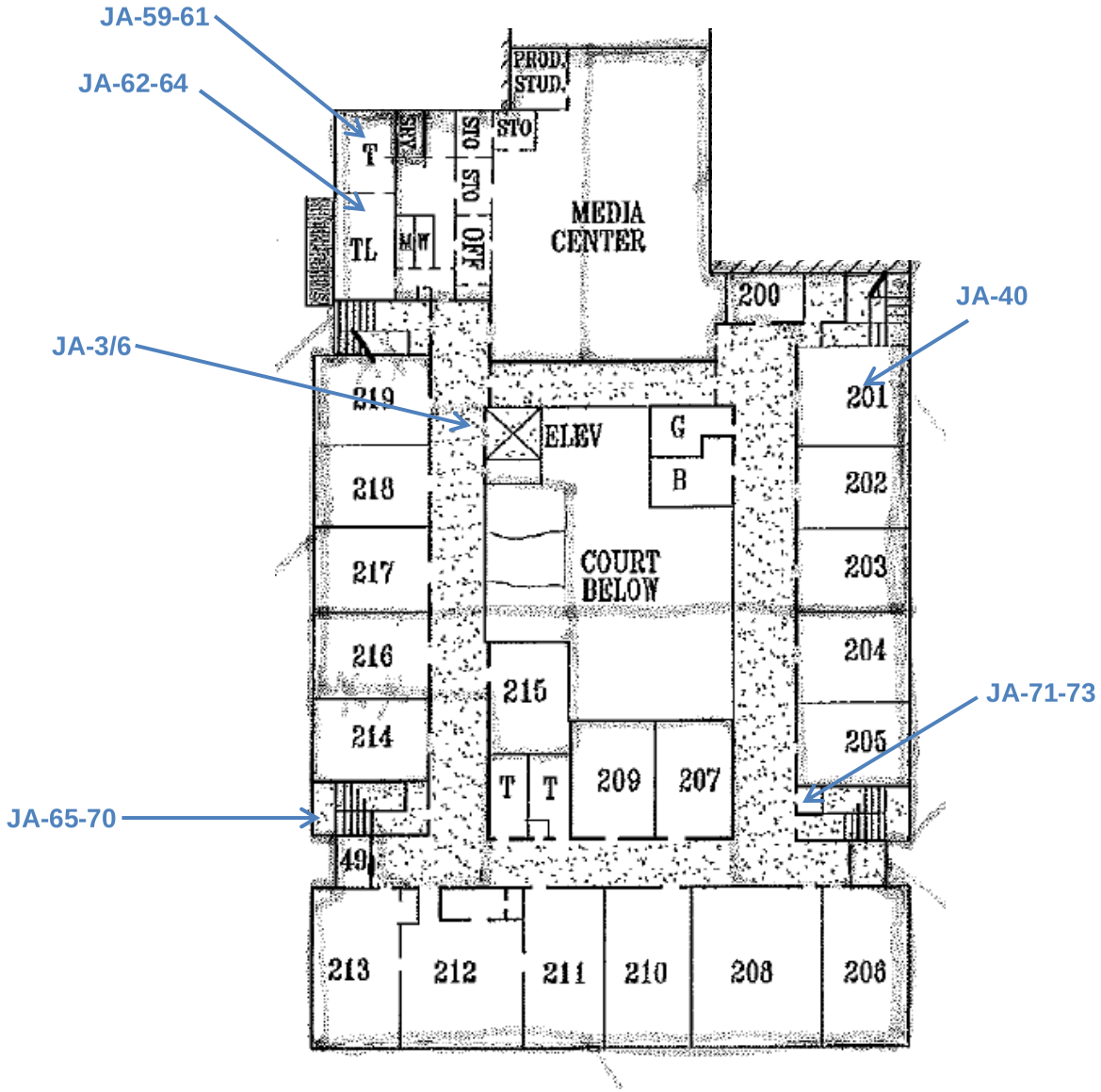
SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-D

Date 3/31/2017

2nd FL



Legend
- Sample Number

Notes
1. Sample Locations are estimated

JOHN ADAMS
1501 CAMERON STREET
ALEXANDRIA, VIRGINIA

SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-D

Date 3/31/2017

APPENDIX C

ASBESTOS SUMMARY TABLES

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

Updated as of January 10, 2017

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS								
White Vibration Damper	Electrical Room G-1 on 1st Floor	F	Damaged	Reported in other areas	1/10/17	Repair or Remove ASAP; Maintain in O & M Plan		Material Sampled on 1/10/2017 - 70% Chrysotile
6" TSI-Elbows	Gym at Exit 10 on 1st Floor (above Ceiling Tiles)	F	Intact	Reported as removed in 2010. Assumed above drop ceiling tiles in other areas	1/10/17	Maintain in O & M Plan		Verify Analytical Results
Black Mastic on Fiberglass Pipe Insulation	Gym at Exit 10 on 1st Floor	NF	Intact	Reported as removed in 2010. On 2" and 4" Pipe Line above Ceiling Tile. Assumed above drop ceiling tiles in other areas	1/10/17	Maintain in O & M Plan		Verify Analytical Results
Fire Doors	Hallways	F	Intact	None	1/10/17	Maintain in O & M Plan		Verify Analytical Results
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS IN NOVEMBER 19, 2013 SURVEY								
Grey Ceiling Tiles	Incinerator Room	NF	N/A	Reported as 50% Remaining, raw edges need encapsulation. Could not locate	1/10/17	Maintain in O & M Plan; Attempt to locate mislabel area		There is no incinerator room according to the building engineer
Mastic on Drain Line	Incinerator Room	NF	N/A	PACM Material reported as removed in 2010. Could not locate	1/10/17	Maintain in O & M Plan; Attempt to locate mislabel area		There is no incinerator room according to the building engineer
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN MARCH 3, 2010 SURVEY								
Gray Spray Applied Fireproofing	South Hallway	F	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 15% Chrysotile
Black Pipe Insulation Sealant	South Hallway	NF	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 5% Chrysotile
Interior Window Caulk	South Hallway	NF	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 8% Chrysotile
Black Pipe Elbow (Fitting) Insulation Sealant	West Hallway	F	Intact	None	1/10/17	Maintain in O&M Plan		Asbestos: 8% Chrysotile
MATERIALS REPORTED AS PREVIOUSLY REMOVED IN 2010 ON PRIOR SURVEYS								
9" x 9" Green Floor Tiles	Hallway Outside Room 8	NF	N/A	Material may be covered by 12" x 12" floor tile	19-Nov-13	Maintain in O & M Plan	N/A	Reported as removed in 2010
9" x 9" Black Floor Tiles	Hallway Outside Room 9	NF	N/A	Material may be covered by 12" x 12" floor tile	19-Nov-13	Maintain in O & M Plan	N/A	Reported as removed in 2011

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Spray-on Insulations	1st Floor Entire Perimeter, Rooms 114-116; 206-213 and Inner Halls	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-Boiler Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI- Tank Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-All Elbows Joints	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Grey Pipe Fitting Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Breeching Insulation	Boiler Room	F	Removed 2010	Replaced heaters and hot water system	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-Vibration Dampers and Elbows	Gym	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
White TSI	Gym Men Locker/Old Bathroom Area /Book Storage	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Cement Countertop Surface	Room 129	NF	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
TSI-Vibration Dampers	Shop 1	F	Removed 2010	Could not locate shop 1	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
Plaster Ceiling	Restrooms	F	Removed 2010	N/A	19-Nov-13	Remove from O & M Plan	N/A	Reported as removed in 2010
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 19, 2013 SURVEY								
12" x 12" Green with White Flecks Floor Tile and associated Black Mastic	Stage on 1st Floor	NF	Intact	This material was not observed in this location but is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile Mastic - 5% Chrysotile
12" x 12" Light Green Flecked Floor Tile and associated Black Mastic	Closet in the Hallway	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 3% Chrysotile
Black Sink Undercoat	Art Classroom 152	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile
12" x 12" Gray with White Flecks Floor Tile and associated Black Mastic	Storage Room in Office 229	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 3% Chrysotile
Greenish Gray Floor Tile and associated Black Mastic	Supply/Copy Room in Office 229	NF	Intact	This material is under carpet and may be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
12" x 12" Beige Flecked Floor Tile and associated Black Mastic	Storage Closet in Hallway by Stairwell B	NF	Intact	This material is under carpet	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile
Off-White Floor Tile and associated Black Mastic	Hallway on 2nd Floor (under Water Fountain)	NF	Intact	This material is assumed to be present in other areas	1/10/17	Add to O & M Plan		Asbestos: Floor Tile - 5% Chrysotile
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN Jan. 10, 2017 SURVEY								
White Vibration Damper Cloth	1st Floor G1 Electric Room	F	Frayed	Unit was not observed to be in use	10-Jan-17	Remain in O&M Plan		Abate/Repair
MATERIALS ASSUMED TO CONTAIN ASBESTOS								
Hardwood Floor Underlayment and associated Mastic	Gym	NF	Intact	PACM until tested; Reported as removed in 2010	1/10/17	Maintain in O & M Plan		Sample if proposed to be disturbed
Plaster Ceiling	Boiler Room	F	Removed 2010	Reported as removed in 2010	1/10/17	Remove from O & M Plan		None
Fountain Coil Wrap	Hallways	F	Removed 2011	Reported as removed in 2011	1/10/17	Remove from O & M Plan		Sample if proposed to be disturbed
Boards above Windows and Drop Ceiling Tiles	Classrooms	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Tectum Boards and associated Mastic	Cafeteria (160) on 1st Floor	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Gypsum Roof Boards	Throughout the Building	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Pipe Flange Gaskets	Throughout the Building	Unknown	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Electrical Panels: Transite Components	Mechanical Rooms	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Thermal System Insulation (TSI)	Pipes within Chases behind Walls and above Ceiling throughout Building	F	Not Observed	PACM Until Tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Mirror Mastic	Bathrooms	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Boards and associated Mastics	Classrooms and Hallways	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Interior Pipe Wrap associated with Water Fountains and Radiators	Throughout the Building	F	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
Waterproofing Membranes/Mastics	Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and Under Ceramic Flooring	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Asphalt-Based Roofing Material and Caulks/Sealants	Roof	NF	Intact	PACM until tested	1/10/17	Add to O & M Plan		Sample if proposed to be disturbed
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN MARCH 3, 2010 SURVEY								
Ceiling Plaster	South & West Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
2' x 4' Ceiling Tile	South, East, & West Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
12" x 12" Yellow Floor Tile and Mastic	South, East, & West Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
4" Gray Cove Base with Tan Mastic	West and East Hallways	N/A	N/A	N/A	N/A	N/A	N/A	NAD
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 19, 2013 SURVEY								
Drywall	Girl Restroom in Cafeteria by the Stage, Office 149E, and Hallway on 2nd Floor by Elevator	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Joint Compound	Hallway at Exit Door 12, Office 149E, and Hallway on 2nd Floor by Elevator	N/A	N/A	N/A	N/A	N/A	N/A	NAD
4" Black Cove Base and associated Brown Mastic	Stage	N/A	N/A	N/A	N/A	N/A	N/A	Cove base - NAD Mastic - NAD
Blue Fire Rate Curtain	Stage	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Beige Fire Rate Curtain	Stage	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Plaster Ceiling	Custodial Office in Kitchen and Stairwell at Exit Doors 5-6	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Light Gray Interior Door Caulk	Exit Door 10 (Gymnasium) and Exit Door by Room 154	N/A	N/A	N/A	N/A	N/A	N/A	NAD
2' x 4' White Pinhole Punch Ceiling Tile	Hallway on 1st Floor by Gymnasium	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Gray Mastic on Metal Duct	Hallway on 1st Floor by Gymnasium	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Spray-on Ceiling Insulation	Classroom 112, 115, 120, 155, and 201	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Solid Drywall Ceiling Tile	Girl Restroom on 1st Floor	N/A	N/A	N/A	N/A	N/A	N/A	Cove base - NAD Mastic - NAD

JOHN ADAMS ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Gray Interior Window Caulk	Classroom 129 & 155 and Hallway on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	Floor Tile - NAD Mastic - NAD
Black Pipe Wrap	Classroom 155	N/A	N/A	N/A	N/A	N/A	N/A	Floor Tile - NAD Mastic - NAD
Grey Sink Undercoat	Art Classroom 151 and Classroom 154	N/A	N/A	N/A	N/A	N/A	N/A	Mastic - NAD Leveling - NAD
White Sink Undercoat	Classroom 153	N/A	N/A	N/A	N/A	N/A	N/A	NAD
4" Brown Cove Base and associated Brown Mastic	Storage Closet in Hallway by Stairwell B	N/A	N/A	N/A	N/A	N/A	N/A	NAD
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN JANUARY 10, 2017 SURVEY								
4" Gray Cove Base with White Mastic	1st FL, Hall at G1 Electric Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Bridging Mastic on Fiberglass of Hot Water Tank	Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	Boiler Room	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, N/A = Not Applicable.

TABLE 1

BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

Sample #	Sampling Location	Material/Description	Analytical Results
JA 74	1st FL, Hall at G1 Electric Room	4" Gray Cove Base with White Mastic	Base - NAD Mastic - NAD
JA 75	1st FL, Hall at G1 Electric Room	4" Gray Cove Base with White Mastic	Base - NAD Mastic - NAD
JA 76	**1st FL, G1 Electric Room**	**White Vibration Dampener Cloth**	**Asbestos: 70% Chrysotile**
JA 77	1st FL, G1 Electric Room	White Vibration Dampener Cloth	N/A
JA 78	Boiler Room	White Bridging Mastic on Fiberglass of Hot Water Tank	NAD
JA 79	Boiler Room	White Bridging Mastic on Fiberglass of Hot Water Tank	NAD
JA 80	Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD
JA 81	Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD
JA 82	Boiler Room	White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank	NAD

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

COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION
P.O. BOX 6Q
RICHMOND 23216-2060

April 10, 1990

Mr. William A. Simms
LEA AHERA Designee
3801 W. Braddock Road
Alexandria, VA 22302

Re: **Management Plans Rec'd:** 5/1/88
Division: Alexandria City Public Schools (101)

Dear Mr. Simms:

Enclosed is a listing of schools that you have submitted to the Department of Education for review. We have found the management plans for these schools to be complete and include the items listed on our review checklist.

Please insert a copy of this letter in each management plan to indicate that we find the plan complete. Your management planner should also be informed that our review is complete.

Sincerely,

David L. Boddy
Associate Director
Energy and Facilities Services

DLB:gmh

Enclosure(s)

A.F. Meyer and Associates, Inc.

John Adams School
Alexandria, Virginia

Management Plan
for
Asbestos Containing
Building Materials

Environmental, System Safety, and Occupational Health Consultants

EC.033 5/88

Virginia Department of Education
Energy and Facilities Services

AHERA MANAGEMENT PLAN COVER SHEET

LEA: Alexandria City Public Schools
Address: 3801 W. Braddock Road
Alexandria, VA 22302
County: City of Alexandria
Phone: 1-703-998-2102

Management Plan Submission: ☒ Original ☐ Resubmittal ☐ Building Occupied After Oct. 12, 1988

List of Documents Attached:

- ☑ A School Buildings
- ☐ B Previous Inspections
- ☑ C Determination of Sampling Locations
- ☑ D Description of Each Sample Area
- ☑ E Bulk Sample Analysis
- ☑ F Assessment of Materials
- ☑ G Response Actions Recommended
- ☑ H Preventive Measures and Response Actions Scheduled
- ☑ I Operations and Maintenance Plan
- ☑ J Resources Needed
- ☑ K Steps to Inform Others
- ☑ L Periodic Surveillance Plan
- ☑ M Reinspection Plan

LEA AHERA DESIGNEE

Typed Name: William A. Simms
Mailing Address: 3801 W. Braddock Road
Alexandria, VA 22302
Phone: Office 823-9666 Home 836-7565

Name of Training Course: Inspection (3 Days) Supervision (1 Day)
Year 88 Month 10 Day 3-6 Total Hours of Course 48
Name of Training Agency: Biospherics Inc.

MANAGEMENT PLANNER - I certify as a management planner that I have prepared or assisted in the preparation of such plan or have reviewed such plan, and that such plan is in compliance with 40 CFR Part 763 subpart E

Typed Name: Michael B. Wigenton Signature: Michael B. Wigenton
Accreditation Number: 8802-02-127 Agency: Tufts University

For persons who performed inspections, and recommend(ed) design, or carry out response actions (except for operations and maintenance) the local education agency used or will use persons who have been accredited by a state which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act or is accredited by an EPA-approved course under section 206(c) of the Title II of the Act. In addition, the LEA has considered whether any conflict of interest may arise from the interrelationship among accredited personnel, such as abatement activities being performed by an inspector or management planner, and whether that should influence the selection of accredited personnel to perform activities under this AHERA program.

The signatories below certify that the general local education agency responsibilities, as stipulated by Part 763.84 have been met or will be met.

Signature: William A. Simms
LEA AHERA Designee
Date: 4-28-89

Signature: Paul W. Mason
LEA Superintendent
P.W. Mason
Typed Name of Superintendent
Date: 4-28-89

FOR REVIEWING AGENCY USE ONLY

☐ Reviewed
☐ Returned for Reasons Stated Below

State I.D.# _____

Reviewer's Signature: _____
Date: _____

PHOTOCOPYING PERMITTED

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E T E R M I N A T I O N O F
S A M P L I N G L O C A T I O N S

DISCUSSION ON SELECTION OF HOMOGENEOUS AREAS:

Homogeneous areas identified in this report are those areas that a US EPA AHERA trained and accredited, Virginia licensed, inspector has established as an association of common features or elements among surfacing materials, thermal system materials, or miscellaneous material that is uniform in color and texture, was likely installed during the same timeframe, and is unlikely to consist of more than one type or formulation of material. In addition, functional space was considered in assigning the boundaries of the homogeneous area by virtue of the similarities or dissimilarities of material assessment factors as described in DOCUMENT F.

The Following Homogeneous Areas were Identified:

Homogeneous Area Name: Acoustical ceiling, 2' x 4'
Homogeneous Area ID Number: M01
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: Floor tile, light green
Homogeneous Area ID Number: M02
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: Acoustical ceiling tile, 2' x 4'
Homogeneous Area ID Number: M03
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E T E R M I N A T I O N O F
S A M P L I N G L O C A T I O N S

The Following Homogeneous Areas were Identified:

Homogeneous Area Name: Homogeneous Area ID Number: M04
Floor tile, off-white
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA02 ACJASA03
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: M05
Floor tile, tan
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: M06
Floor tile, dark gray
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: M07
Floor linoleum, dark green
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E T E R M I N A T I O N O F
S A M P L I N G L O C A T I O N S

The Following Homogeneous Areas were Identified:

Homogeneous Area Name:
Floor tile, orange
Homogeneous Area ID Number: M08
Field Documents:
Sample Area : ACJASA03
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Gyp board ceiling
Homogeneous Area ID Number: M09
Field Documents:
Sample Area : ACJASA01
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Ceiling, troweled on plaster
Homogeneous Area ID Number: M10
Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Acoustical ceiling tile, 1' x 1'
Homogeneous Area ID Number: M11
Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E T E R M I N A T I O N O F
S A M P L I N G L O C A T I O N S

The Following Homogeneous Areas were Identified:

Homogeneous Area Name:
Vinyl steps
Homogeneous Area ID Number: M12
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Sheetrock walls
Homogeneous Area ID Number: M15
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Acoustical ceiling tile, 2' x 4'
Homogeneous Area ID Number: M16
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA03
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Floor tile, dark green
Homogeneous Area ID Number: M17
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Signature: M B Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E T E R M I N A T I O N O F
S A M P L I N G L O C A T I O N S

The Following Homogeneous Areas were Identified:

Homogeneous Area Name: Homogeneous Area ID Number: M99
Fire doors
Field Documents: Estimated Amount of Material: ALL
Sample Area :
Homogeneous Area: ACJAHA02 ACJAHA03
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: S13
Sprayed on foyer, outside building
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA01
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: S14
Spray on insulation beam, above windows
Field Documents: Estimated Amount of Material: 1,400 SF
Sample Area : ACJASA01 ACJASA03
Homogeneous Area: ACJAHA01 ACJAHA02
Photograph : ACJAP01 ACJAP02

Homogeneous Area Name: Homogeneous Area ID Number: T01
Pipe elbow, 18"
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E T E R M I N A T I O N O F
S A M P L I N G L O C A T I O N S

The Following Homogeneous Areas were Identified:

Homogeneous Area Name:
Boiler room, hot water tank's insulation

Homogeneous Area ID Number: T02

Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

Estimated Amount of Material: 1 EA

Homogeneous Area Name:
Boiler room, boiler's insulation

Homogeneous Area ID Number: T03

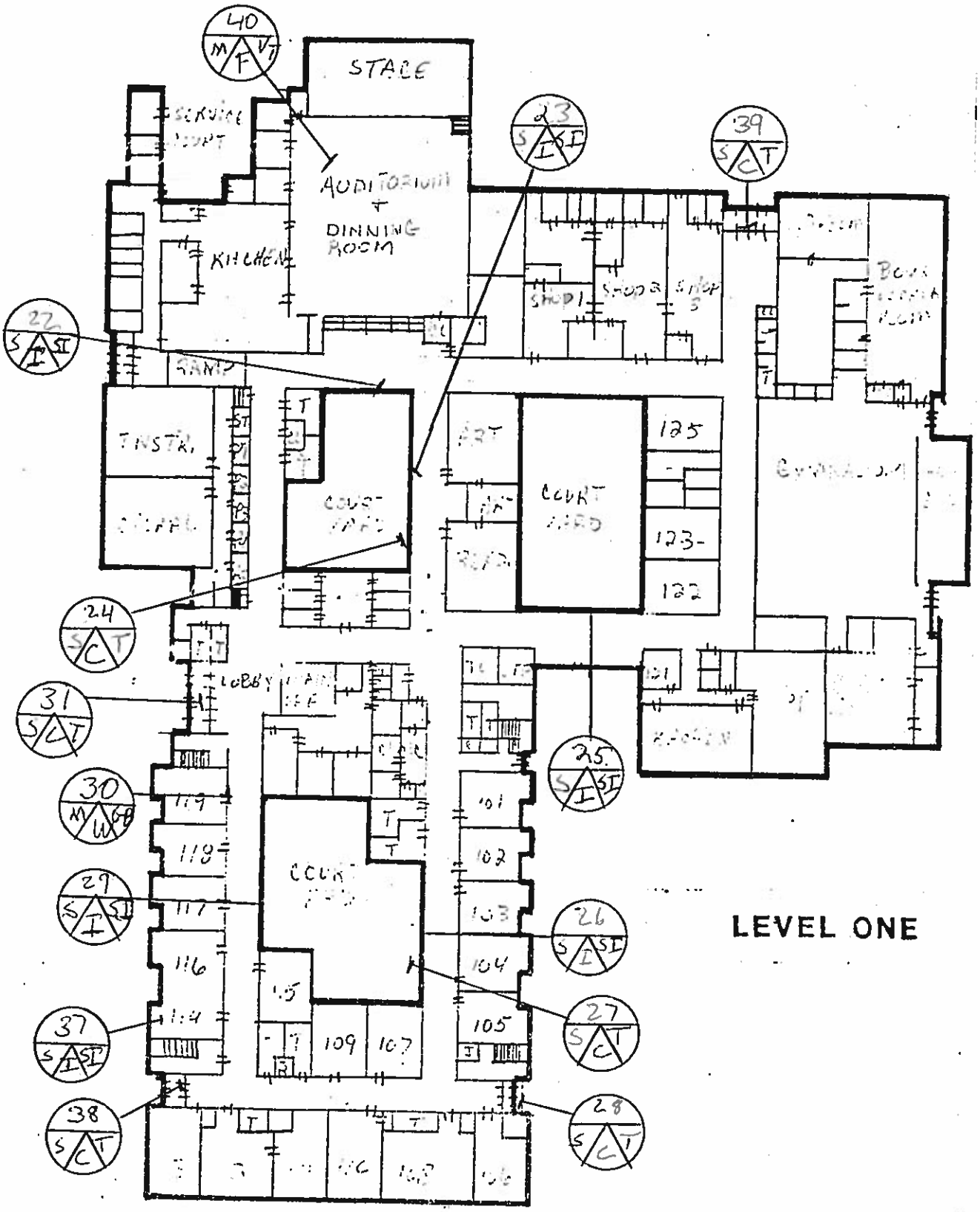
Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

Estimated Amount of Material: 1 EA

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

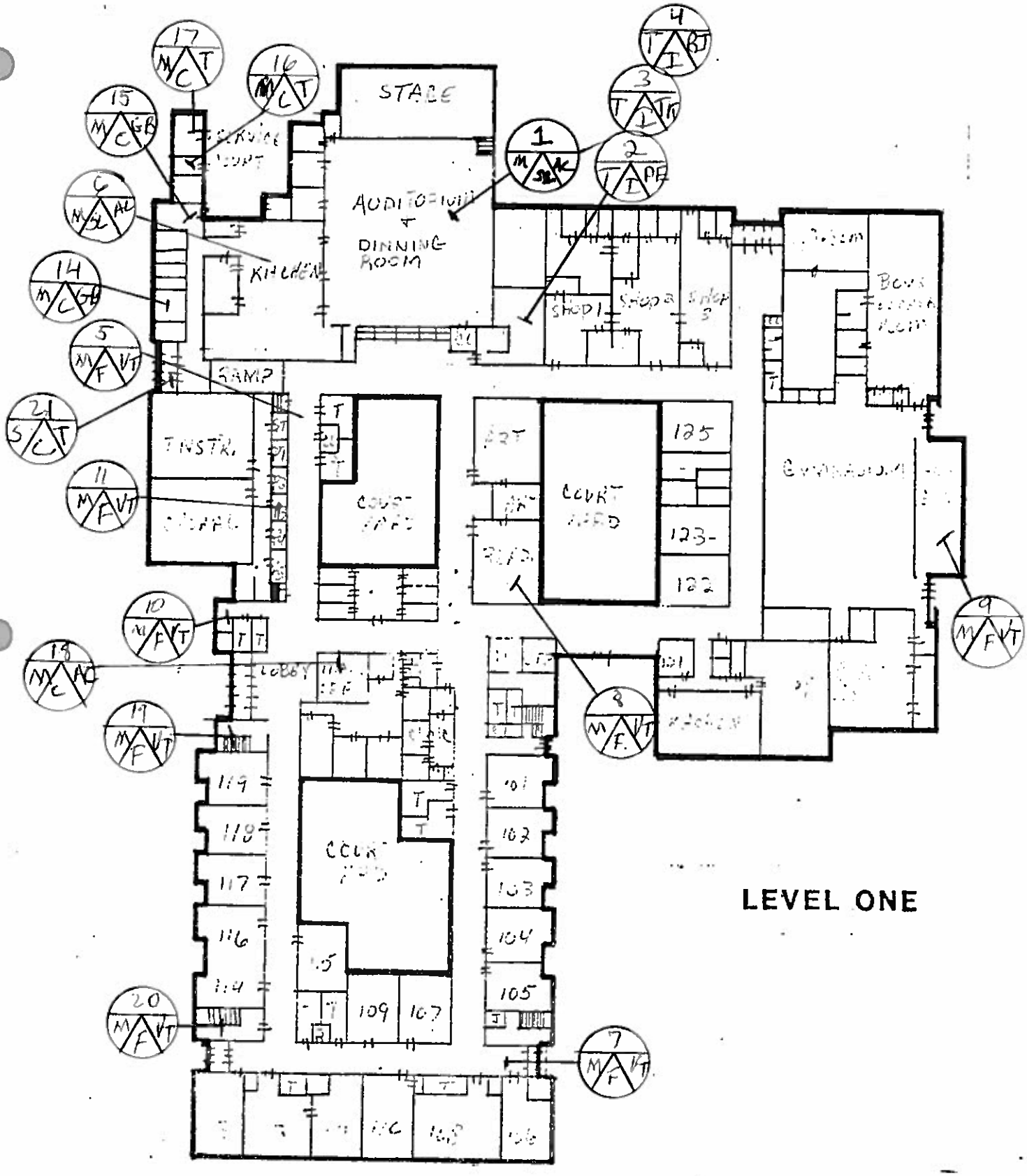
Signature: MB Wigenton Date: 10/25/88
Agency: Tufts University

JOHN ADAMS



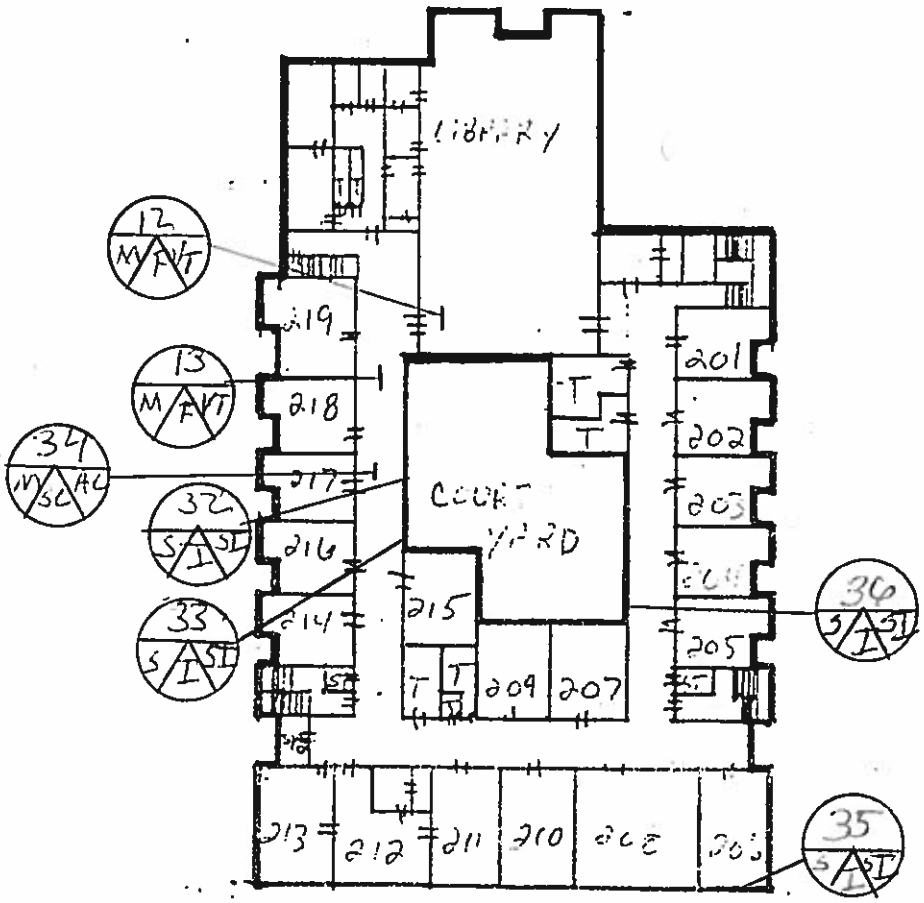
ACJASA01

JOHN ADAMS



ACJASA02

JOHN ADAMS



ACJASA03

LEVEL TWO

JB.

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F
E A C H S A M P L E A R E A

DISCUSSION ON SELECTION OF SAMPLING LOCATIONS:

After applying standard sampling protocols for miscellaneous, thermal system, and surfacing materials as discussed below, specific sampling locations were chosen by the inspector, considering the following factors: ease in sampling; minimization of excessive or unnecessary damage; homogeneity with the suspect material; low visibility of the location. In certain cases the samples were taken from already damaged areas to document asbestos content of a specific friable and damaged material or for assessment of debris associated with such damage.

The following sections and pages of this DOCUMENT D will discuss the standard sampling protocols followed for each type (miscellaneous, thermal system, surfacing) of material within its designated homogeneous area and list sample locations, and related data corresponding to each homogeneous area. All sampling location diagrams follow this DOCUMENT D.

DISCUSSION ON SELECTION OF MISCELLANEOUS MATERIAL SAMPLES:

Miscellaneous materials include interior building material finishes on structural components, structural members or fixtures. Examples include, floor and ceiling tiles. Friable and non-friable miscellaneous materials are collected from each homogeneous area by an accredited and licensed inspector in a manner sufficient to determine the presence of ACM.

The following miscellaneous materials were sampled:

Homogeneous Area Name:
Acoustical ceiling, 2' x 4'

Homogeneous Area ID Number: M01

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM01001		

Inspector: Mike Wigenton Signature: MBWigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F E A C H S A M P L E A R E A

The following miscellaneous materials were sampled:

Homogeneous Area Name:
Floor tile, light green

Homogeneous Area ID Number: M02

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM02005	05/05/88	ACJAM02007

Homogeneous Area Name:
Acoustical ceiling tile, 2' x 4'

Homogeneous Area ID Number: M03

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM03006		

Homogeneous Area Name:
Floor tile, off-white

Homogeneous Area ID Number: M04

Field Documents:
Sample Area : ACJASA02 ACJASA03
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM04008	05/05/88	ACJAM04013

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F
E A C H S A M P L E A R E A

The following miscellaneous materials were sampled:

Homogeneous Area Name:
Floor tile, tan

Homogeneous Area ID Number: M05

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM05009		

Homogeneous Area Name:
Floor tile, dark gray

Homogeneous Area ID Number: M06

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM06010	05/05/88	ACJAM06Q010

Homogeneous Area Name:
Floor linoleum, dark green

Homogeneous Area ID Number: M07

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM07011		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F
E A C H S A M P L E A R E A

The following miscellaneous materials were sampled:

Homogeneous Area Name:
Floor tile, orange

Homogeneous Area ID Number: M08

Field Documents:
Sample Area : ACJASA03
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM08012		

Homogeneous Area Name:
Gyp board ceiling

Homogeneous Area ID Number: M09

Field Documents:
Sample Area : ACJASA01
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM09014	05/05/88	ACJAM09015

Homogeneous Area Name:
Ceiling, troweled on plaster

Homogeneous Area ID Number: M10

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM10016	05/05/88	ACJAM10017

Inspector: Mike Wigenton Signature: MR Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F
E A C H S A M P L E A R E A

The following miscellaneous materials were sampled:

Homogeneous Area Name:
Acoustical ceiling tile, 1' x 1'

Homogeneous Area ID Number: M11

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM11018		

Homogeneous Area Name:
Vinyl steps

Homogeneous Area ID Number: M12

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM12019	05/05/88	ACJAM12020

Homogeneous Area Name:
Sheetrock walls

Homogeneous Area ID Number: M15

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM15030		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F E A C H S A M P L E A R E A

The following miscellaneous materials were sampled:

Homogeneous Area Name:
Acoustical ceiling tile, 2' x 4'
Homogeneous Area ID Number: M16
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA03
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM16034		

Homogeneous Area Name:
Floor tile, dark green
Homogeneous Area ID Number: M17
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAM17040		

Homogeneous Area Name:
Fire doors
Homogeneous Area ID Number: M99
Field Documents:
Estimated Amount of Material: ALL
Sample Area :
Homogeneous Area: ACJAHA02 ACJAHA03
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID

*** ASSUMED POSITIVE - NO SAMPLES COLLECTED ***

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F
E A C H S A M P L E A R E A

DISCUSSION ON SELECTION OF SURFACING MATERIAL SAMPLES:

The AFMA accredited inspector, collects, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM. Three bulk samples are collected for homogeneous areas of 1000 sq/ft or less; 5 bulk samples are collected for homogeneous areas greater than 1000 sq/ft and less than 5000 sq/ft; At least 7 samples are collected for all areas greater than 5000 sq/ft.

The following surfacing materials were sampled:

Homogeneous Area Name: Homogeneous Area ID Number: S13
Sprayed on foyer, outside building
Field Documents: Estimated Amount of Material: 0
Sample Area : ACJASA01
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAS13021	05/05/88	ACJAS13024
05/05/88	ACJAS13027	05/05/88	ACJAS13028
05/05/88	ACJAS13031	05/05/88	ACJAS13038
05/05/88	ACJAS13039	05/05/88	ACJAS13Q027
05/05/88	ACJAS13Q039		

Homogeneous Area Name: Homogeneous Area ID Number: S14
Spray on insulation beam, above windows
Field Documents: Estimated Amount of Material: 1,400 SF
Sample Area : ACJASA01 ACJASA03
Homogeneous Area: ACJAHA01 ACJAHA02
Photograph : ACJAP01 ACJAP02

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAS14022	05/05/88	ACJAS14023
05/05/88	ACJAS14025	05/05/88	ACJAS14026
05/05/88	ACJAS14029	05/05/88	ACJAS14032
05/05/88	ACJAS14033	05/05/88	ACJAS14035
05/05/88	ACJAS14036	05/05/88	ACJAS14037
05/05/88	ACJAS14Q029		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F
E A C H S A M P L E A R E A

DISCUSSION ON SELECTION OF THERMAL SYSTEM SAMPLES:

AFMA's accredited inspector's collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that are not assumed to be ACM. At least one bulk sample for patched thermal system insulation is also collected (areas less than 6 linear or square feet). Inspectors also sample cemented or plaster type fittings such as tees, elbows, and valves. The number of these such samples depends on the inspectors needs to assess system ACM content.

The following thermal system materials were sampled:

Homogeneous Area Name: Pipe elbow, 18"
Homogeneous Area ID Number: T01
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACJASA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAT01002		

Homogeneous Area Name: Boiler room, hot water tank's insulation
Homogeneous Area ID Number: T02
Field Documents:
Estimated Amount of Material: 1 EA
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAT02003		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

D E S C R I P T I O N O F E A C H S A M P L E A R E A

The following thermal system materials were sampled:

Homogeneous Area Name:
Boiler room, boiler's insulation

Homogeneous Area ID Number: T03

Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

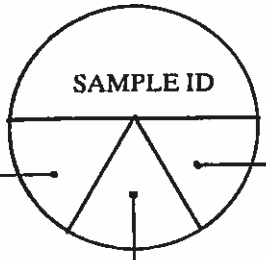
Estimated Amount of Material: 1 EA

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
05/05/88	ACJAT03004		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/25/88
Accreditation Number: 8802-02-063 Agency: Tufts University

SYMBOLS KEY



MATERIAL TYPES

S	SURFACE
T	THERMAL
M	MISCELLANEOUS

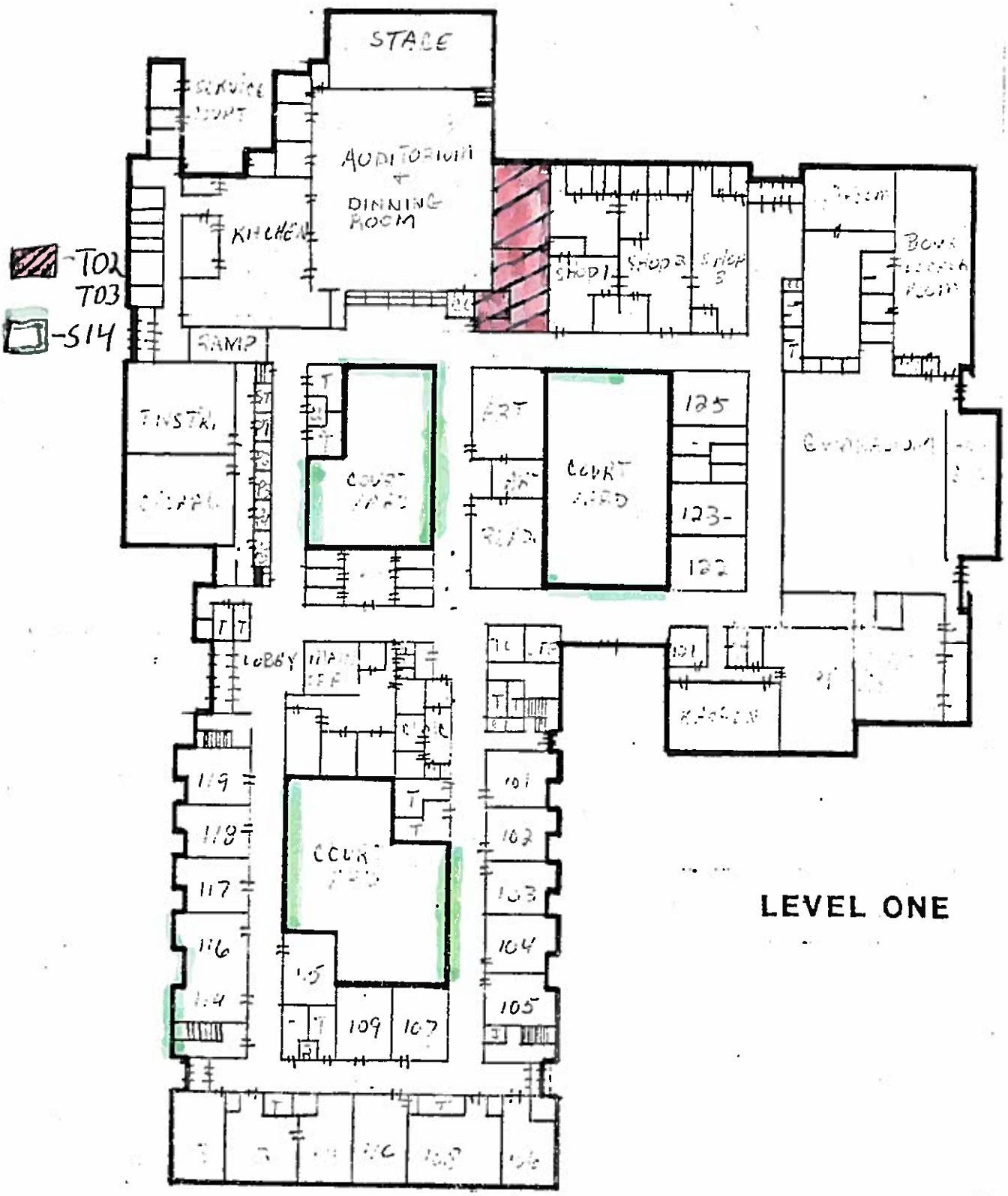
LOCATION CODES

C	CEILING
W	WALL
F	FLOOR
B	BASE
I	INSULATION
CP	CRAWL SPACE
SC	SUSPENDED CEILING
CF	CAFETERIA

MATERIAL DESCRIPTION CODES

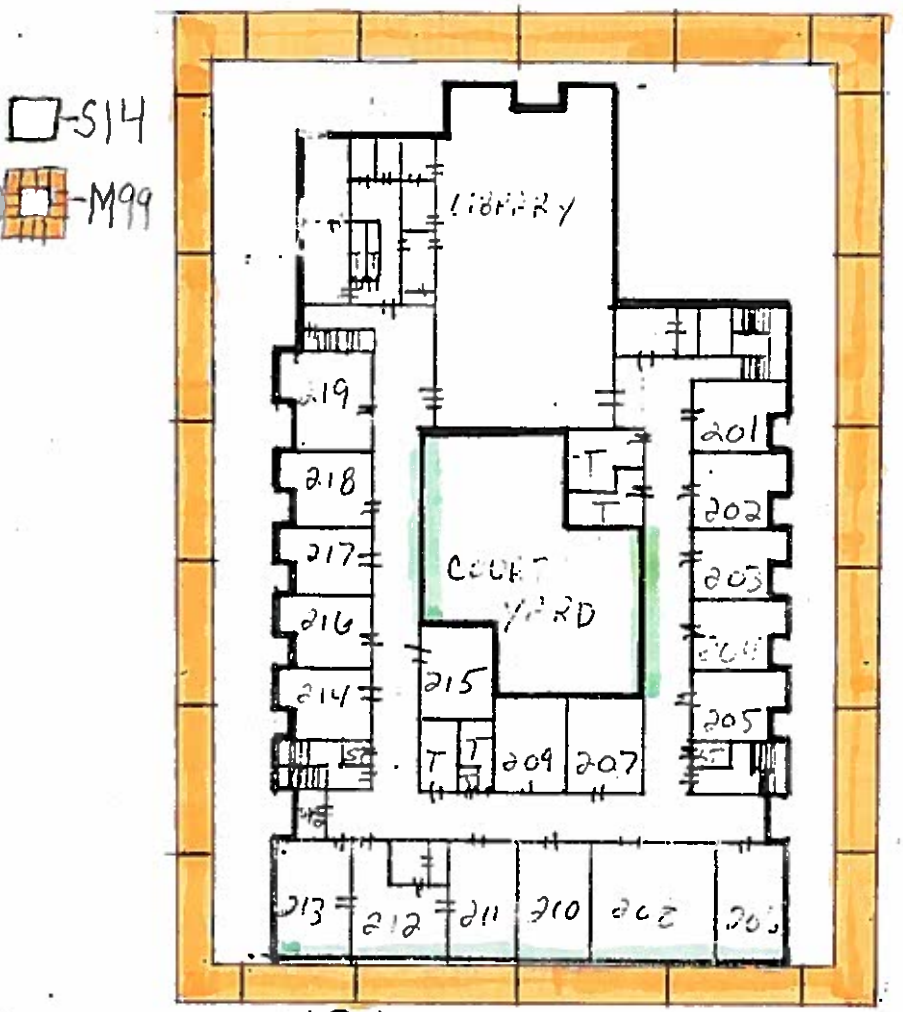
FD	FIRE DOOR
R	ROPE
RD	ROOF DRAIN
EA	EARTH
DE	DEBRIS
SO	SPRAY ON PLASTER
T	TROWELED ON PLASTER
TX	TEXTURED PLASTER
PL	PLASTER WALL/CEILING
PB	PLASTER BOARD
PG	PEG BOARD
GB	GYPSUM BOARD/SHEET ROCK
VW	VINYL COVERING
PM	PATCHING MATERIAL
TW	TAR WRAP
CD	CLASSROOM DIVIDER
CN	FIRE CURTAIN
AC	ACOUSTICAL TILE
SI	SPRAY INSULATION ON STRUCTURAL MEMBERS
TK	TANK INSULATION
D	DUCT INSULATION
IR	INCINERATOR INSULATION
BI	BLOWN-IN INSULATION
GI	GENERAL INSULATION
FC	FLEX CONNECTORS
GK	GASKET
BJ	BOILER JACKET
HS	HANGING STRAP CRADLE
SK	STACK BREECHING/EXHAUST STACK
TB	TRANSITE BOARD
TP	TRANSITE PIPE
TD	TRANSITE DUCT
VT	VINYL TILE/COMPOSITION TILE
RS	RESILIENT SHEET
VB	VINYL BASE
CM	CONCRETE/MASONRY
SD	STAIR TREAD
GM	GLUE/MASTIC
SP	STRAIGHT PIPE
PE	PIPE ELBOW
PJ	PIPE JOINT
PV	PIPE VALVE
PH	PIPE HANGER
PW	PIPE WRAPPING

JOHN ADAMS



ACJAHA01

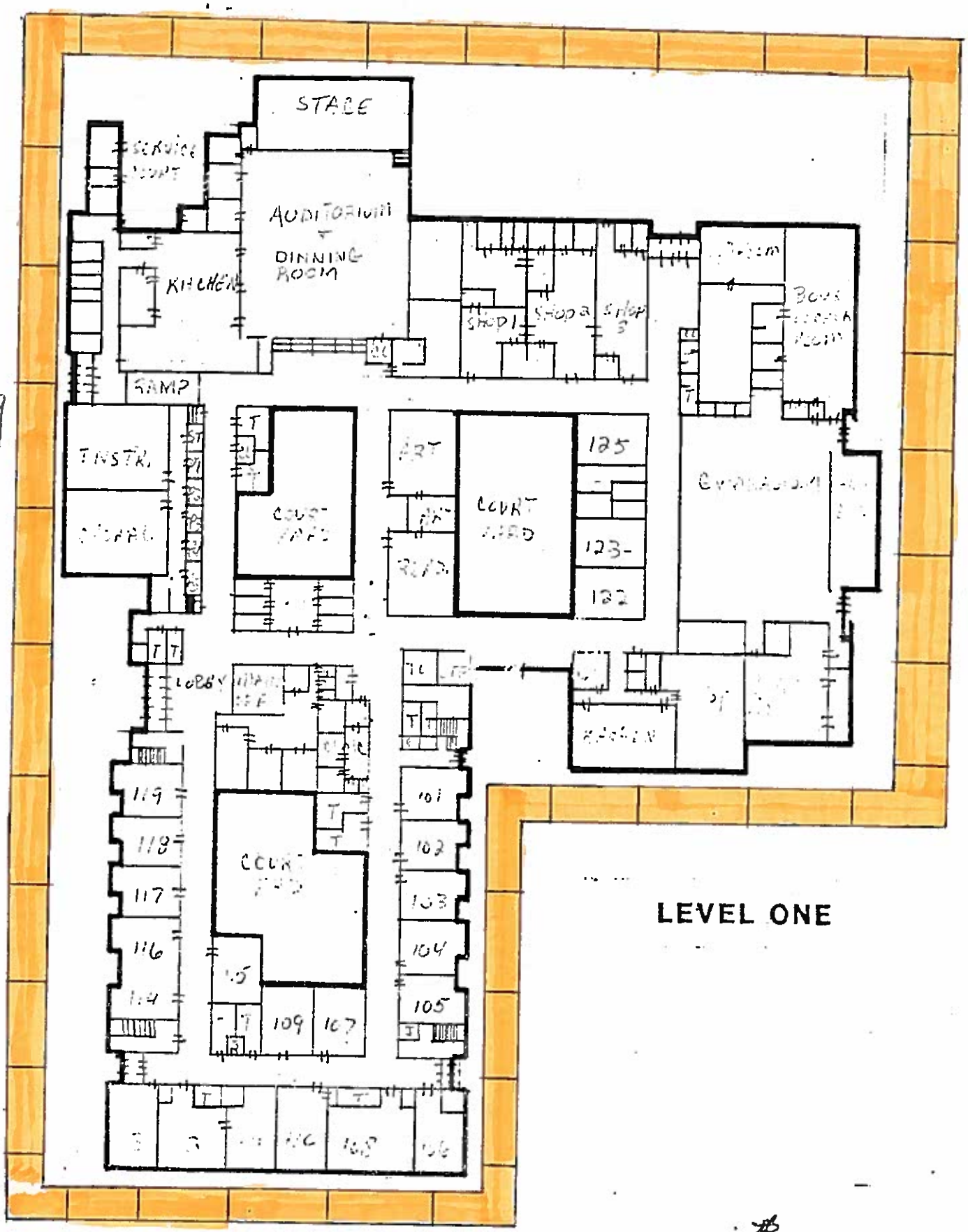
JOHN ADAMS



ACJAHA02 LEVEL TWO

JB.

JOHN ADAMS



AGJAHA03

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Acoustical ceiling, 2' x 4'

Homogeneous Area ID Number: M01

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM01001	8083294-1530			AML	Pink & white, pressed, easily separated,
			TOTAL:	<1		fibrous material

Homogeneous Area Name:
Floor tile, light green

Homogeneous Area ID Number: M02

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM02005	8083298-1530			AML	Olive-green, solid, difficult to crush,
			TOTAL:	<1		fibrous material
05/05/88	ACJAM02007	8083304-1530	Chrysotile	Tr. <1	AML	Olive-green, solid, difficult to crush,
			TOTAL:	Tr. <1		fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Acoustical ceiling tile, 2' x 4'

Homogeneous Area ID Number: M03

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM03006	8083299-1530	TOTAL:	<1	AML	Pink & white, pressed, easily separated, fibrous material

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Homogeneous Area Name:
Floor tile, off-white

Homogeneous Area ID Number: M04

Field Documents:
Sample Area : ACJASA02 ACJASA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM04008	8083305-1530	TOTAL:	<1	AML	Beige, solid, difficult to crush, fibrous material
05/05/88	ACJAM04013	8083310-1530	TOTAL:	<1	AML	Beige, solid, difficult to crush, fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Floor tile, tan

Homogeneous Area ID Number: M05

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM05009	8083306-1530			AML	Brown, solid, difficult to crush,
			TOTAL:	<1		fibrous material

Homogeneous Area Name:
Floor tile, dark gray

Homogeneous Area ID Number: M06

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM06010	8083307-1530			AML	Gray, solid, difficult to crush,
			TOTAL:	<1		fibrous material

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM06Q010	04A	Chrysotile	Tr. <1	BIO	
			TOTAL:	Tr. <1		

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Floor linoleum, dark green

Homogeneous Area ID Number: M07

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM07011	8083308-1530			AML	Dark-green & brown, easily separated,
			TOTAL:	<1		fibrous material

Homogeneous Area Name:
Floor tile, orange

Homogeneous Area ID Number: M08

Field Documents:
Sample Area : ACJASA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM08012	8083309-1530			AML	Orange, solid, difficult to crush,
			TOTAL:	<1		fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Gyp board ceiling

Homogeneous Area ID Number: M09

Field Documents:
Sample Area : ACJASA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM09014	8083311-1530			AML	Gray, firm, easily crushed,
			TOTAL:	<1		fibrous material
05/05/88	ACJAM09015	8083312-1530			AML	Gray, easily crushed, fibrous material
			TOTAL:	<1		

Homogeneous Area Name:
Ceiling, troweled on plaster

Homogeneous Area ID Number: M10

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM10016	8083313-1530			AML	Gray, firm, easily crushed,
			TOTAL:	<1		fibrous material
05/05/88	ACJAM10017	8083300-1530			AML	Tan & white, easily crushed material
			TOTAL:	<1		

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Acoustical ceiling tile, 1' x 1'

Homogeneous Area ID Number: M11

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM11018	8083301-1530			AML	Tan, firmly pressed, easily separated,
			TOTAL:	<1		fibrous material

Homogeneous Area Name:
Vinyl steps

Homogeneous Area ID Number: M12

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM12019	8083302-1530			AML	Brown, firm rubber-like material
			TOTAL:	<1		
05/05/88	ACJAM12020	8083314-1530			AML	Brown, firm, rubber-like,
			TOTAL:	<1		fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Sheetrock walls

Homogeneous Area ID Number: M15

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM15030	8083324-1530			AML	Gray, solid, easily crushed,
			TOTAL:	<1		fibrous material

Homogeneous Area Name:
Acoustical ceiling tile, 2' x 4'

Homogeneous Area ID Number: M16

Field Documents:
Sample Area : ACJASA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM16034	8083328-1530			AML	Pink & white, pressed, easily separated,
			TOTAL:	<1		fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Floor tile, dark green

Homogeneous Area ID Number: M17

Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAM17040	8083334-1530			AML	Green, solid, difficult to crush,
			TOTAL:	<1		fibrous material

Homogeneous Area Name:
Sprayed on foyer, outside building

Homogeneous Area ID Number: S13

Field Documents:
Sample Area : ACJASA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS13021	8083315-1530			AML	Gray & white, fibrous granular material
			TOTAL:	<1		
05/05/88	ACJAS13024	8083318-1530			AML	White, powdery, fibrous material
			TOTAL:	<1		
05/05/88	ACJAS13027	8083321-1530			AML	White, fine granular material
			TOTAL:	<1		
05/05/88	ACJAS13028	8083322-1530			AML	White granular material
			TOTAL:	<1		

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name:
Sprayed on foyer, outside building

Homogeneous Area ID Number: S13

Field Documents:
Sample Area : ACJASA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS13031	8083325-1530			AML	White & gray, rough granular,
			TOTAL:	<1		fibrous material
05/05/88	ACJAS13038	8083332-1530			AML	White, granular material
			TOTAL:	<1		
05/05/88	ACJAS13039	8083333-1530			AML	White, granular, fibrous material
			TOTAL:	<1		

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS13Q027	03A			BIO	
			TOTAL:	NAFD		
05/05/88	ACJAS13Q039	01A			BIO	
			TOTAL:	NAFD		

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: S14
Spray on insulation beam, above windows
Field Documents:
Sample Area : ACJASA01 ACJASA03
Homogeneous Area: ACJAHA01 ACJAHA02

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS14022	8083316-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material
05/05/88	ACJAS14023	8083317-1530	Chrysotile	15-20	AML	Tan, soft, easily separated,
			TOTAL:	15-20		fibrous material
05/05/88	ACJAS14025	8083319-1530	Chrysotile	20-25	AML	Tan, soft, easily separated,
			TOTAL:	20-25		fibrous material
05/05/88	ACJAS14026	8083320-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14029	8083323-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14032	8083326-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14033	8083327-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14035	8083329-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material
05/05/88	ACJAS14036	8083330-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material
05/05/88	ACJAS14037	8083331-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: S14
Spray on insulation beam, above windows
Field Documents:
Sample Area : ACJASA01 ACJASA03
Homogeneous Area: ACJAHA01 ACJAHA02

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS14Q029	02A	Chrysotile	15-20	BIO	
			Amosite	01-02	BIO	
			TOTAL:	15-20		

Homogeneous Area Name: Homogeneous Area ID Number: T01
Pipe elbow, 18"
Field Documents:
Sample Area : ACJASA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAT01002	8083295-1530			AML	Gray, easily crushed, fibrous material
			TOTAL:	<1		

See Appendix 1 for Laboratory Information and Certification Statements.

Virginia Department of Education
Energy and Facilities Services

B U L K S A M P L E
A N A L Y S I S

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T02
Boiler room, hot water tank's insulation
Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAT02003	8083296-1530	Chrysotile	10-15	AML	Tan, firm, easily crushed, fibrous
			Amosite	01-05	AML	material
			TOTAL:	15-20		

Homogeneous Area Name: Homogeneous Area ID Number: T03
Boiler room, boiler's insulation
Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAT03004	8083297-1530	Chrysotile	50-55	AML	Gray, soft, easily separated,
			TOTAL:	50-55		fibrous material

See Appendix 1 for Laboratory Information and Certification Statements.

AMERICAN MEDICAL LABORATORIES, INC.®
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Age and sex dependent normal values are printed when available
if age and sex are designated. Otherwise, adult values are given.

INDUSTRIAL HYGIENE DEPARTMENT

RECEIVED : 05/27/88
RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1250

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8083294	ACJAM01001	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3740 : ACJA M01 001		
	GROSS DESCRIPTION:		
	PINK AND WHITE, PRESSED, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	85-90	%
	CELLULOSE:	25-30	%
	FIBROUS GLASS:	55-60	%
	NON-FIBROUS:	5-10	%
	UNSPECIFIED:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083295	ACJAT01002	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3741 : ACJA T01 002		
	GROSS DESCRIPTION:		
	GRAY, EASILY CRUSHED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	15-20	%
	CELLULOSE:	1-5	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	75-80	%
	QUARTZ:	10-15	%
	GYPSUM:	60-65	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083296	ACJAT02003	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		

CONTINUED ON NEXT PAGE

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

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INDUSTRIAL HYGIENE DEPARTMENT

RECEIVED : 05/27/88
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REPORTED : 07/10/88
WORK ORDER: 1250

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	SITE OR LOCATION:		
	7346-3742 : ACJA T02 003		
	GROSS DESCRIPTION:		
	TAN, FIRM, EASILY CRUSHED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	15-20	%
	CHRYSOTILE:	10-15	%
	AMOSITE:	1-5	%
	FIBROUS NON-ASBEST:	15-20	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	55-60	%
	QUARTZ:	1-5	%
	GYPSUM:	50-55	%
	ANALYST:	N. ALTON BARTLETT	
8083297	ACJAT03004	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3743 : ACJA T03 004		
	GROSS DESCRIPTION:		
	GRAY, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	50-55	%
	CHRYSOTILE:	50-55	%
	NON-FIBROUS:	40-45	%
	UNSPECIFIED:	5-10	%
	QUARTZ:	1-5	%
	GYPSUM:	25-30	%
	ANALYST:	N. ALTON BARTLETT	
8083298	ACJAM02005	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3744 : ACJA M02 005		
	GROSS DESCRIPTION:		
	OLIVE-GREEN, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	QUARTZ:	10-15	%
	CALCITE:	15-20	%
	GYPSUM:	55-60	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	

N. Alton Bartlett

8083301	ACJAM11018	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3748 : ACJA M11 018		
	GROSS DESCRIPTION:		
	TAN, FIRMLY PRESSED, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	80-85	%
	CELLULOSE:	15-20	%
	FIBROUS GLASS:	60-65	%
	NON-FIBROUS:	10-15	%
	UNSPECIFIED:	1-5	%
	GYPSUM:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	

N. Alton Bartlett

8083302	ACJAM12019	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3749 : ACJA M12 019		
	GROSS DESCRIPTION:		
	BROWN, FIRM RUBBER-LIKE MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	55-60	%
	CALCITE:	35-40	%
	NOTES:	No asbestiform minerals observed.	

CONTINUED ON NEXT PAGE

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER----------VALUE-----UNITS----------

CONTINUED FROM PRIOR PAGE

ANALYST: N. ALTON BARTLETT

N. Alton Bartlett

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE

IRA D. GODWIN, M.D.
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WORK ORDER: 1251

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8083304	ACJAM02007	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3730 : ACJA M02 007		
	GROSS DESCRIPTION:		
	OLIVE-GREEN, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	CHRYSOTILE:	TRACE	%
	FIBROUS NON-ASBEST:	5-10	%
	CELLULOSE:	5-10	%
	NON-FIBROUS:	85-90	%
	UNSPECIFIED:	10-15	%
	QUARTZ:	1-5	%
	CALCITE:	65-70	%
	ANALYST:	N. ALTON BARTLETT	
8083305	ACJAM04008	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3731 : ACJA M04 008		
	GROSS DESCRIPTION:		
	BEIGE, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	1-5	%
	QUARTZ:	1-5	%
	CALCITE:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083306	ACJAM05009	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	SITE OR LOCATION:		
	7346-3732 : ACJA M05 009		
	GROSS DESCRIPTION:		
	BROWN, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	1-5	%
	QUARTZ:	5-10	%
	CALCITE:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083307	ACJAM06010	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3733 : ACJA M06 010		
	GROSS DESCRIPTION:		
	GRAY, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	1-5	%
	QUARTZ:	1-5	%
	CALCITE:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083308	ACJAM07011	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3734 : ACJA M07 011		

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ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	GROSS DESCRIPTION:		
	DARK-GREEN AND BROWN, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	15-20	%
	CELLULOSE:	15-20	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083309	ACJAM08012	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3735 : ACJA M08 012		
	GROSS DESCRIPTION:		
	ORANGE, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	1-5	%
	QUARTZ:	1-5	%
	CALCITE:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083310	ACJAM04013	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3736 : ACJA M04 013		
	GROSS DESCRIPTION:		
	BEIGE, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	1-5	%
	QUARTZ:	5-10	%
	CALCITE:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083311	ACJAM09014	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3737 : ACJA M09 014		
	GROSS DESCRIPTION:		
	GRAY, FIRM, EASILY CRUSHED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	1-5	%
	QUARTZ:	10-15	%
	GYPSUM:	60-65	%
	PERLITE:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083312	ACJAM09015	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3738 : ACJA M09 015		
	GROSS DESCRIPTION:		
	GRAY, EASILY CRUSHED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	QUARTZ:	15-20	%
	GYPSUM:	70-75	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083313	ACJAM10016	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3739 : ACJA M10 016		
	GROSS DESCRIPTION:		
	GRAY, FIRM, EASILY CRUSHED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	QUARTZ:	15-20	%
	GYPSUM:	60-65	%
	PERLITE:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE

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WORK ORDER: 1252

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8083314	ACJAM12020	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3750 : ACJA M12 020		
	GROSS DESCRIPTION:		
	BROWN, FIRM, RUBBER-LIKE, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	60-65	%
	CALCITE:	25-30	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083315	ACJAS13021	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3751 : ACJA S13 021		
	GROSS DESCRIPTION:		
	GRAY AND WHITE, FIBROUS GRANULAR MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	MICA/VERMICULITE:	5-10	%
	QUARTZ:	15-20	%
	GYPSUM:	60-65	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083316	ACJAS14022	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	7346-3752 : ACJA S14 022		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	25-30	%
	CHRYSOTILE:	25-30	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	60-65	%
	MICA/VERMICULITE:	15-20	%
	GYPSUM:	40-45	%
	ANALYST:	N. ALTON BARTLETT	
8083317	ACJAS14023	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3753 : ACJA S14 023		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	15-20	%
	CHRYSOTILE:	15-20	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	70-75	%
	MICA/VERMICULITE:	20-25	%
	GYPSUM:	45-50	%
	ANALYST:	N. ALTON BARTLETT	
8083318	ACJAS13024	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3754 : ACJA S13 024		
	GROSS DESCRIPTION:		
	WHITE, POWDERY, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%

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7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	NON-FIBROUS:	90-95	%
	QUARTZ:	10-15	%
	GYPSUM:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083319	ACJAS14025	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3755 : ACJA S14 025		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	20-25	%
	CHRYSOTILE:	20-25	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	65-70	%
	MICA/VERMICULITE:	25-30	%
	GYPSUM:	35-40	%
	ANALYST:	N. ALTON BARTLETT	
8083320	ACJAS14026	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3756 : ACJA S14 026		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	30-35	%
	CHRYSOTILE:	30-35	%
	NON-FIBROUS:	60-65	%
	MICA/VERMICULITE:	30-35	%
	GYPSUM:	25-30	%
	ANALYST:	N. ALTON BARTLETT	
8083321	ACJAS13027	BULK SAMPLE	

CONTINUED ON NEXT PAGE

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

AMERICAN MEDICAL LABORATORIES, INC.®
P.O. Box 188 • 11091 Main Street
Fairfax, Virginia 22030-0188
Telephone: (703) 691-9120
Toll free number: (800) 336-3718 / In Virginia call (800) 572-2068
Age and sex dependent normal values are printed when available
if age and sex are designated. Otherwise, adult values are given.

INDUSTRIAL HYGIENE DEPARTMENT

M

RECEIVED : 05/27/88
RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1252

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3757 : ACJA S13 027		
	GROSS DESCRIPTION:		
	WHITE, FINE GRANULAR MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	QUARTZ:	40-45	%
	GYPSUM:	50-55	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	

N. Alton Bartlett

8083322	ACJAS13028	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3758 : ACJA S13 028		
	GROSS DESCRIPTION:		
	WHITE GRANULAR MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	QUARTZ:	55-60	%
	GYPSUM:	35-40	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	

N. Alton Bartlett

8083323	ACJAS14029	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3759 : ACJA S14 029		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	30-35	%
	CHRYSOTILE:	30-35	%

CONTINUED ON NEXT PAGE

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REPORTED : 07/10/88
WORK ORDER: 1252

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER	VALUE	UNITS
CONTINUED FROM PRIOR PAGE		
NON-FIBROUS:	60-65	%
MICA/VERMICULITE:	20-25	%
GYPSUM:	35-40	%
ANALYST:	N. ALTON BARTLETT	

N. Alton Bartlett

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE

IRA D. GODWIN, M.D.
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INDUSTRIAL HYGIENE DEPARTMENT

RECEIVED : 05/27/88
RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1253

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8083324	ACJAM15030	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3760 : ACJA M15 030		
	GROSS DESCRIPTION:		
	GRAY, SOLID, EASILY CRUSHED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	QUARTZ:	5-10	%
	GYPSUM:	65-70	%
	PERLITE:	10-15	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083325	ACJAS13031	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3761 : ACJA S13 031		
	GROSS DESCRIPTION:		
	WHITE AND GRAY, ROUGH GRANULAR, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	QUARTZ:	40-45	%
	GYPSUM:	45-50	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083326	ACJAS14032	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		

CONTINUED ON NEXT PAGE

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RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1253

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	7346-3762 : ACJA S14 032		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	30-35	%
	CHRYSOTILE:	30-35	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	55-60	%
	MICA/VERMICULITE:	25-30	%
	GYPSUM:	25-30	%
	ANALYST:	N. ALTON BARTLETT	
8083327	ACJAS14033	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3763 : ACJA S14 033		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	30-35	%
	CHRYSOTILE:	30-35	%
	NON-FIBROUS:	60-65	%
	MICA/VERMICULITE:	20-25	%
	GYPSUM:	35-40	%
	ANALYST:	N. ALTON BARTLETT	
8083328	ACJAM16034	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3764 : ACJA M16 034		
	GROSS DESCRIPTION:		
	PINK AND WHITE, PRESSED, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	85-90	%
	CELLULOSE:	25-30	%
	FIBROUS GLASS:	55-60	%

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INDUSTRIAL HYGIENE DEPARTMENT

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RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1253

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
	NON-FIBROUS:	5-10	%
	UNSPECIFIED:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083329	ACJAS14035	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3765 : ACJA S14 035		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	25-30	%
	CHRYSOTILE:	25-30	%
	FIBROUS NON-ASBEST:	1-5	%
	FIBROUS GLASS:	1-5	%
	NON-FIBROUS:	60-65	%
	MICA/VERMICULITE:	30-35	%
	GYPSUM:	25-30	%
	ANALYST:	N. ALTON BARTLETT	
8083330	ACJAS14036	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3766 : ACJA S14 036		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	25-30	%
	CHRYSOTILE:	25-30	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	60-65	%
	MICA/VERMICULITE:	30-35	%
	GYPSUM:	25-30	%
	ANALYST:	N. ALTON BARTLETT	

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INDUSTRIAL HYGIENE DEPARTMENT

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RECEIVED : 05/27/88
RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1253

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
	CONTINUED FROM PRIOR PAGE		
8083331	ACJAS14037	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3767 : ACJA S14 037		
	GROSS DESCRIPTION:		
	TAN, SOFT, EASILY SEPARATED, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	25-30	%
	CHRYSOTILE:	25-30	%
	FIBROUS NON-ASBEST:	5-10	%
	CELLULOSE:	1-5	%
	FIBROUS GLASS:	1-5	%
	NON-FIBROUS:	55-60	%
	MICA/VERMICULITE:	30-35	%
	GYPSUM:	20-25	%
	ANALYST:	N. ALTON BARTLETT	
8083332	ACJAS13038	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3768 : ACJA S13 038		
	GROSS DESCRIPTION:		
	WHITE, GRANULAR MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	QUARTZ:	40-45	%
	GYPSUM:	50-55	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT	
8083333	ACJAS13039	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3769 : ACJA S13 039		
	GROSS DESCRIPTION:		

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INDUSTRIAL HYGIENE DEPARTMENT

M

RECEIVED : 05/27/88
RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1253

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER	VALUE	UNITS
CONTINUED FROM PRIOR PAGE		
WHITE, GRANULAR, FIBROUS MATERIAL		
TOTAL % ASBESTOS:	<1	%
FIBROUS NON-ASBEST:	1-5	%
CELLULOSE:	1-5	%
NON-FIBROUS:	90-95	%
QUARTZ:	50-55	%
GYPSUM:	35-40	%
NOTES:	No asbestiform minerals observed.	
ANALYST:	N. ALTON BARTLETT	

N. Alton Bartlett

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE

IRA D. GODWIN, M.D.
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INDUSTRIAL HYGIENE DEPARTMENT

RECEIVED : 05/27/88
RELEASED : 07/09/88
REPORTED : 07/10/88
WORK ORDER: 1254

7346 A. F. MEYER, VIRGINIA
ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8083334	ACJAN17040	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	SITE OR LOCATION:		
	7346-3770 : ACJA M17 040		
	GROSS DESCRIPTION:		
	GREEN, SOLID, DIFFICULT TO CRUSH, FIBROUS MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	5-10	%
	QUARTZ:	1-5	%
	CALCITE:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	N. ALTON BARTLETT/V.	

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

Received: 05/23/88

BIOSPHERICS INC REPORT Work Order # 88-05-417
Results by Sample

MBW

SAMPLE ID ACJASQC039 → ACJAS13Q039 FRACTION 01A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 05/26/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	NAD
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
NANF	99+%

Definitions of Reporting Terms.
NAD = No Asbestos Detected. * = Presence Noted.
NANF = Non-asbestos Non-fibrous.
Trace = Trace Amounts Noted; less than 1%
Sample Information:
SAMPLE COLLECTED BY RENEE E. WASHINGTON

MBW

SAMPLE ID ACJASQC029 ACJAS14Q029 FRACTION 02A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 05/26/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	15-20%
% Amosite	1-2%
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
FIBROUS GLASS	TRACE
NANF	75-80%

Definitions of Reporting Terms.
NAD = No Asbestos Detected. * = Presence Noted.
NANF = Non-asbestos Non-fibrous.
Trace = Trace Amounts Noted; less than 1%
Sample Information:
SAMPLE COLLECTED BY RENEE E. WASHINGTON

Received: 05/23/88 Results by Sample

SAMPLE ID ACJASQC027 → ACJHS13Q(027 (mw) FRACTION 03A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 05/26/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	NAD
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
NANF	99+%

Definitions of Reporting Terms.
NAD = No Asbestos Detected. * = Presence Noted.
NANF = Non-asbestos Non-fibrous.
Trace = Trace Amounts Noted; less than 1%
Sample Information:
SAMPLE COLLECTED BY RENEE E. WASHINGTON

SAMPLE ID ACJAMQC010 → ACJAM06Q(010 (mw) FRACTION 04A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 05/26/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	TR,<1%
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
FIBROUS GLASS	TRACE
NANF	98+%

Definitions of Reporting Terms.
NAD = No Asbestos Detected. * = Presence Noted.
NANF = Non-asbestos Non-fibrous.
Trace = Trace Amounts Noted; less than 1%
Sample Information:
SAMPLE COLLECTED BY RENEE E. WASHINGTON

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name:
Fire doors

Homogeneous Area ID Number : M99

Field Documents:
Sample Area :
Homogeneous Area: ACJAHA02 ACJAHA03
Photograph :

Estimated Amount of Material: ALL

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
The integrity of the fire doors prevents access or contact with the asbestos fibers.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the fire doors is not sufficient to cause the release of asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the fire doors is not sufficient to cause damage.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory Comments

*** ASSUMED POSITIVE - NO ADDITIONAL SAMPLES COLLECTED ***

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name:
Spray on insulation beam, above windows

Homogeneous Area ID Number : S14

Field Documents:

Sample Area	:	ACJASA01	ACJASA03
Homogeneous Area	:	ACJAHA01	ACJAHA02
Photograph	:	ACJAP01	ACJAP02

Estimated Amount of Material: 1,400 SF

ASSESSMENT CATEGORY #: 2
SPECIFIC DESCRIPTION : Damaged, Friable Surfacing Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE
The spray on material had several areas in which pieces of the material were missing. Some of the "missing" spray on material was on top of the upper window ledges and nearby pipes.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Medium.
Pieces of the loose, spray on material, which is very light and fluffy, were seen on top of pipes, ducts, and acoustical ceiling tiles which are frequently removed--causing the fibers to become airborne.

POTENTIAL FOR VIBRATION DISTURBANCE - Medium.
The normal indoor activities and occasional outdoor disturbances are capable of causing significant vibration to loosen the asbestos fibers from the spray on material.

POTENTIAL FOR AIR EROSION/DISTURBANCE - Yes.
There is sufficient natural and/or mechanical ventilation to dislodge the spray on material from the beams and cause the asbestos fibers to become airborne.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS14022	8083316-1530	Chrysotile	25-30	AML	Tan, soft, easily separated, fibrous material
			TOTAL:	25-30		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name:
Spray on insulation beam, above windows

Homogeneous Area ID Number : S14

Field Documents:

Sample Area :	ACJASA01	ACJASA03
Homogeneous Area:	ACJAHA01	ACJAHA02
Photograph :	ACJAP01	ACJAP02

Estimated Amount of Material: 1,400 SF

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS14023	8083317-1530	Chrysotile	15-20	AML	Tan, soft, easily separated,
			TOTAL:	15-20		fibrous material
05/05/88	ACJAS14025	8083319-1530	Chrysotile	20-25	AML	Tan, soft, easily separated,
			TOTAL:	20-25		fibrous material
05/05/88	ACJAS14026	8083320-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14029	8083323-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14032	8083326-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14033	8083327-1530	Chrysotile	30-35	AML	Tan, soft, easily separated,
			TOTAL:	30-35		fibrous material
05/05/88	ACJAS14035	8083329-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material
05/05/88	ACJAS14036	8083330-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material
05/05/88	ACJAS14037	8083331-1530	Chrysotile	25-30	AML	Tan, soft, easily separated,
			TOTAL:	25-30		fibrous material

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAS14Q029	02A	Chrysotile	15-20	BIO	
			Amosite	01-02	BIO	
			TOTAL:	15-20		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name:
Boiler room, hot water tank's insulation

Homogeneous Area ID Number : T02

Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

Estimated Amount of Material: 1 EA

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Thermal System Insulation

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
As long as the insulation is not damaged, there is potential of the asbestos fibers becoming released.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within this room is not sufficient to damage the insulation which contains the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The natural and/or mechanical ventilation in this room is not suffificent to cause the asbestos fibers to become released.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAT02003	8083296-1530	Chrysotile	10-15	AML	Tan, firm, easily crushed, fibrous
			Amosite	01-05	AML	material
			TOTAL:	15-20		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MW Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name:
Boiler room, boiler's insulation

Homogeneous Area ID Number : T03

Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

Estimated Amount of Material: 1 EA

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Thermal System Insulation

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
As long as the insulation is not damaged, there is no potential of the asbestos fibers becoming released.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within this room is not sufficient to damage the insulation which contains the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The natural and/or mechanical ventilation in this room is not sufficient to cause the asbestos fibers to become released.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
05/05/88	ACJAT03004	8083297-1530	Chrysotile	50-55	AML	Gray, soft, easily separated, fibrous material
			TOTAL:	50-55		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/25/88
Agency: Tufts University

AHERA MANAGEMENT PLAN
BUILDING JOHN ADAMS

ALEXANDRIA CITY PUBLIC SCHOOLS
POSITIVE SAMPLING SUMMARY

MATERIAL DESCRIPTION	TOTAL AMOUNT	MATERIAL LOCATION	HAZARD POTENTIAL	CONDITION	% ASBESTOS	ESTIMATED COST		STATUS
						REMOVE	REPLACE	
FIRE DOORS M99	ALL	HALLWAYS	LOW	NON-FRIABLE	?			5 MONITOR
SPRAY ON INSULATION S14	1400 SF	ROOM 114, 116, 206-213 COURTYARD ABOVE A WINDOWS	MEDIUM	FRIABLE	30-35	$55,600	$4,800	2 ENCAP
HOT WATER TANK INSULATION T02	1 EACH	BOILER RM	LOW	NON-FRIABLE	15-20	$12,500	$1,100	7 MONITOR
BOILER INSULATION T03	1 EACH	BOILER RM	LOW	NON-FRIABLE	50-55	$13,200	$1800	7 MONITOR
						$81,300	$7,700	$89,000

Virginia Department of Education
Energy and Facilities Services

R E S P O N S E A C T I O N S
R E C O M M E N D E D

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Fire doors

Homogeneous Area ID Number : M99

Estimated Amount of Material: ALL
LEA Response Action Priority: 8

Field Documents:
Sample Area :
Homogeneous Area: ACJAHA02 ACJAHA03
Photograph :

RECOMMENDED RESPONSE ACTION:
1) Include this material in all O&M activities.
2) Reinspect and reassess within three years.

RESPONSE ACTION SCHEDULE: Begin: July 9, 1989 End: Upon Removal

PREVENTIVE MEASURES:
See DOCUMENT I. 2 for O&M recommendations.

Management Planner: Mike Wigenton
Accreditation Number: 8802-02-127

Signature: M B Wigenton Date: 10/25/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

R E S P O N S E A C T I O N S
R E C O M M E N D E D

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Spray on insulation beam, above windows

Homogeneous Area ID Number : S14
Estimated Amount of Material: 1,400 SF
LEA Response Action Priority: 2

Field Documents:

Sample Area	ACJASA01	ACJASA03
Homogeneous Area	ACJAHA01	ACJAHA02
Photograph	ACJAP01	ACJAP02

PIH NOTICE: This area has been identified as containing a potential immediate hazard to human health. Please refer to the PIH notice received by the LEA AHERA designee for details.

RECOMMENDED RESPONSE ACTION: Accept_____ Reject X
1) Remove the material.
2) Refer to DOCUMENT J. RESOURCES NEEDED

OPTIONAL RESPONSE ACTION #1: Accept X Reject_____
1) Encapsulate the material.
2) Refer to DOCUMENT J. RESOURCES NEEDED

OPTIONAL RESPONSE ACTION #2: Accept_____ Reject X
1) Enclose the material.
2) Refer to DOCUMENT J. RESOURCES NEEDED

RESPONSE ACTION SCHEDULE: Begin: July 9, 1989 End: October, 1992

REMOVAL COST ESTIMATE:

Abatement and Disposal:	$55,594.40
Replacement Cost :	$4,732.00

PREVENTIVE MEASURES:
See DOCUMENT I. 3 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-127 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

R E S P O N S E A C T I O N S
R E C O M M E N D E D

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room, hot water tank's insulation

Homogeneous Area ID Number : T02
Estimated Amount of Material: 1 EA
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

RECOMMENDED RESPONSE ACTION: Accept_____ Reject_X_
1) Remove the material.
2) Refer to DOCUMENT J. RESOURCES NEEDED

OPTIONAL RESPONSE ACTION: Accept_X_ Reject_____
1) Include this area in all O&M activities.
2) Refer to DOCUMENT L.1 Perodic Surveillance Plan.
3) Reinspect and reassess this area within three years.

RESPONSE ACTION SCHEDULE: Begin: July 9, 1989 End: October, 1992

REMOVAL COST ESTIMATE:
Abatement and Disposal: $12,485.00
Replacement Cost : $1,084.00

PREVENTIVE MEASURES:
See DOCUMENT I. 4 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-127 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

R E S P O N S E A C T I O N S
R E C O M M E N D E D

LEA: Alexandria City Public Schools
School: John Adams School
Building: John Adams Elementary School
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room, boiler's insulation

Homogeneous Area ID Number : T03

Estimated Amount of Material: 1 EA

Field Documents:
Sample Area : ACJASA02
Homogeneous Area: ACJAHA01
Photograph :

LEA Response Action Priority: 8

RECOMMENDED RESPONSE ACTION: Accept_____ Reject_X_

1) Remove the material.
2) Refer to DOCUMENT J. RESOURCES NEEDED

OPTIONAL RESPONSE ACTION: Accept_X_ Reject_____

1) Include this area in all O&M activities.
2) Refer to DOCUMENT L.1 Perodic Surveillance Plan.
3) Reinspect and reassess this area within three years.

RESPONSE ACTION SCHEDULE: Begin: July 9, 1989 End: October, 1992

REMOVAL COST ESTIMATE:

Abatement and Disposal:	$13,201.00
Replacement Cost :	$1,804.00

PREVENTIVE MEASURES:
See DOCUMENT I. 5 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date: 10/25/88
Accreditation Number: 8802-02-127 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: John Adams School
Building: See Below

R E M O V A L C O S T
S U M M A R Y

BUILDING NAME: John Adams Elementary School

HOMOGENEOUS AREA ID	REMOVAL	REPLACEMENT
S14	$55,594.40	$4,732.00
T02	$12,485.00	$1,084.00
T03	$13,201.00	$1,804.00
TOTAL FOR John Adams Elementary School	$81,280.40	$7,620.00

Note:

Cost estimates are for LEA planning purposes only. The estimates are calculated for each homogeneous area, except floor tiles, flex connectors, boiler gaskets, and fire doors. All cost estimates are based on a three man crew performing the abatement actions. Included in the cost estimates are the following: contractor general mobilization costs, contractor daily project costs, and contractor costs for air testing per 40 CFR 763 Appendix A Unit II requirements. Material replacement costs are also provided assuming any materials removed will be replaced by the contractor. Refined or actual abatement costs can only be determined upon definition of project scope and project design, based on the actual response, as selected by the LEA.

Virginia Department of Education
Energy and Facilities Services

LEA: City of Alexandria Public Schools
School: John Adams School
Building: See Below

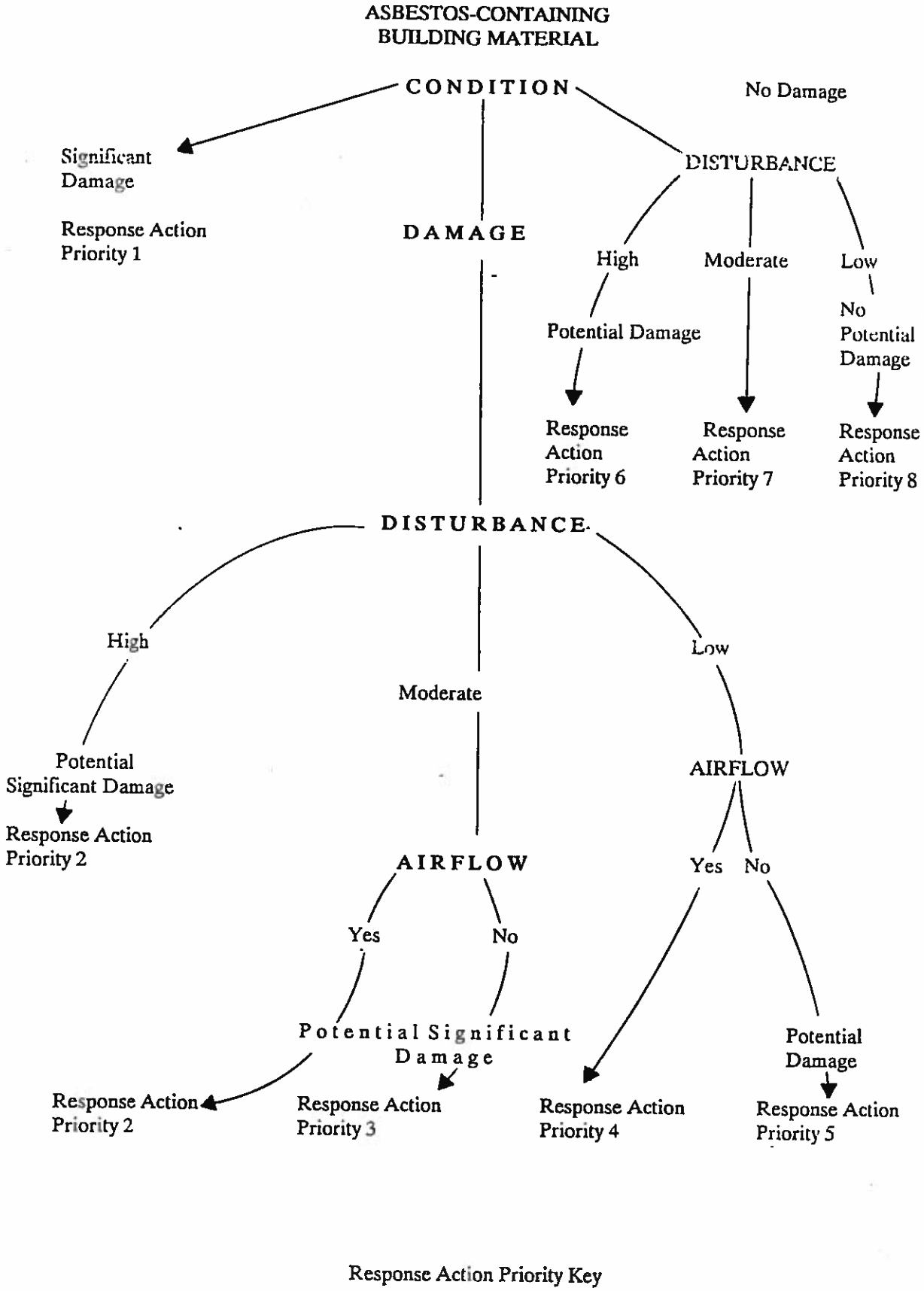
R E M O V A L C O S T
S U M M A R Y

BUILDING NAME: John Adams School

HOMOGENEOUS AREA ID	EST. AMOUNT OF MATERIAL	REMOVAL	REPLACEMENT
M99-Fire Doors	26 ea	$ 10,400.00	$ 5,200.00
TOTAL From Previous Document G.S.1		81,280.40	7,620.00
TOTAL for John Adams School		$ 91,680.40	$12,820.00

Note:

Cost estimates are for LEA planning purposes only. All cost estimates are based on a three man crew performing the abatement actions. Included in the cost estimates are the following: contractor general mobilization costs, contractor daily project costs, and contractor costs for air testing per 40 CFR 763 Appendix A Unit II requirements. Material replacement costs are also provided assuming any materials removed will be replaced by the contractor. Refined or actual abatement costs can only be determined upon definition of project scope and project design, based on the actual response, as selected by the LEA. Cost estimates for removal of fire doors are being provided for administrative purposes only and do not constitute a recommendation for removal except in cases of damage.



Response Action Priority Key

Alexandria City Public Schools
3 Year AHERA Reinspection
John Adams Elementary School
April 13, 1992

In accordance with paragraph 763.85(b)(1) of the Asbestos Hazard Emergency Response Act (AHERA), the John Adams Elementary School was reinspected on April 13, 1992. The reinspection was accomplished by Ernest R. Drew, III, a certified and licensed Inspector and Management Planner, under the rules established by the Commonwealth of Virginia Department of Commerce. Mr. Drew's asbestos Inspector license number is 3303000246 and his Management Planner license number is 3304000179.

Only the areas of asbestos containing building materials (ACBM) that were identified by A. F. Meyer in their initial inspection of May 5, 1988 were reinspected.

The first type of asbestos containing material identified by A. F. Meyer in their inspection was some thermal system insulation (TSI) in the boiler room. This ACBM (T03) is tank insulation and boiler insulation. Both are nonfriable and in excellent condition. The assessment remains Category 5 (ACBM with Potential for Damage).

The second area was some surfacing material that is located above the windows to the courtyards. This material is sprayed onto the beams above the suspended ceiling and has been encapsulated. No change is made to the original assessment of "ACBM with potential for damage."

The last area is the fire doors which were assumed to contain asbestos. These doors are hard material and contained in metal. They are in excellent condition however there exists a potential for damage. The assessment remains unchanged.

The asbestos containing materials are being maintained in accordance with the Management Plan and the laws of Virginia and the United States Environmental Protection Agency. Extra precautions are being taken to prevent fiber releases and ensure a safe environment for the students and faculty.

A copy of this report must be filed with and become a part of the school Management Plan. The next six month surveillance is due October 13, 1992 and the next three year reinspection is due no later than April 13, 1995.



Ernest R. Drew, III
Virginia Inspector #3303000246
Virginia Management Planner #3304000179

MasiMax
Resources, Inc.

THREE-YEAR REINSPECTION OF ASBESTOS-CONTAINING MATERIALS
ALEXANDRIA CITY PUBLIC SCHOOL SYSTEMS (ACPS)
John Adams Elementary School
August 10, 2007

MasiMax Resources Inc. – Environmental Health & Safety Services (MasiMax) conducted the Three Year Re-Inspection of Asbestos-Containing Materials (ACM) at the John Adams Elementary School on June 21, 2007. The purpose of the re-inspection was to assess the condition of all friable and non-friable Asbestos Containing Building Materials (ACBMs) listed as present from the previous triennial re-inspection.

The Scope of Work included a review of the Asbestos Operations & Management Plan (O&M), asbestos inspection and assessment of ACBM, and updated recommended response actions based on the condition of the ACBM.

All tasks were performed in accordance with re-inspection and assessment criteria established by the Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), 40 CFR, Part 763.85 and Part 763.88. Each homogeneous area of ACM identified by the previous triennial re-inspection report was inspected. Additionally, the quantity, type, current conditions and recommendations are provided in the table presented in Attachment A.

MasiMax's performed an assessment of the school's asbestos O&M to review if the information required by AHERA is present and current. A checklist of the assessment findings is presented in Attachment B. Included in the checklist is the Local Education Agency's (LEA) designated person listed in the on-site O&M plan; however, ACPS should verify if this information is current.

The re-inspection was conducted by Virginia state licensed asbestos inspectors. All work was directed and supervised by a Certified Industrial Hygienist (CIH) who is also licensed by the State of Virginia as an Asbestos Management Planner. Copies of the Virginia asbestos inspector and management planner licenses are presented in Attachment C.

Under the AHERA requirements 763.93, a copy of the triennial re-inspection report shall be included in the ACPS's Management Plan. In addition, all six (6) month periodic inspection reports, response actions conducted at the school, and personnel training records shall be included in the Management Plan. It is the responsibility of the LEA designated person to ensure the Management Plan is updated regularly and made available to any interested party.

Mark Schneider, CIH, PG, LAC
VA Management Planner # 3304 001536
Exp. 06/30/2008

Bjarne Smith
VA Asbestos Inspector # 3303 002764
Exp. 08/31/2007

Amy Chang
VA Asbestos Inspector # 3303 002399
Exp. 05-31-2008

CHECKLIST FOR ALEXANDRIA CITY PUBIC SCHOOLS AHERA MANAGEMENT PLANS

SCHOOL NAME: John Adams

Yes No

■ ☐ Name and address of school, including a statement of whether the facility has friable, non-friable ACBM, suspect friable ACBM, or suspect non-friable ACBM.

Comments: _____

Yes

■ LEA – Designated Person

Name: William Simms Phone #: 703-836-7565

Yes No

■ ☐ Initial Inspection Reports including:

- Date of inspection;
- Diagram or description of ACBM material locations;
- Bulk sample analysis report;
- Initial response action recommendations;
- Assessment of asbestos materials; and,
- Signature, state, and accreditation # of inspector(s).

Comments: _____

Yes No

☐ ■ Records of all response actions for the last three (3) years (or longer), including:

- Detailed description of response actions;
- Air sample results;
- Signature, state, and accreditation of air sampler;
- Signature, state and accreditation of designer; and,
- Signature, state, and accreditation of contractor.

Comments: Also did not have record of Boiler Room abatement.

Yes No

■ ☐ Recommendations for all response actions.

Comments: _____

Yes No

■ ☐ Signature, State, and accreditation of Management Planner, Inspector(s), Designer(s), and Contractor(s) for initial and all re-inspections.

Comments: 2004 re-inspection report present.

Yes No

☐ ■ 6-Month O&M Inspections

Comments: Only six month inspection record for 1990.

Inspector (s): Bjarne Smith and Amy Chang Date: 6/21/2007

Management Planner: _____ Date: 08/21/2007

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
1st flr. entire perimeter	Spray-on Insulation	ALL	Gray	ALL	ALL	Along I-beams above windows, throughout	2	Yes	Yes	Throughout	ALL	Air Erosion	O & M
Boiler Room	TSI-boiler insulation	ALL	N/A	2	EA	Boilers 1 & 2. boiler abated.	1	Yes	Yes	Throughout	8 SF	Distributed	Verify Removal
Boiler Room	TSI-tank insulation	ALL	N/A	1	EA	New fiberglass insulation on tank	5	Yes	No	N/A	N/A	N/A	N/A
Boiler Room	TSI-elbows, joints	ALL	N/A	10	EA	Labeled as ACM. Many replaced,reduced to 10 each.	1	Yes	Yes	Throughout	3 EA	Impact	Repair/Remove
Boiler Room	TSI-elbow	3 in	White	50	EA	(3" water line-silver). Reduced to 20 each, some replaced	5	No	No	N/A	N/A	N/A	O & M

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Boiler Room	Pipe fitting insulation	ALL	Gray	20	EA	Elbows-suspect, 1(18") elbow previously sampled,	5	No	No	N/A	N/A	N/A	O & M
Boiler Room	Breaching Insulation	ALL	White	600	SF	Unable to locate in 2007	5	No	No	N/A	N/A	N/A	Verify Repair/Removal
Ground floor Elec. room (near kitchen/room 121 in old drawing)	Vibration Damper	ALL	White	1	EA	Unable to locate.	5	No	No	N/A	N/A	N/A	O & M
Gym	TSI -4 vibration dampers & 18 elbows	ALL		N/A	N/A	Unable to locate	5	No	No	N/A	N/A	N/A	Verify Repair/Removal
Gym & Throughout - Above Ceiling Tiles	TSI-elbow	6 in	N/A	ALL	EA	Wrapped with Duct Tape. Good Condition.	5	No	No	N/A	N/A	N/A	O & M

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Gym Men Locker Old Bathroom Area/Book Storage	TSI		White			3" elbow PACM GC, 4" elbows-men's rm & 5 fittings.	5	No	No	N/A	N/A	N/A	O & M
Hallway outside room 8 (room 121 in old drawing)_	Floor Tile	9x9	Green	10	SF	Carpeted/tiled over or removed	5	No	No	N/A	N/A	N/A	O & M
Hallway outside room 8 (room 121 on old drawing)	Floor Tile	9x9	Black	10	SF	Carpeted/tiled/removed	5	No	No	N/A	N/A	N/A	O & M
Hallways	Fire Doors	door	Various	ALL	ALL	Metal & wood	5	No	No	N/A	N/A	N/A	O & M
Incinerator Room	Ceiling	ALL	Gray	100	SF	No access; Currently used as a storage room	0	No	Yes	N/A	1 sq. feet	N/A	O & M

City of Alexandria - AHERA Inspection

School **John Adams** Date 6/20/2007 Inspector(s) Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Room 114-16, 206-13, inner halls	Spray-on insulation	ALL	Gray	1400	SF	In rooms, along walls & above windows: minor debris.	2	Yes	Yes	Throughout	1400 SF	Air Erosion	Repair/Remove
Room 129	Cementitious countertop surface	ALL	Gray	75	SF	Still present	5	No	No	N/A	N/A	N/A	O & M
Shop 1	TSI-vibration damper					Under renovation-inaccessible.	5	No	No	N/A	N/A	N/A	O & M
Throughout - Above Ceiling Tiles	Black Mastic on Fiberglass insulated pipes	ALL	Black	ALL	ALL	Good condition	5	No	No	N/A	N/A	N/A	O & M