AHERA - THREE YEAR REINSPECTION



FRANCIS HAMMOND MIDDLE SCHOOL

4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-E4-9

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

AUGUST 21, 2025

August 21, 2025

Mr. Lee Conroy
Alexandria City Public Schools
1709 North Beauregard Street
Alexandria, Virginia 22311

ECS Project No. 47:11652-E4-9

Reference: AHERA - Three Year Reinspection, Francis Hammond Middle School, 4646 Seminary Road, 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 Francis Hammond Middle School located at 4646 Seminary Road 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. The following materials were observed to be damaged at the time of the site visit:

- **9" x 9" Maroon Floor Tile and associated Mastic located in the storage rooms near the auditorium were observed as damaged.**
- **Thermal System Insulation (TSI) wrap located in the hallway above the drop ceiling between the Dance studio and Weight Rooms was observed as damaged.**

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

Signature for Adam Truax
Adam Truax

Signature for Christopher J. Chapman, CIH
Christopher J. Chapman, CIH

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1.0 SITE DESCRIPTION

The subject property consists of Francis Hammond Middle School, a three-story (including the basement) brick school building located at 4646 Seminary Road in Alexandria, Virginia. The school was originally constructed in 1956 and has been improved with various renovations over the years. Building finishes observed included concrete sub-floors, vinyl floor tiles, carpet, and/or ceramic tiles; the wall systems appeared to generally consist of concrete masonry unit (CMU) block walls, drywall wallboard, and/or ceramic wall tiles; and the ceiling systems appeared to generally consist of suspended drop ceilings with ceiling tiles 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 Floor Tiles and associated Mastic from Rooms E113, C100, C102, C103, C104, C105, C016, C107, C108, C109, C111, E217, B200, B201, B202, B203, B204, B205, B206, B207, B208, B209, and B211 in 2021 (ECS Project No. 47:11652-F1).
- Asbestos-containing Floor Tiles and associated Mastic from the first floor main office of the school in 2021 (ECS Project No. 47:1519-F5).
- Asbestos-containing Floor Tiles and associated Mastic from Rooms C118, C122, E107, E108, and E110 from the first floor in 2022 (ECS Project No. 47:11652-F3)
- Asbestos-containing Carpet Mastic in Foyer 26-27 in 2023 (ECS Project No. 47:11652-F6)
- Asbestos-containing Floor Tiles and associated Mastic from Room E210 Classroom Storage in 2024 (ECS Project No. 47:11652-F7)

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 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. ECS notes the following ACMs were observed to be damaged during the site reconnaissance.

- **9" x 9" Maroon Floor Tile and associated Mastic located in the storage rooms near the auditorium were observed as damaged.**
- **TSI wrap above the drop ceiling in the hallway between the dance studio and weight rooms was observed as damaged.**

Previously identified ACBM in the building is identified in a Table in Appendix I.

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

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

5.1 Asbestos-Containing Materials

ECS recommends the damaged 9" x 9" Maroon Floor Tile and Mastic in the storage rooms near the auditorium and the TSI wrap above the drop ceiling in the hallway between the dance studio and weight rooms be abated by a Virginia licensed asbestos abatement contractor.

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

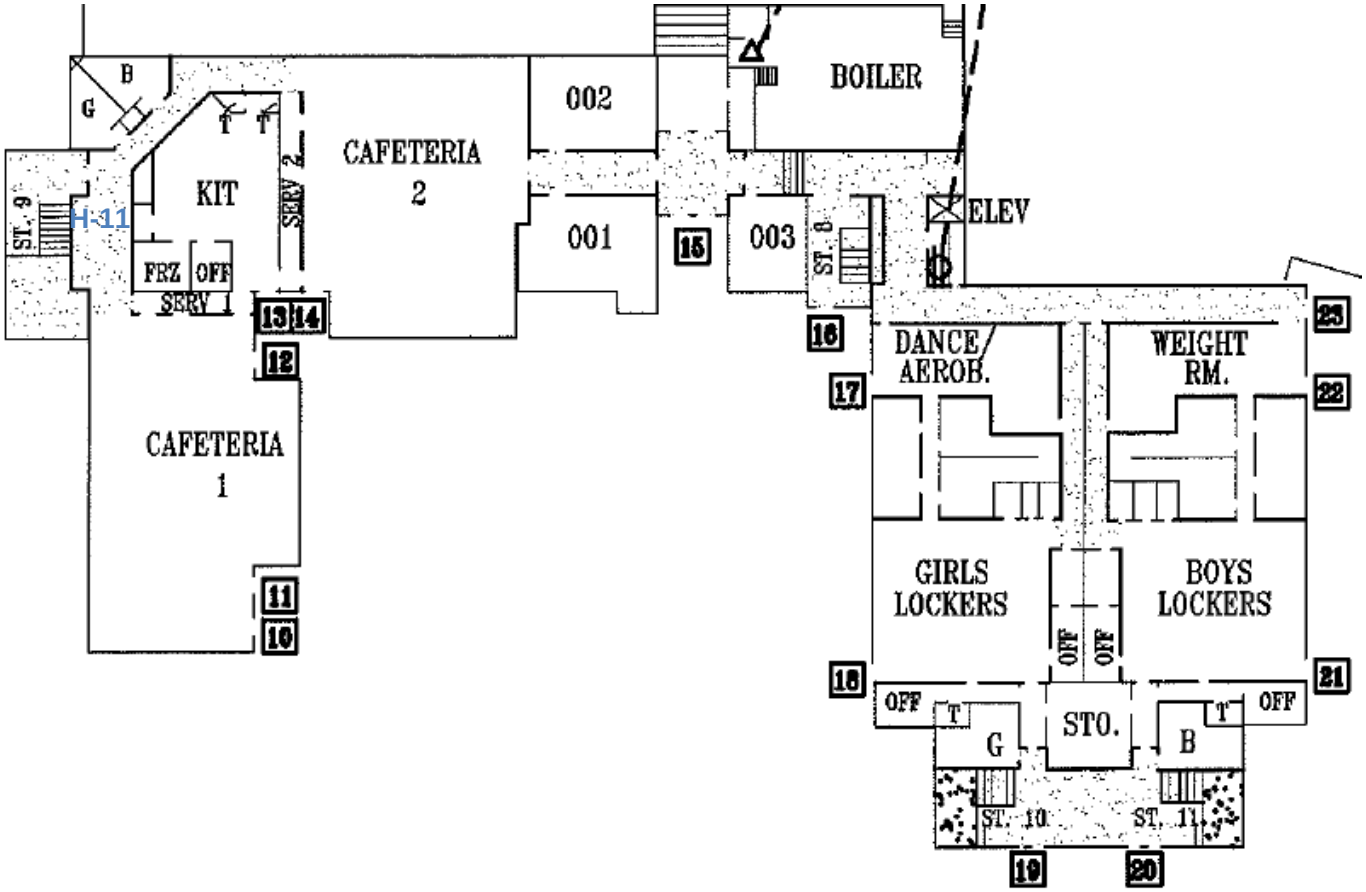
services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

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								
Boiler Insulation	Boiler behind Lower Metal Sheet in Boiler Room	NF	Intact	Assumed to be covering ACM Boiler Exhaust Pipe Insulation	18-Jun-25	Maintain in O & M Plan		Sample if proposed Disturbed
9' x 9" Maroon With Black Trim Floor Tiles and associated Mastic	Storage Room next to Auditorium	NF	Damaged	Floor Tiles were missing with Mastic exposed.	18-Jun-25	Repair or Remove		Floor Tile: 8% Chrysotile Mastic: 10% Chrysotile
9" x 9" Light Brown Floor Tiles and associated Mastic	Electrical Closet/Store Room across B229 on 2nd Floor and Math Storage Room on 1st Floor	NF	Intact	Observed in Closet across from B229, Not Observed in Storage Room	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
Thermal System Insulation (TSI) 4" Pipe Mudded Elbow Joints	Hallway between Dance and Weight Rooms in Basement and Cafeteria on 1st Floor	F	Damaged	TSI Wrap above drop ceiling is Damaged. Mudded Elbows/ Joints were not observed.	18-Jun-25	Repair or Remove		Verify Analytical Results
9" x 9" Blue Floor Tiles and associated Mastic	Office Store Room, and Rooms 113C-115C	NF	Intact	Observed Intact in Office Store Room. Not Observed in Rooms 113C-115C, assumed to be present	18-Jun-25	Maintain in O & M Plan		2-5% Chrysotile
Ceiling and Wall Tile Brown Mastic	1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 and 1st Floor	NF	Intact	Assumed under existing materials in other areas	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
Laboratory Sink's Grey Undercoat	Room 223B	NF	Intact	None	18-Jun-25	Maintain in O & M Plan		Sample if proposed Disturbed.
White Ceiling Plaster	Room 225B, Auditorium, and Throughout Building	F	Intact	None	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS ON JUNE 18, 2025 SURVEY								
9" x 9" Light Brown Floor Tiles and associated Mastic	Main Gymnasium on 1st Floor	NF	N/A	Assumed under existing materials in other areas	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
9" x 9" Light Brown Floor Tiles and associated Mastic	Gym Lobby on 1st Floor	NF	N/A	Assumed under existing materials in other areas or abated	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
Black Wrap on Fiberglass Pipe	Kitchen above Ceiling Tile	NF	N/A	Assumed to be present in other locations	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
Red Rust Floor Tiles	1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 and 1st Floor	NF	N/A	Abated (ECS Project No. 47:11652-F1) Assumed to be present in other locations	18-Jun-25	Remove from O & M Plan pending verification of removal		1-5% Chrysotile
9" x 9" Green Floor Tiles and associated Mastic	Room B222, E203, and Auditorium	NF	N/A	Assumed under existing materials in other areas	18-Jun-25	Maintain in O & M Plan		5-10% Chrysotile
White Duct Seam Tape on Roof Drain Pipe	Room D202	NF	N/A	Inaccessable during Survey, assumed to be present.	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results
9" x 9" Green Floor Tiles and associated Mastic	Room B222, E203, and Auditorium	NF	N/A	Assumed under existing materials in other areas or abated	18-Jun-25	Maintain in O & M Plan		Not observed - Verify removal or sampling if encountered/uncovered
White Mastic on Fiberglass Duct Insulation	Room225B	NF	N/a	Inaccessable during Survey, assumed to be present.	18-Jun-25	Maintain in O & M Plan		Verify Analytical Results

Appendix II: Floor Plan

Basement Level



FRANCIS HAMMOND
4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA

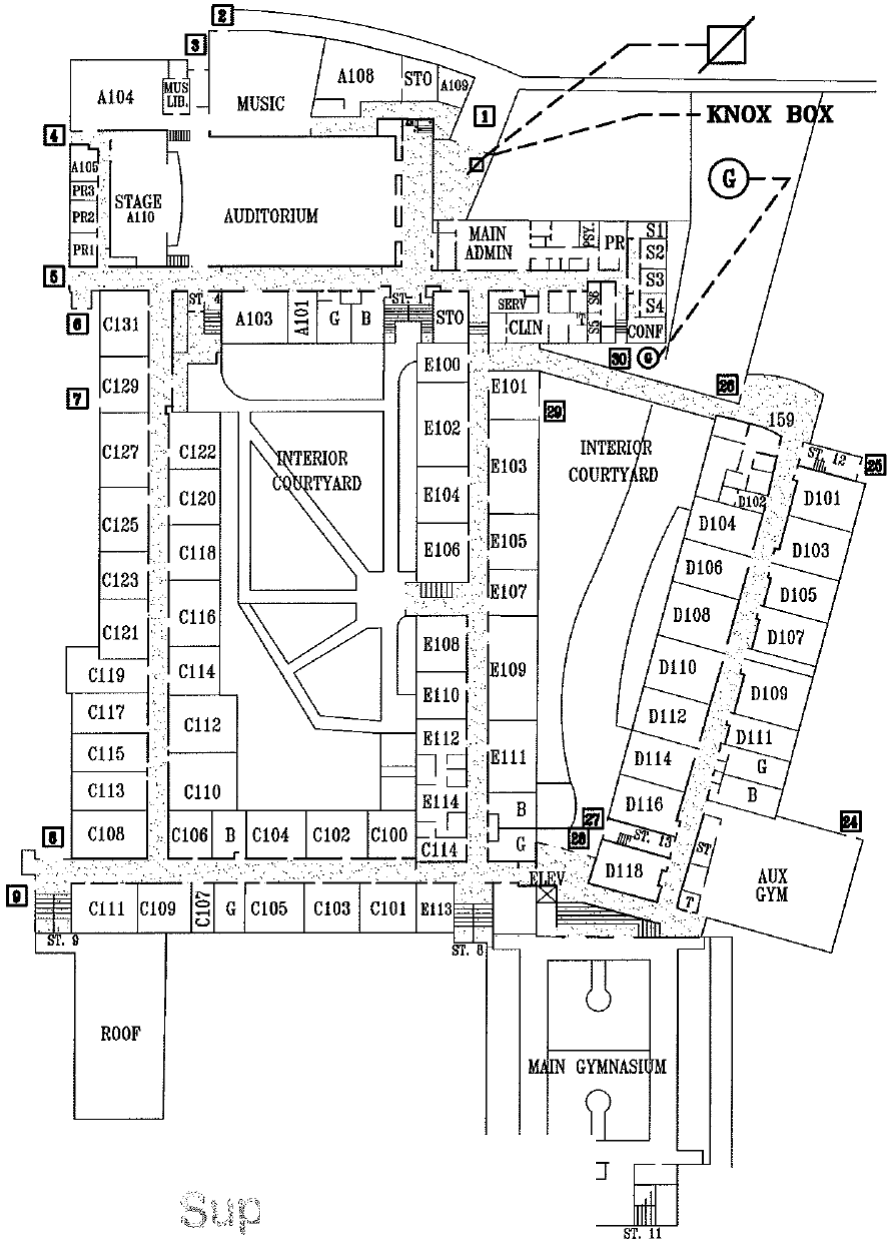
SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No.

Date

1st FL



FRANCIS HAMMOND
4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA

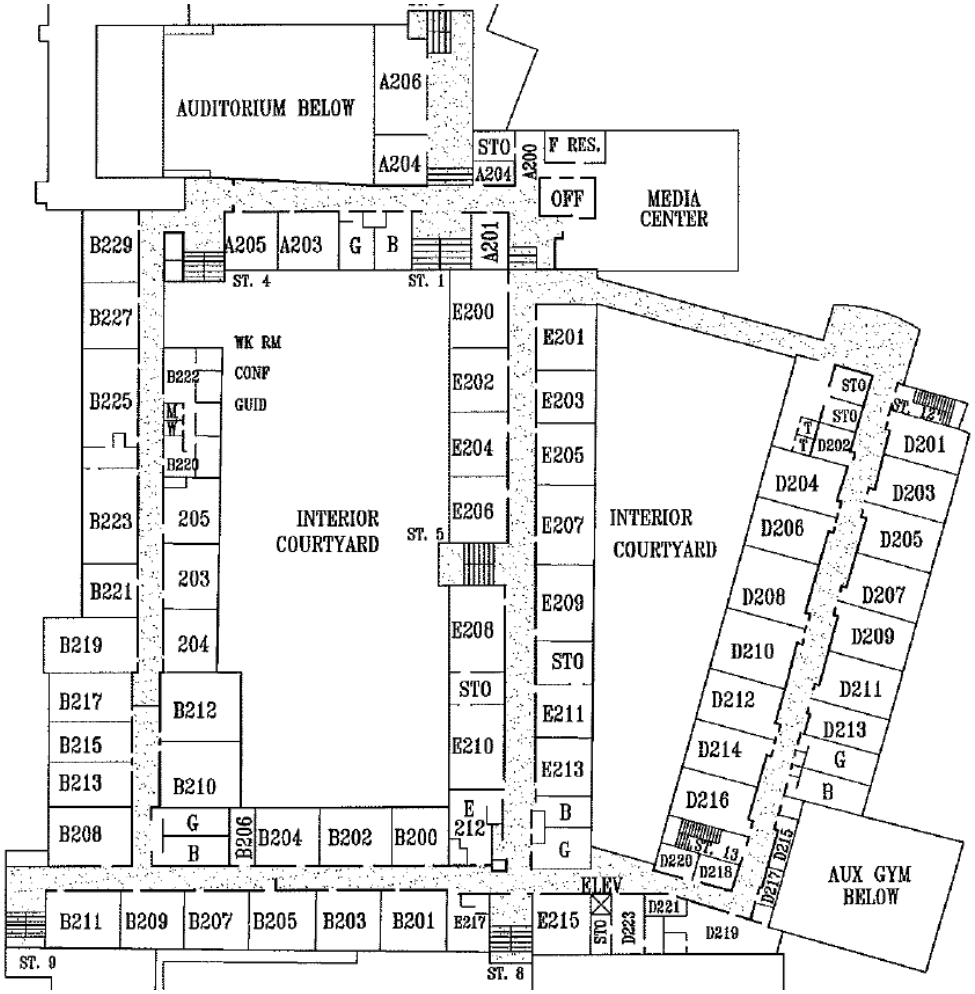
SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No.

Date

2nd FL



FRANCIS HAMMOND
4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA

SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No.

Date

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 License Number 3304001722

License Details

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

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Appendix IV: Previous Reports

AHERA ASBESTOS-CONTAINING MATERIALS SURVEY



FRANCIS HAMMOND MIDDLE SCHOOL

4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-E2

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

MARCH 24, 2022

March 24, 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, Francis Hammond Middle School, 4646 Seminary Road, Alexandria, Virginia

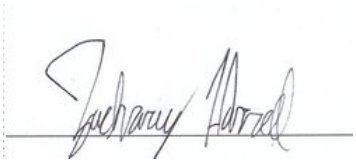
Dear Mr. Contreras:

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 Francis Hammond Middle School located at 4646 Seminary Road in Alexandria, Virginia. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:16069-EP and the terms and conditions of the agreement authorizing those services.

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

Sincerely,

ECS Mid-Atlantic, LLC





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EXECUTIVE SUMMARY

The subject property, Francis Hammond Middle School is a 236,125 square foot, school building reportedly originally constructed in 1956.

The purpose of the survey was to determine if asbestos-containing building materials (ACBMs) present on the subject property. The survey was performed within interior areas of the 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, none of the sampled materials were reported to contain asbestos for the current survey.

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.

- Boiler Insulation and old boiler components present in the boiler room
- 9" x 9" Vinyl Floor Tiles present in select closets, and possibly under new flooring applications
- Roofing components such as flashing, sealants, and caulks
- Gray sink undercoated assumed to still be present in Room 223B
- Pipe insulation and duct insulation components such as mastics, muds, and sealants are assumed to be present in concealed 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.

- Various Vinyl Floor Tile and associated Mastic abatements have taken place over the past few years (reference ECS Project No. 47:11652-E2- F1, 47:11652-E2- F3, 47:11652-E2- F5). However ACM floor tile may remain in places where those abatements did not occur.

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 Francis Hammond Middle School, a three-story (including the basement) brick school building located at 4646 Seminary Road in Alexandria, Virginia. The school was originally constructed in 1956 and has been improved with various renovations over the years. Building finishes observed included concrete sub-floors, vinyl floor tiles, carpet, and/or ceramic tiles; the wall systems appeared to generally consist of concrete masonry unit (CMU) block walls, drywall wallboard, and/or ceramic wall tiles; and the ceiling systems appeared to generally consist of suspended drop ceilings with ceiling tiles 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 the AHERA management plan for the school.

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

3.0 METHODOLOGY

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

3.1 Asbestos-Containing Materials

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

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs.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, Inc. (SAI) submitted a signed final laboratory report to ECS on February 2, 2022. None of the bulk samples submitted for analysis were reported to contain asbestos in detectable concentrations. 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, 8 bulk samples from homogeneous areas were submitted to the laboratory of which 10 layers were analyzed. No asbestos was detected in these samples.

Summary of Previously Identified Asbestos-Containing Materials

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Roofs P, E, & B	Black Parapet Caulk	2% Chrysotile	Category I non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Roofs P, E, & B	1" Black Flashing Caulk	6% Chrysotile	Category I non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Roofs P, M, & F	Black Waterproofing Mastic Under Flashing	12% Chrysotile	Category I non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Roof Q	Black Tar on Exhaust Vents	12% Chrysotile	Category I non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Roof M	1" White Flashing Caulk	2% Chrysotile	Category I non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Roof L	Black Tar with Silver Paint on Metal Roof Flashing	5% Chrysotile	Category I non-friable	Not applicable	Inaccessible during survey, assumed to be present.

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Boiler behind Lower Metal Sheet in Boiler Room	Boiler Insulation	60% Chrysotile	Category II non-friable	Not applicable	Observed (pictured)
Storage Room next to Auditorium	9" x 9" Maroon Floor Tile and Associated Black Mastic	Floor Tile – 8% Chrysotile Mastic – 10% Chrysotile	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Electrical Closet/ Store room across B229 on 2nd Floor and Math Storage Room on 1st Floor	9" x 9" Light Brown Floor Tiles and associated Mastic	Unknown	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Main Gymnasium on 1st Floor	9" x 9" Light Brown Floor Tiles and associated Mastic	Unknown	Category II non-friable	Not applicable	Not observed, assumed to be present, concealed under new flooring or abated.
Main Gym Lobby on 1st Floor	9" x 9" Brown Floor Tiles and associated Mastic	Unknown	Category II non-friable	Not applicable	Not observed, assumed to be present, concealed under new flooring or abated.

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Hallway between Dance and Weight Rooms in Basement and Cafeteria on 1st Floor	Thermal System Insulation (TSI)- 4" Pipe Mudded Elbows/Joints	3-5 % Chrysotile	Friable	(5) ACBM with potential for damage.	Not observed during survey, assumed to have been abated. Still may be present throughout the building in concealed areas.
Kitchen above Ceiling Tile	Black Wrap on Fiberglass Pipe	Unknown	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Office Storeroom, and Rooms 113C- 115C	9" x 9" Blue Floor Tiles and associated Mastic	2-5 % Chrysotile	Category II non-friable	Not applicable	Not observed during survey, assumed to be present.
1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 on 1st Floor	Red Rust Floor Tiles **	1-5 % Chrysotile	Category II non-friable	Not applicable	Abated (ECS PROJECT NO. 47:11652-F1)
1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 on 1st Floor	Ceiling and Wall Tile Brown Mastic **	Unknown	Category II non-friable	Not applicable	Abated (ECS PROJECT NO.47:11652-F1).
Room 114, C98, and E114	9" x 9" Dark Green Floor Tiles and associated Mastic	5-10% Chrysotile	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.

Location	Material Description	Analytical Results	EPA Category	AHERA Category	Abatement History
Room D202	White Duct Seam Tape on Roof Drain Pipe	Unknown	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Room B222, E203, and Auditorium	9" x 9" Green Floor Tiles and associated Mastic	3-5% Chrysotile	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present. (pictured in other areas)
Room 223B	Laboratory Sink's Grey Undercoat	Unknown	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Room 225B	White Mastic on Fiberglass Duct Insulation	Unknown	Category II non-friable	Not applicable	Inaccessible during survey, assumed to be present.
Room 225B, Auditorium, and Throughout Building	White Ceiling Plaster	Unknown	Friable	(5) ACBM with potential for damage.	Observed

Notes:
**** Additionally, ACM floor tile and mastic were abated from rooms E113, C100, C102, C103, C104, C105,C106, C107, C108, C109, C111, E217, B200, B201, B202, B203, B204,B205, B206, B207, B208, B209, and B211 in 2021 (ECS PROJECT NO.47:11652-F1).**
1. Upon review of historical documentation, floor tile and associated mastic were abated from the first floor main office of the school in 2021 (ECS PROJECT NO.47:1519-F5),
2. In 2022, ACM floor tile and mastic were abated from rooms C118, C122, E107, E108, and E110 from the 1st floor (ECS PROJECT NO.47:11652-F3).
3. No additional description of the vinyl floor tiles abated was provided in historical documentation reviewed.

Summary of Non Asbestos-Containing Materials Identified

Location	Material Description	Analytical Results
Materials Sampled in 2021 AHERA Survey		
Basement outside of Elevator	Blue mottled Floor Tile	NAD
Basement outside of Elevator	Tan mottled Floor Tile	NAD
Stair 12 Floor 2	Red Stand Pipe Wall Packing	NAD
Floor 2 outside of Stair 12	2' x 4' White Pinhole and Large Fissure Ceiling Tile	NAD
Previously Sampled Materials		
Roofs P, E, & B	Gypsum Board (4th layer)	NAD
Roof R	1/2" Gray Parapet Caulk	NAD
Roof R	1” Gray Flashing Caulk	NAD
Roof R	Black “Expand-O-Flash” Caulk	NAD
Roof M	Gray Caulk on Mechanical Units	NAD
Roof O	Black Tar on Roof Exhaust	NAD
Roof O	1” White “Rock Edge” Caulk	NAD
Roof L	1” Brown/White Parapet Caulk	NAD
Roof E	White Pitch Pocket	NAD
Roof H	Black Pitch Pocket	NAD
Roof F	1/2” White Parapet Caulk	NAD
Roof F	Hot Roof Membrane (3rd layer)	NAD
Boiler Room, Cafeteria, Hallway between Classrooms C108-C109, & Classroom E202	Plaster Wall	Finish – NAD Base – NAD
Boiler Room, Cafeteria & the Hallway between Classrooms C108-C109	Plaster Ceiling	Finish – NAD Base – NAD
Boiler Room	Boiler Interior Surfacing Layer on Brick Wall	NAD
Boiler Room	Boiler Interior Brick	NAD

Location	Material Description	Analytical Results
Boiler Room	Grout Associated with Boiler Interior Brick Wall	NAD
Boiler Room	White Pipe Bridging Mastic on Fiberglass	NAD
Boiler Room	White Pipe Wrap with White Mastic on Fiberglass	NAD
Boiler Upper Doors in Boiler Room	White Boiler Cord	NAD
Cafeteria 2	Interior Window Glazing	NAD
Cafeteria 2, Janitor Closet between Cafeterias, & Room D202/Roof Access	Drywall	NAD
Cafeteria 2, Janitor Closet between Cafeterias, & Room D202/Roof Access	Joint Compound	NAD
Dance/Weight Room	8" Mudded Pipe Fitting	Wrap – NAD Insulation – NAD
Dance/Weight Room	4" Mudded Pipe Fitting	Wrap – NAD Insulation – NAD
Weight Room	Drywall and Joint Compound	Drywall – NAD Joint Compound – NAD
Classroom C115, Hallway between Classrooms C110-C131, & Hallway to Music Rooms A108-A106	Gray Fireproofing	NAD
Hallway to Music Rooms A108-A106	Black Mastic on Brick Wall	NAD
Bridge on 2nd Floor	Gray Interior Window Caulk	NAD
Bridge on 2nd Floor	Gray Mastic on Metal Duct	NAD
Lower Level Dance Hallway	2' x 4' Pinhole Ceiling Tile	NAD
D219	12" x 12" Light Blue Floor Tile with White Flecks and associated Yellow Mastic	Both NAD

Location	Material Description	Analytical Results
2nd FL Hallway at D217 & D219	Beige Sheet Floor with Fabric and associated Yellow Mastic	Both NAD
D209	12" x 12" Gray Floor Tile with Gray/ White Flecks and associated Yellow Mastic	Both NAD
D207	12" x 12" White Floor Tile with Beige Flecks	NAD
Hall at D200	Green Sheet Floor with Fabric and associated Yellow Mastic	Both NAD
Hall at D200	4" Dark Blue Cove Base and associated Yellow Mastic	Both NAD
Hall at E200	4" Green Cove Base and associated Yellow Mastic	Both NAD
Hall at B207	Red Sheet Floor with Fabric	NAD
B211	12" x 12" Dark Blue Floor Tile and associated Yellow Mastic	Both NAD
C107	12" x 12" Off-White Floor Tile with Blue/Tan Flecks (Top Layer) and associated Yellow Mastic	Both NAD
C107	2' x 4' Pinhole Fissure Ceiling Tile	NAD
D103	12" x 12" Light Gray Floor Tile with White Flecks and associated Gray Mastic	Both NAD
D103	4" Gray Cove Base and associated White Mastic	Both NAD

Notes:
NAD = No Asbestos Detected
Due to the nondestructive means of this survey, newly applied and installed flooring components and air moving equipment components were not sampled to avoid voiding warranty or damage to said systems.
Locations reflect the area in which the material was sampled. These materials may be representative of and located in other homogenous areas throughout the school.

4.2 Suspect or Assumed Asbestos-Containing Materials

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

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

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

- **Floor Stripe/Tile and associated Mastic** in joint hallways.
- **Hardwood Floor Underlayment and associated Mastic** in the old gym or stage.
- **1' x 1' Acoustical Ceiling and Wall Tile Mastic** in the auditorium.
- **Wood Wainscoting Mastic** in auditorium and stage.
- **Boilers Components** in boilers (gasket, fire brick, etc.).
- **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.
- **Mastics** behind/under mirrors and dry-erase/chaulk 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.
- **Vibration Dampener Cloth** associated with HVAC Systems.
- **Roofing Materials** including caulk, flashing, membranes.
- **Felt Paper and Leveling Compound** associated with hardwood floors.
- **Asbestos-Cement Pipe Conduit** encased in duct banks and/or below sub-grade.
- **Laboratory Bench Tops**
- **Terrazzo Stairs, Floors, Sinks, and Window Sills**
- **Exterior Soffit Materials**
- **Spray-On Fireproofing** above ceilings and behind 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 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.

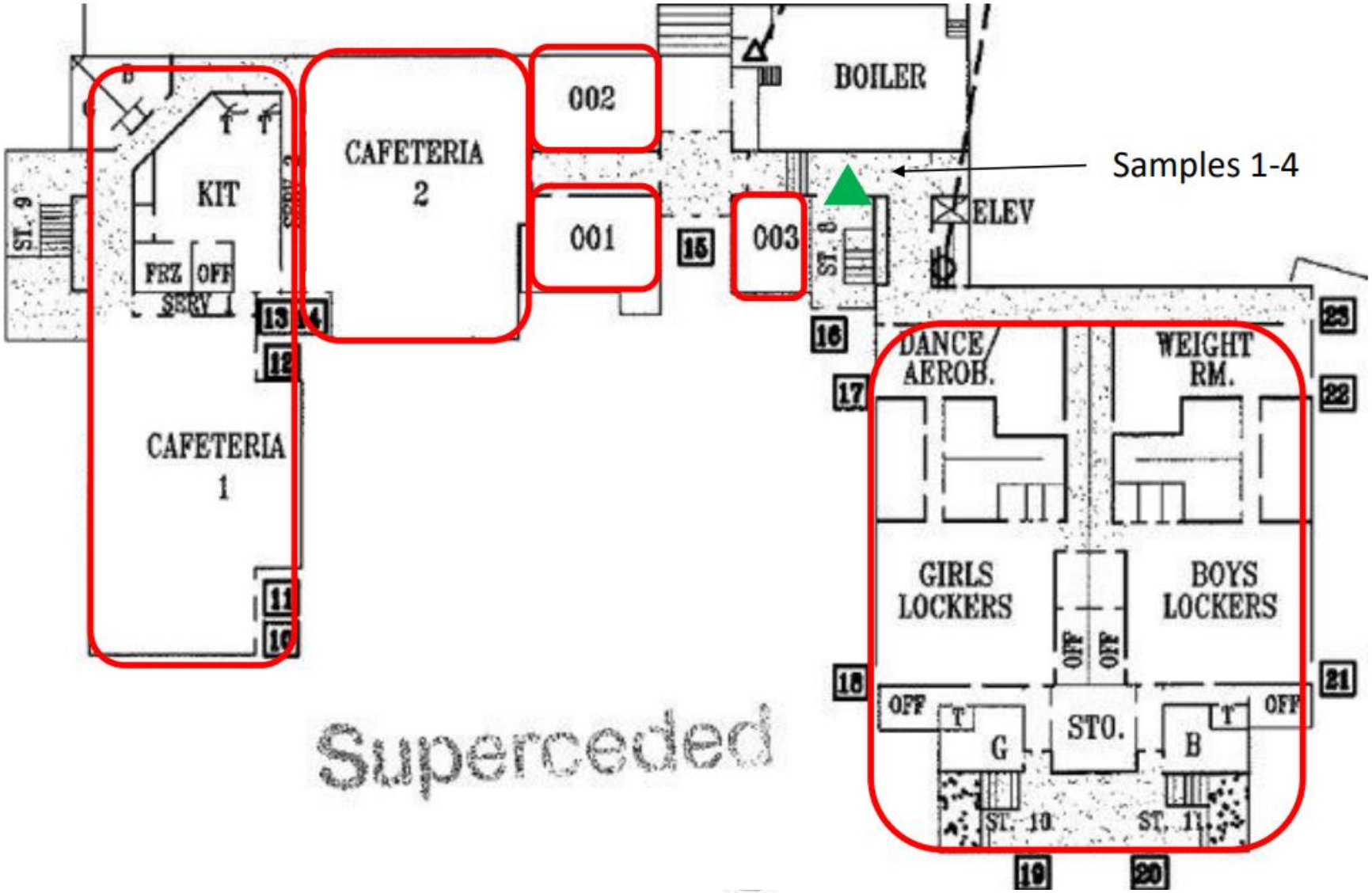
During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling 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: Drawings



Inaccessible Areas (during time of survey)

Sample Locations

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, Virginia, 22304

Sample Location Sketch - Basement

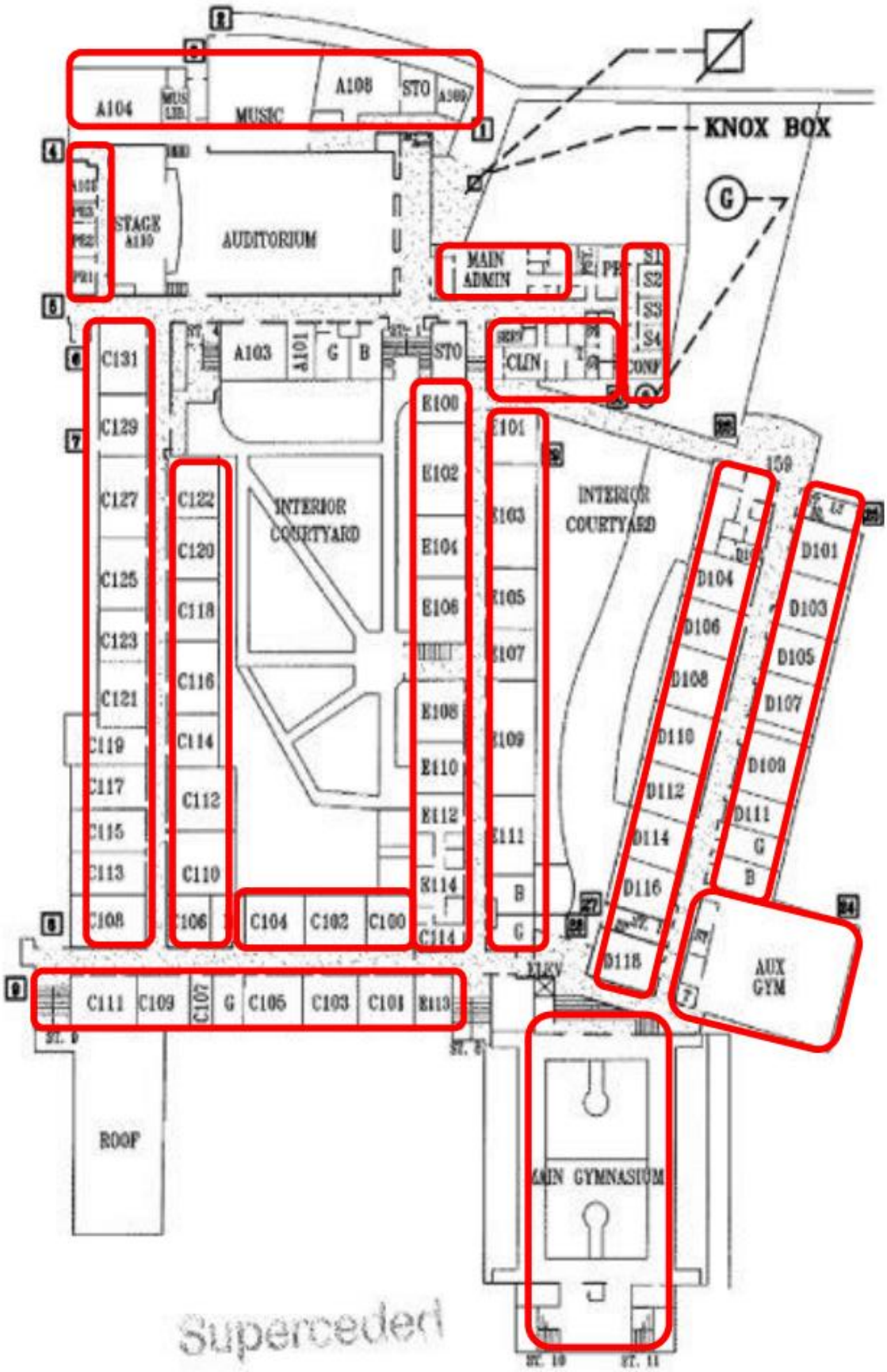
Scale: NTS

Project No. 11652-E2

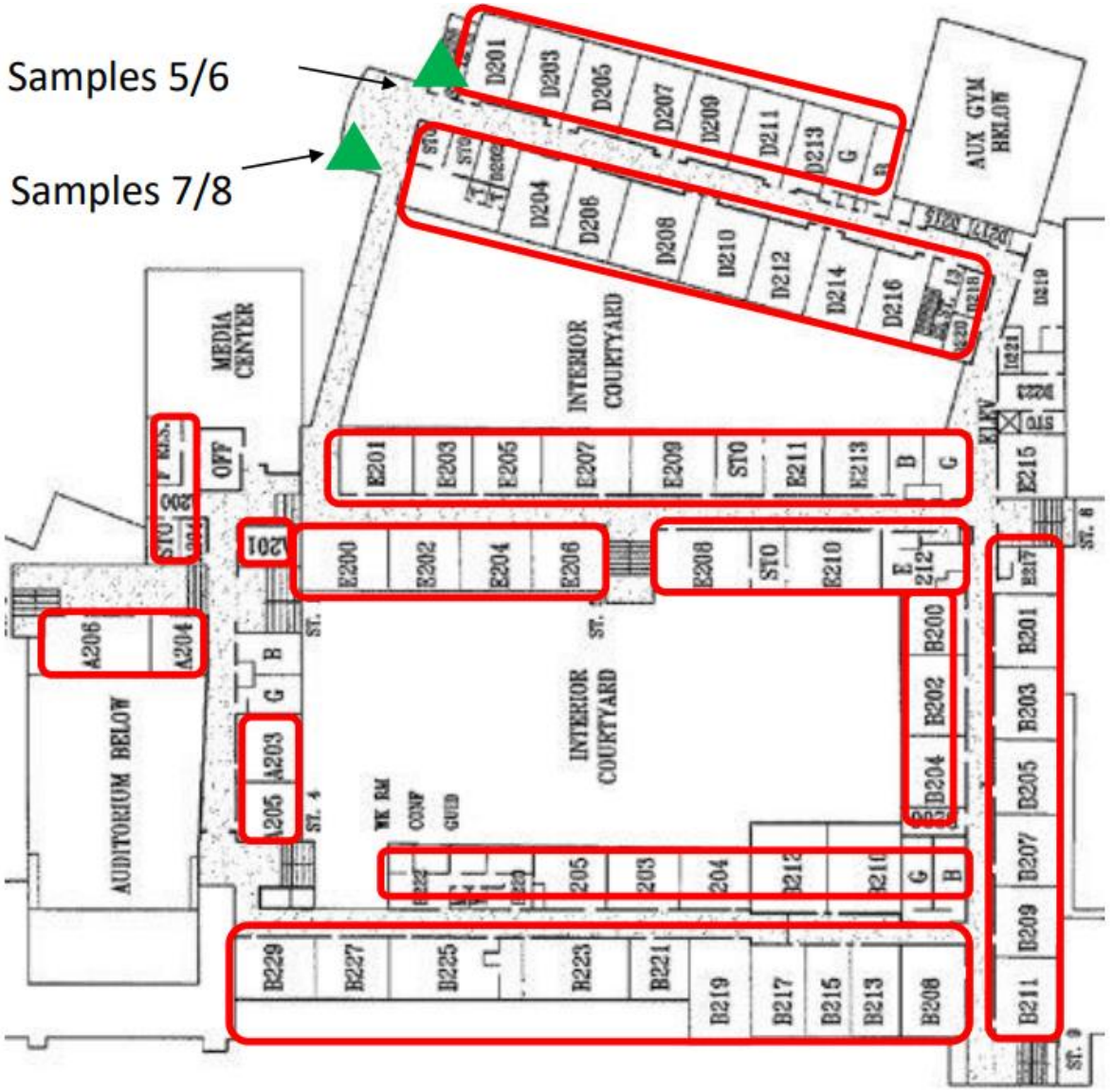
Site Visit: 12/17/21

Inaccessible Areas (during time of survey)

Sample Locations



Site Visit: 12/17/21	Project No. 11652-E2	Scale: NTS	Sample Location Sketch – First Floor	ECS	Francis Hammond Middle School 4646 Seminary Rd, Alexandria, Virginia, 22304



Inaccessible Areas (during time of survey)

Sample Locations

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, Virginia, 22304

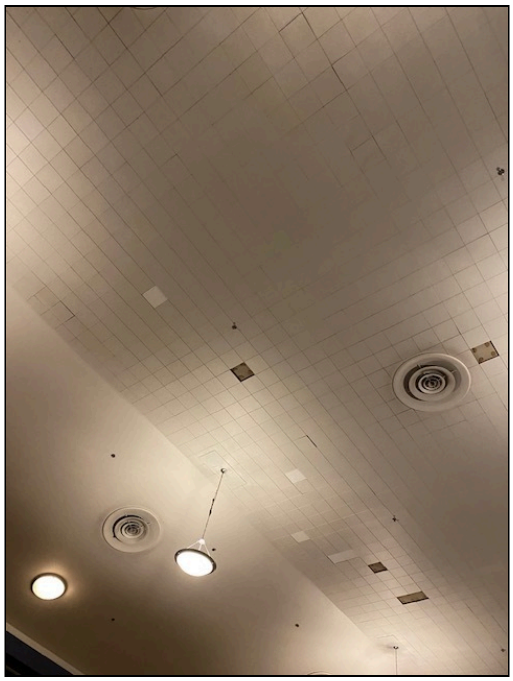
Sample Location Sketch- Second Floor

Scale: NTS

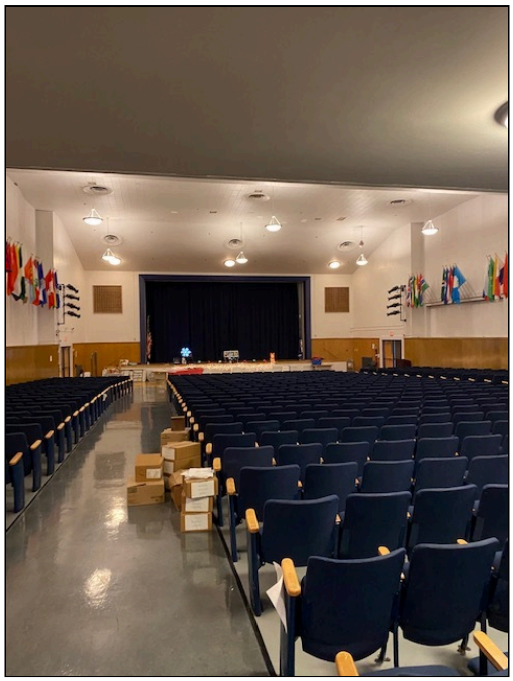
Project No. 11652-E2

Site Visit: 12/17/21

Appendix II: Site Photographs



1 - View of Auditorium Ceiling Tile



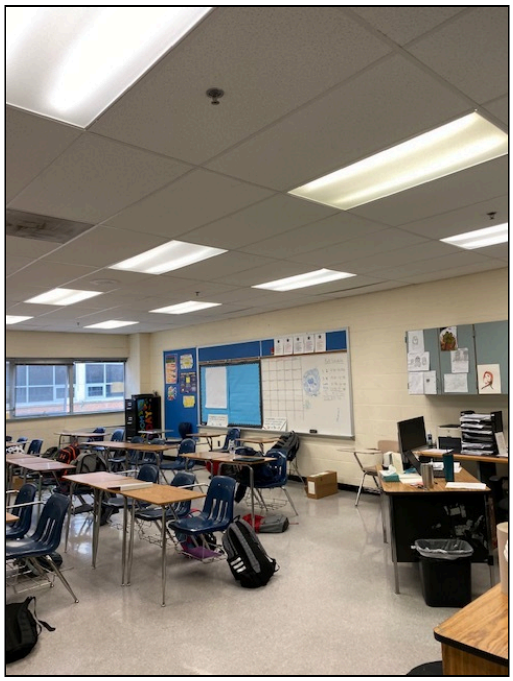
2 - View of Auditorium



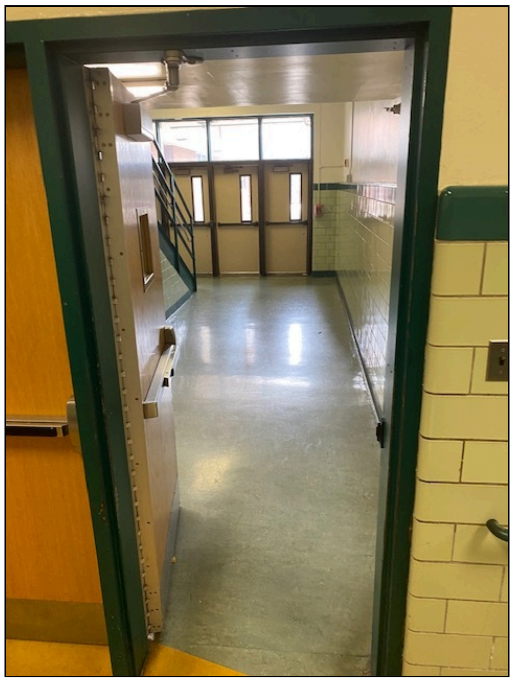
3 - View of Ceiling Tile



4 - View of Clinic Room



5 - View of D116 Classroom



6 - View of Exit Door 2



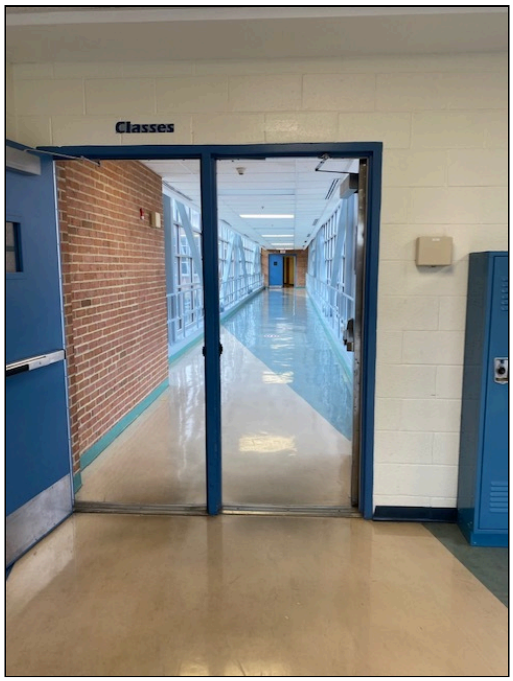
7 - View of Exit Door



8 - View of Front Entrance



9 - View of Front Foyer



10 - View of Glass Bridge



11 - View of Gym Foyer



12 - View of Hallway 2



13 - View of Hallway 3



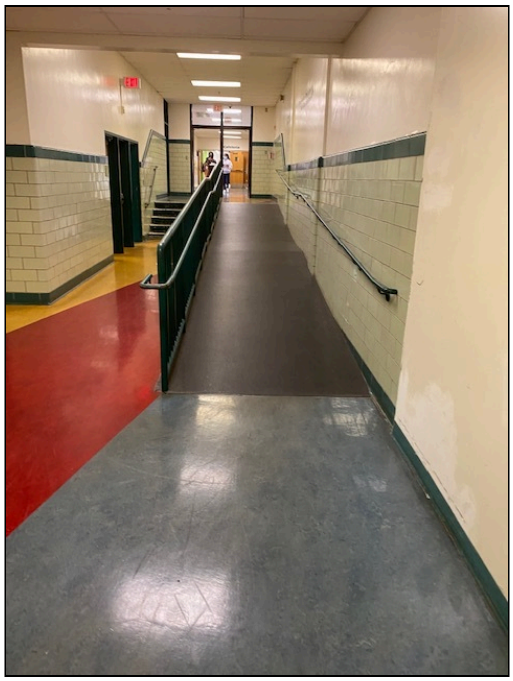
14 - View of Hallway damaged Floor Sampling



15 - View of Hallway Fire Damper and Ceiling Tile



16 - View of Hallway near Classroom 200



17 - View of Hallway Ramp First Floor



18 - View of Hallway to Cafeteria



19 - View of Main Lobby



20 - View of Mechanical Room 2



21 - View of Mechanical room HVAC Duct



22 - View of Mechanical Room Thermal System Insulation (TSI)



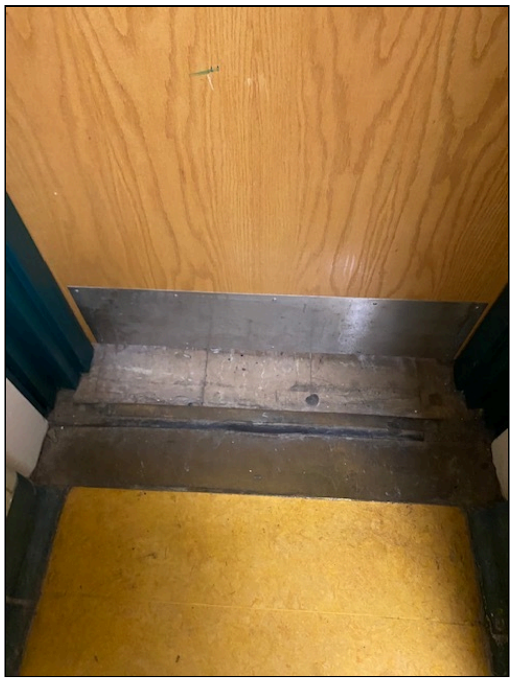
23 - View of Mechanical Room



24 - View of Media Center



25 - View of Old Boiler



26 - View of residual 9" x 9" Floor Tile in inaccessible closet



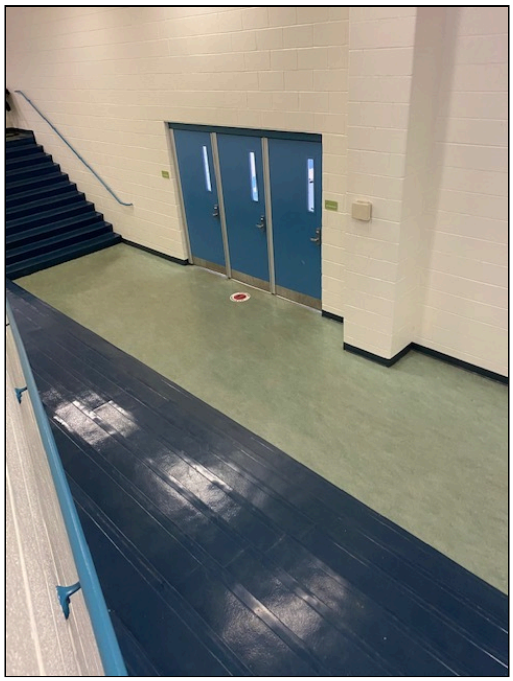
27 - View of Stage Ceiling



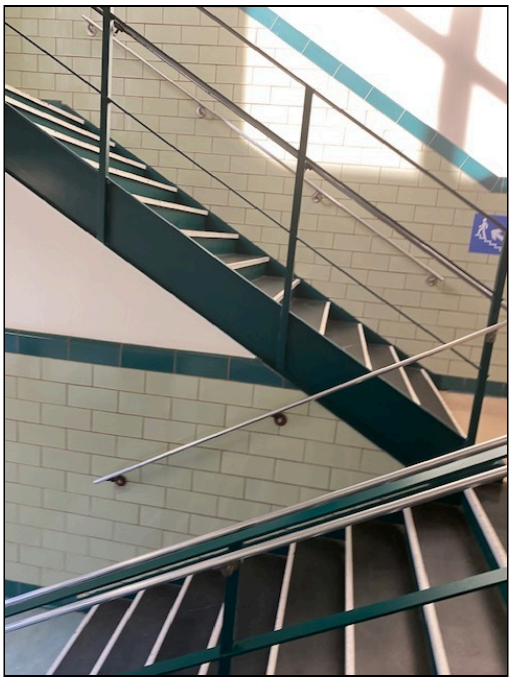
28 - View of Stage Tag



29 - View of Stage



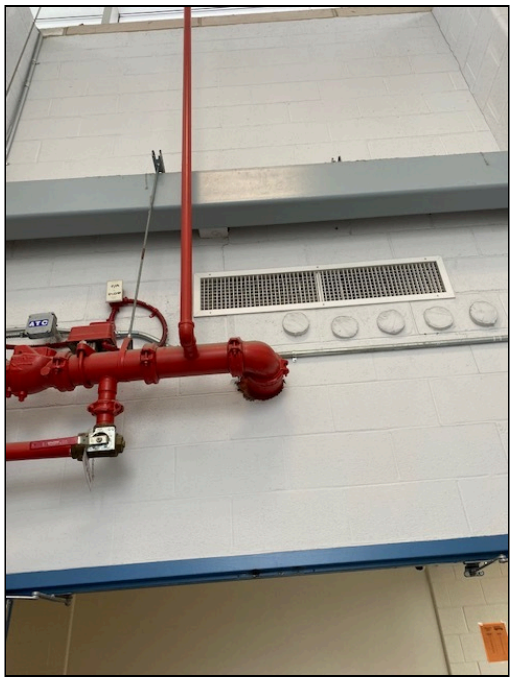
30 - View of Stairs to Gym



31 - View of Stairwell near Entrance



32 - View of Stairwell near Turf Field



33 - View of Standpipe Wall Packing



34 - View of Third Floor Hallway

Appendix III: Asbestos Bulk Sample Results

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

Sample #	Sampling Location	Material/Description	Analytical Results
1	asement outside of Elevato	Blue mottled Floor Tile	NAD
2	asement outside of Elevato	Blue mottled Floor Tile	NAD
3-A	asement outside of Elevato	Tan mottled Floor Tile- Tile	NAD
3-B	asement outside of Elevato	Tan mottled Floor Tile- Mastic	NAD
4-A	asement outside of Elevato	Tan mottled Floor Tile- Tile	NAD
4-B	asement outside of Elevato	Tan mottled Floor Tile- Mastic	NAD
5	Stair 12 Floor 2	Red Stand Pipe Wall Packing	NAD
6	Stair 12 Floor 2	Red Stand Pipe Wall Packing	NAD
7	Floor 2 Outside of Stair 12	2x4' White Pinhole and Large Fissure Ceiling Tile	NAD
8	Floor 2 Outside of Stair 12	2x4' White Pinhole and Large Fissure Ceiling Tile	NAD

Table Notes:
Bold = Asbestos-Containing Materials
N/A = Not Analyzed
None Detected = 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 TESTING NVLAP LAB CODE 200664-0

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

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

Attn: Michael Hamill

Project: ACPS/ 47:11652-E2 Francis Hammond (12-17-21) AHERA Survey

Lab Order ID: 71984386
Analysis ID: 71984386_PLM
Date Received: 1/31/2022
Date Reported: 2/2/2022

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
1 *71984386PLM_1*	Blue mottled floor tile	None Detected	10% Cellulose	90% Other	Blue, Gray Non Fibrous Homogeneous Ashed, Crushed
2 *71984386PLM_2*	Blue mottled floor tile	None Detected	10% Cellulose	90% Other	Blue, Gray Non Fibrous Homogeneous Ashed, Crushed
3 - A *71984386PLM_3*	Tan mottled floor tile *tile*	None Detected	5% Cellulose	95% Other	Tan, Brown Non Fibrous Homogeneous Ashed, Crushed
3 - B *71984386PLM_9*	Tan mottled floor tile *mastic*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved, Crushed
4 - A *71984386PLM_4*	Tan mottled floor tile *tile*	None Detected	5% Cellulose	95% Other	Tan, Brown Non Fibrous Homogeneous Ashed, Crushed
4 - B *71984386PLM_10*	Tan mottled floor tile *mastic*	None Detected		100% Other	Yellow Non Fibrous Homogeneous Dissolved, Crushed
5 *71984386PLM_5*	Red stand pipe wall packing	None Detected	5% Fiber Glass	95% Other	Red, Black Non Fibrous Homogeneous Ashed, Crushed
6 *71984386PLM_6*	Red stand pipe wall packing	None Detected	5% Fiber Glass	95% Other	Red, Black Non Fibrous Homogeneous Ashed, Crushed

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

Katelyn Stewart (10)

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

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

Attn: Michael Hamill

Project: ACPS/ 47:11652-E2 Francis Hammond (12-17-21) AHERA Survey

Lab Order ID: 71984386
Analysis ID: 71984386_PLM
Date Received: 1/31/2022
Date Reported: 2/2/2022

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
7 *71984386PLM_7*	2x4' white pinhole and large fissure ceiling tile	None Detected	30% Cellulose 30% Fiber Glass	20% Other 20% Perlite	White, Tan Fibrous Homogeneous Ashed, Crushed
8 *71984386PLM_8*	2x4' white pinhole and large fissure ceiling tile	None Detected	30% Cellulose 30% Fiber Glass	20% Other 20% Perlite	White, Tan Fibrous Homogeneous Ashed, Crushed

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

Katelyn Stewart (10)

Analyst

Approved Signatory

11984380

Client:	ECS Mid-Atlantic, LLC	***Instructions:***
Contact:	Michael Hamill	*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:	MHamill@ecslimited.com	***Enter samples between "<<" and ">>"***
Project:	ACPS/ 47:11652-E2 Francis Hamm	***Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample.***
Client Notes:	**Positive Stop**	*Only Enter your data on the first sheet "Sheet1"*
P.O. #.		*Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.*
Date Submitted:	1/27/2022 0:00	
Analysis:	PLM EPA 600/R-93/116	
TurnAroundTime:	3 day TAT	

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		Blue mottled floor tile	Basement outside of elevator
2		Blue mottled floor tile	Basement outside of elevator
3		Tan mottled floor tile	Basement outside of elevator
4		Tan mottled floor tile	Basement outside of elevator
5		Red stand pipe wall packing	Stair 12 Floor 2
6		Red stand pipe wall packing	Stair 12 Floor 2
7		2x4' white pinhole and large fissure ceiling tile	Floor 2 outside of Stair 12
8		2x4' white pinhole and large fissure ceiling tile	Floor 2 outside of Stair 12
>>			

Accepted ☒

Rejected ☐

B Kelley 1/31 ID-30A

Relinquished By

Received By

Appendix V: Certifications/ Licenses

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2022

NUMBER
3309002099

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS PROJECT MONITOR LICENSE

ZACHARY DAVID HARRELL
1927 N CAMERON ST
ARLINGTON, VA 22207

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS PROJECT MONITOR LICENSE
NUMBER: 3309002099 EXPIRES: 12-31-2022

ZACHARY DAVID HARRELL
1927 N CAMERON ST
ARLINGTON, VA 22207

(FOLD)

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

DPOR-PC (02/2017)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2022

NUMBER
3303004832

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

ZACHARY DAVID HARRELL
1927 N CAMERON ST
ARLINGTON, VA 22207

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

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

ZACHARY DAVID HARRELL
1927 N CAMERON ST
ARLINGTON, VA 22207

(FOLD)

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

DPOR-PC (02/2017)

Appendix VI: 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 VII: Previous Reports

ASBESTOS ABATEMENT PROJECT MONITORING SUMMARY REPORT

FRANCIS HAMMOND MIDDLE SCHOOL - MAIN OFFICE

4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:1519-F5

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

MAY 28, 2021

May 28, 2021

Ms. Carol Cheney
Alexandria City Public Schools
1340 Braddock Place
Suite 620
Alexandria, Virginia 22314

ECS Project No. 47:1519-F5

Reference: Asbestos Abatement Project Monitoring Summary Report, Francis Hammond Middle School - Main Office, 4646 Seminary Road, Alexandria, Virginia

Dear Ms. Cheney:

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 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

3.0 ASBESTOS ABATEMENT ACTIVITIES 1

3.1 Asbestos Removal 1

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4.0 FINAL CLEARANCE AIR SAMPLING 2

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Appendix I: Drawings

Appendix II: Daily Field Reports with PCM Air Sample Results

Appendix III: Certifications/Licenses

1.0 PROJECT DESCRIPTION

The asbestos abatement work was performed by Waco, Inc., in general from June 26 to 29, 2020 and included the removal of the asbestos-containing floor tile and associated mastic from the first floor main office of the school. 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 enclosures 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 Commonwealth of 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 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 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 Commonwealth of 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

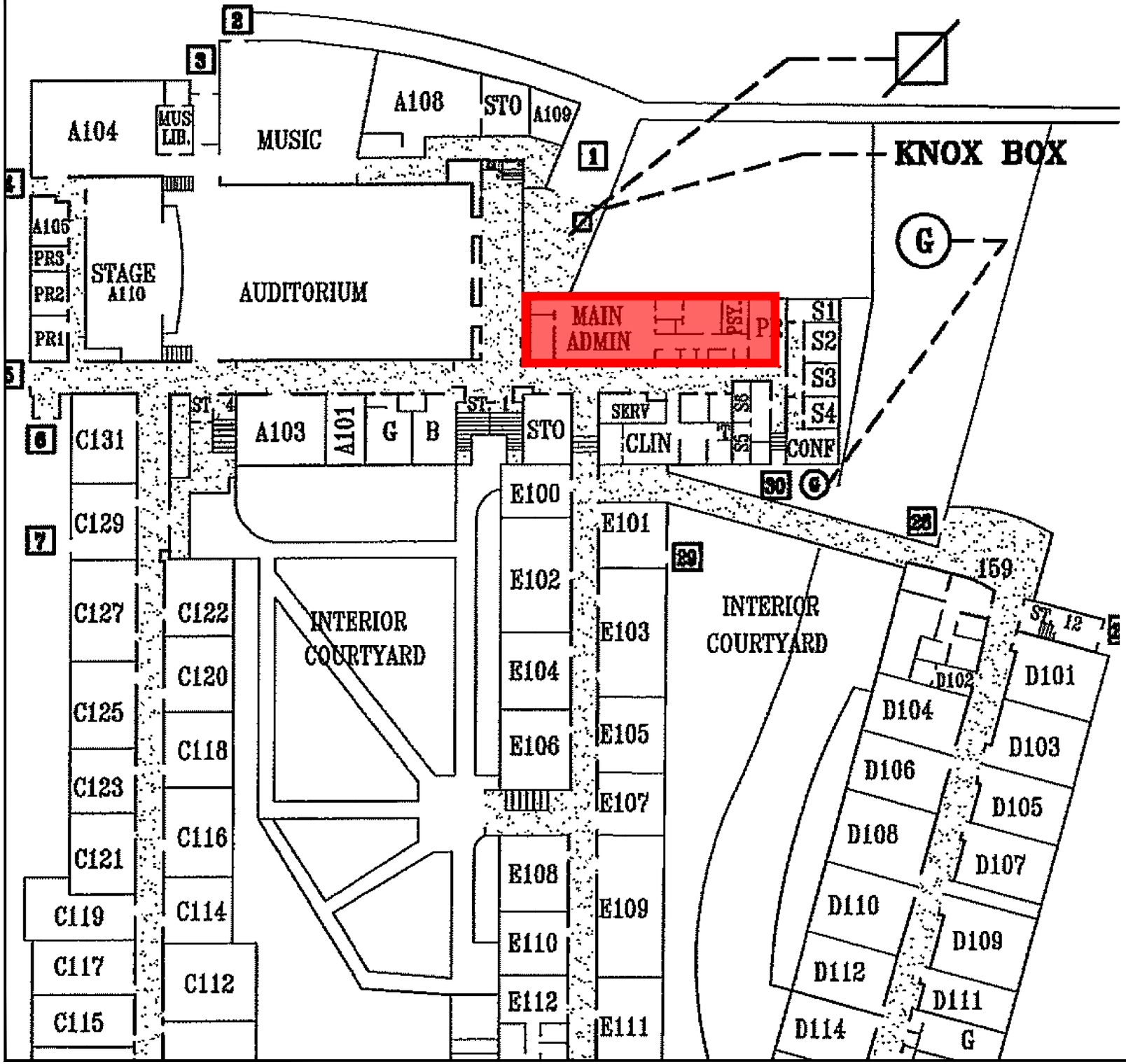
The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards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



LEGEND

ABATEMENT AREA

*PLEASE NOTE THAT THE ABOVE-REFERENCED ASBESTOS CONTAINING MATERIALS (ACM's), OTHER INDENTIFIED ACM's, AND/OR ASSUMED ACM's ARE MOST LIKELY IN OTHER AREAS OF THE SCHOOL BUILDING.

**THE ASBESTOS-CONTAINING FLOORING MATERIALS MAY STILL BE PRESENT IN THE IDENTIFIED AREAS BENEATH FURNITURE, SHELVES, CABINETS, PARTITION WALLS, ETC.

FRANCIS C. HAMMOND MIDDLE SCHOOL

ABATEMENT AREA MAP

ALEXANDRIA CITY PUBLIC SCHOOLS

ECS REVISIONS

ENGINEER	DRAFTING
	CJK

SCALE	NO SCALE
PROJECT NO.	47;1519-F5
SHEET	1/1
DATE	05/17/2021

Appendix II: Daily Field Reports with PCM Air Sample Results

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 1, 2020

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

ATTN: Carol Cheney

RE: **ACPS Francis Hammond Abatement Monitoring**
ECS Job # **1519-F5**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

CC: Alexandria City Public Schools - John Finnigan
Waco Inc. - Chris Lanham
Waco Inc. - Steve Williams

ENCL:

Field Report # 1	6/26/2020	6 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-F5**
Report No.	**1**
Day & Date	**Friday 6/26/2020**
Weather	**90 °/ Sunny**
On-Site Time	**10.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**10.50**
Re Obs Time	**0.00**

Project	**ACPS Francis Hammond Abatement Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**Waco Inc.**

Remarks **6 PCM**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**7:00A**	**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 to be removed today is asbestos-containing floor tile and associated mastic from the first floor main office.

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.

Prior to starting the removal of the specified material the abatement permit was reviewed. The permit was on-site and the removal of the specified material could begin.

FIRST FLOOR MAIN OFFICE WORK AREA

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 9:15 and 9:20 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 12:15 and 12:20 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.

Between 12:15 and 12:20 pm, 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 5:10 and 5:15 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.

By John A O'Neil 1510

65870

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.

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 06262006JO appeared to be overloaded with dust and/or other particulates and therefore, this air sample could not be analyzed. ECS informed the abatement contractor to utilize additional engineering controls in the work area to reduce airborne fiber concentrations.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-F5
Project Address: 4646 Seminary Road
Alexandria, VA-22304

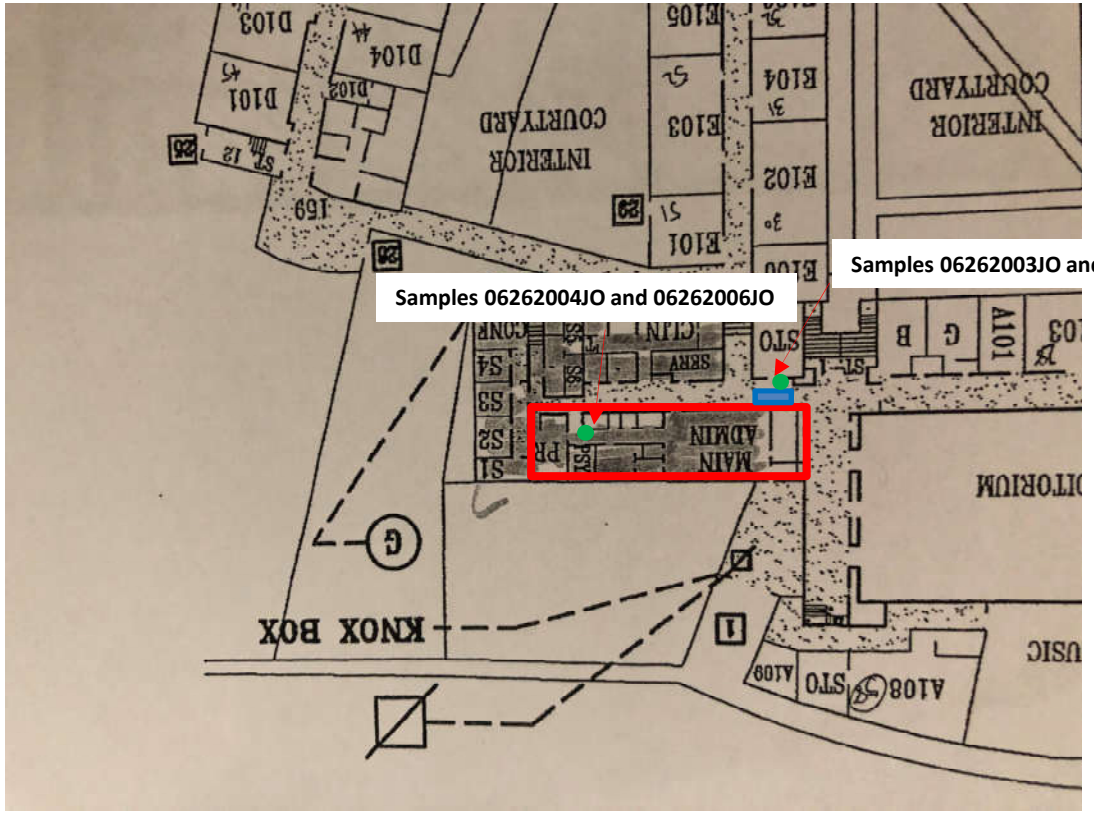
Date: 6/27/2020
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
06262005 JO	First Floor Main Office -OWA	12:15 PM	5:15 PM	2.5	2.5	2.5	300	750.0	2.5	100	0.002
06262002 JO	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
06262003 JO	First Floor Main Office - OWA	9:15 AM	12:15 PM	2.5	2.5	2.5	180	450.0	1.0	100	0.001
06262004 JO	First Floor Main Office - IWA	9:20 AM	12:15 PM	2.5	2.5	2.5	175	437.5	15.0	100	0.017
06262006 JO	First Floor Main Office - IWA	12:20 PM	5:20 PM	2.5	2.5	2.5	300	750.0	N/A	N/A	
06262001 JO	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 06262006JO appeared to be overloaded with with dust and/or other particulates, and therefore this air sample could not be analyzed. N/A = Not Available

ECS Technician: John A O'Neil **Date:** 6/27/2020



Containment Area

Three stage decontamination unit

PCM Air Sample Locations

PCM Final Air Sample Locations

Francis Hammond Elementary School
4646 Seminary Road
Alexandria, VA 22304

WORK AREA SKETCH
First Floor

SCALE NTS

Project No
47-1519-F5

6/26/2020

Attachments



View of Inside First Floor Main Office Prior to Abatement

Figure 1



View of Inside First Floor Main Office Prior to Abatement

Figure 2

Attachments



View of Inside First Floor Main Office Prior to Abatement

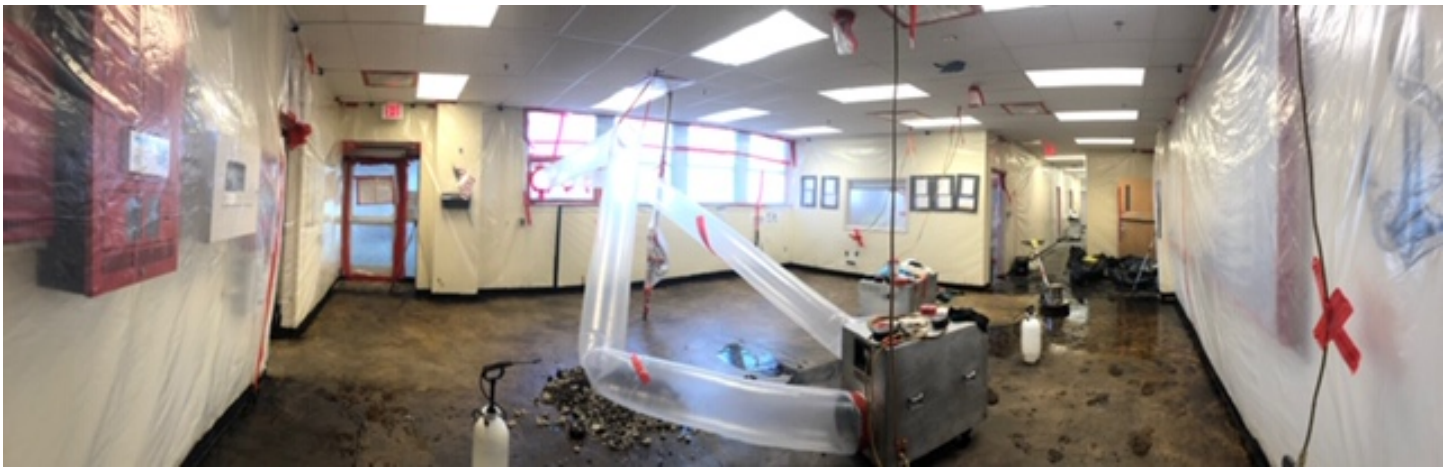
Figure 3



View of Inside First Floor Main Office Following Removal of Floor Tile

Figure 4

Attachments



View of Inside First Floor Main Office Following Removal of Floor Tile

Figure 5

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 1519-F5 **Date:** 6/27/2020

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: First Floor Main Office - Floor Tile and Associated Mastic Removal

	Work Area Location/Description	First Floor Main Office - Floor Tile
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	7
	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: Bobby Rhett **Date:** 6/27/2020

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-F5 **Date:** 6/27/2020

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: First Floor Main Office - Floor Tile and Associated Mastic Removal

	Work Area Location/Description	First Floor Main Office - Floor Tile
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:** 6/27/2020

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 1, 2020

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

ATTN: Carol Cheney

RE: **ACPS Francis Hammond Abatement Monitoring**
ECS Job # **1519-F5**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

CC: Alexandria City Public Schools - John Finnigan
Waco Inc. - Chris Lanham
Waco Inc. - Steve Williams

ENCL:

Field Report # 2	6/27/2020	6 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-F5**
Report No.	**2**
Day & Date	**Saturday 6/27/2020**
Weather	**90 °/ Sunny**
On-Site Time	**8.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**8.50**
Re Obs Time	**0.00**

Project	**ACPS Francis Hammond Abatement Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**Waco Inc.**

Remarks **6 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 material to be removed today is asbestos-containing floor mastic from the first floor main office.

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.

Prior to starting the removal of the specified material, the abatement permit was reviewed. The permit was on-site and the removal of the specified material could begin.

FIRST FLOOR MAIN OFFICE WORK AREA

Between 7:00 am and 7:01 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 10:00 am and 10:01 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. New PCM air samples were started in these locations.

Between 1:30 pm and 1:31 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.

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.

By JP Nuique 1825

65874

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.

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.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 1519-F5
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 6/27/2020
Page: 1 of 1

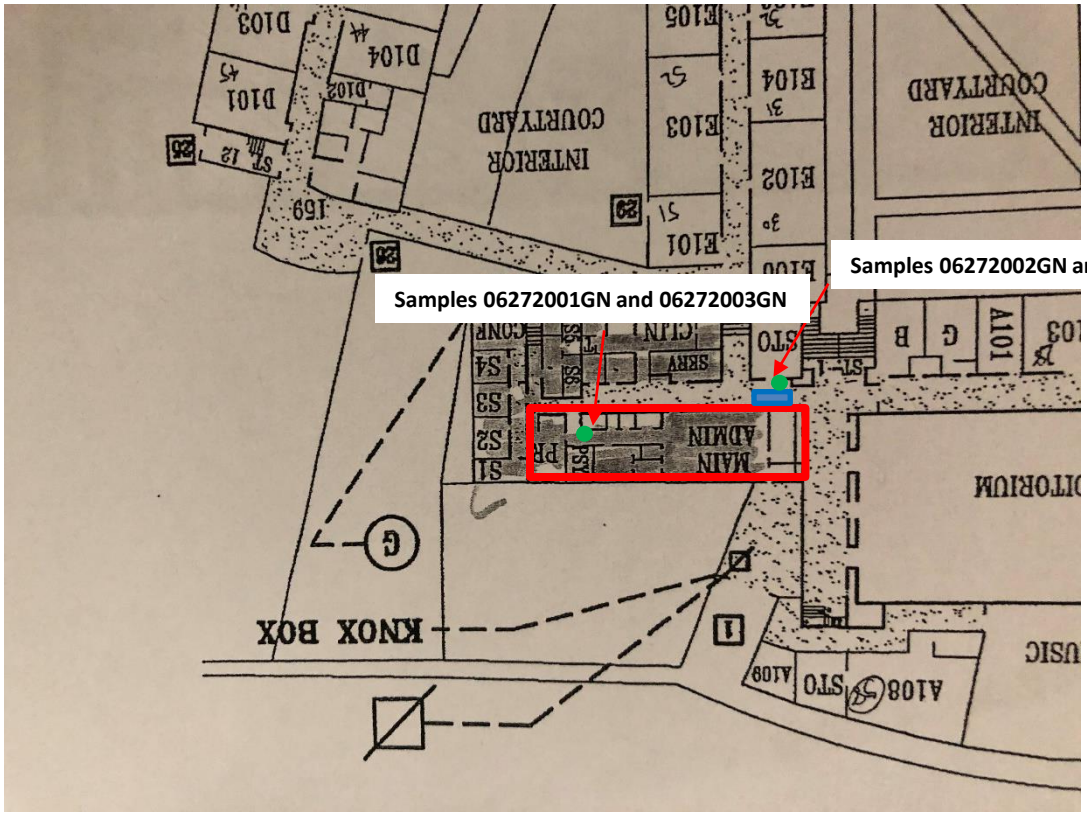
Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
06272002 GN	OWA/1st Floor Main Office Work Area at Decontamination Unit Entry	7:01 AM	10:01 AM	3.0	3.0	3.0	180	540.0	0.0	100	0.000
062720FB 02GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
062720FB 01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
06272001 GN	IWA/1st Floor Main Office Work Area	7:00 AM	10:00 AM	3.0	3.0	3.0	180	540.0	9.5	100	0.009
06272004 GN	OWA/1st Floor Main Office Work Area at Decontamination Unit Entry	10:01 AM	1:31 PM	3.0	3.0	3.0	210	630.0	1.0	100	0.001
06272003 GN	IWA/1st Floor Main Office Work Area	10:00 AM	1:30 PM	3.0	3.0	3.0	210	630.0	5.0	100	0.004

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

Notes:

ECS Technician: JP Nuique

Date: 6/27/2020



Containment Area

Three stage decontamination unit

PCM Air Sample Locations

Francis Hammond Elementary School
4646 Seminary Road
Alexandria, VA 22304

WORK AREA SKETCH
First Floor

SCALE NTS

Project No
47-1519-F5

6/27/2020

Attachments



View following removal of floor tile and black mastic within the 1st floor main office work area

Figure 1



View following removal of floor tile and black mastic within the 1st floor main office work area

Figure 2

Attachments



View following removal of floor tile and black mastic within the 1st floor main office work area

Figure 3



View following removal of floor tile and black mastic within the 1st floor main office work area

Figure 4

Attachments



View following removal of floor tile and black mastic within the 1st floor main office work area

Figure 5



View following removal of floor tile and black mastic within the 1st floor main office work area

Figure 6

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 1519-F5 **Date:** 6/27/2020

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Main Office Work Area

	Work Area Location/Description	1st Floor Main Office 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	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: Bobby Rhett **Date:** 6/27/2020

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 1519-F5 **Date:** 6/27/2020

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Main Office Work Area

	Work Area Location/Description	1st Floor Main Office 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	N/A
	Mechanical Equipment	N/A
	Ducts	N/A
	Pipes	N/A
	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	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 next working day.

ECS Technician: Bobby Rhett **Date:** 6/27/2020

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 1, 2020

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

ATTN: Carol Cheney

RE: **ACPS Francis Hammond Abatement Monitoring**
ECS Job # **1519-F5**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

CC: Alexandria City Public Schools - John Finnigan
Waco Inc. - Chris Lanham
Waco Inc. - Steve Williams

ENCL: Field Report # 3 6/29/2020 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-F5**
Report No.	**3**
Day & Date	**Monday 6/29/2020**
Weather	**85 °/ Sunny**
On-Site Time	**6.00**
Lab Time	**0.00**
Travel Time*	**1.00**
Total	**7.00**
Re Obs Time	**0.00**

Project	**ACPS Francis Hammond Abatement Monitoring**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**Waco Inc.**

Remarks **5 TEM**

Trip Charges*	Tolls/Parking*	Mileage*	**10**	Time of	Arrival	Departure
Chargeable Items					**7:00A**	**1:00P**

* 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 final clearance air sampling for asbestos abatement. The materials previously removed was floor tile and associated mastic from the first floor main office.

FIRST FLOOR MAIN OFFICE WORK AREA:

Following the successful completion of the final clearance visual survey and the application of an encapsulant to surfaces within the regulated work area the previous work shift, 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 10:00 am, the sampling pumps inside the work area were checked using a rotameter after the air within the regulated work area was sampled using TEM cassettes for 150 minutes at 8.0 liters per minute.

At 12:40 pm, the sampling pumps outside the work area were checked using a rotameter after the air within 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 shipped to Scientific Analytical Institute, Inc. (SAI) in Greensboro, North Carolina for analysis. A copy of the chain of custody has been attached.

GENERAL:

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. SAI informed ECS that the analytical results of the TEM final clearance air samples collected from the first floor main office work area found the airborne asbestos fiber concentrations to be less than this maximum allowable concentration. The client and abatement contractor were informed of the results. A copy of the laboratory report is attached.

Airborne Asbestos Analysis

By Transmission Electron Microscopy
AHERA Methodology (40 CFR, Part 763, Subpart E, Appendix A)

NVLAP Lab Code: 200664-0

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

Attn: Bobby Rhett

Project: Francis Hammond

Lab Order ID: 71945289
Analysis ID: '1945289_AHE
Date Received: 6/30/2020
Date Reported: 6/30/2020

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume / *Filter Area* / *Area Analyzed*	Analytical Sensitivity Str/cc	Asbestos Structures	Raw Structure Count	Concentration Str/cc	Loading Str/mm ^{2}
062920-01AF	Main Office - IWA FC	1200 L	0.00497	None Detected		<0.00497	**<15.5**
		385 mm²					
71945289AHE_1		*0.0645 mm²*					
062920-02AF	Main Office - IWA FC	1200 L	0.00497	None Detected		<0.00497	**<15.5**
		385 mm²					
71945289AHE_2		*0.0645 mm²*					
062920-03AF	Main Office - IWA FC	1200 L	0.00497	None Detected		<0.00497	**<15.5**
		385 mm²					
71945289AHE_3		*0.0645 mm²*					
062920-04AF	Main Office - IWA FC	1200 L	0.00497	None Detected		<0.00497	**<15.5**
		385 mm²					
71945289AHE_4		*0.0645 mm²*					
062920-05AF	Main Office - IWA FC	1200 L	0.00497	None Detected		<0.00497	**<15.5**
		385 mm²					
71945289AHE_5		*0.0645 mm²*					

Disclaimer: Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA IHPAT program. IHPAT Laboratory ID: 173190. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The laboratory is not responsible for data collected by personnel who are not part of the laboratory. Results reported in both structures/cm³ and structures/mm² are dependent on the volume of air sampled and measured by non-laboratory personnel and are not covered by the laboratory's NVLAP accreditation.

Heather Davide (5)

Analyst

Approved Signatory

Scientific Analytical Institute
4604 Dundas Dr. Greensboro, NC 27407
Phone: 336.292.3888 Fax: 336.292.3313
www.sailab.com lab@sailab.com

Lab Use Only
Lab Order ID: 7194589
Client Code: _____

Company Contact Information	
Company: ECS Mid-Atlantic LLC	Contact: Bobby Rhett
Address: 14026 Thunderbolt Place	Phone ☐: 703-471-8400
Suite 100	Fax ☐:
Chantilly, VA 20151	Email ☒: brhett@ecslimited.com

Billing/Invoice Information	Turn Around Times	
Company: Same	90 Min. ☐	48 Hours ☐
Contact:	3 Hours ☐	72 Hours ☐
Address:	6 Hours ☒	96 Hours ☐
	12 Hours ☐	120 Hours ☐
	24 Hours ☐	144+Hours ☐

Asbestos Test Types	
PLM EPA 600/R-93/116 (PLM)	☐
Positive stop	☐
PLM Point Count 400 (PT4)	☐
PLM Point Count 1000 (PTM)	☐
PCM NIOSH 7400-A Rules (PCM)	☐
B Rules (PCB) ☐ TWA (PTA)	☐
TEM AHERA (AHE)	☒
TEM Level II (LII)	☐
TEM NIOSH 7402 (TNI)	☐
TEM Bulk Qualitative (TBL)	☐
TEM Bulk Chatfield (TBS)	☐
TEM Bulk Quantitative (TBQ)	☐
TEM Wipe ASTM D6480-05	☐
TEM Microvac ASTM D5755-02	☐
TEM Water EPA 100.2 (TW1)	☐
Other: _____	☐

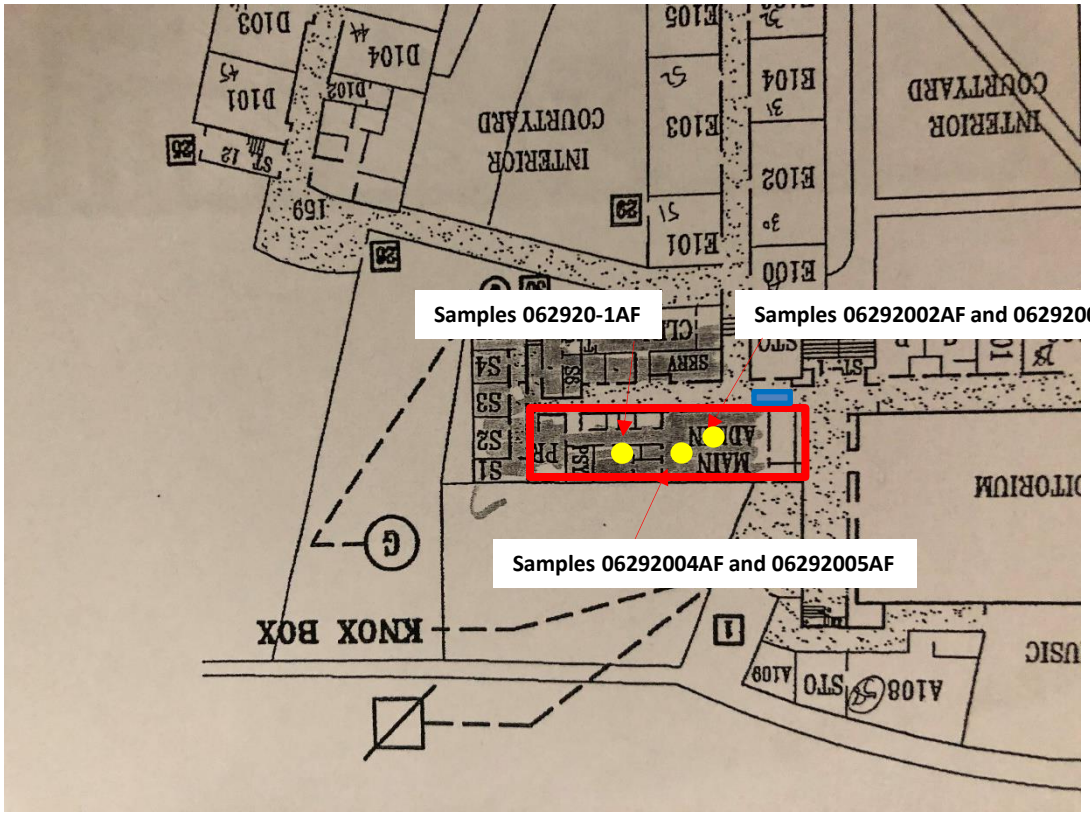
PO Number: 47 1519-F5
Project Name/Number: Francis Hammond

Agressive Air Sampling
Please analyze IWA Only

Sample ID #		Volume/Area	Comments
062920-01AF	Main Office - IWA FC	1,200L	
062920-02AF	Main Office - IWA FC	1,200L	
062920-03AF	Main Office - IWA FC	1,200L	
062920-04AF	Main Office - IWA FC	1,200L	
062920-05AF	Main Office - IWA FC	1,200L	Accepted ☑
062920-06AF	Main Office - OWA FC	1,200L	
062920-07AF	Main Office - OWA FC	1,200L	Rejected ☐
062920-08AF	Main Office - OWA FC	1,200L	
062920-09AF	Main Office - OWA FC	1,200L	
062920-10AF	Main Office - OWA FC	1,200L	
062920-11AF	Field Blank	NA	

Total # of Samples 13

Relinquished by	Date/Time	Received by	Date/Time
Anna Francisco	6/29/20 12:50pm	N. Francis 6/30	1AM



Containment Area

Three stage decontamination unit

PCM Air Sample Locations

TEM Final Air Sample Locations

Francis Hammond Elementary School
4646 Seminary Road
Alexandria, VA 22304

WORK AREA SKETCH
First Floor

SCALE NTS

Project No
47-1519-F5

6/29/2020

Appendix III: Certifications/ Licenses

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
03-31-2021

NUMBER
3309001932

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS PROJECT MONITOR LICENSE

ANNA CHRISTINA FRANCIOSA
1310 L STREET, NW
SUITE 425
WASHINGTON, DC 20005

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS PROJECT MONITOR LICENSE
NUMBER: 3309001932 EXPIRES: 03-31-2021

ANNA CHRISTINA FRANCIOSA
1310 L STREET, NW
SUITE 425
WASHINGTON, DC 20005

(FOLD)

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

DPOR-PC (02/2017)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2020

NUMBER
3309002004

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS PROJECT MONITOR LICENSE

JOHN ALEXANDER O'NEIL
4835 CORDELL AVE
APT 812
BETHESDA, MD 20814

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS PROJECT MONITOR LICENSE
NUMBER: 3309002004 EXPIRES: 12-31-2020

JOHN ALEXANDER O'NEIL
4835 CORDELL AVE
APT 812
BETHESDA, MD 20814

(FOLD)

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

DPOR-PC (02/2017)

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).

ASBESTOS FINAL ABATEMENT PROJECT MONITORING REPORT

FRANCIS C. HAMMOND MIDDLE SCHOOL

4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-F1

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-F1

Reference: Asbestos Final Abatement Project Monitoring Report, Francis C. Hammond Middle School, 4646 Seminary Road, 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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TABLE OF APPENDICES

Appendix I: Daily Field Reports with PCM Air Sample Results

Appendix II: Drawings

Appendix III: Certifications/Licenses

1.0 PROJECT DESCRIPTION

The subject property consists of Francis C. Hammond Middle School located at 4646 Seminary Road in Alexandria, Virginia. The asbestos abatement work was performed by Waco, Inc., in general from July 15 through July 30, 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 47:18961-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 E113, C100, C102, C103, C104, C105, C106, C107, C108, C109, and C111
- Floor tile and associated black mastic - Phase 2 - Rooms E217, B200, B201, B202, B203, B204, B205, B206, B207, B208, B209, and B211.

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.

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 19, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road Alexandria, VA 22304**

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 7/15/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**1**
Day & Date	**Thursday 7/15/2021**
Weather	**94 °/ Sunny**
On-Site Time	**1.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**1.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:00A**	**6:30A**
				4:00P	**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 remove for this project are asbestos-containing floor tile associated floor mastic on the 1st floor. Photographs for today's work are attached to this report.

1ST FLOOR WORK AREA

The undersigned observed the abatement workers set-up containment in the first-floor work area for the removal of the floor tile and associated floor mastic.

The abatement is scheduled to begin tomorrow, Friday July 16, 2021.

By JP Nuique 1825

Attachments



View of work area preparation activities on the 1st floor

Figure 1

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 Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 2 7/16/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**2**
Day & Date	**Friday 7/16/2021**
Weather	**87 °/ 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 floor tile/carpet and associated black floor mastic in the 1st floor hallway and classrooms C100 – C109 and C111. Photographs and a sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 – C109 and C111 WORK AREA

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 11:00 am and 11:15 am, 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.

At 11:30 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the hallway on the 1st floor. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.
Abatement workers were observed removing floor tile and associated black floor mastic using a scraper machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities

At 4:20 pm, the sampling pumps were checked using a rotameter. The flow rate was 1.5 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.

By Brittany Felts 1825

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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)
07162101BF	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07162102BF	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07162103BF	OWA- Decontamination unit	11:30 AM	4:20 PM	1.5	1.5	1.5	290	435.0	1.0	100	0.001
07162104BF	OWA- Critical Barrier near door 23	11:30 AM	4:20 PM	1.5	1.5	1.5	290	435.0	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:** 7/16/2021

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/18/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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	8
	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:** 7/18/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/18/2021

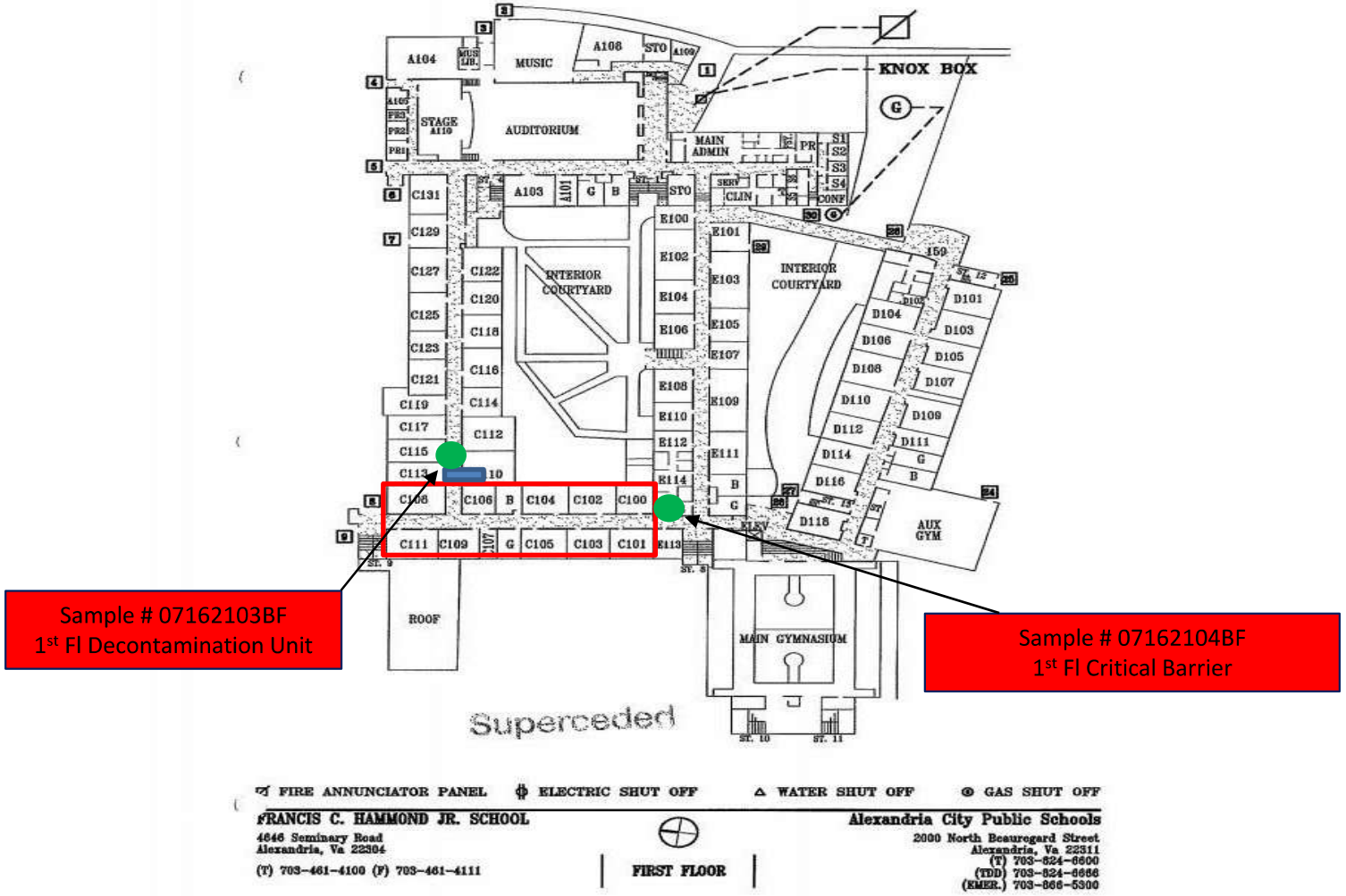
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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	4
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/18/2021



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/16/21

Attachments



View of abatement activities in the first floor work area

Figure 1



View of abatement activities in the first 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 Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road Alexandria, VA 22304**

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 # 3 7/17/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**3**
Day & Date	**Saturday 7/17/2021**
Weather	**96 °/ 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**	**6:30A**
				8:30A	**12:00P**
				12:30P	**2:00P**
				4:00P	**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 floor tile/carpet and associated black floor mastic in the 1st floor hallway and classrooms C100 – C109 and C111. Photographs and sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 – C109 and C111 WORK AREA

At 6:30 am, PCM air samples were started outside the work area at the decontamination unit entry and critical barrier in the hallway on the 1st floor. The sampling pumps were calibrated using a rotameter to 1.0 liters per minute.

Abatement workers were observed removing floor tile and associated black floor mastic using a scraper machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

At 4:20 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

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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	6:30 AM	4:20 PM	1.0	1.0	1.0	590	590.0	0.0	100	0.000
07172104BF	OWA- critical barrier in the hallway on 1st floor	6:30 AM	4:20 PM	1.0	1.0	1.0	590	590.0	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:** 7/17/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/18/2021

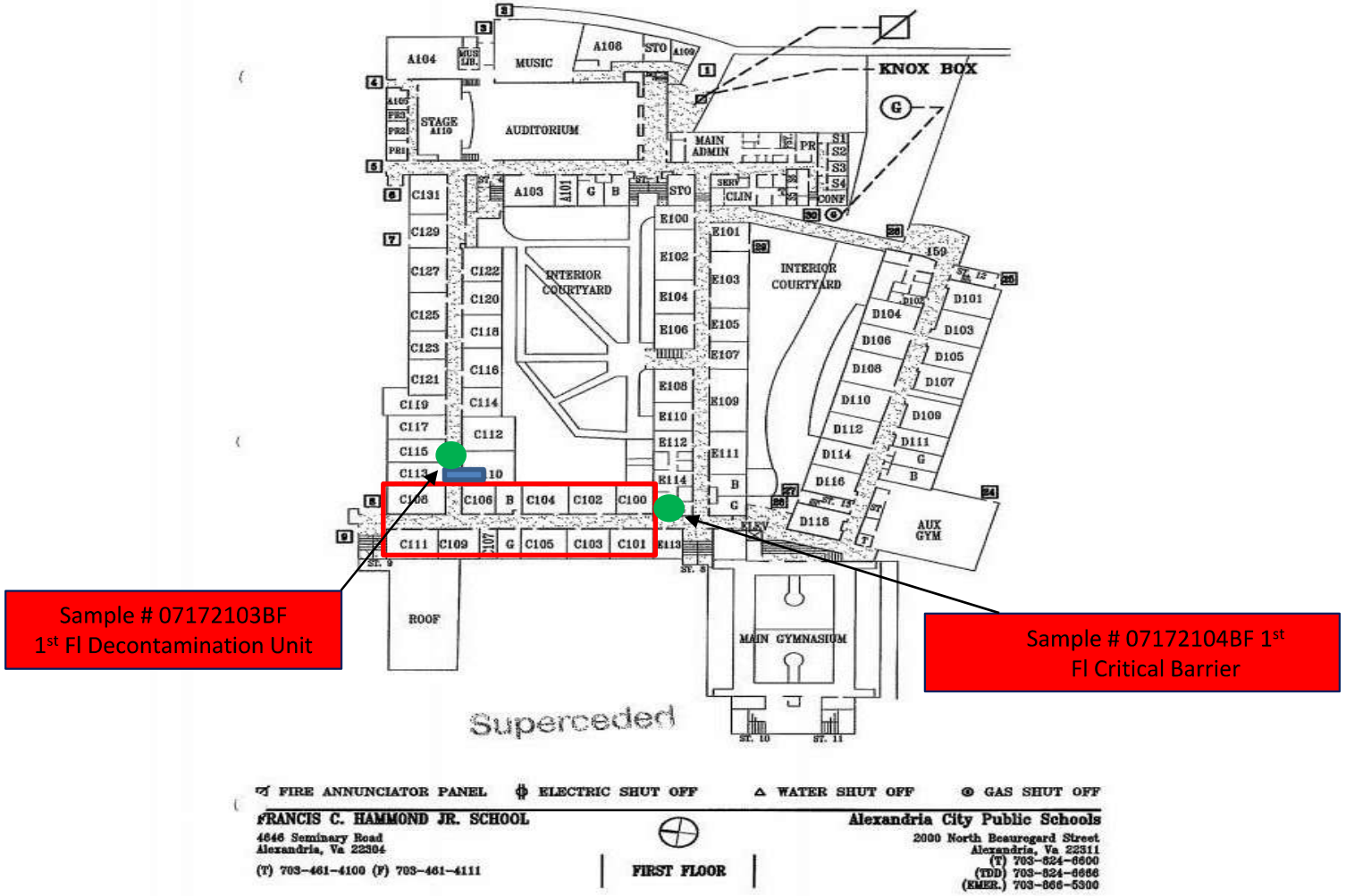
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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:** 7/18/2021



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/17/21

Attachments



View of abatement activities in the first floor work area

Figure 1



View of abatement activities in the first 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 Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 4 7/18/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**4**
Day & Date	**Sunday 7/18/2021**
Weather	**68 °/ Sunny**
On-Site Time	**1.25**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**1.25**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**7:15A**	**7:45A**
				1:45P	**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 materials to be removed today are floor tile/carpet and associated black floor mastic in the 1st floor hallway and classrooms C100 – C109 and C111. Photographs and a sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 – C109 and C111 WORK AREA

Between 7:40 am and 7:42 am, PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier near the stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing black floor mastic using an edge grinder with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 2:00 pm and 2:02, 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 Suhel Shafaat 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

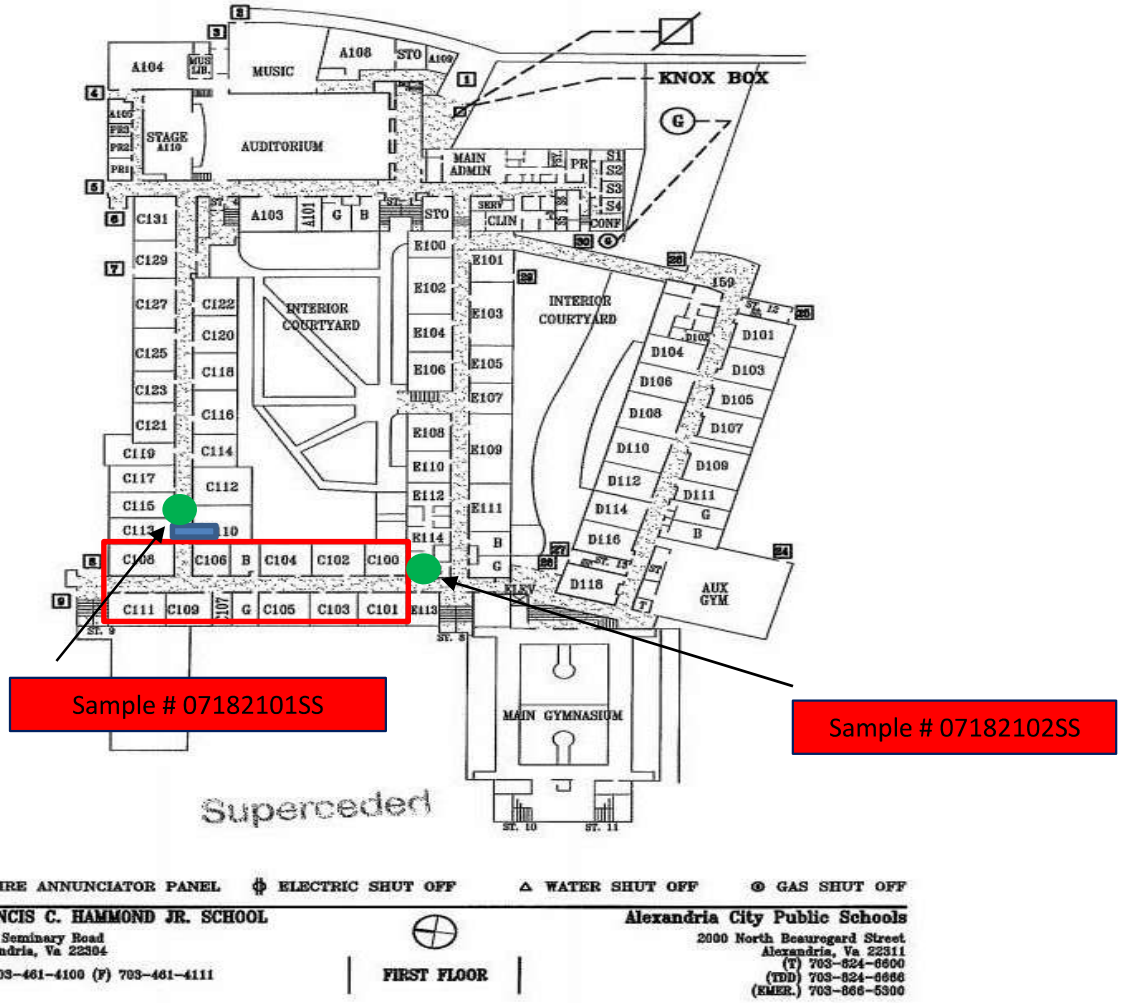
Date: 7/18/2021
Page: 1 of 1

Sample #	Location/Description	Start	Stop	Start Flow (lpm)	Stop Flow (lpm)	Average Flow (lpm)	Total Time (lpm)	Volume (l)	Fibers (#)	Field (#)	Result (f/cc)
07182101SS	OWA/ 1st Floor Work Area, At Decontamination Unit Entry	7:40 AM	2:00 PM	2.0	2.0	2.0	380	760.0	0.5	100	0.000
07182102SS	OWA/Outside the Critical Barrier, Near Door	7:42 AM	2:02 PM	2.0	2.0	2.0	380	760.0	2.0	100	0.001
07182103SS	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
07182104SS	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: Suhel Shafaat **Date:** 7/18/2021



Regulated Work Area
Decontamination Unit
OWA PCM Air Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/18/21

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/18/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st Floor Hallway and Classrooms
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:

ECS Technician: John A. O'Neil **Date:** 7/18/2021

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 Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 5 7/19/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**5**
Day & Date	**Monday 7/19/2021**
Weather	**90 °/ 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				**6:30A**	**12:00P**
				3:00P	**3:30P**

* 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 floor tile/carpet and associated black floor mastic in the 1st floor hallway and classrooms C100 - C109 and C111. Photographs and sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 - C109 and C111 WORK AREA

Between 6:50 and 9:40 am, PCM air samples were started outside the work area at the decontamination unit entry, the critical barrier in the hallway, and the waste decontamination unit on 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute. Abatement workers were removing black floor mastic using a blast track machine and grinder machines with HEPA vacuum attachments.

At 7:30 am, The undersigned observed a negative pressure manometer reading of -0.013 column inches of water instead of the required minimum -0.020 column inches of water. The undersigned entered the work area and observed unsafe work practices by the abatement contractor which included the dry removal of asbestos by grinding and not using water and the critical barrier was slit opened to take waste barrels out of the work area. The undersigned discussed these issues with the abatement contractor supervisor Miguel Sandoval of WACO and requested to stop work and correct the issues before continuing abatement. ECS project manager Michael Hamill contacted Chris Lanham from WACO to discussed and resolve the issue on the job.

At 9:40 am, The abatement contractor installed a one stage waste decontamination unit to removed asbestos waste bags and barrels out of the work area.

At 10:00 am, The abatement contractor informed ECS that the containment was under the required negative pressure, which was observed at -0.024 column inches of water.

By JP Nuique 1825

At 12:00 pm, The abatement contractor resumed the abatement activities.

Between 3:15 and 3:19 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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,1st Floor Work Area at Decontamination Unit Entry	6:50 AM	3:15 PM	2.0	2.0	2.0	505	1010.0	8.0	100	0.004
07192102GN	OWA,1st Floor Work Area at Critical Barrier	6:54 AM	3:17 PM	2.0	2.0	2.0	503	1006.0	3.0	100	0.001
07192103GN	OWA,1st Floor Work Area at Waste Decontamination Unit	9:40 AM	3:19 PM	2.0	2.0	2.0	339	678.0	4.0	100	0.003
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

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/20/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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	3
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

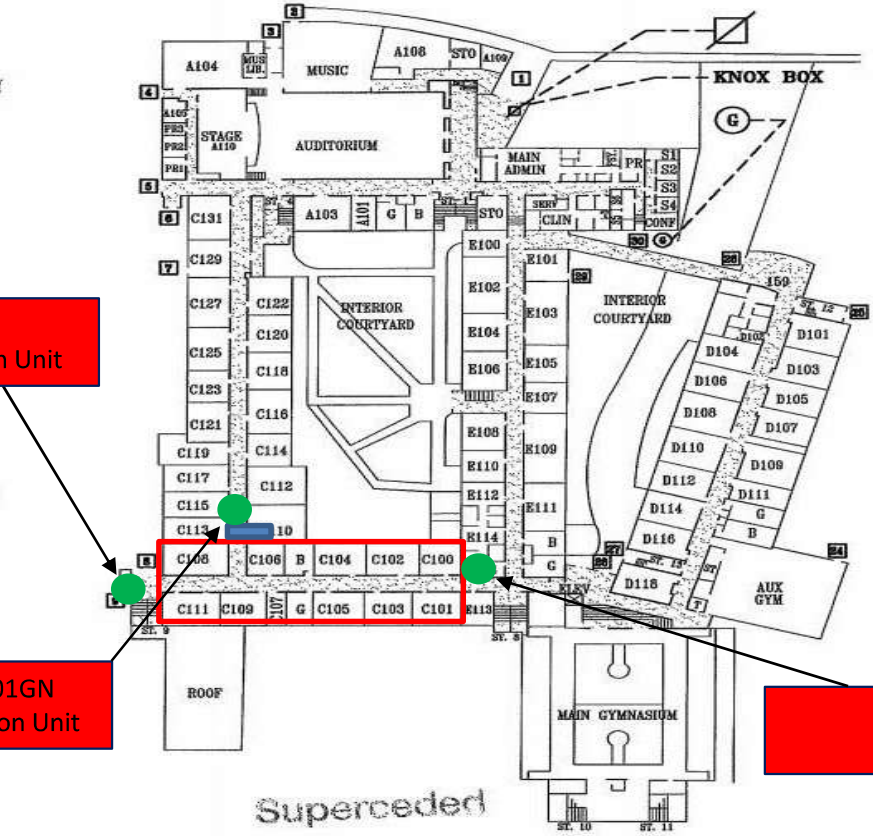
Notes:

ECS Technician: John A. O'Neil **Date:** 7/20/2021

Sample # 07192103GN
1st Fl Waste Decontamination Unit

Sample # 07192101GN
1st Fl Decontamination Unit

Sample # 07192102
1st Fl Critical Barrier



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/19/21

Attachments



View of the critical barrier slit opened to removed asbestos waste

Figure 1



View of the newly installed waste decontamination installed

Figure 2

Attachments



View of manometer reading following corrections to the containment

Figure 3

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 Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 6 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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**6**
Day & Date	**Tuesday 7/20/2021**
Weather	**91 °/ 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*	Time of	Arrival	Departure
Chargeable Items				**7:30A**	**3:30P**

* 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 floor tile/carpet and associated black floor mastic in the 1st floor hallway and classrooms C100 - C109 and C111. Photographs and sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 - C109 and C111 WORK AREA

Between 7:42 and 7:46 am, PCM air samples were started outside the work area at the decontamination unit entry, the critical barrier in the hallway, and the waste decontamination unit on 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute. Abatement workers were removing black floor mastic using grinder machines with HEPA vacuum attachments and started final cleaning of the work area.

Between 3:19 and 3:23 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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,1st Floor Work Area at Decontamination Unit Entry	7:42 AM	3:19 PM	2.0	2.0	2.0	457	914.0	2.0	100	0.001
07202102GN	OWA,1st Floor Work Area at Critical Barrier Hallway	7:44 AM	3:21 PM	2.0	2.0	2.0	457	914.0	0.0	100	0.000
07202103GN	OWA,1st Floor Work Area at Critical Barrier Hallway	7:46 AM	3:23 PM	2.0	2.0	2.0	457	914.0	1.0	100	0.001
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-F1 **Date:** 7/21/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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	3
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

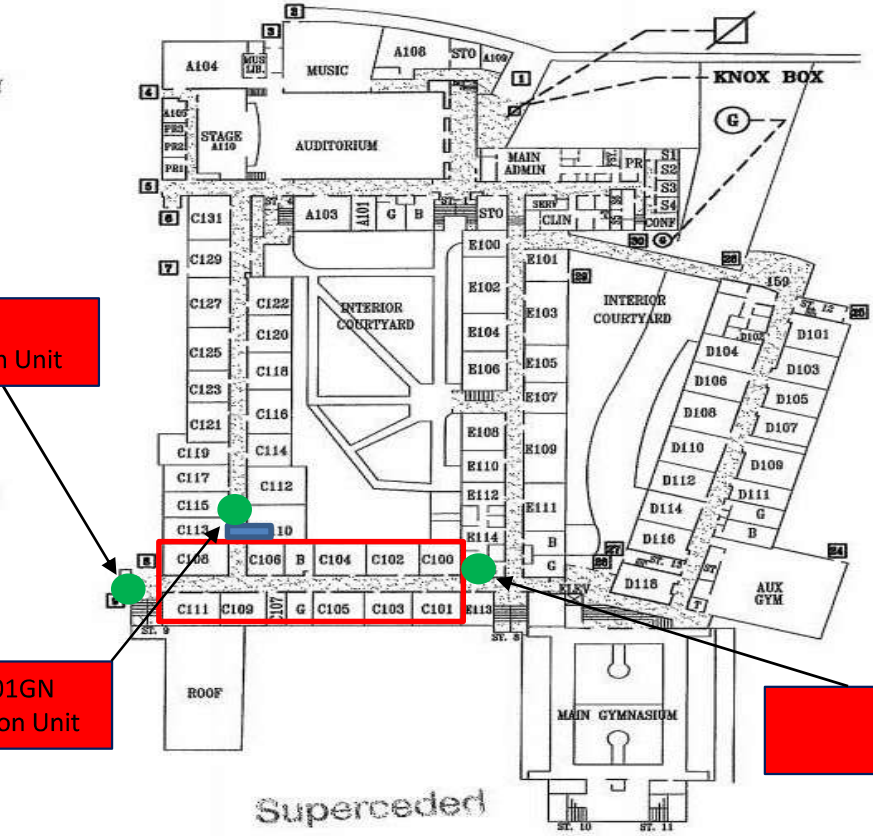
Notes:

ECS Technician: John A. O'Neil **Date:** 7/21/2021

Sample # 07202103GN
1st Fl Waste Decontamination Unit

Sample # 07202101GN
1st Fl Decontamination Unit

Sample # 07202102
1st Fl Critical Barrier



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/20/21

Attachments



View of abatement activities in the 1st floor work area

Figure 1



View of abatement activities in the 1st floor work area (2)

Figure 2

Attachments



View of abatement activities in the 1st floor work area (3)

Figure 3



View of abatement activities in the 1st 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 27, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road Alexandria, VA 22304**

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 # 7 7/21/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**7**
Day & Date	**Wednesday 7/21/2021**
Weather	**91 °/ Sunny**
On-Site Time	**7.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**7.00**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**7:00A**	**2:00P**

* 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.

he undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are floor tile/carpet and associated black floor mastic in the 1st floor hallway and classrooms C100 – C109 and C111. Photographs and a sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 – C109 and C111 WORK AREA

Between 7:23 and 7:31 am, PCM air samples were started outside the work area at the decontamination unit entry, the critical barrier in the hallway, and the waste decontamination unit on 1st floor. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Abatement workers were observed removing black floor mastic using grinder machines with HEPA vacuum attachments and beginning final cleaning of the work area.

Between 1:49 and 1:57 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 on 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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,1st Floor Work Area at Decontamination Unit Entry	7:31 AM	1:49 PM	2.0	2.0	2.0	378	756.0	3.0	100	0.002
07212102GN	OWA,1st Floor Work Area at Critical Barrier Hallway	7:23 AM	1:55 PM	2.0	2.0	2.0	392	784.0	3.0	100	0.002
07212103GN	OWA,1st Floor Work Area at Critical Barrier Hallway	7:27 AM	1:57 PM	2.0	2.0	2.0	390	780.0	1.0	100	0.001
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 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:** 7/21/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/22/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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	3
	Number of PCM Blank Samples	2
	Work Area Acceptable	Yes

Notes:

ECS Technician: John A. O'Neil **Date:** 7/22/2021

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-F1 **Date:** 7/22/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 1st Floor Hallway and Classrooms C100 – C109 and C111 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	1st 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

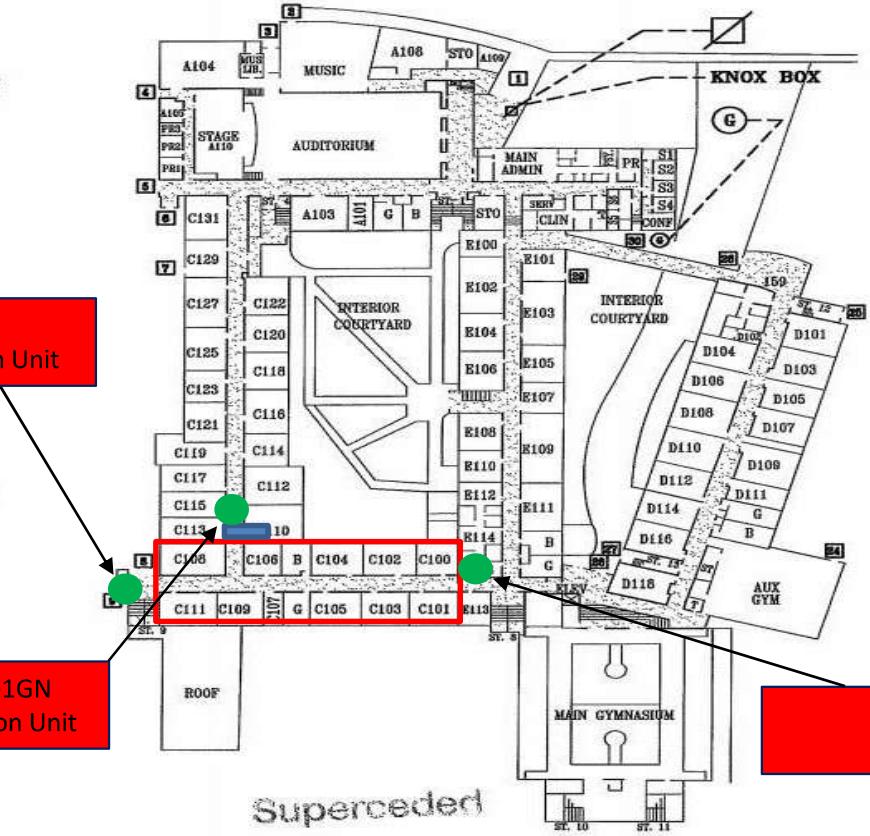
Notes: ECS will collect the TEM final clearance air samples on the next working shift.

ECS Technician: John A. O'Neil **Date:** 7/22/2021

Sample # 07212103GN
1st Fl Waste Decontamination Unit

Sample # 07212101GN
1st Fl Decontamination Unit

Sample # 07212102
1st Fl Critical Barrier



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/21/21

Attachments



View of where the floor tile and associated mastic was removed from the 1st floor work area

Figure 1



View of where the floor tile and associated mastic was removed from the 1st floor work area (2)

Figure 2

Attachments



View of where the floor tile and associated mastic was removed from the 1st floor work area (3)

Figure 3



View of where the floor tile and associated mastic was removed from the 1st floor work area (4)

Figure 4

Attachments



View of where the floor tile and associated mastic was removed from the 1st 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 27, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road Alexandria, VA 22304**

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 # 8 7/22/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**8**
Day & Date	**Thursday 7/22/2021**
Weather	**84 °/ 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**
				8:30A	**9:30A**
				11:30A	**3:30P**

* 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 floor tile/ carpet and associated black floor mastic in the 2nd floor hallway and classrooms B205 – B209 and B211. Photographs and a sketch for today's regulated work area are attached to this report.

1ST FLOOR HALLWAY AND CLASSROOMS C100 – C109 and C111 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 during the previous work shift. 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 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 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. of Beltsville MD for 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 Analytical, Inc. of Beltsville MD, informed ECS that the analytical results of the TEM final clearance air samples collected from 1st floor work area found the airborne asbestos fiber concentrations to be less

than the maximum allowable concentration. The client and abatement contractor supervisor were informed of the results. A copy of the laboratory report is attached.

2ND FLOOR HALLWAY AND CLASSROOMS B205 – B209 and B211 WORK AREA

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 1:47 and 1:55 pm, 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 10.0 liters per minute.

Abatement workers were observed removing floor tile and carpet with associated black floor mastic using a scraper machine and hand scrapers.

Between 3:00 and 3:03 pm, the sampling pumps were checked using a rotameter. The flow rate was 10.0 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.

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: 192106983
Customer ID: ECMA78
Customer PO:
Project ID:

Attention: JOHN ONEIL
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
Project: Francis Hammond ES / 47:11652-F1

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 07/22/2021 11:13 AM
Analysis Date: 07/22/2021
Collected Date: 07/22/2021

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)
072221-01GN *192106983-0001*	FC, IWA, 1st Fl.	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072221-02GN *192106983-0002*	FC, IWA, 1st Fl.	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072221-03GN *192106983-0003*	FC, IWA, 1st Fl.	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072221-04GN *192106983-0004*	FC, IWA, 1st Fl.	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
072221-05GN *192106983-0005*	FC, IWA, 1st Fl.	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049

Analyst(s)
Emily Baker (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: 07/22/2021 17:44 PM

OrderID: 192106983

Asbestos Chain of Custody

EMSL Order Number *(lab use only)*: 192106983

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

PHONE:
FAX:

Company Name: ECS Mid Atlantic LLC		**EMSL Customer ID:**	
Street: 14026 Thunderbolt Place Suite 100		**City:** Chantilly	**State or Province:** VA
Zip/Postal Code: 20151	**Country:** US	**Telephone #:**	**Fax #:**
Report To (Name): John Oneil		**Please Provide Results via:** ☐ Fax ☑ Email	
email Address: JOneil@ecslimited.com		**Purchase Order Number:**	
Client Project ID: Francis Hammond ES/47:11652-F1		**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: Gallardo Nuigue **Sampler's Signature:**

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
072221 01 GW	FC, IWA, 1st Fl.	1200 L	7/22/21
02			
03			
04			
05			

Client Sample # (s): 01 GW - 136 **Total # of Samples:** 3

Relinquished by (Client): Gallardo Nuigue **Date:** 7/22/21 **Time:**

Received by (Lab): **Date:** **Time:**

Comments/Special Instructions: Aggressive
Analyze IWA only

'21 JUL 22 AM 10:5

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.

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
072221 06	FC, OWA, 1st Fl.	1200 L	7/22/21
07			
08			
09			
10			
11	Field Blank opened 30 sec. by Entrance	N/A	
12	Field Blank opened 30 sec. in Ambient	N/A	
13	Sealed Blank (not opened)	N/A	

*Comments/Special Instructions:

Sample Instructions

EMSL Analytical, Inc. is (DBA, LA Testing) Laboratory Terms and Conditions are incorporated into this chain of custody by reference.

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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 at Decontamination Unit Entry	1:47 PM	3:00 PM	10.0	10.0	10.0	73	730.0	1.0	100	0.001
07222102GN	OWA,2nd Floor Work Area at Critical Barrier Hallway	1:55 PM	3:03 PM	10.0	10.0	10.0	68	680.0	0.0	100	0.000
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 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:** 7/22/2021

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/23/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B205 – B209 and B211 - Floor Tile and Associated Black Mastic

	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	8
	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:** 7/23/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/23/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

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:** 7/23/2021

Attachments



View of 2nd floor work area during pre-abatement walk-through

Figure 1



View of 2nd floor work area during pre-abatement walk-through (2)

Figure 2

Attachments



View of 2nd floor work area during pre-abatement walk-through (3)

Figure 3



View of 2nd floor work area during pre-abatement walk-through (4)

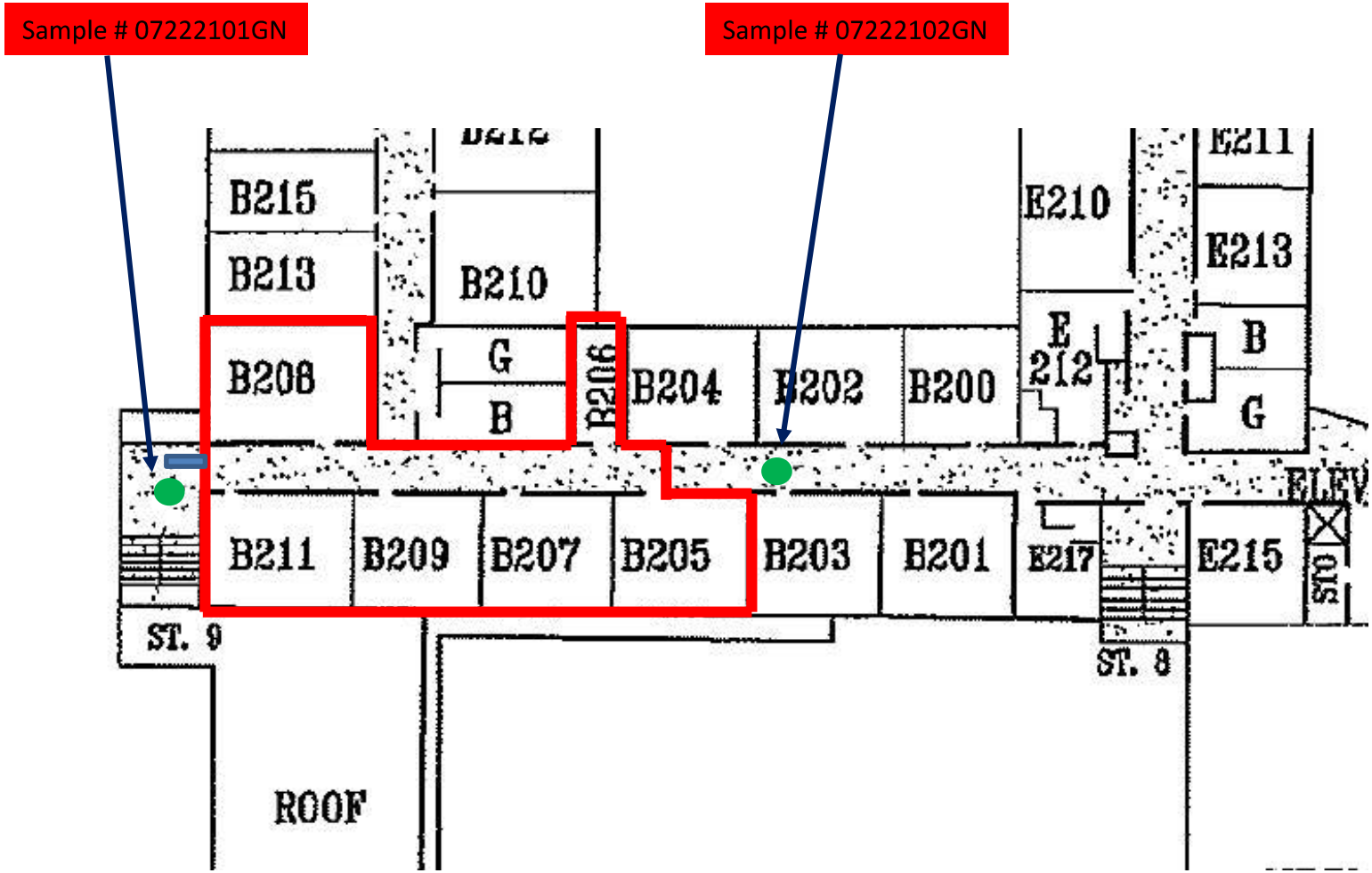
Figure 4

Attachments



View of 2nd floor work area during pre-abatement walk-through (5)

Figure 5



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/22/21

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

LETTER OF TRANSMITTAL

July 27, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road Alexandria, VA 22304**

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 # 9 7/23/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**9**
Day & Date	**Friday 7/23/2021**
Weather	**87 °/ Cloudy**
On-Site Time	**3.75**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**3.75**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items				**6:00A**	**9:45A**

* 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 floor tile, carpet, and associated black floor mastic in the 2nd floor hallway and classrooms B205 – B209 and B211. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B205 – B209 and B211 WORK AREA

Between 6:36 am and 6:38 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 2.0 liters per minute.

Abatement workers were observed removing floor tile and carpet with associated black floor mastic using scraper machine and hand scrapers.

At 9:45 am, the undersigned departed jobsite. Mr. JP Nuique of ECS will continue monitoring for rest of the shift and complete the chain of custody. See report no. 10 for additional details about today's abatement activities.

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 Suhel Shafaat 1825

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/23/2021

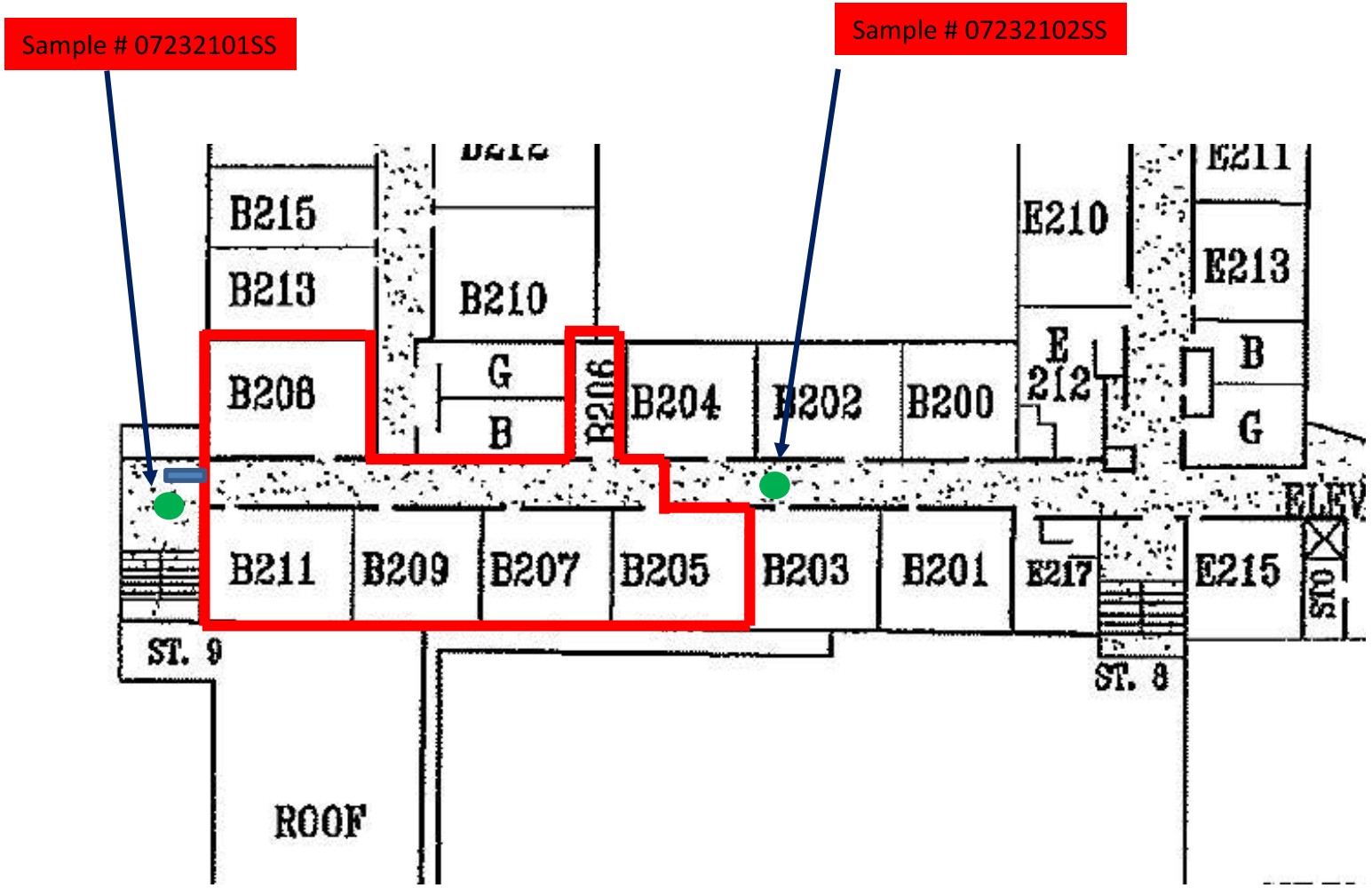
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B205 – B209 and B211 - 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	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:** 7/23/2021



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/23/21

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

LETTER OF TRANSMITTAL

July 27, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 10 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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**10**
Day & Date	**Friday 7/23/2021**
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				**12:00P**	**1:00P**
				3:00P	**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 floor tile, carpet, and associated black floor mastic in the 2nd floor hallway and classrooms B205 – B209 and B211. A sketch for today's regulated work area is attached to this report.

Note that the undersigned arrived on-site at noon to take over monitoring for Suhel Shafaat. For additional details about activities prior to the undersigned's arrival, refer to report no. 9.

2ND FLOOR HALLWAY AND CLASSROOMS B205 – B209 and B211 WORK AREA

Between 6:36 am and 6:38 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 2.0 liters per minute.

Abatement workers were removing floor tile and carpet with associated black floor mastic using scraper machine, hand scrapers, and a blast track machine.

Between 3:30 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 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

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 at Decontamination Unit Entry	6:36 AM	3:30 PM	2.0	2.0	2.0	534	1068.0	1.0	100	0.000
07232102GN	OWA,2nd Floor Work Area at Hallway Critical Barrier	6:38 AM	3:32 PM	2.0	2.0	2.0	534	1068.0	1.0	100	0.000
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-F1 **Date:** 7/24/2021

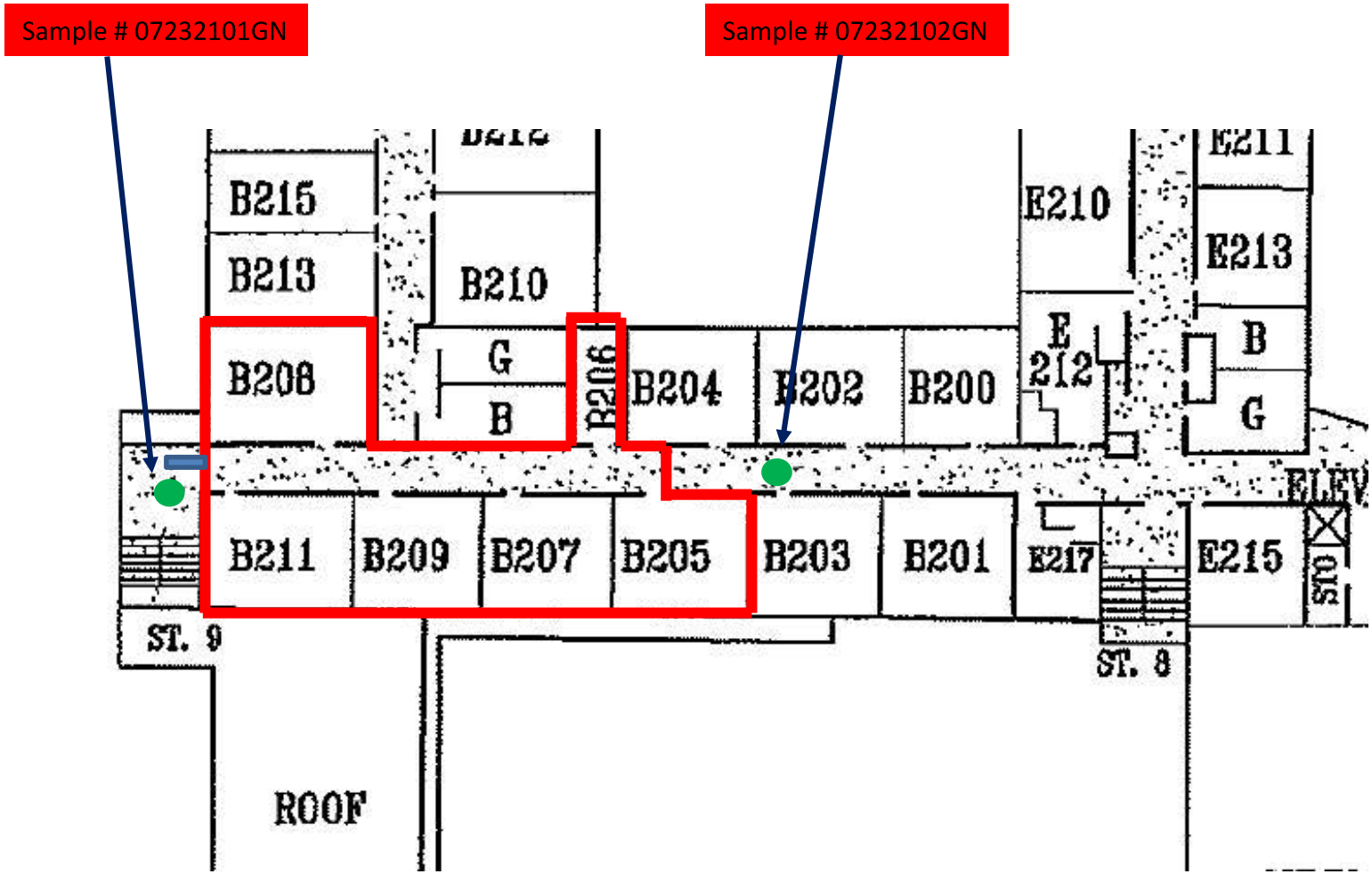
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B205 – B209 and B211 - 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



Work Area
Decontamination Unit
Sample Location

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

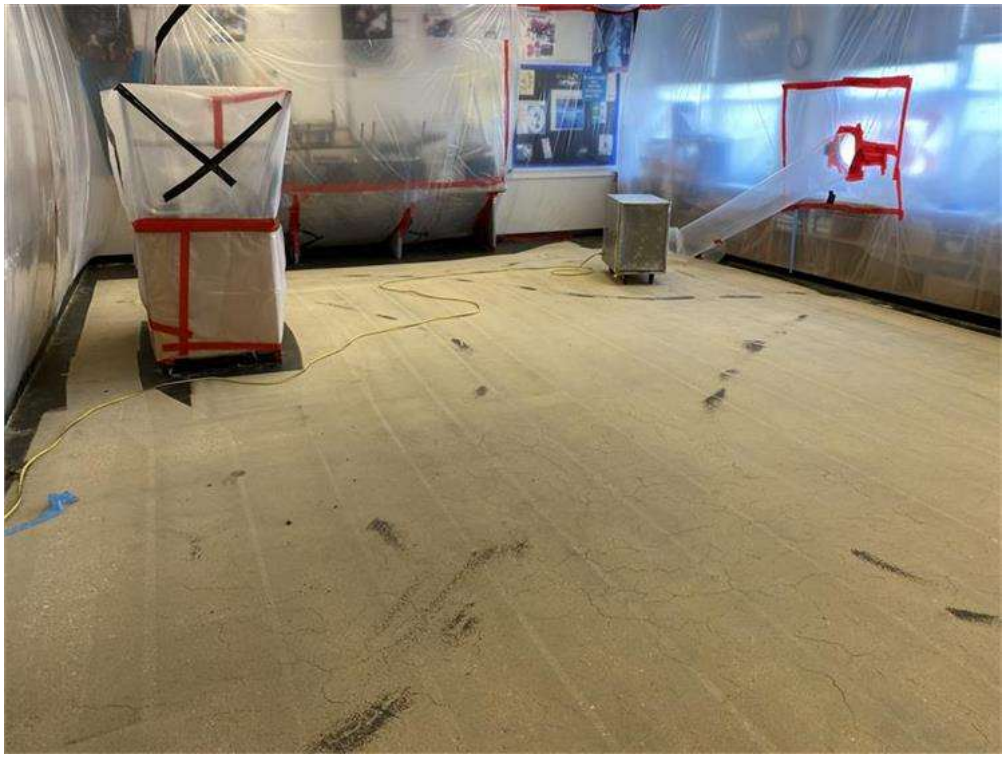
WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/23/21

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 the micromanometer for the 2nd floor work area

Figure 4

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

LETTER OF TRANSMITTAL

July 27, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 11 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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**11**
Day & Date	**Saturday 7/24/2021**
Weather	**85 °/ 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 floor tile, carpet, and associated black floor mastic in the 2nd floor hallway and classrooms B205 – B209 and B211. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B205 – B209 and B211 WORK AREA

Between 6:30 and 6:32 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 2.0 liters per minute.

Abatement workers were removing floor tile and carpet with associated black floor mastic using scraper machine, hand scrapers, and a blast track machine.

Between 3:02 and 3:04 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/24/2021
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)
07242101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:30 AM	3:02 PM	2.0	2.0	2.0	512	1024.0	2.0	100	0.001
07242102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit and Critical Barrier Hallway	6:32 AM	3:04 PM	2.0	2.0	2.0	512	1024.0	2.0	100	0.001
072421FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072421FB02GN	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:** 7/24/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/25/2021

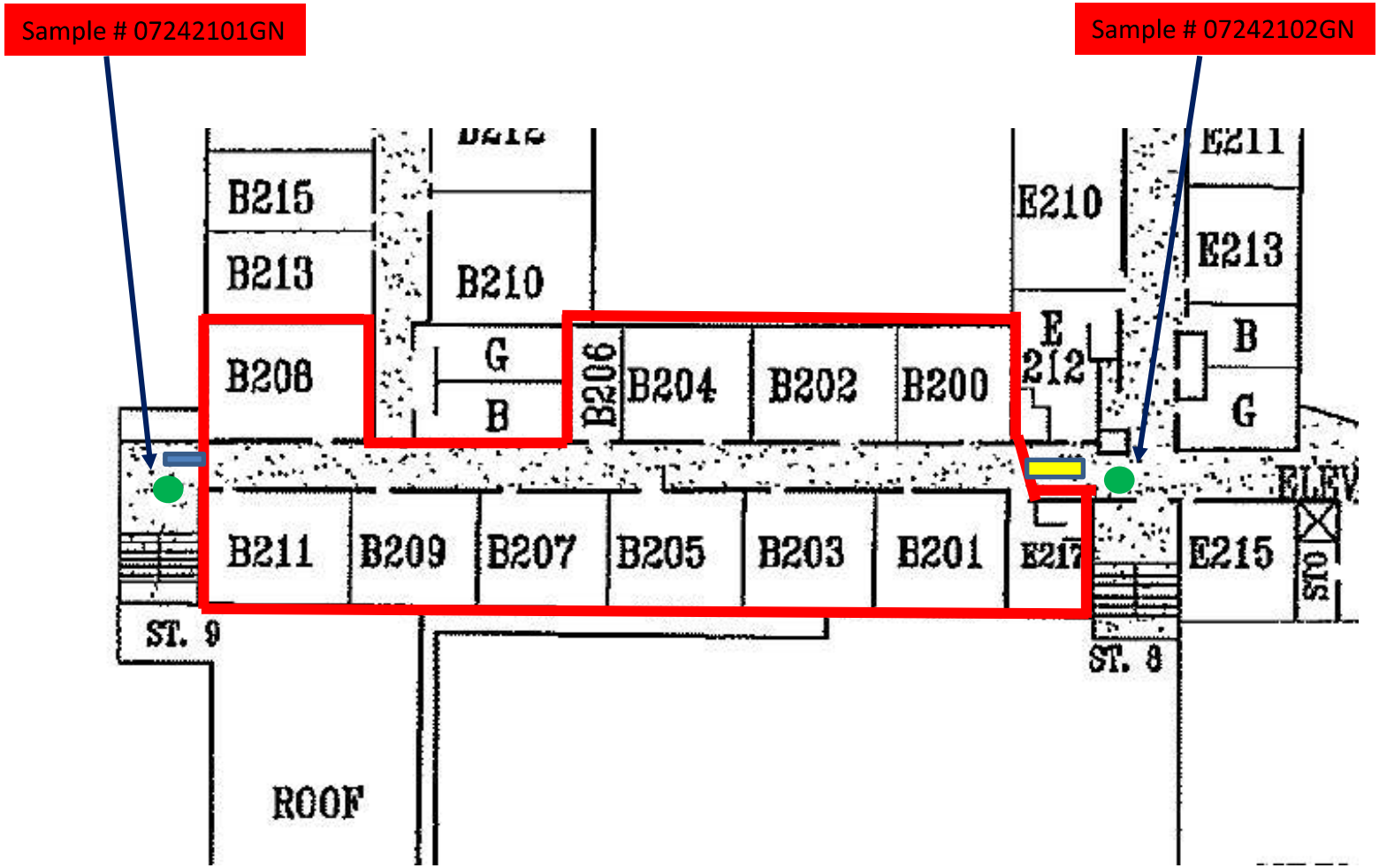
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B205 – B209 and B211 - 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:** 7/25/2021



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/24/21

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)

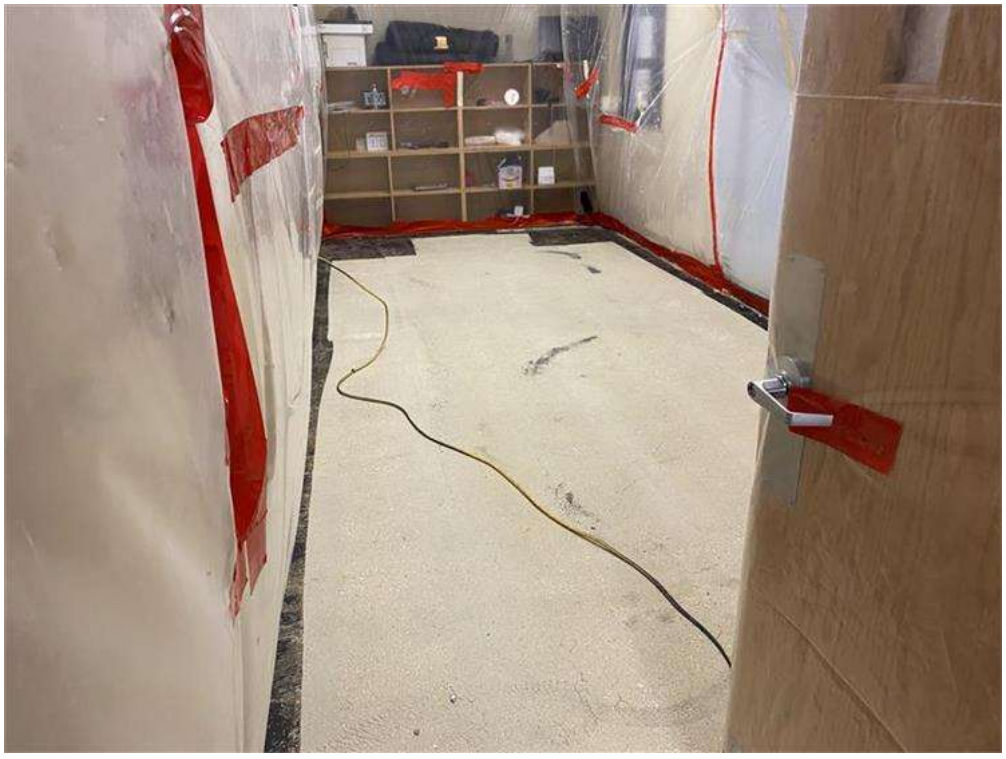
Figure 2

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 the micromanometer for the 2nd floor work area

Figure 5

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

LETTER OF TRANSMITTAL

July 27, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 12 7/25/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

John A. O'Neil
Environmental Staff Project Manager

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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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**12**
Day & Date	**Sunday 7/25/2021**
Weather	**88 °/ 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 is black floor mastic from the 2nd floor hallway and classrooms B205 – B209 and B211. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B205 – B209 and B211 WORK AREA

Between 7:10 and 7:12 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 2.0 liters per minute. Abatement workers were removing black floor mastic unit a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 3:05 and 3:07 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.

By JP Nuique 1825

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/25/2021
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)
07252101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	7:10 AM	3:05 PM	2.0	2.0	2.0	475	950.0	2.0	100	0.001
07252102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit/Critical Barrier Hallway	7:12 AM	3:07 PM	2.0	2.0	2.0	475	950.0	1.0	100	0.001
072521FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072521FB02GN	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:** 7/25/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/26/2021

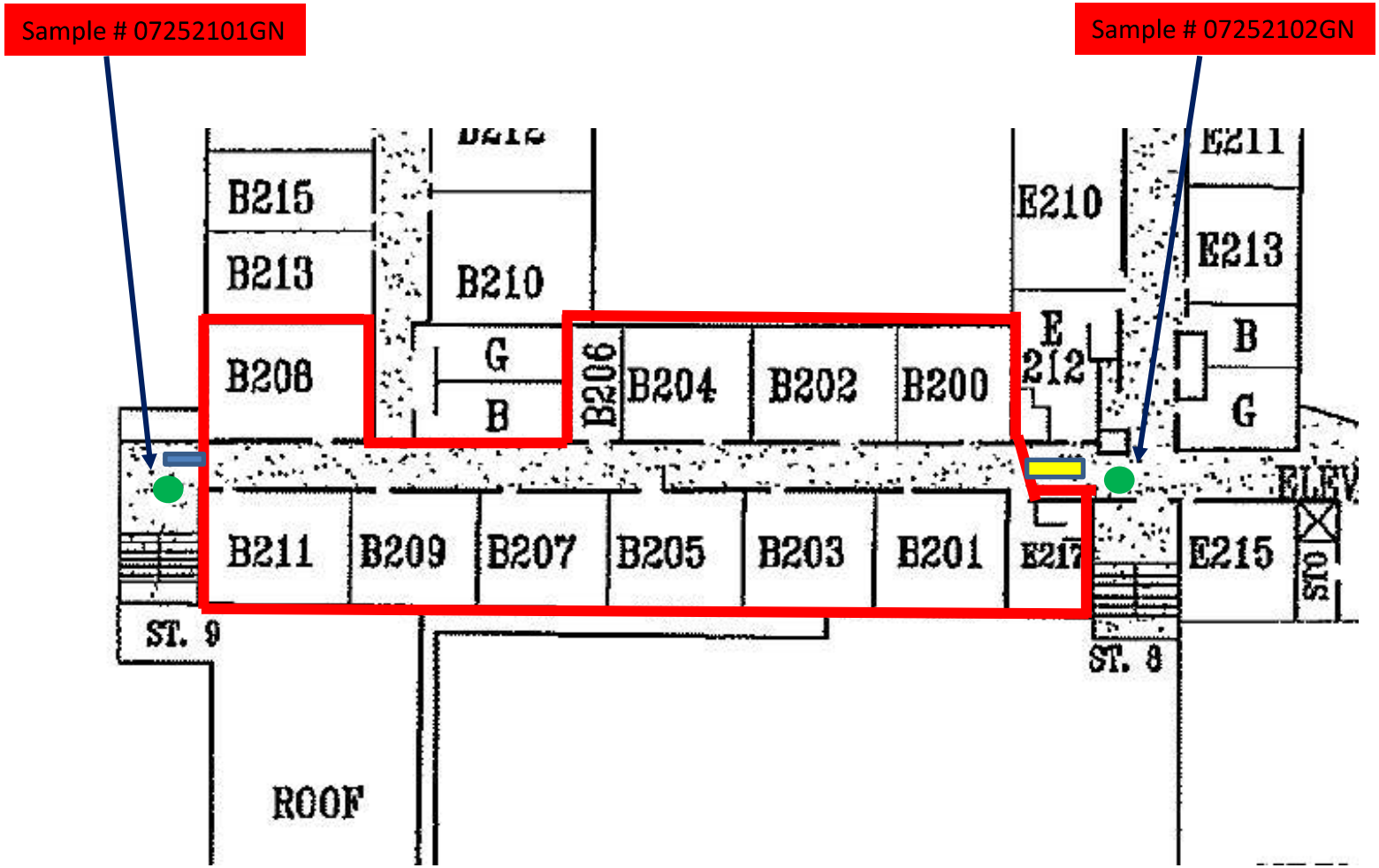
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B205 – B209 and B211 - 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:** 7/26/2021



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/25/21

Attachments



View of abatement actitivies in the 2nd floor work area (1)

Figure 1



View of abatement actitivies in the 2nd floor work area (4)

Figure 2

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 Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road Alexandria, VA 22304**

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 # 13 7/26/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**13**
Day & Date	**Monday 7/26/2021**
Weather	**90 °/ 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*	Time of	Arrival	Departure
Chargeable Items				**7:30A**	**3:30P**

* 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 floor tile, carpet, and associated black floor mastic in the 2nd floor hallway and classrooms B200 – B209, B211 and E217. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B200 – B209, B211 and E217 WORK AREA

Between 7:42 and 7:44 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 2.0 liters per minute.

Abatement workers were observed removing floor mastic using grinder machines with HEPA vacuum attachments. Water sprayers were utilized during the abatement activities.

Between 3:00 and 3:02 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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/26/2021
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)
07262101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	7:42 AM	3:00 PM	2.0	2.0	2.0	438	876.0	2.0	100	0.001
07262102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit/Critical Barrier Hallway	7:44 AM	3:02 PM	2.0	2.0	2.0	438	876.0	0.0	100	0.000
072621FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072621FB02GN	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:** 7/26/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/27/2021

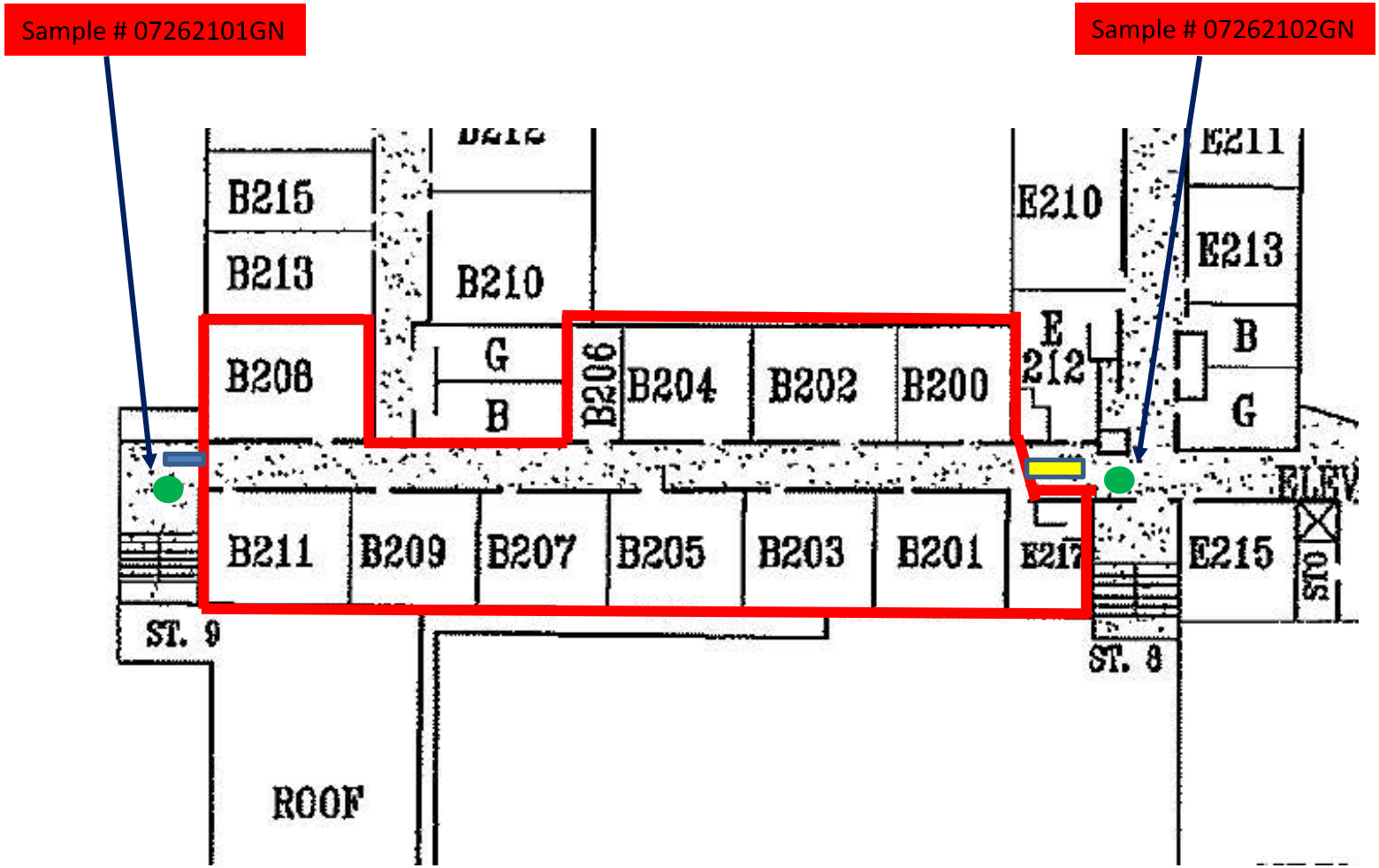
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - 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:** 7/27/2021



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

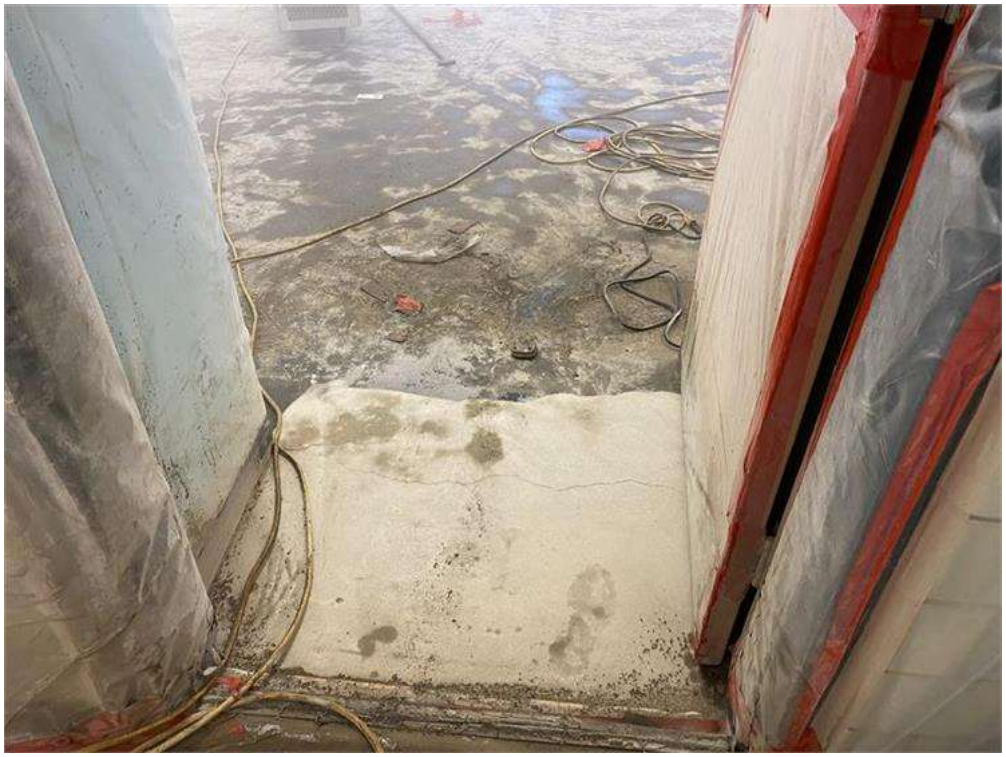
7/26/21

Attachments



View of abatement activities in the 2nd floor work area.

Figure 1



View of abatement activities in the 2nd floor work area.

Figure 2

Attachments



View of abatement activities in the 2nd floor work area.

Figure 3



View of abatement activities in the 2nd floor work area.

Figure 4

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

LETTER OF TRANSMITTAL

July 30, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 14 7/27/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**14**
Day & Date	**Tuesday 7/27/2021**
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 is black floor mastic in the 2nd floor hallway and classrooms B200 - B209, B211 and E217. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B200 - B209, B211 and E217 WORK AREA

Between 7:10 and 7:12 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 2.0 liters per minute. Abatement workers were removing black floor mastic using a grinder machine with a HEPA vacuum attachment. Water sprayers were utilized during the abatement activities.

Between 3:20 and 3:22 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.

By JP Nuique 1825

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/27/2021
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)
07272101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	7:10 AM	3:20 PM	2.0	2.0	2.0	490	980.0	5.0	100	0.003
07272102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit/Critical Barrier Hallway	7:12 AM	3:22 PM	2.0	2.0	2.0	490	980.0	0.0	100	0.000
072721FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072721FB02GN	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:** 7/27/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/28/2021

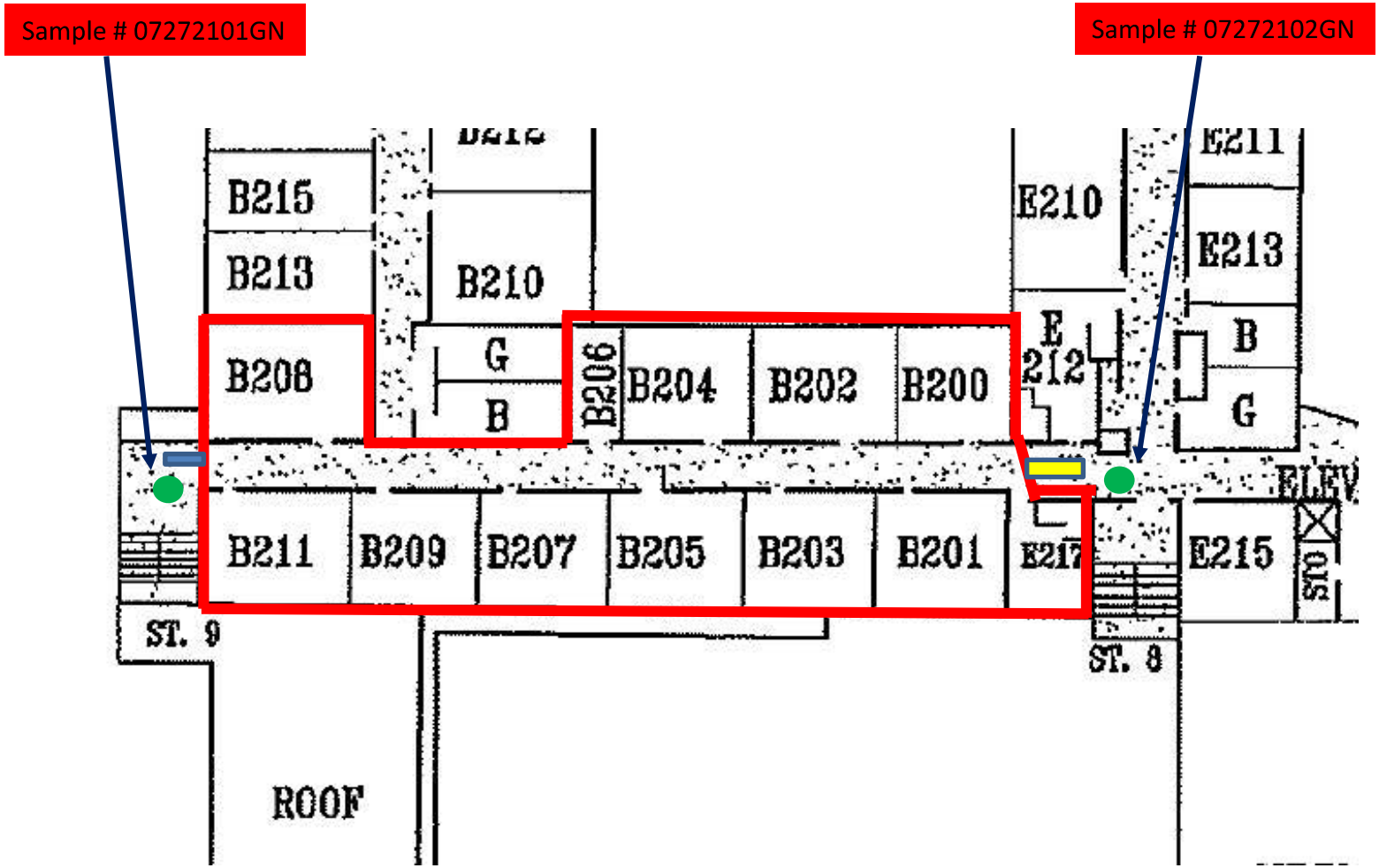
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - 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:** 7/28/2021



Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Scale: NTS

Project No.
47:11652- F1

7/27/21

Attachments



View of the micromanometer for the second floor work area

Figure 1



View of abatement activities in the 2nd floor work area (1)

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (2)

Figure 3



View of abatement activities in the 2nd floor work area (3)

Figure 4

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

LETTER OF TRANSMITTAL

July 30, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 # 15 7/28/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**15**
Day & Date	**Wednesday 7/28/2021**
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 material to be removed today is black floor mastic in the 2nd floor hallway and classrooms B200 - B209, B211 and E217. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B200 - B209, B211 and E217 WORK AREA

Between 7:08 and 7:10 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 2.0 liters per minute. Abatement workers were removing floor mastic using grinder machines with HEPA vacuum attachments and started final cleaning of the work area. Water sprayers were utilized during the abatement activities.

Between 3:30 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 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.

By JP Nuique 1825

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/28/2021
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)
07282101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	7:08 AM	3:30 PM	2.0	2.0	2.0	502	1004.0	2.0	100	0.001
07282102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit/Critical Barrier	7:10 AM	3:32 PM	2.0	2.0	2.0	502	1004.0	2.0	100	0.001
072821FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
072821FB02GN	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:** 7/28/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/29/2021

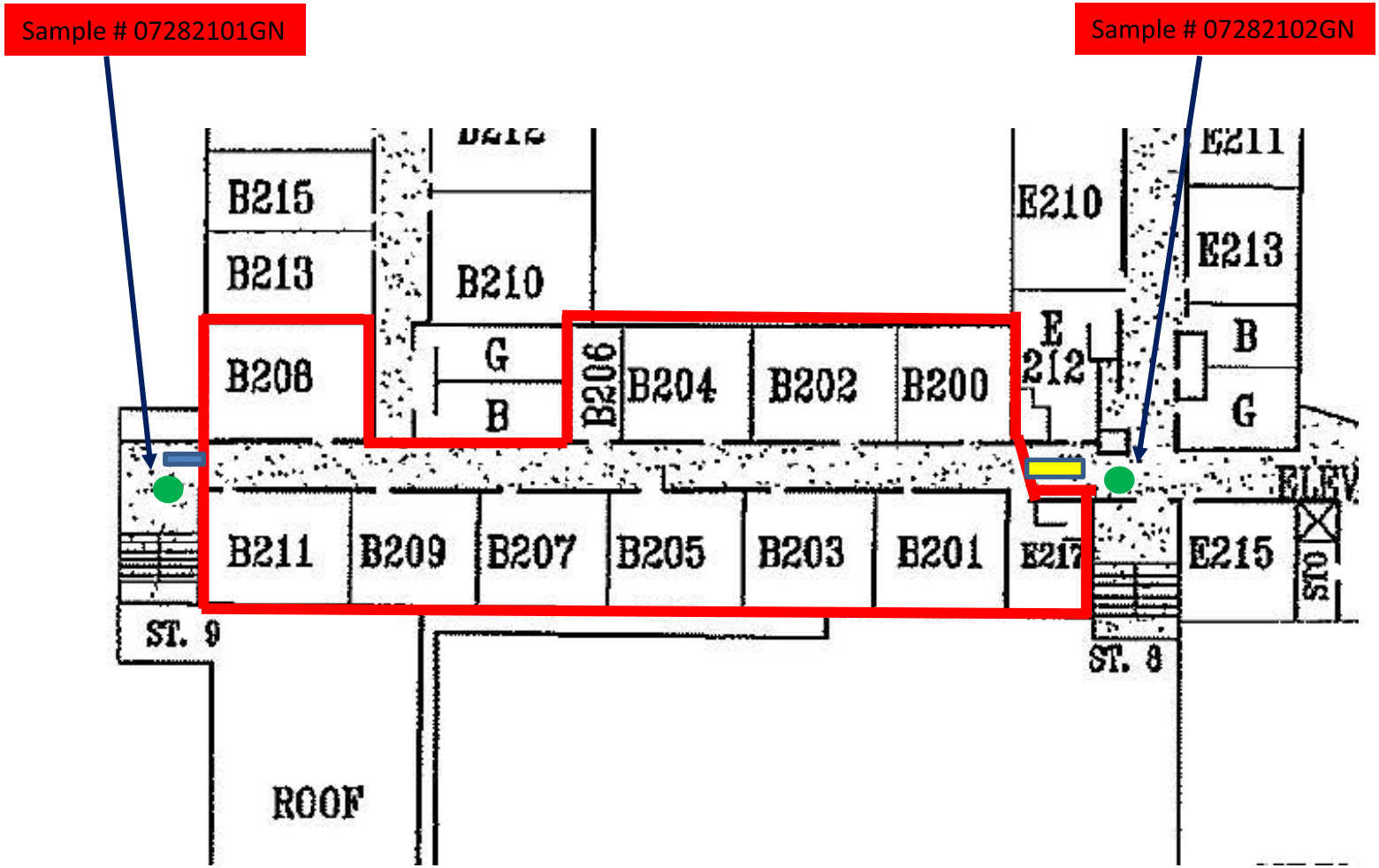
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - 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:** 7/29/2021



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/28/21

Attachments



View of the micromanometer for the 2nd floor work area

Figure 1



View of abatement activities in the 2nd floor work area

Figure 2

Attachments



View of abatement activities in the 2nd floor work area (2)

Figure 3

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

LETTER OF TRANSMITTAL

July 30, 2021

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

ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 7/29/2021

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 Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**16**
Day & Date	**Thursday 7/29/2021**
Weather	**90 °/ Cloudy**
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**
				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 black floor mastic in the 2nd floor hallway and classrooms B200 - B209, B211 and E217. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B200 - B209, B211 and E217 WORK AREA

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 2.0 liters per minute. Abatement workers were removing floor mastic using a grinder machine with a HEPA vacuum attachment and continued final cleaning of the work area. Water sprayers were utilized during the abatement activities.

Between 2:00 and 2:02 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 on the next working shift.

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/29/2021
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)
07292101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:42 AM	2:00 PM	2.0	2.0	2.0	438	876.0	1.0	100	0.001
07292102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit/Critical Barrier	6:44 AM	2:02 PM	2.0	2.0	2.0	438	876.0	1.0	100	0.001
072921FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
0729FB02GN	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:** 7/29/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/29/2021

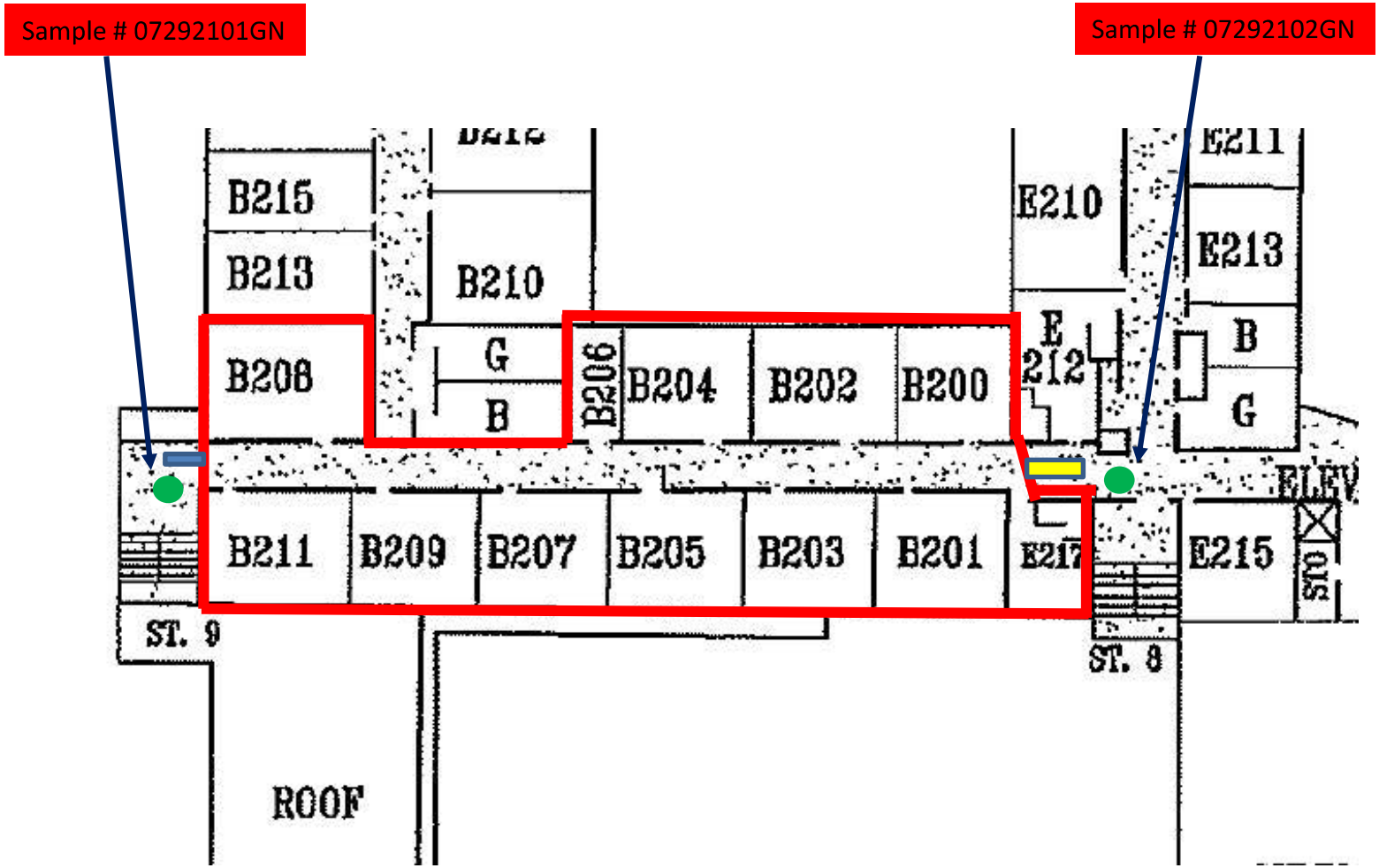
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - 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:** 7/29/2021



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/29/21

Attachments



View of where the floor tile and associated mastic was removed from the 2nd floor work area

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

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-F1 **Date:** 7/29/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	nd 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:** 7/29/2021

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

LETTER OF TRANSMITTAL

July 30, 2021

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1340 Braddock Place Suite 620
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ATTN: John Finnigan

RE: **ACPS Francis Hammond ES Abatement Monitoring**
ECS Job # **47:11652-F1**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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 7/29/2021

Stephen Geraci, P.E., CHMM
Vice President, Principal Engineer

John A. O'Neil
Environmental Staff Project Manager

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(703) 471-8400 [Phone]
(703) 834-5527 [Fax]

FIELD REPORT

Project	**ACPS Francis Hammond ES Abatement**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F1**
Report No.	**16**
Day & Date	**Thursday 7/29/2021**
Weather	**90 °/ Cloudy**
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**
				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 black floor mastic in the 2nd floor hallway and classrooms B200 - B209, B211 and E217. A sketch for today's regulated work area is attached to this report.

2ND FLOOR HALLWAY AND CLASSROOMS B200 - B209, B211 and E217 WORK AREA

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 2.0 liters per minute. Abatement workers were removing floor mastic using a grinder machine with a HEPA vacuum attachment and continued final cleaning of the work area. Water sprayers were utilized during the abatement activities.

Between 2:00 and 2:02 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 on the next working shift.

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-F1
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 7/29/2021
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)
07292101GN	OWA,2nd Floor Work Area at Decontamination Unit Entry	6:42 AM	2:00 PM	2.0	2.0	2.0	438	876.0	1.0	100	0.001
07292102GN	OWA,2nd Floor Work Area at Waste Decontamination Unit/Critical Barrier	6:44 AM	2:02 PM	2.0	2.0	2.0	438	876.0	1.0	100	0.001
072921FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
0729FB02GN	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:** 7/29/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F1 **Date:** 7/29/2021

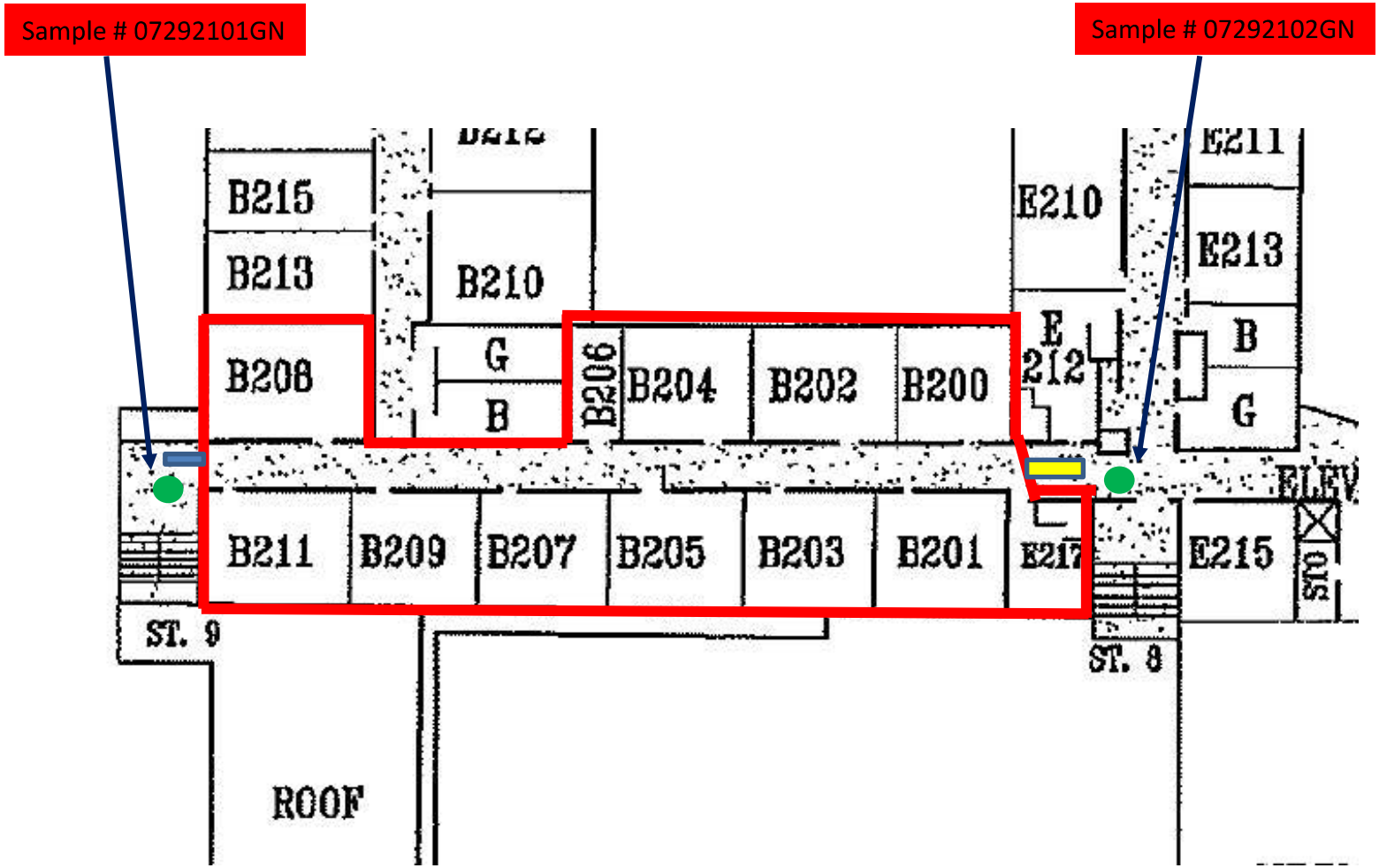
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: 2nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - 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:** 7/29/2021



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652- F1

7/29/21

Attachments



View of where the floor tile and associated mastic was removed from the 2nd floor work area

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

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-F1 **Date:** 7/29/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

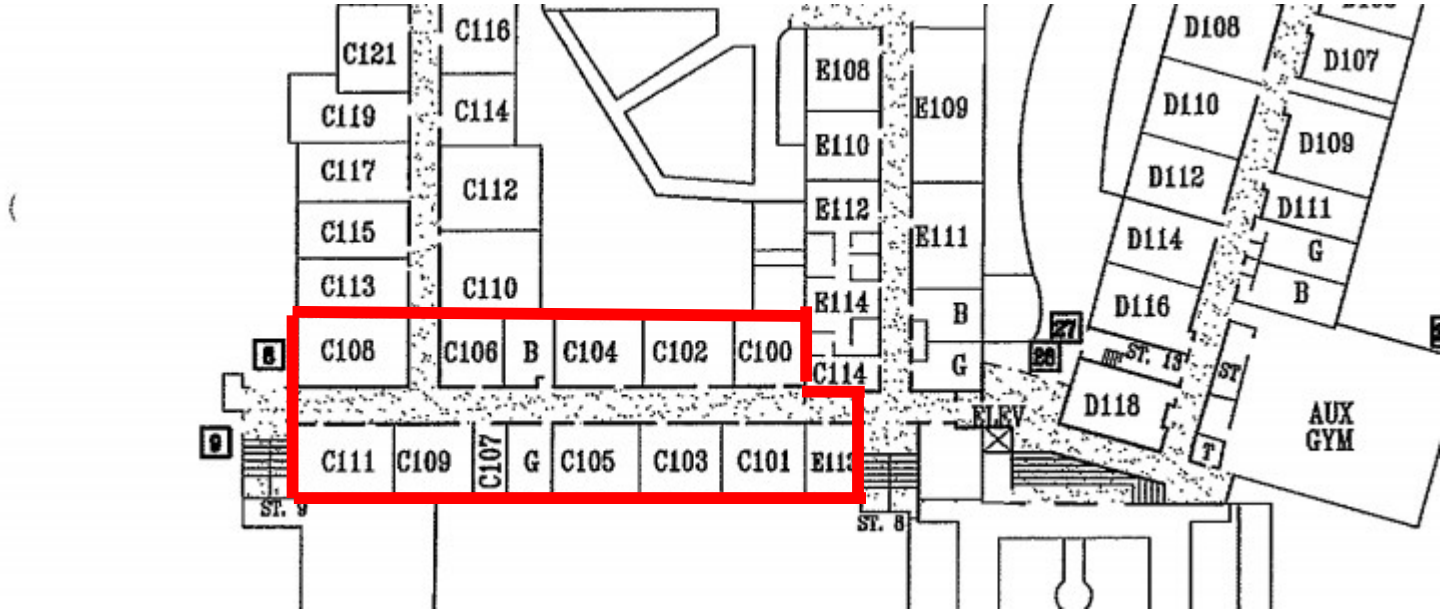
Work Area Location/Description: nd Floor Hallway and Classrooms B200 – B209, B211 and E217 - Floor Tile and Associated Black Mastic

	Work Area Location/Description	nd 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:** 7/29/2021

Appendix II: Drawings



Abatement Area

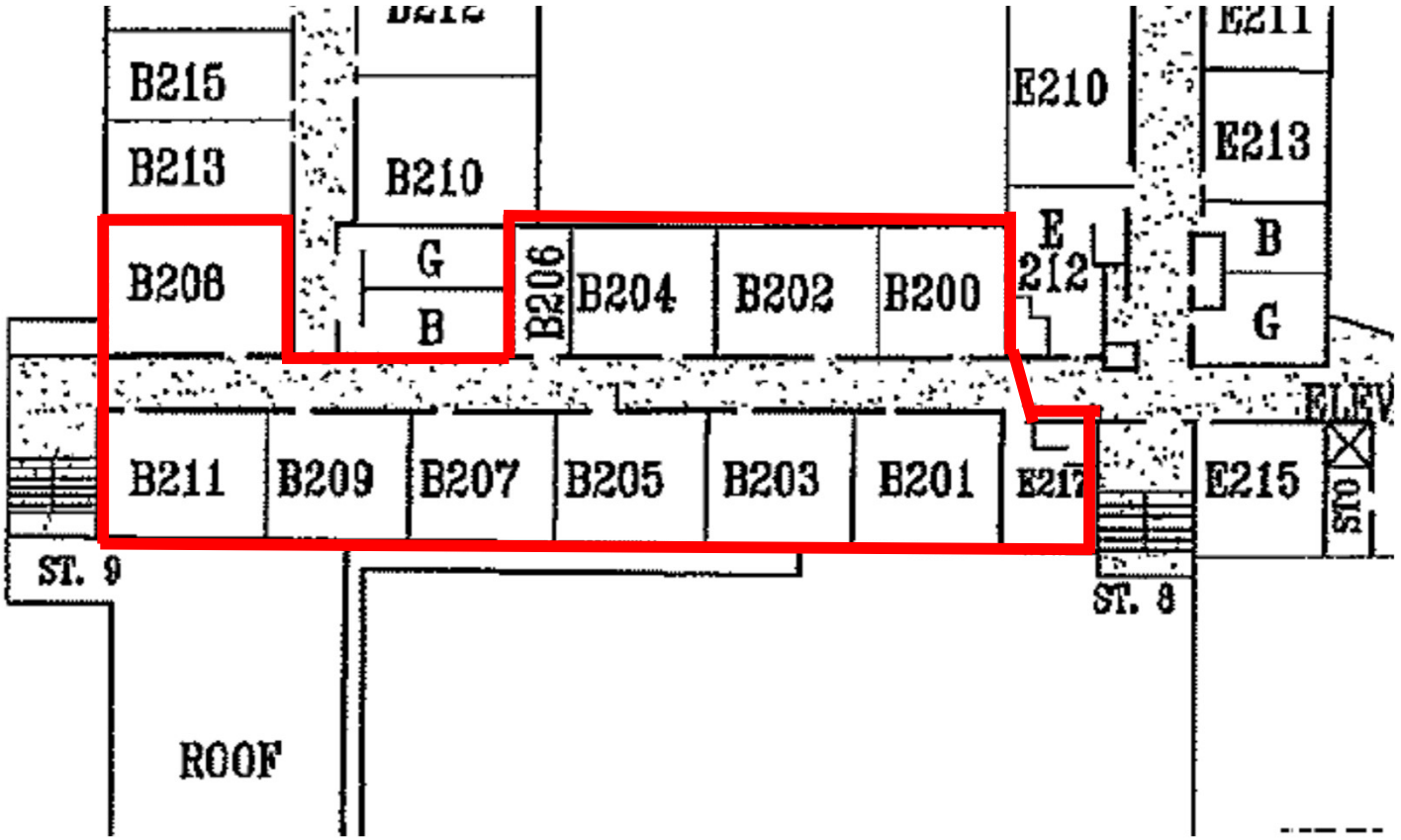
Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

ABATEMENT AREA
FIRST FLOOR

Scale: NTS

Project No.
47:11652- F1

8/11/21



Abatement Area

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

ABATEMENT AREA
SECOND FLOOR

Scale: NTS

Project No.
47:11652- F1

8/11/21

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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DPOR License Lookup License Number 3309001240

License Details

Name	SHAFAAT, SUHEL
License Number	3309001240
License Description	Asbestos Project Monitor License
Rank	Asbestos Project Monitor
Address	MANASSAS, VA 20109
Initial Certification Date	2003-09-10
Expiration Date	2021-10-31

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DPOR License Lookup build 1,444 (built 2021-08-04 03:00:51).

DPOR License Lookup License Number 3309002004

License Details

Name	O'NEIL, JOHN ALEXANDER
License Number	3309002004
License Description	Asbestos Project Monitor License
Rank	Asbestos Project Monitor
Address	FAIRFAX, VA 22033
Initial Certification Date	2019-12-03
Expiration Date	2021-12-31

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ASBESTOS ABATEMENT PROJECT MONITORING SUMMARY REPORT



FRANCIS C. HAMMOND MIDDLE SCHOOL C/E ROOMS

4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-F3

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

JANUARY 25, 2022

January 25, 2022

Mr. Norman Wiebusch
Alexandria City Public Schools
1340 Braddock Place
Suite 620
Alexandria, Virginia 22314

ECS Project No. 47:11652-F3

Reference: Asbestos Abatement Project Monitoring Summary Report, Francis C. Hammond Middle School C/E Rooms, 4646 Seminary Road, Alexandria, Virginia

Dear Mr. Wiebusch:

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

Jennifer Turner
Environmental Scientist
jturner@ecscapitolservices.com
703-471-8400

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

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6.0 LIMITATIONS 2

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Appendix II: Daily Field Reports with PCM Air Sample Results

Appendix III: Certifications/Licenses

1.0 PROJECT DESCRIPTION

The asbestos abatement work was performed by Waco, Inc., in general from December 21 through December 28 and included the removal of the following asbestos-containing materials (ACMs):

- Floor tiles and associated mastic from rooms C118, C122, E107, E108, and E110 from the 1st floor.

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 regulated work areas. The regulated work areas within the subject building consisted of enclosures 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 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 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.).

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: Drawings



Legend

= Area Where Asbestos-Containing Floor Tile and Mastic was Abated

Francis C Hammond Middle School
4646 Seminary Rd
Alexandria, VA 22304

Work Area Sketch

SCALE NTS

Project No. 47:11652-F3

Date 12/21-12/28-21

Appendix II: 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

December 26, 2021

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

ATTN: Mr. Norman Wiebusch

RE: **ACPS Francis C. Hammond Middle School C/E Rooms**
ECS Job # **47:11652-F3**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - John Finnigan
Waco, Inc - Chris Lanham

ENCL: Field Report # 2 12/21/2021

Michael P. Hamill, CIH, CSP
Environmental Senior Project Manager

Jennifer Turner
Environmental Scientist

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 No.	**47:11652-F3**
Report No.	**2**
Day & Date	**Tuesday 12/21/2021**
Weather	**42 °/ Cloudy**
On-Site Time	**5.00**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**5.00**
Re Obs Time	**0.00**

Project	**ACPS Francis C. Hammond Middle School C/E**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**9:15A**	**1:15P**
				2:30P	**3:30P**

* 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 asbestos-containing floor tile and mastic in the 1st floor classroom C118 and C122 work area.

Prior to starting the removal of the specified material, the abatement permit was reviewed. The abatement contractor was notified the permit was on-site and the removal of the specified materials could begin.

Prior to starting the removal of the specified material, 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.

CLASSROOM C118 AND C122 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. Please refer to the attached drawing for Work Area and Phase Contrast Microscopy (PCM) air sample locations.

Between 9:30 am-9:31 am, PCM air samples were started outside the work area at decontamination unit entry and in the critical barrier by the hallway. The sampling pumps were calibrated using a rotameter to 3.0 liters per minute.

ECS observed the abatement workers removing floor tiles and black mastic using motorized floor scraper and hand tools. The abatement contractor workers were placing the removed floor tiles inside waste drums.

Between 2:45-2:46 pm, the sampling pump was checked using a rotameter. The flow rate was 3.0 liters

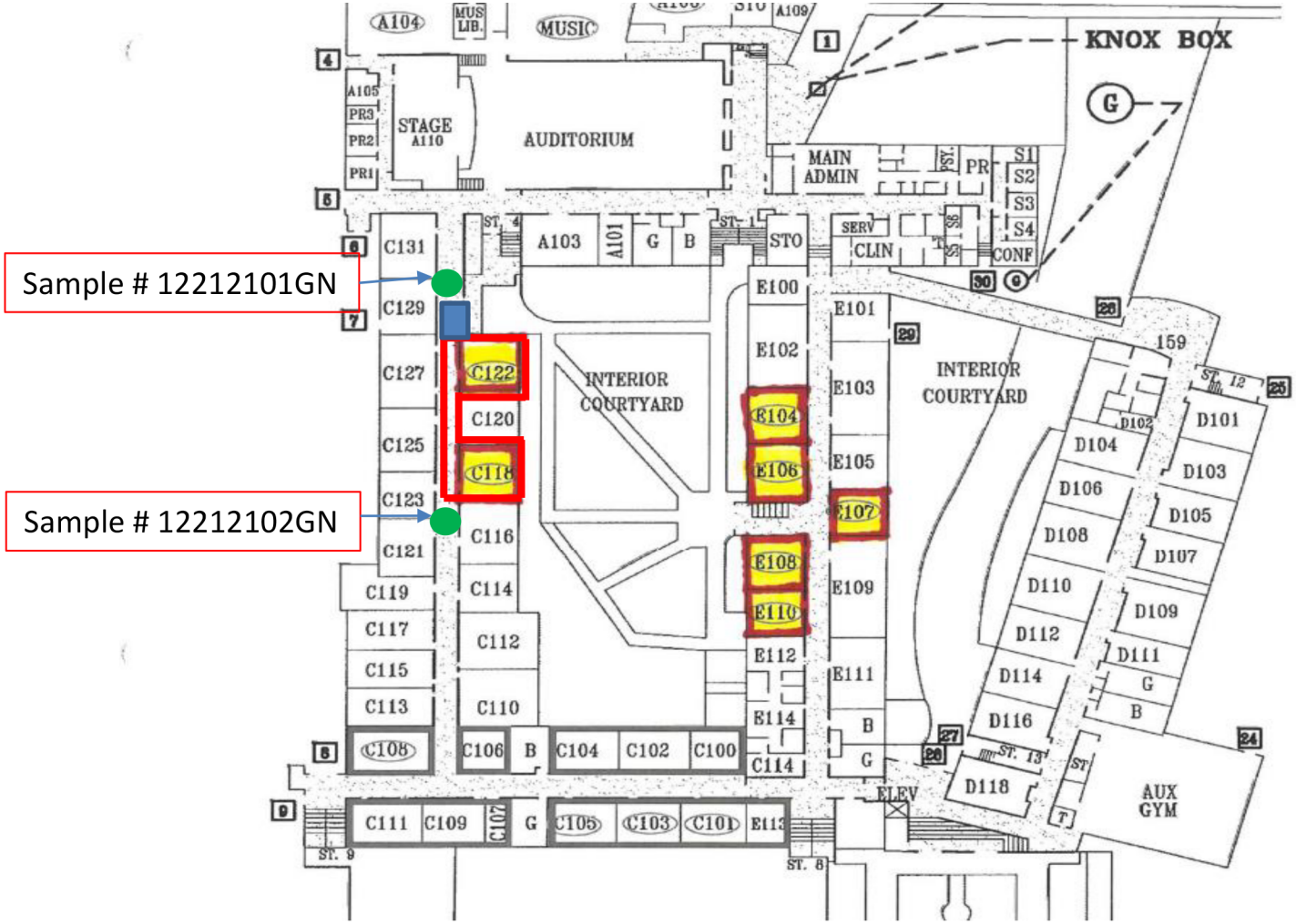
per minute. The PCM air samples were stopped and gathered for analysis.

GENERAL

The regulated work areas were 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 waste drums which were sealed in general accordance with applicable regulations. Waste drums were placed inside the work 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.



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652-F3

12/21/21

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

LETTER OF TRANSMITTAL

December 26, 2021

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

ATTN: Mr. Norman Wiebusch

RE: **ACPS Francis C. Hammond Middle School C/E Rooms**
ECS Job # **47:11652-F3**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - John Finnigan
Waco, Inc - Chris Lanham

ENCL: Field Report # 1 12/22/2021

Michael P. Hamill, CIH, CSP
Environmental Senior Project Manager

No Signature on File

Jennifer Turner
Environmental Scientist

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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 No.	**47:11652-F3**
Report No.	**1**
Day & Date	**Wednesday 12/22/2021**
Weather	**44 °/ Sunny**
On-Site Time	**2.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**2.50**
Re Obs Time	**0.00**

Project	**ACPS Francis C. Hammond Middle School C/E**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**8:15A**	**9:45A**
				2:30P	**3:30P**

* 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 asbestos-containing floor tile and mastic in the 1st floor classroom C118 and C122 work area.

Prior to starting the removal of the specified material, the abatement permit was reviewed. The abatement contractor was notified the permit was on-site and the removal of the specified materials could begin.

Prior to starting the removal of the specified material, 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.

CLASSROOM C118 AND C122 WORK AREA MONITORING

Please refer to the attached drawing for Work Area and Phase Contrast Microscopy (PCM) air sample locations.

Between 8:16 am-8:17 am, PCM air samples were started outside the work area at decontamination unit entry and in the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

ECS observed the abatement workers removing floor tiles and black mastic using motorized floor scraper and hand tools. The abatement contractor workers were placing the removed floor tiles inside waste drums.

Between 2:45-2:46 pm, the sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis.

By JP Nuique 1625

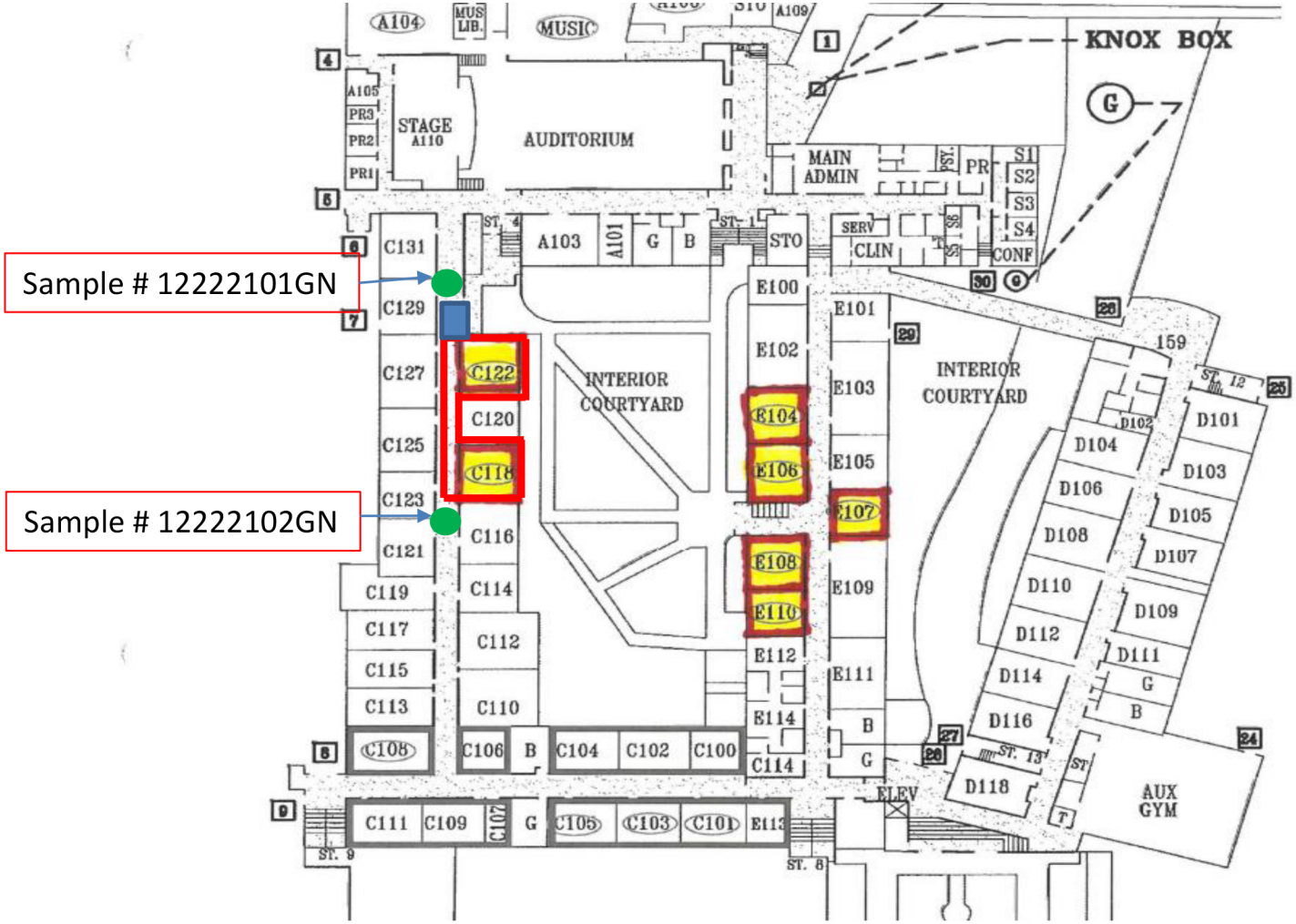
GENERAL

The regulated work areas were 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 waste drums which were sealed in general accordance with applicable regulations. Waste drums were placed inside the work 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 less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652-F3

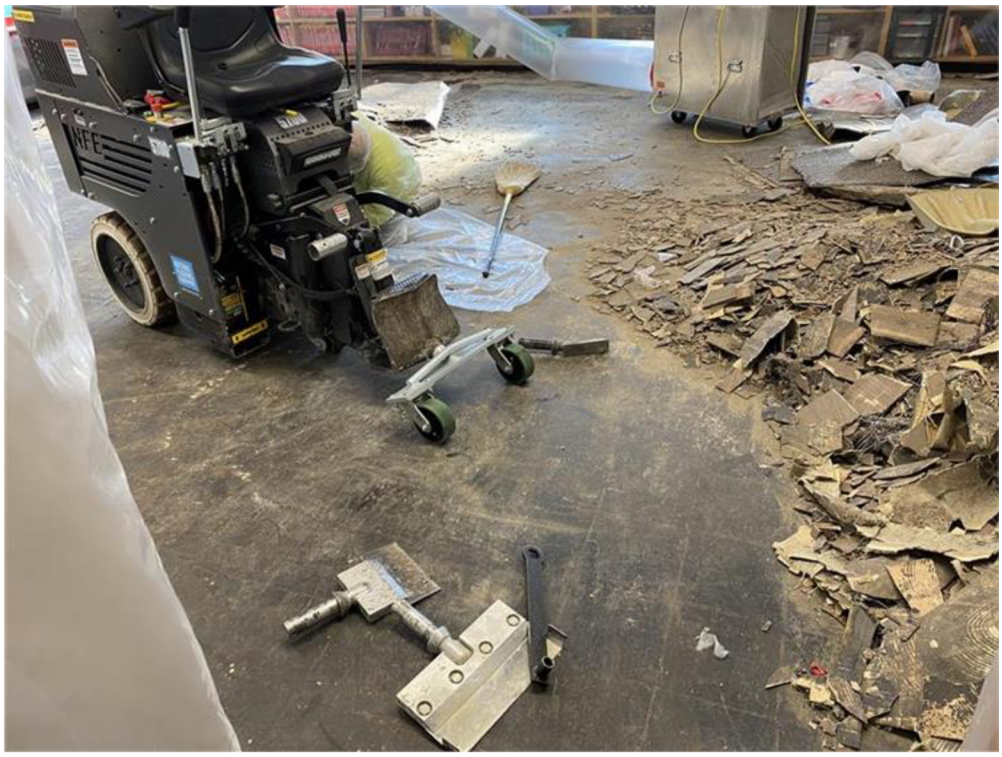
12/22/21

Attachments



View of abatement activities within the 1st floor classroom C118 and C122

Figure 1



View of abatement activities within the 1st floor classroom C118 and C122

Figure 2

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-F3
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 12/22/2021
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)
12222101GN	OWA,C118 and C122 work area at decontamination unit entry	8:16 AM	2:45 PM	1.5	1.5	1.5	389	583.5	3.0	100	0.003
12222102GN	OWA,C118 and C122 work area at the critical barrier by the hallway	8:17 AM	2:46 PM	1.5	1.5	1.5	389	583.5	2.0	100	0.002
122221FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
122221FB02GN	Field Blank	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 re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.

ECS Technician: JP Nuique **Date:** 12/22/2021

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

LETTER OF TRANSMITTAL

December 26, 2021

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

ATTN: Mr. Norman Wiebusch

RE: **ACPS Francis C. Hammond Middle School C/E Rooms**
ECS Job # **47:11652-F3**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - John Finnigan
Waco, Inc - Chris Lanham

ENCL: Field Report # 3 12/23/2021

Michael P. Hamill, CIH, CSP
Environmental Senior Project Manager

Jennifer Turner
Environmental Scientist

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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 Francis C. Hammond Middle School C/E**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F3**
Report No.	**3**
Day & Date	**Thursday 12/23/2021**
Weather	**44 °/ 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				**7:45A**	**11:30A**
				1:15P	**3:30P**

* 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 mastic in the 1st floor classroom C118 and C122 work area.

CLASSROOM C118 AND C122 WORK AREA MONITORING

Please refer to the attached drawing for Work Area and Phase Contrast Microscopy (PCM) air sample locations.

Between 7:48 am-7:49 am, PCM air samples were started outside the work area at decontamination unit entry and in the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

ECS observed the abatement workers removing floor tiles and black mastic using motorized floor scraper, buffer and hand tools. The abatement contractor workers were placing the removed floor tiles inside waste drums.

Between 2:30-2:31 pm, the sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis.

GENERAL

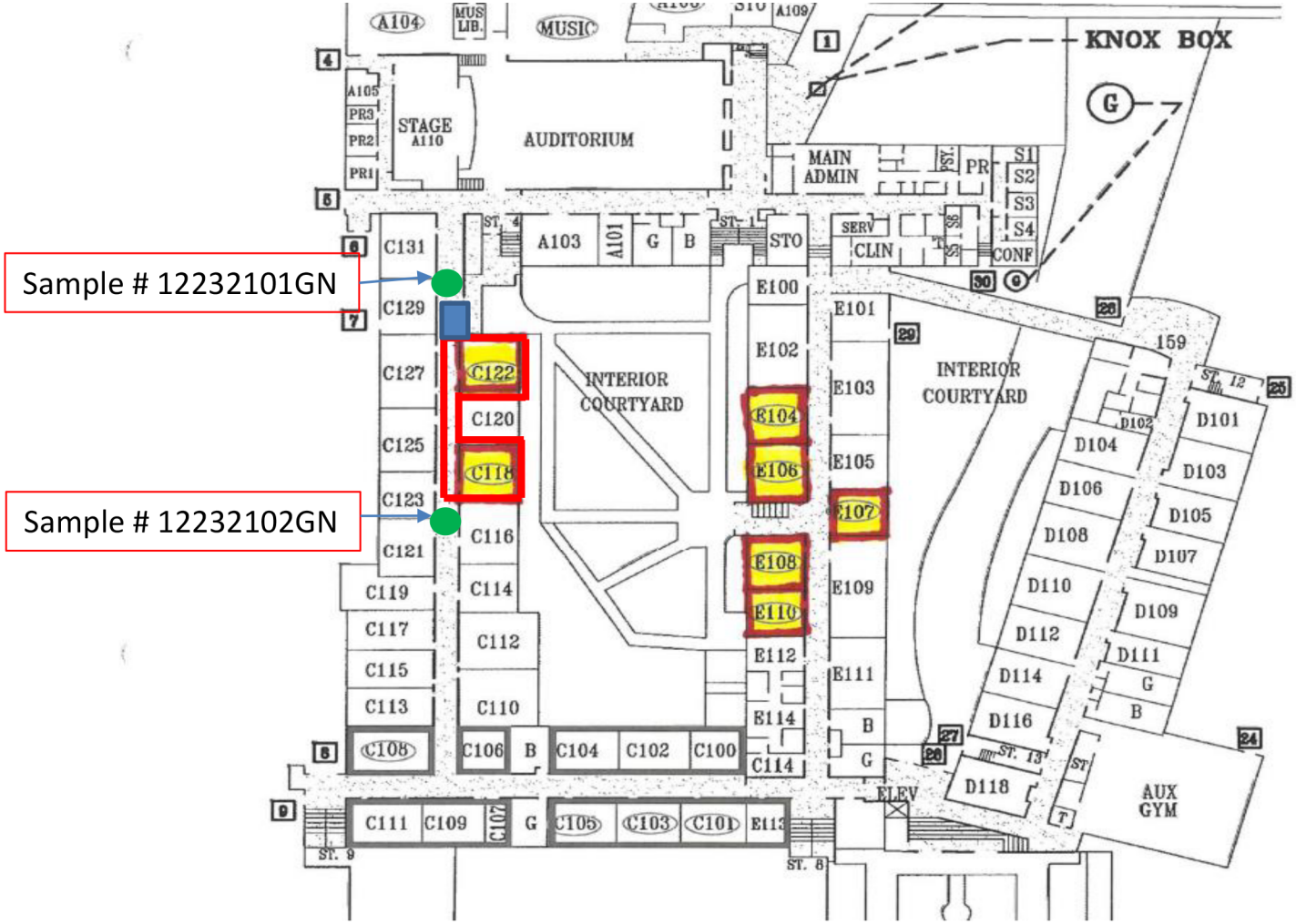
The regulated work areas were surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in waste

drums which were sealed in general accordance with applicable regulations. Waste drums were placed in waste hauling container.

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 less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.
47:11652-F3

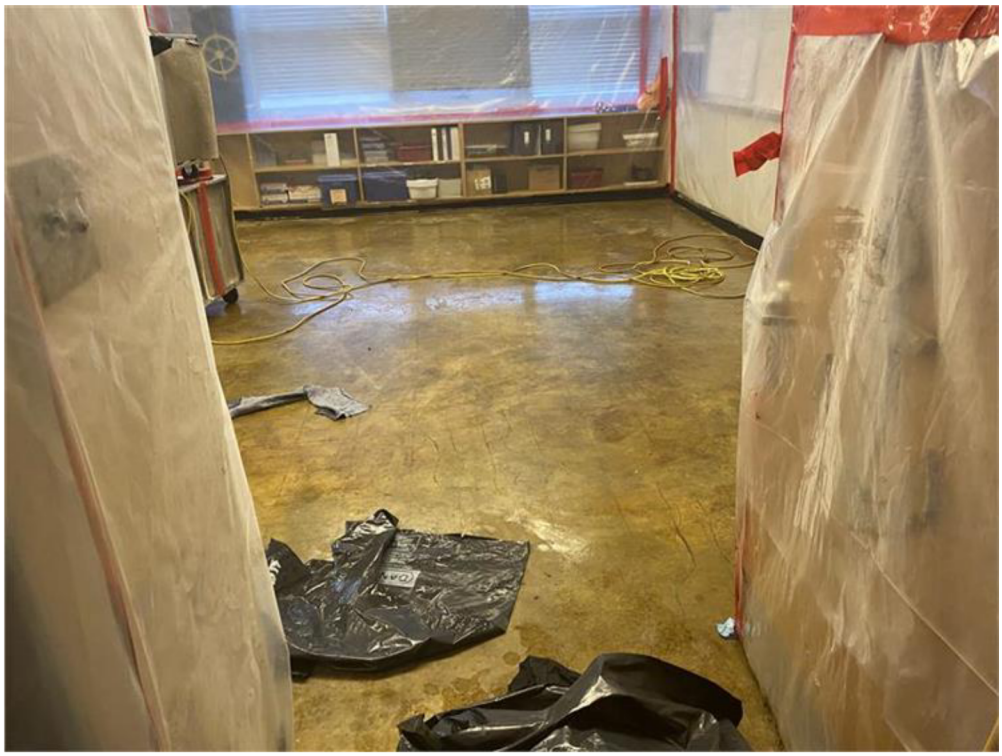
12/23/21

Attachments



View of abatement activities within the classroom C118 and C122 work area

Figure 1



View of abatement activities within the classroom C118 and C122 work area

Figure 2

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-F3
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 12/23/2021
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)
12232101GN	OWA,1st floor Classroom C118 and C122 work area at decontamination unit entry	7:48 AM	2:30 PM	1.5	1.5	1.5	402	603.0	2.0	100	0.002
12232102GN	OWA,1st floor Classroom C118 and C122 work area at critical barrier by the hallway	7:49 AM	2:31 PM	1.5	1.5	1.5	402	603.0	2.0	100	0.002
122321FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
122321FB02GN	Field Blank	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 re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.

ECS Technician: JP Nuique **Date:** 12/23/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F3 **Date:** 12/24/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: Classroom C118 and C122

	Work Area Location/Description	Classroom C118 and C122
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: Jennifer Turner **Date:** 12/24/2021

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

LETTER OF TRANSMITTAL

December 30, 2021

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

ATTN: Mr. Norman Wiebusch

RE: **ACPS Francis C. Hammond Middle School C/E Rooms**
ECS Job # **47:11652-F3**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - John Finnigan
Waco, Inc - Chris Lanham

ENCL: Field Report # 4 12/26/2021

Michael P. Hamill, CIH, CSP
Environmental Senior Project Manager

Jennifer Turner
Environmental Scientist

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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 Francis C. Hammond Middle School C/E**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F3**
Report No.	**4**
Day & Date	**Sunday 12/26/2021**
Weather	**55 °/ Sunny**
On-Site Time	**1.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**1.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**6:45A**	**7:00A**
				10:45A	**12:00P**

* 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 1st floor classroom C118 and C122 work area.

CLASSROOM C118 AND C122 WORK AREA MONITORING

Please refer to the attached drawing for Work Area and Phase Contrast Microscopy (PCM) air sample locations.

Between 6:54 am-6:55 am, PCM air samples were started outside the work area at decontamination unit entry and in the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

ECS observed the abatement workers were removing black floor mastic using buffer and hand tools.

Between 11:30-11:31 am, the sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis.

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 on the next working shift.

By JP Nuique 1625

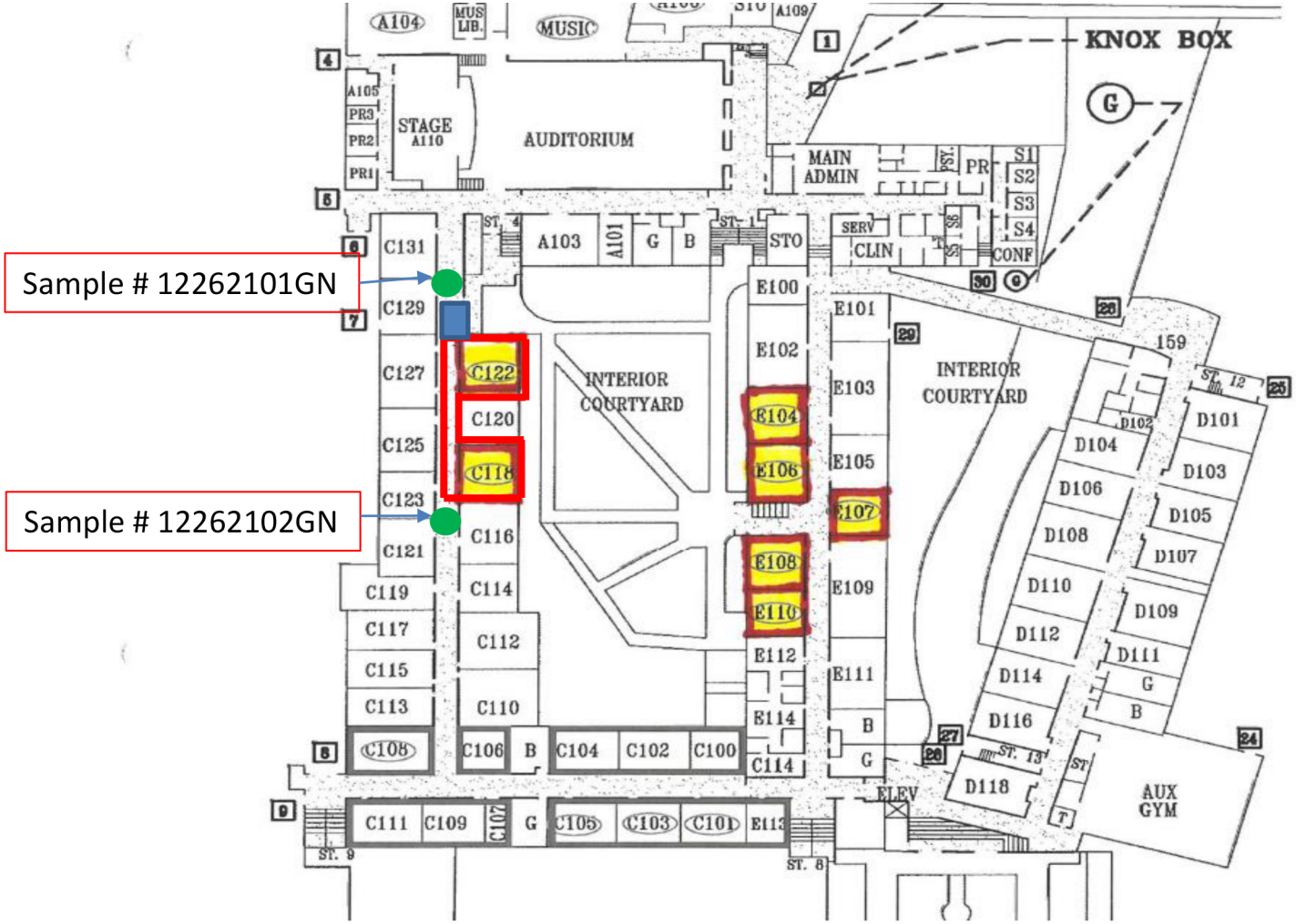
GENERAL

The regulated work areas were 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 waste drums which were sealed in general accordance with applicable regulations. Waste drums were placed in waste hauling container.

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 less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.



Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Work Area

Decontamination Unit

Sample Location

Waste Decontamination Unit

Scale: NTS

Project No.

12/26/21

Attachments



View of classroom C118 and C122 work area following abatement activities

Figure 1



View of classroom C118 and C122 work area following abatement activities

Figure 2

Attachments



View of classroom C118 and C122 work area following abatement activities

Figure 3

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-F3
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 12/26/2021
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)
12262101GN	OWA,Classroom C118 and C122 work area at decontamination unit entry	6:54 AM	11:30 AM	1.5	1.5	1.5	276	414.0	0.5	100	0.001
12262102GN	OWA,Classroom C118 and C122 work area at the critical barrier in the hallway	6:55 AM	11:31 AM	1.5	1.5	1.5	276	414.0	0.0	100	0.000
122621FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A			0.0	100	NFD
122621FB01GN	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 re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.

ECS Technician: JP Nuique **Date:** 12/26/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F3 **Date:** 12/27/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: Classroom C118 and C122

	Work Area Location/Description	Classroom C118 and C122
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: Jennifer Turner **Date:** 12/27/2021

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-F3 **Date:** 12/27/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: Classroom C118 and C122

	Work Area Location/Description	Classroom C118 and C122
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: Jennifer Turner **Date:** 12/27/2021

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

LETTER OF TRANSMITTAL

December 30, 2021

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

ATTN: Mr. Norman Wiebusch

RE: **ACPS Francis C. Hammond Middle School C/E Rooms**
ECS Job # **47:11652-F3**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - John Finnigan
Waco, Inc - Chris Lanham

ENCL: Field Report # 5 12/27/2021

Michael P. Hamill, CIH, CSP
Environmental Senior Project Manager

Jennifer Turner
Environmental Scientist

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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 Francis C. Hammond Middle School C/E**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F3**
Report No.	**5**
Day & Date	**Monday 12/27/2021**
Weather	**42 °/ Cloudy**
On-Site Time	**5.50**
Lab Time	**0.00**
Travel Time*	**0.00**
Total	**5.50**
Re Obs Time	**0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
Chargeable Items				**7:00A**	**11:45A**
				1:45P	**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 materials to be removed today are asbestos-containing floor tile and mastic in the 1st floor classroom E107, E108 and E110 work area.

CLASSROOM C118 AND C122 WORK AREA FINAL CLEARANCE TEM AIR SAMPLES

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area the previous shift. 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 10:15 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 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., Beltsville MD for analysis. A copy of the chain of custody has been attached.

The EPA and VA 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., Beltsville MD, informed ECS that the analytical results of the TEM final clearance air samples collected from 1st floor CLASSROOM C118 AND C122 work area found the airborne asbestos fiber concentrations to be less than the maximum allowable concentration. The client and abatement contractor supervisor were informed of the results. A copy of the laboratory report is attached.

By JP Nuique 1625

CLASSROOM E107,E108 AND E110 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. Please refer to the attached drawing for Work Area and Phase Contrast Microscopy (PCM) air sample locations.

Between 7:15 am-7:16 am, PCM air samples were started outside the work area at decontamination unit entry and in the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

ECS observed the abatement workers removing floor tiles and black mastic using motorized floor scraper and hand tools. The abatement contractor workers were placing the removed floor tiles inside waste drums.

Between 2:19-2:20 pm, the sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis.

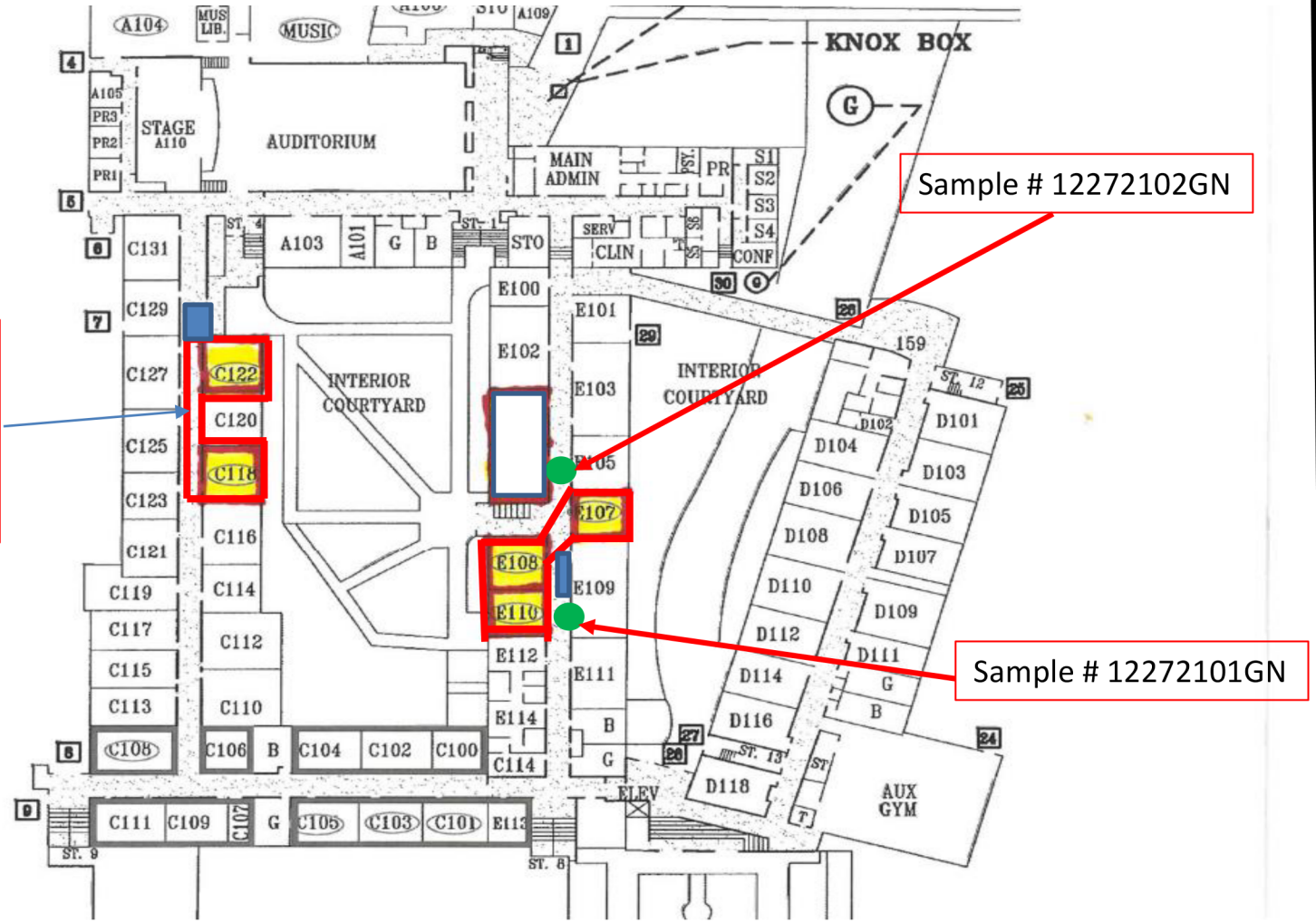
GENERAL

The regulated work areas were 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 waste drums which were sealed in general accordance with applicable regulations. Waste drums were placed in the hallway outside the work area temporarily.

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 less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.



Work Area
Decontamination Unit
Sample Location
Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

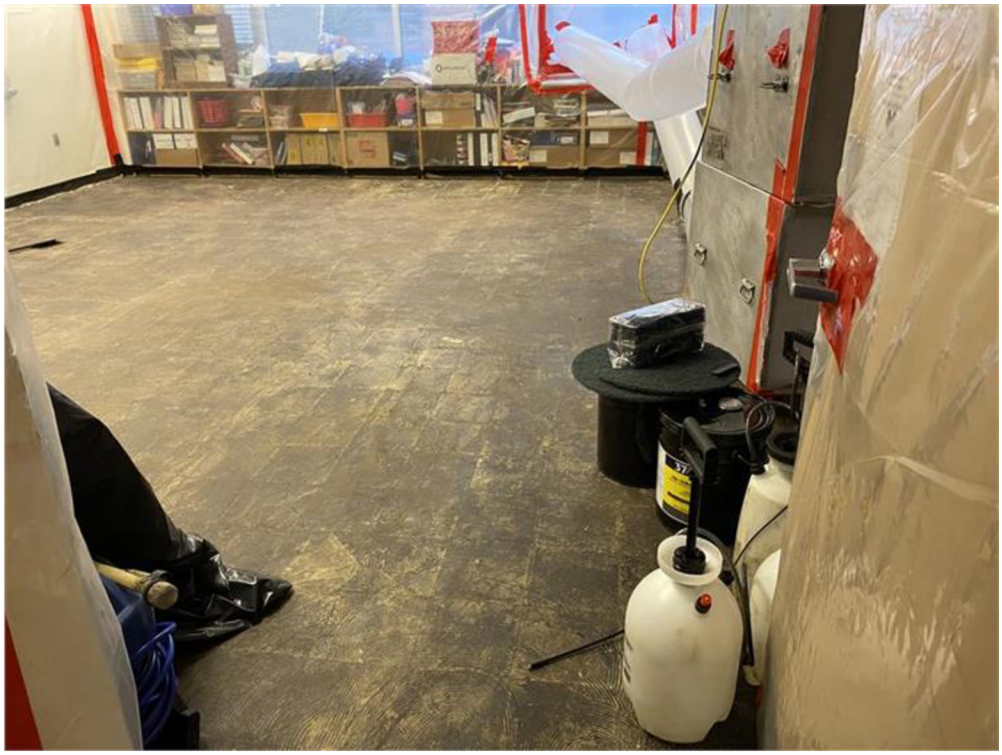
WORK AREA SKETCH

Scale: NTS

Project No.

12/27/21

Attachments



View of abatement activities within the Classroom E107,E108 and E110 work area

Figure 1



View of abatement activities within the Classroom E107,E108 and E110 work area

Figure 2

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-F3
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 12/27/2021
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)
12272101GN	OWA,Classroom E107,108 and E110 work area at decontamination unit entry	7:15 AM	2:19 PM	1.5	1.5	1.5	424	636.0	3.0	100	0.002
12272102GN	OWA,Classroom E107,108 and E110 work area at critical barrier in the hallway	7:16 AM	2:20 PM	1.5	1.5	1.5	424	636.0	0.0	100	0.000
122721FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A			0.0	100	NFD
122721FB01GN	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 re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.

ECS Technician: JP Nuique **Date:** 12/27/2021

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: 192112082
Customer ID: ECMA78
Customer PO:
Project ID:

Attention: Michael Hamill
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
Project: FRANCIS HAMMOND/ 47:11652- F3

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 12/27/2021 15:17 PM
Analysis Date: 12/28/2021
Collected Date: 12/27/2021

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 (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)
12272101GN *192112082-0001*	FC, IWA, CLASSRM C118 & C122	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
12272102GN *192112082-0002*	FC, IWA, CLASSRM C118 & C122	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
12272103GN *192112082-0003*	FC, IWA, CLASSRM C118 & C122	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
12272104GN *192112082-0004*	FC, IWA, CLASSRM C118 & C122	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
12272105GN *192112082-0005*	FC, IWA, CLASSRM C118 & C122	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049

Analyst(s)
Emily Baker (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: 12/28/2021 14:09 PM

OrderID: 192112082

Asbestos Chain of Custody

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

EMSL Order Number *(lab use only)*: 192112082

PHONE:
FAX:

Company Name: ECS Mid Atlantic		**EMSL Customer ID:**	
Street:		**City:**	**State or Province:**
Zip/Postal Code:	**Country:**	**Telephone #:**	**Fax #:**
Report To (Name): Michael Hamill		**Please Provide Results via:** ☐ Fax ☑ Email	
email Address: Mhamill@ecslimited.com		**Purchase Order Number:**	
Client Project ID: Francis Hammond / 47:11652-F3		**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	**TEM – Air[1]**	**TEM- Settled Dust**
☐ NIOSH 7400	☑ AHERA 40 CFR, Part 763	☐ Microvac - ASTM D 5755
☐ w/ OSHA 8hr. TWA	☐ NIOSH 7402	☐ Wipe - ASTM D6480
PLM - Bulk (reporting limit)	☐ EPA Level II	☐ Carpet Sonication (EPA 600/J-93/167)
☐ PLM EPA 600/R-93/116 (<1%)	☐ ISO 10312	**Soil – Rock – Vermiculite (reporting limit)**
☐ PLM EPA NOB (<1%)	**TEM - Bulk**	☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
Point Count	☐ TEM EPA NOB	☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*
☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ NYS NOB 198.4 (non-friable-NY)	☐ TEM Qualitative via Filtration Prep
Point Count w/Gravimetric	☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)*	☐ TEM Qualitative via Drop Mount Prep
☐ 400 (<0.25%) ☐ 1000 (<0.1%)		☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM
☐ NYS-198.1-(friable -NY)	**TEM – Water:** EPA-100.2	*Lower reporting limits avaialble on request*
☐ NYS 198.6 NOB (non-friable-NY)	Fibers >10µm ☐ Waste ☐ Drinking	**Other test (please specify):**
☐ NYS 198.8 SOF-V	All Fiber Sizes ☐ Waste ☐ Drinking	
☐ NIOSH 9002 (<1%)		

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

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

Sampler's Name: Gallardo Nuñez **Sampler's Signature:**

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
122721 01 GN	FC, IWA, Classroom C118 & C122	1200 L	12/22/21
02			
03			
04			
05			

Client Sample # (s): 01 GN - 13 GN **Total # of Samples:** 13

Relinquished by (Client): Gallardo Nuñez **Date:** 12/27/21 **Time:**

Received by (Lab): Mary Nyberg DB **Date:** **Time:** '21 DEC 27 PM 3:17

Comments/Special Instructions:
Aggressive
Analyze IWA 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.

OrderID: 192112082

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

192112082

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
122721 06 GW	FC, DWA, Classroom C118 & C122	200 L	12/27/21
07 GW			
08			
09			
10			
11	Field Blank opened 30 secs. by Entrance	N/A	
12	Field Blank opened 30 secs. in Ambient	N/A	
13	Sealed Blank (not opened)	N/A	

*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.

ECS Mid-Atlantic, LLC

Pre-Abatement Work Area Checklist

Project Number: 47:11652-F3 **Date:** 12/28/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: Classroom E107,E108, and E110

	Work Area Location/Description	Classroom E107,E108, and E110
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: Jennifer Turner **Date:** 12/28/2021

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F3 **Date:** 12/28/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: Classroom E107,E108, and E110

	Work Area Location/Description	Classroom E107,E108, and E110
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: Jennifer Turner **Date:** 12/28/2021

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

LETTER OF TRANSMITTAL

December 30, 2021

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

ATTN: Mr. Norman Wiebusch

RE: **ACPS Francis C. Hammond Middle School C/E Rooms**
ECS Job # **47:11652-F3**

Permits:
Location: **4646 Seminary Road**
Alexandria, VA 22304

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

CC: Alexandria City Public Schools - John Contreras
Alexandria City Public Schools - John Finnigan
Waco, Inc - Chris Lanham

ENCL: Field Report # 6 12/28/2021

Michael P. Hamill, CIH, CSP
Environmental Senior Project Manager

No Signature on File

Jennifer Turner
Environmental Scientist

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 Francis C. Hammond Middle School C/E**
Location	**Alexandria, VA**
Client	**Alexandria City Public Schools**
Contractor	**None Listed**

Project No.	**47:11652-F3**
Report No.	**6**
Day & Date	**Tuesday 12/28/2021**
Weather	**51 °/ Cloudy**
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*	Times of	Arrival	Departure
Chargeable Items				**7:00A**	**8:30A**
				12:30P	**8:00P**

* 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 mastic in the 1st floor classroom E107, E108 and E110 work area.

CLASSROOM E107,E108 AND E110 WORK AREA MONITORING

Please refer to the attached drawing for Work Area and Phase Contrast Microscopy (PCM) air sample locations.

Between 7:30 am-7:31 am, PCM air samples were started outside the work area at decontamination unit entry and in the critical barrier in the hallway. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

ECS observed the abatement workers removing floor tiles and black mastic using motorized floor scraper, buffer and hand tools. The abatement contractor workers were placing the removed floor tiles inside waste drums.

Between 3:00-3:01 pm, the sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis.

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. After waiting for the encapsulant to dry,

By JP Nuique 1625

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 7:30 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., Beltsville MD for analysis. A copy of the chain of custody has been attached.

The EPA and VA 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, Inc. of Beltsville, MD, informed ECS that the analytical results of the TEM final clearance air samples collected from the classrooms E107, E108, and E110 work area found the airborne asbestos fiber concentrations to be less than the maximum allowable concentration. The client and abatement contractor supervisor were informed of the results. A copy of the laboratory report is attached.

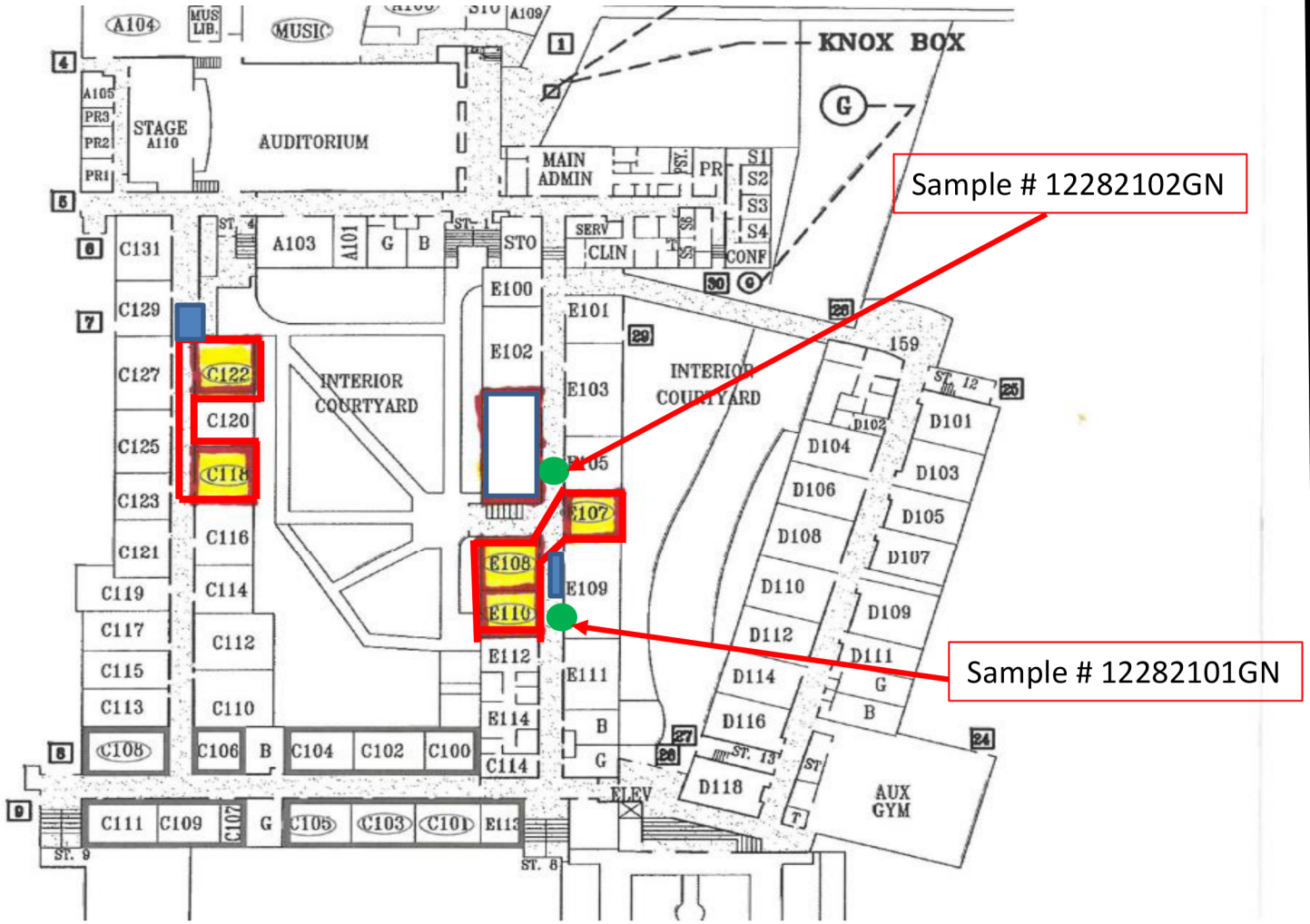
GENERAL

The regulated work areas were 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 waste drums which were sealed in general accordance with applicable regulations. Waste drums were placed in the hallway outside the work area temporarily.

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 less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations.



Work Area

Decontamination Unit

Sample Location

Waste Decontamination Unit

Francis Hammond Middle School
4646 Seminary Rd,
Alexandria, VA 22304

WORK AREA SKETCH

Scale: NTS

Project No.

12/28/21

Attachments



View of the classroom E107,E108,E110 work area following abatement activities

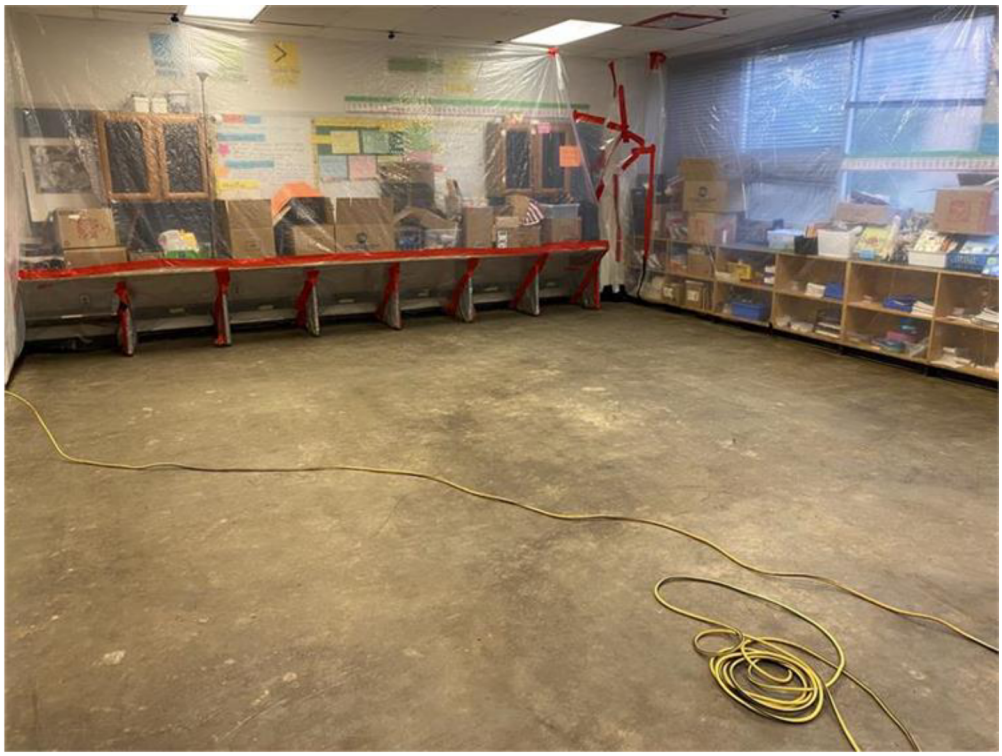
Figure 1



View of Classroom E107,E108 and E110 work area during pre abatement walk through on 12-27-21.

Figure 2

Attachments



View of the classroom E107,E108,E110 work area following abatement activities

Figure 3



View of Classroom E107,E108 and E110 work area during pre abatement walk through on 12-27-21.

Figure 4

Attachments



View of the classroom E107,E108,E110 work area following abatement activities

Figure 5



View of Classroom E107,E108 and E110 work area during pre abatement walk through on 12-27-21.

Figure 6

Attachments



View of Classroom E107,E108 and E110 work area during pre abatement walk through on 12-27-21.

Figure 7

ECS Mid-Atlantic, LLC

Daily Work Area Checklist

Project Number: 47:11652-F3 **Date:** 12/29/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: CLASSROOM E107,E108 AND E110

	Work Area Location/Description	CLASSROOM E107,E108 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: Jennifer Turner **Date:** 12/29/2021

ECS Mid-Atlantic, LLC

PCM Air Sample Field Data Sheet

WORK AREA SAMPLES

Project Number: 47:11652-F3
Project Address: 4646 Seminary Road
Alexandria, VA-22304

Date: 12/28/2021
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)
12282101GN	OWA,Classroom E107,E108 and E110 work area at decontamination unit entry	7:30 AM	3:00 PM	1.5	1.5	1.5	450	675.0	3.5	100	0.003
12282102GN	OWA,Classroom E107,E108 and E110 work area at the critical barrier in the hallway	7:31 AM	3:01 PM	1.5	1.5	1.5	450	675.0	1.0	100	0.001
122821FB01GN	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	100	NFD
122821FB01GN	Field Blank	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 re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM air samples collected from outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations

ECS Technician: JP Nuique **Date:** 12/28/2021

ECS Mid-Atlantic, LLC

Final Clearance Checklist

Project Number: 47:11652-F3 **Date:** 12/29/2021

Project Address: 4646 Seminary Road
Alexandria, VA-22304

Work Area Location/Description: CLASSROOM E107,E108 AND E110

	Work Area Location/Description	CLASSROOM E107,E108 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	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	TEM
	Number of Samples Collected	5 IWA, 5 OWA, 3 Blanks
	Sample Volume (liters)	1200
	Work Area Acceptable	Yes

Notes:

ECS Technician: Jennifer Turner **Date:** 12/29/2021

OrderID: 192112126

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (*lab use only*): 192112126

PHONE:
FAX:

Company Name: ECS Mid Atlantic LLC		**EMSL Customer ID:**	
Street:		**City:**	**State or Province:**
Zip/Postal Code:	**Country:**	**Telephone #:**	**Fax #:**
Report To (Name): Michael Hamill		**Please Provide Results via:** ☐ Fax ☑ Email	
email Address: MHamill@ecslimited.com		**Purchase Order Number:**	
Client Project ID: Francis Hammond / 47:11652-F3		**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: Gallardo Nuigue **Sampler's Signature:**

Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
122821 01 GW	FC, IWA, Classroom E107, E108 & E110	1200 L	12/28/21
02			
03			
04			
05			

Client Sample # (s): 01 GW - 13 GW **Total # of Samples:** 13 GW

Relinquished by (Client): Gallardo Nuigue **Date:** 12/28/21 **Time:**

Received by (Lab): **Date:** 12-29-21 **Time:** 8:30

Comments/Special Instructions: Analyze IWA only

Aggressive

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.

OrderID: 192112126

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 192112126

PHONE
F...

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
122821 06 GW	FC, OWA, Classroom E107, E108, & E110	1200 L	12/28/21
07			
08			
09			
10			
11	Field Blank opened 30 secs. by Entrance	N/A	
12	Field Blank opened 30 secs. in Ambient	N/A	
13	Sealed Blank (not opened)	N/A	

***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 Cc Page 2 of 2 n of custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgement of all terms and conditions.

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: 192112126
Customer ID: ECMA78
Customer PO:
Project ID:

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

Project: FRANCIS HAMMOND / 47:11652-F3

Phone: (703) 471-8400
Fax: (703) 471-8400
Received Date: 12/29/2021 08:30 AM
Analysis Date: 12/29/2021
Collected Date: 12/28/2021

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)
12282101GN	FC, IWA, CLASSRM E107 E108 & E110	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192112126-0001										
12282102GN	FC, IWA, CLASSRM E107 E108 & E110	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192112126-0002										
12282103GN	FC, IWA, CLASSRM E107 E108 & E110	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192112126-0003										
12282104GN	FC, IWA, CLASSRM E107 E108 & E110	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192112126-0004										
12282105GN	FC, IWA, CLASSRM E107 E108 & E110	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
192112126-0005										

Analyst(s)

Emily Baker (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: 12/29/2021 13:50 PM

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	2021-07-31

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DPOR License Lookup build 1,472 (built 2021-02-15 10:16:48).

APPENDIX A

PREVIOUS REPORTS

FRANCIS C. HAMMOND JR. 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 Closet/Storeroom across B229 on 2nd Floor and Math Storage Room on 1st Floor (Assumed under Existing Flooring Materials in other Areas)	9" x 9" Light Brown Floor Tile and associated Mastic	Category I Non-Friable
Main Gymnasium on 1st Floor (Assumed under Existing Flooring Materials in other Areas)	9" x 9" Light Brown and Brown Floor Tile and associated Mastic	Category I Non-Friable
Main Gym Lobby on 1st Floor (Assumed under 12" x 12" Floor Tile in other Areas)	9" x 9" Brown Floor Tile and associated Mastic (under 12" x 12" Floor Tile)	Category I Non-Friable
Hallway between Dance and Weight Rooms in Basement and Cafeteria on 1st Floor (Assumed in other Areas)	TSI – Mudded Elbows/Joints (above Drop Ceiling Tiles)	Friable
Kitchen on 1st Floor (Assumed in other Areas)	Black Wrap on Fiberglass Pipe Insulation (above Drop Ceiling Tiles)	Category II Non-Friable
Office Storeroom on 1st Floor (Assumed in other Areas)	9" x 9" Blue Floor Tiles and associated Mastic	Category I Non-Friable

Location	Material	Friability
Classroom C108 on 1st Floor (Observed under Carpet in other Areas)	Rust (Red) Floor Tiles (under Carpet)	Category I Non-Friable
1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 on 1st Floor (Assumed above Drop Ceiling Tile in other Areas)	Ceiling Tile Brown Mastic (above Drop Ceiling Tile) *	Category II Non-Friable
Classroom E114 on 1st Floor (Assumed under 12" x 12" Floor Tile in other Areas)	9" x 9" Dark Green Floor Tile and associated Mastic (Assumed under 12" x 12" Floor Tile)	Category I Non-Friable
Classroom D202 on 2nd Floor (Assumed in other Areas)	White Duct Seam Tape associated with Roof Drain (above Drop Ceiling Tile)	Category II Non-Friable
Classroom E203 on 2nd Floor (Assumed under Carpet in other Areas)	9" x 9" Green Floor Tile and associated Mastic (under Carpet)	Category I Non-Friable
Classroom B223 on 2nd Floor	Laboratory Sink (Gray Undercoat Sink)	Friable
Observed in some Areas	White Ceiling Plaster **	Friable
Hallway between Classrooms C100-C111 and Classroom C115 on 1st Floor (Assumed above Drop Ceiling Tile in other Areas)	White Duct Mastic (on Fiberglass Insulation) (above Drop Ceiling Tiles)	Category II Non-Friable
SAMPLED BY ECS IN NOVEMBER 7, 2013		
Boiler Room	Boiler Insulation behind Lower Metal Sheet ***	Friable
Storage Rooms next to Auditorium	9" x 9" Maroon Floor Tile and associated Black Mastic****	Category I Non-Friable
MATERIALS ASSUMED TO CONTAIN ASBESTOS ***		
Weight Room, Main Gymnasium and Stage	Wood Floor Underlayment and associated Mastic	Category I Non-Friable

Location	Material	Friability
Auxiliary Gymnasium	Wall Boards and associated Mastic	Category II Non-Friable
Auditorium	1' x 1' Acoustical Ceiling and Wall Tile Mastic	Category II Non-Friable
Stage and Auditorium	Wood Wainscoting Mastic	Category II Non-Friable
Classrooms	Black Window Sill	Category II Non-Friable
Throughout Building	Interior Pipe Wrap associated with Water Fountains and Radiators	Category II Non-Friable
Throughout Building	Interior Pipe Wrap associated with Water Fountains and Radiators	Category II Non-Friable
Hallways and Classrooms	Boards and associated Mastics	Category II Non-Friable
Classroom A204 on 2nd Floor	Acoustical Peghole Boards and associated Mastic	Category II Non-Friable
Throughout Building	Black Stairway Treads	Category II Non-Friable
Classrooms	Boards above Windows	Category II Non-Friable
Boiler Room	Containing Interior Boiler Components	Unknown
Joint Hallways	Floor Stripe/Tile and associated Mastic	Category I Non-Friable
Bathrooms	Mirror Mastics	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
Throughout Building	Fire Door and associated Casings Insulation	Friable
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: * Degraded plaster ceiling with this material was observed above the drop ceiling tiles in the above listed location. Debris with ceiling tile brown mastic residual was observed on top of the drop ceiling tiles.
** This material was reported to be present in the Room 226; however, this room could not be located during the re-inspection. This material was observed in other areas.
*** This material appeared to be damaged behind the metal sheeting.
**** Missing floor tiles and floor tile residual were observed in the above listed locations.
***** 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
Hallway between Dance and Weight Rooms in Basement and Cafeteria on 1st Floor	TSI – Mudded Elbows/Joints (above Drop Ceiling Tiles)	5 – ACBM with Potential for Damage

Location	Material	Physical Assessment Category
Classroom B223 on 2nd Floor	Laboratory Sink (Gray Undercoat Sink)	7 – Any Remaining Friable ACBM
Observed in some Areas	White Ceiling Plaster	5 – ACBM with Potential for Damage
Boiler Room	Boiler Insulation behind Lower Metal Sheet	1 – Damaged or Significantly Damaged TSI ACBM

Recommendations

1) Damaged plaster ceiling with identified asbestos-containing ceiling tile brown mastic was observed above the drop ceiling tiles in hallway between the classrooms C100-C111 and Classroom C106 on the 1st floor. Debris and residual brown ceiling tile mastic from this condition was observed on top of the drop ceiling tile in those locations. This debris should be considered asbestos-contaminated and be removed by personnel designated by the School and trained in Operations & Maintenance asbestos activities. Degraded plaster ceiling should be patched as soon as possible to avoid future damage to the asbestos containing brown ceiling tile mastic. Water intrusion, if any, which may cause the degraded condition, should be repaired.

2) The identified white ceiling plaster was reported to be present in the Room 226; however, this room could not be located during the re-inspection. Similar type of this material was observed in other areas. ECS collected samples from this material in the boiler room, cafeteria and 1st floor hallway between the Classrooms C108-C109. No asbestos was detected in the samples collected from those areas. It is recommended this material to be sampled from any area where damaged or degraded plaster ceiling is observed that has not been sampled during the initial inspection and three-year re-inspections.

3) The identified friable asbestos-containing boiler insulation appeared to be damaged behind the metal sheeting. At the time of the re-inspection, the boiler appeared to be no longer in use. If this material is scheduled for removal, the metal sheeting around the boiler should be considered asbestos-contaminated and be removed by a Commonwealth of Virginia licensed asbestos abatement contractor:

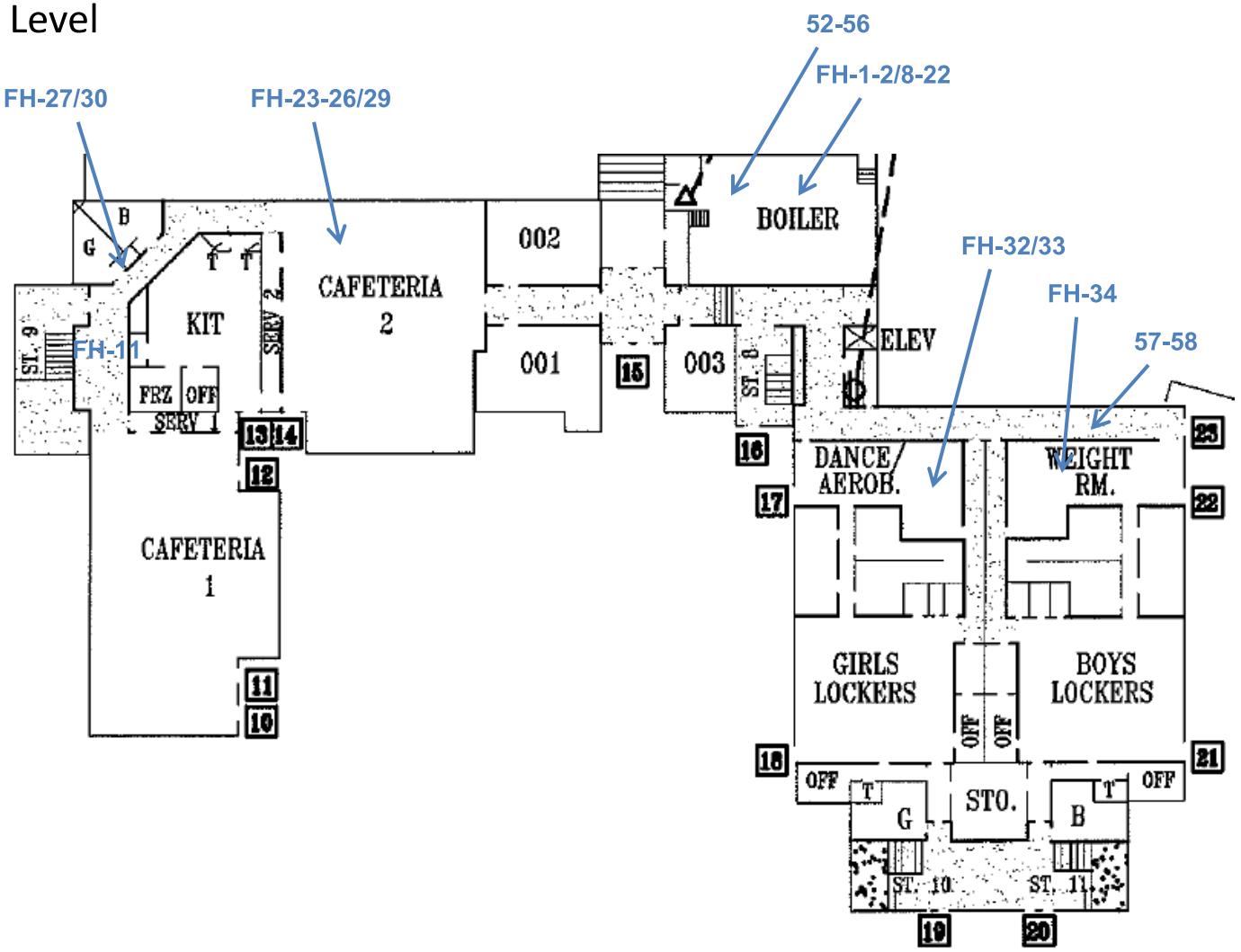
4) Residual and missing identified asbestos-containing floor tiles were observed in the storage rooms next to the auditorium. Identified asbestos-containing floor mastics were observed to be exposed in those areas. Any missing floor tile should be

replaced as soon as possible to avoid future damage to the asbestos containing floor mastics. Asbestos-containing floor tile residual observed in those areas should be removed by personnel designated by the School and trained in Operations & Maintenance asbestos activities.

APPENDIX B

FLOOR PLANS

Basement Level



Legend
- Sample Number

Notes
1. Sample Locations are estimated

FRANCIS HAMMOND
4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA

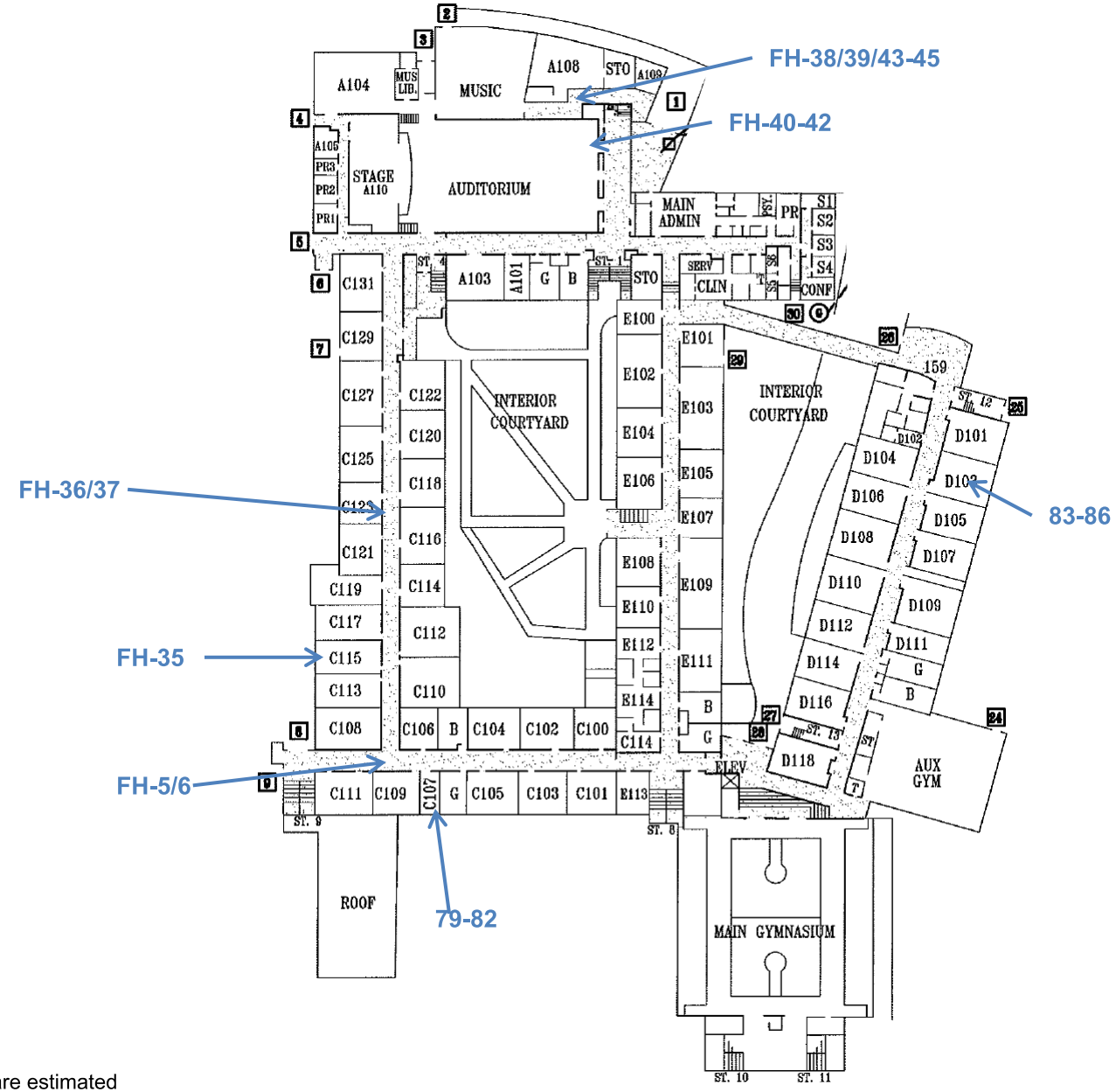
SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-D

Date 3/31/2017

1st FL



Legend
- Sample Number

Notes
1. Sample Locations are estimated

FRANCIS HAMMOND
4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA

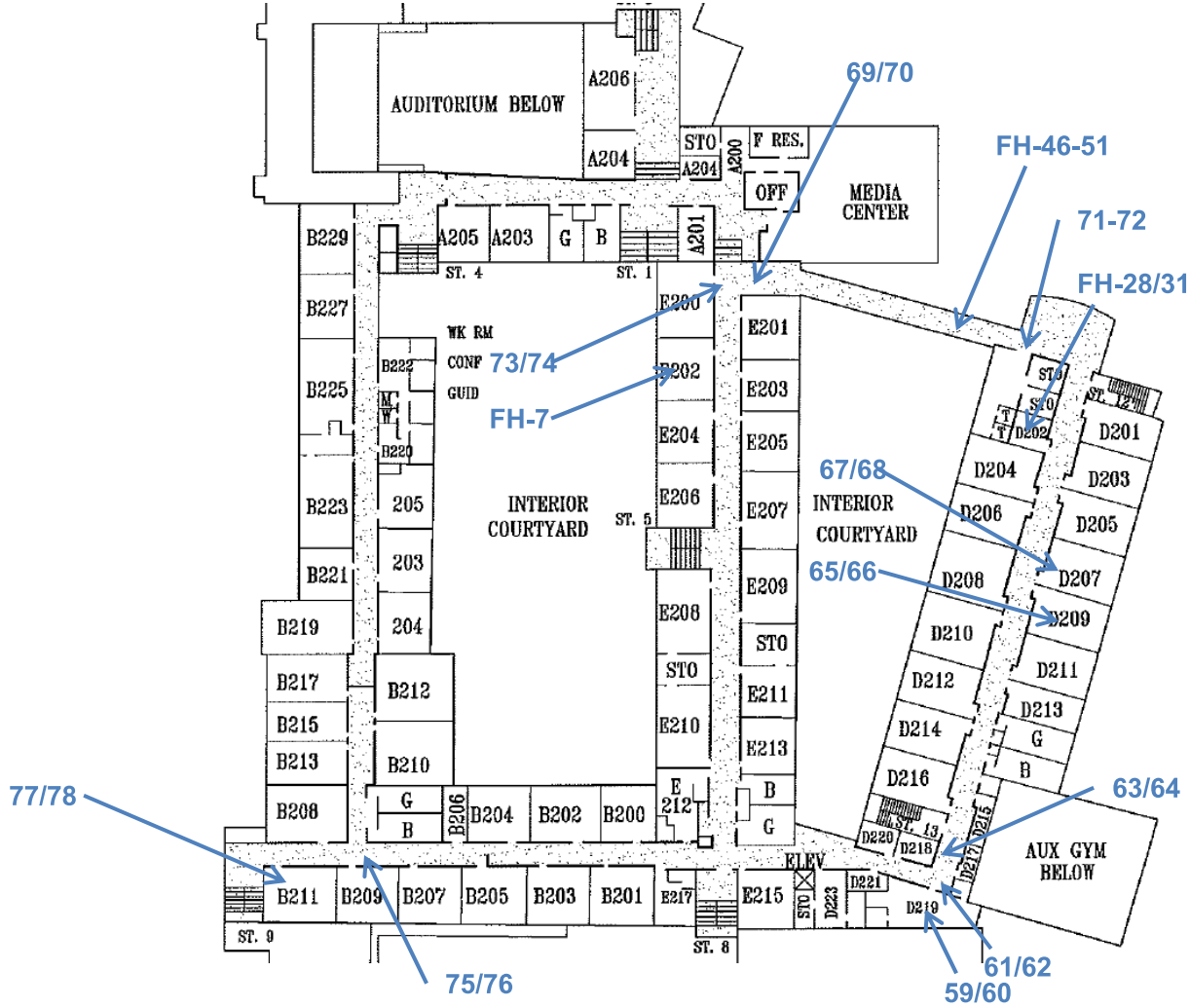
SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-D

Date 3/31/2017

2nd FL



Legend

- Sample Number

Notes

1. Sample Locations are estimated

FRANCIS HAMMOND
4646 SEMINARY ROAD
ALEXANDRIA, VIRGINIA

SAMPLING LOCATIONS
ACPS

SCALE NTS

Project No. 47:1519-D

Date 3/31/2017

APPENDIX C

ASBESTOS SUMMARY TABLES

FRANCIS HAMMOND 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								
9" x 9" Light Brown Floor Tiles and associated Mastic	Electrical Closet/Storeroom across B229 on 2nd Floor and Math Storage Room on 1st Floor	NF	Intact	Assumed under existing flooring materials in other areas	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
9" x 9" Light Brown Floor Tiles and associated Mastic	Main Gymnasium on 1st Floor	NF	Intact	Assumed under existing flooring materials in other areas	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
9" x 9" Brown Floor Tiles and associated Mastic	Main Gym Lobby on 1st Floor	NF	Intact	Under 12" x 12" floor tile in the main gym along the wall at the lobby.	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
TSI-Mudded Elbows/Joints	Hallway between Dance and Weight Rooms in Basement and Cafeteria on 1st Floor	F	Intact	Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
Black Wrap on Fiberglass Pipe	Kitchen above Ceiling Tile	F	Intact	Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
9" x 9" Blue Floor Tiles and associated Mastic	Office Storeroom, and Rooms 113C- 115C	NF	Intact	Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
Red Rust Floor Tiles	1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 on 1st Floor	NF	Intact	Materials are located under carpet. Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
Ceiling and Wall Tile Brown Mastic	1st and 2nd Floor Hallways and Classrooms C100-C111 and E100-114 on 1st Floor	NF	Intact	Materials are located above ceiling tile. Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
9" x 9" Dark green Floor Tiles and associated Mastic	Room 114, C98, and E114	NF	Intact	Material is under 12" x 12" floor tile. Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Reported as Enclosed. Verify Analytical Results
White Duct Seam Tape on Roof Drain Pipe	Room D202	NF	Intact	Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
9" x 9" Green Floor Tiles and associated Mastic	Room B222 and E203	NF	Intact	Assumed under existing materials in other areas	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
Laboratory Sink's Grey Undercoat	Room 223B	NF	Intact	None	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
White Mastic on Fiberglass Duct Insulation	Room 225B	NF	Intact	None	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results
White Ceiling Plaster	Room 225B, Auditorium, and Throughout Building	F	N/A	None	10-Jan-17	Maintain in O & M Plan		Verify Analytical Results

FRANCIS HAMMOND ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS IN NOVEMBER 7, 2013 SURVEY								
9' x 9" Grey Floor Tiles and associated Mastic	Storerooms B225 and B227	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Black Mastic on Foil Wrap Duct Insulation	Throughout the building	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Green Duct Mastic	Throughout the building	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
White Duct Mastic	Throughout the building	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Fire Doors	Throughout the building	F	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Remove from O & M Plan		Verify Removal
Red/Brown Duct mastic	Throughout the building	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Grey Electrical Panel board/Fiberboard Materials	2nd Floor Hallway	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan, Verify Removal		Not observed - Verify removal or Sample if proposed to be disturbed
White Electrical Stage Wire Insulation	Auditorium	F	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Not observed - Verify removal or Sample if proposed to be disturbed
9" x 9" Brown Floor Tiles and associated Mastic	Room 115B	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Not observed - Verify removal or Sample if proposed to be disturbed
White Electrical Stage Wire Insulation	Auditorium	F	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Not observed - Verify removal or Sample if proposed to be disturbed
9" x 9" Brown Floor Tiles and associated Mastic	Band Room E	NF	N/A	This material is reported as ACM; however it was not observed in this area. ECS observed only carpet.	10-Jan-17	Remove from O & M Plan pending verification of removal		Not observed - Verify removal
9" x 9" Brown Floor Tiles and associated Mastic	Room 229	NF	N/A	Materials may be covered with carpet	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
9" x 9" Green Floor Tiles and associated Mastic	Crawlspace Under Gym	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Not observed - Verify removal or Sample if proposed to be disturbed
White Mastic on Fiberglass Pipes	Gym	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Orange Spray-on Insulation	Room 106D	F	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Not observed - Verify removal or Sample if proposed to be disturbed
Brown Surfacing Material	Room 200, 202, 204, 206, 224, and 226	F	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Remove from O & M Plan pending verification of removal		Not observed - Verify removal

FRANCIS HAMMOND ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
9" x 9" Green Floor Tiles and associated Mastic	Room 203D	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Remove from O & M Plan pending verification of removal		Not observed - Verify removal
9" x 9" Blue Floor Tiles and associated Mastic	Room 142	NF	N/A	This material is reported as ACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Expansion Seam between Brick Wall	Hallway at the Cafeteria	NF	Intact	This material is reported as PACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
4" Mudded Pipe Fitting	Cafeteria	F	Intact	This material is reported as PACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Black Terrazzo Steps	Stairs to Cafeteria	NF	Intact	This material is reported as PACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
1' x 1' White Pinhole Ceiling Tile and Brown Dot Glue	Hallway by Rooms 108C - 109C	NF	Intact	This material is reported as PACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Grey Metal Duct Mastic	Room E202	NF	Intact	This material is reported as PACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Writing Board Mastic	All Classrooms	NF	Intact	This material is reported as PACM; however it was not observed in this area.	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 7, 2013 SURVEY								
Boiler Insulation behind Lower Sheet Metal	Boiler Room	F	Intact	None	10-Jan-17	Add to O & M Plan		Asbestos: 60% Chrysotile
9' x 9" Maroon Floor Tile and associated Mastic	Storage Room next to Auditorium	NF	Intact	This material may be present in other areas	10-Jan-17	Add to O & M Plan		Asbestos: Floor Tile - 8% Chrysotile Mastic - 10% Chrysotile
MATERIALS ASSUMED TO CONTAIN ASBESTOS								
Floor Stripe/Tile and associated Mastic	Joint Hallways	NF	Intact	None	10-Jan-17	Add in O & M Plan		Sample if proposed to be disturbed
Cove Base and associated Mastic	Throughout the Building	NF	Intact	Various types of cove base and associated mastic were sampled as NAD by ECS.	10-Jan-17	Remove from O & Plan		None
Hardwood Floor Underlayment and associated Mastic	Old Gym and Stage	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Plaster Walls	Throughout the Building	F	Intact	Sampled NAD by ECS.	10-Jan-17	Remove from O & Plan		None
1' x 1' Acoustical Ceiling and Wall Tile Mastic	Auditorium	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed

FRANCIS HAMMOND ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
Wood Wainscoting Mastic	Auditorium and Stage	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Black Window Sills	Classrooms	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Grey Fireproofing	Room 115C and Possibly throughout the Building	F	Intact	Sampled NAD by ECS.	10-Jan-17	Maintain in O & M Plan		None
Stairway Treads	Throughout the building	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Boards and associated Mastics	Hallways and Classrooms	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Boards Above Windows	Classrooms	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Containing Interior Boiler Components	Boiler Room	F	Intact	PACM until tested	10-Jan-17	Remove from O & M Plan		Sample if proposed to be disturbed
Wall Boards and associated Mastic	Auxiliary Gym	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Black Stair Treads	Throughout the Building	NF	Intact	PACM until tested	10-Jan-17	Maintain in O & M Plan		Sample if proposed to be disturbed
Pipe Flange Gaskets	Throughout the Building	Unknown	Intact	PACM until tested	10-Jan-17	Add to O & M Plan		Sample if proposed to be disturbed
Electrical Panels: Transite Components	Mechanical Rooms	NF	Intact	PACM until tested	10-Jan-17	Add to O & M Plan		Sample if proposed to be disturbed
Thermal System Insulation	Throughout building behind Solid Walls and Ceiling	F	Not Observed	PACM Until Tested	10-Jan-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	10-Jan-17	Add to O & M Plan		Sample if proposed to be disturbed
Mirror Mastic	Bathrooms	NF	Intact	PACM until tested	10-Jan-17	Add to O & M Plan		Sample if proposed to be disturbed
Chalkboards and associated Mastics	Classrooms	NF	Intact	PACM until tested	10-Jan-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	10-Jan-17	Add to O & M Plan		Sample if proposed to be disturbed
Asphalt-Based Roofing Material and Caulks/Sealants	Roof	NF	Intact	PACM until tested	10-Jan-17	Add to O & M Plan		Sample if proposed to be disturbed
Elevator Components	Break Shoes, Mastics, Cables	NF	Intact	PACM until tested	10-Jan-17	Add to O & M Plan		Sample if Proposed for Removal

FRANCIS HAMMOND ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 7, 2013 SURVEY								
Plaster Wall/Ceiling	Boiler Room, Cafeteria, Hallway between Classrooms C108 -C109, and Classroom E202	N/A	N/A	N/A	N/A	N/A	N/A	Finish - NAD Base - NAD
Boiler Interior Surfacing Layer	Brick Wall on Boiler in Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Boiler Interior Brick	Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Grout associated with Boiler Interior Brick Wall	Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
White Boiler Cord	Upper Boiler Doors in Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Interior Window Glazing	Cafeteria 2	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Drywall	Cafeteria 2, Janitors Closet between Cafeterias, and Room D202	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Joint Compound	Cafeteria 2, Janitors Closet between Cafeterias, and Room D203	N/A	N/A	N/A	N/A	N/A	N/A	NAD
8" Mudded Pipe Fitting	Dance/Weight Room	N/A	N/A	N/A	N/A	N/A	N/A	Wrap - NAD Insulation - NAD
Drywall and Joint Compound	Weight Room	N/A	N/A	N/A	N/A	N/A	N/A	Drywall - NAD Joint Compound - NAD
Grey Fireproofing	Hallway between Rooms C110 - 131, Music Rooms A108 - A106, and Classroom C115	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Black Mastic on Brick Wall	Hallway to Music Rooms A106 - A106	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Grey Interior Window Caulk	Bridge on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
Grey Mastic on Metal Duct	Bridge on 2nd Floor	N/A	N/A	N/A	N/A	N/A	N/A	NAD
NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS ON JANUARY 10, 2017 SURVEY								
White Pipe Bridging Mastic on Fiberglass	Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	
White Pipe Wrap with White Mastic on Fiberglass	Boiler Room	N/A	N/A	N/A	N/A	N/A	N/A	
2' x 4' Pinhole Ceiling Tile	Lower Level - Dance Hallway	N/A	N/A	N/A	N/A	N/A	N/A	
12" x 12" Light Blue Floor Tile with White Flecks with Yellow Mastic	D219	N/A	N/A	N/A	N/A	N/A	N/A	
Blue Sheet Floor with Fabric	2nd FL Hall at D219	N/A	N/A	N/A	N/A	N/A	N/A	
Beige Sheet Floor with Fabric	2nd FL Hall at D217	N/A	N/A	N/A	N/A	N/A	N/A	
12" x 12" Gray Floor Tile with Gray/White Flecks	D209	N/A	N/A	N/A	N/A	N/A	N/A	

FRANCIS HAMMOND ELEMENTARY SCHOOL
ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

MATERIAL	LOCATION	FRIABILITY	CONDITION	COMMENTS	LAST INSPECTION DATE	RECOMMENDATION	SEMI-ANNUAL INSPECTION DATE	REMARKS
12" x 12" White Floor Tile with Beige Flecks	D207	N/A	N/A	N/A	N/A	N/A	N/A	
Green Sheet Floor with Fabric	Hall at D200	N/A	N/A	N/A	N/A	N/A	N/A	
4" Dark Blue Cove Base with Yellow Mastic	Hall at D200	N/A	N/A	N/A	N/A	N/A	N/A	
4" Green Cove Base with Yellow Mastic	Hall at E200	N/A	N/A	N/A	N/A	N/A	N/A	
Red Sheet Floor with Fabric	Hall at B207	N/A	N/A	N/A	N/A	N/A	N/A	
12" x 12" Dark Blue Floor Tile with Yellow Mastic	B211	N/A	N/A	N/A	N/A	N/A	N/A	
12" x 12" Off-White Floor Tile with Blue/Tan Flecks (Top Layer)	C107	N/A	N/A	N/A	N/A	N/A	N/A	
2' x 4' Pinhole Fissure Ceiling Tile	C107	N/A	N/A	N/A	N/A	N/A	N/A	
12" x 12" Light Gray Floor Tile with White Flecks with Gray Mastic	D103	N/A	N/A	N/A	N/A	N/A	N/A	
4" Gray Cove Base with White Mastic	D103	N/A	N/A	N/A	N/A	N/A	N/A	

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
FH 52	Boiler Room	White Pipe Bridging Mastic on Fiberglass	NAD
FH 53	Boiler Room	White Pipe Bridging Mastic on Fiberglass	NAD
FH 54	Boiler Room	White Pipe Wrap with White Mastic on Fiberglass	NAD
FH 55	Boiler Room	White Pipe Wrap with White Mastic on Fiberglass	NAD
FH 56	Boiler Room	White Pipe Wrap with White Mastic on Fiberglass	NAD
FH 57	Lower Level Dance Hallway	2' x 4' Pinhole Ceiling Tile	NAD
FH 58	Lower Level Dance Hallway	2' x 4' Pinhole Ceiling Tile	NAD
FH 59 - A	D219	12" x 12" Light Blue Floor Tile with White Flecks	NAD
FH 59 - B	D219	Yellow Mastic of 12" x 12" Light Blue Floor Tile with White Flecks	NAD
FH 60 - A	D219	12" x 12" Light Blue Floor Tile with White Flecks	NAD
FH 60 - B	D219	Yellow Mastic of 12" x 12" Light Blue Floor Tile with White Flecks	NAD
FH 61	2nd FL Hallway at D219	Blue Sheet Floor with Fabric	NAD
FH 62	2nd FL Hallway at D219	Blue Sheet Floor with Fabric	NAD
FH 63 - A	2nd FL Hallway at D217	Beige Sheet Floor with Fabric	NAD
FH 63 - B	2nd FL Hallway at D217	Yellow Mastic of Beige Sheet Floor with Fabric	NAD
FH 64 - A	2nd FL Hallway at D217	Beige Sheet Floor with Fabric	NAD
FH 64 - B	2nd FL Hallway at D217	Yellow Mastic of Beige Sheet Floor with Fabric	NAD
FH 65 - A	D209	12" x 12" Gray Floor Tile with Gray/White Flecks	NAD
FH 65 - B	D209	Yellow Mastic of 12" x 12" Gray Floor Tile with Gray/White Flecks	NAD
FH 66 - A	D209	12" x 12" Gray Floor Tile with Gray/White Flecks	NAD

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

TABLE 1

BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

Sample #	Sampling Location	Material/Description	Analytical Results
FH 66 - B	D209	Yellow Mastic of 12" x 12" Gray Floor Tile with Gray/White Flecks	NAD
FH 67	D207	12" x 12" White Floor Tile with Beige Flecks	NAD
FH 68	D207	12" x 12" White Floor Tile with Beige Flecks	NAD
FH 69 - A	Hall at D200	Green Sheet Floor with Fabric	NAD
FH 69 - B	Hall at D200	Yellow Mastic of Green Sheet Floor with Fabric	NAD
FH 70 - A	Hall at D200	Green Sheet Floor with Fabric	NAD
FH 70 - B	Hall at D200	Yellow Mastic of Green Sheet Floor with Fabric	NAD
FH 71 - A	Hall at D200	4" Dark Blue Cove Base	NAD
FH 71 - B	Hall at D200	Yellow Mastic of 4" Dark Blue Cove Base	NAD
FH 72 - A	Hall at D200	4" Dark Blue Cove Base	NAD
FH 72 - B	Hall at D200	Yellow Mastic of 4" Dark Blue Cove Base	NAD
FH 73 - A	Hall at E200	4" Green Cove Base	NAD
FH 73 - B	Hall at E200	Yellow Mastic of 4" Green Cove Base	NAD
FH 74 - A	Hall at E200	4" Green Cove Base	NAD
FH 74 - B	Hall at E200	Yellow Mastic of 4" Green Cove Base	NAD
FH 75	Hall at B207	Red Sheet Floor with Fabric	NAD
FH 76	Hall at B207	Red Sheet Floor with Fabric	NAD
FH 77 - A	B211	12" x 12" Dark Blue Floor Tile	NAD
FH 77 - B	B211	Yellow Mastic of 12" x 12" Dark Blue Floor Tile	NAD
FH 78 - A	B211	12" x 12" Dark Blue Floor Tile	NAD

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

TABLE 1

BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

Sample #	Sampling Location	Material/Description	Analytical Results
FH 78 - B	B211	Yellow Mastic of 12" x 12" Dark Blue Floor Tile	NAD
FH 79 - A	C107	12" x 12" Off-White Floor Tile with Blue/Tan Flecks (Top Layer)	NAD
FH 79 - B	C107	Yellow Mastic of 12" x 12" Off-White Floor Tile	NAD
FH 80 - A	C107	12" x 12" Off-White Floor Tile with Blue/Tan Flecks (Top Layer)	NAD
FH 80 - B	C107	Yellow Mastic of 12" x 12" Off-White Floor Tile	NAD
FH 81	C107	2' x 4' Pinhole Fissure Ceiling Tile	NAD
FH 82	C107	2' x 4' Pinhole Fissure Ceiling Tile	NAD
FH 83 - A	D103	12" x 12" Light Gray Floor Tile with White Flecks	NAD
FH 83 - B	D103	Gray Mastic of 12" x 12" Light Gray Floor Tile with White Flecks	NAD
FH 84 - A	D103	12" x 12" Light Gray Floor Tile with White Flecks	NAD
FH 84 - B	D103	Gray Mastic of 12" x 12" Light Gray Floor Tile with White Flecks	NAD
FH 85 - A	D103	4" Gray Cove Base	NAD
FH 85 - B	D103	White Mastic of 4" Gray Cove Base	NAD
FH 86 - A	D103	4" Gray Cove Base	NAD
FH 86 - B	D103	White Mastic of 4" Gray Cove Base	NAD

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

APPENDIX Q

HISTORICAL INFORMATION

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.

Francis C. Hammond Junior High
Alexandria, Virginia

Management Plan
for
Asbestos Containing
Building Materials

Environmental, System Safety, and Occupational Health Consultants

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: Homogeneous Area ID Number: M01
Floor tile, 1' x 1', off white
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: M02
Floor tile, 9" x 9", dark green, room ~~139~~ 142
Field Documents: Estimated Amount of Material: 300 SF
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: M03
Floor tile, 9" x 9", blue
Field Documents: Estimated Amount of Material: 2,800 SF
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP03

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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, 1' x 1', white with brown specks
Homogeneous Area ID Number: M04
Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Floor tile, 1' x 1', light gray
Homogeneous Area ID Number: M05
Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Floor tile, 9" x 9", gray
Homogeneous Area ID Number: M06
Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :
Estimated Amount of Material: 100 SF

Homogeneous Area Name:
Floor tile, 9" x 9", brown, room ~~106~~ 108
Homogeneous Area ID Number: M07
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph :
Estimated Amount of Material: 600 SF

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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:
Linoleum, brown
Homogeneous Area ID Number: M08
Field Documents:
Estimated Amount of Material: 3,000 SF
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph : ACFHP04

Homogeneous Area Name:
Linoleum, brown with white streaks
Homogeneous Area ID Number: M09
Field Documents:
Estimated Amount of Material: 1,050 SF
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :

Homogeneous Area Name:
Gyp board ceiling
Homogeneous Area ID Number: M11
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02 ACFHSA03
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Acoustical ceiling tile, rough surface, 2' x 4'
Homogeneous Area ID Number: M12
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: 2' x 4' acoustical ceiling tile, holes in random pattern
Homogeneous Area ID Number: M13
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA03
Homogeneous Area:
Photograph :

Homogeneous Area Name: 2' x 4', acoustical ceiling tile, serpentine
Homogeneous Area ID Number: M14
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: 2' x 4', acoustical ceiling tile, very rough surface
Homogeneous Area ID Number: M15
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: 2' x 4', acoustical ceiling tile, fine grain surface
Homogeneous Area ID Number: M16
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: 1' x 1' acoustical ceiling tile, evenly-holed pattern
Homogeneous Area ID Number: M17
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:
Photograph :

Homogeneous Area Name: 1' x 1' acoustical ceiling tile, rough surface
Homogeneous Area ID Number: M18
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Homogeneous Area Name: Crawl space, material lining ceiling
Homogeneous Area ID Number: M19
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Homogeneous Area Name: Adhesive material on ceiling
Homogeneous Area ID Number: M20
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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, 9" x 9", beige
Homogeneous Area ID Number: M21
Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Floor tile, 9" x 9", green with white specks, auditorium
Homogeneous Area ID Number: M22
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph :
Estimated Amount of Material: 4,500 SF

Homogeneous Area Name:
1' x 1', acoustical ceiling tile, random pattern design
Homogeneous Area ID Number: M23
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :
Estimated Amount of Material: 0

Homogeneous Area Name:
Floor tile, rust with white specks
Homogeneous Area ID Number: M24
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph : ACFHP01
Estimated Amount of Material: 5,000 SF

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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:
Fire doors
Homogeneous Area ID Number: M99
Field Documents:
Estimated Amount of Material: ALL
Sample Area :
Homogeneous Area: ACFHHA01 ACFHHA03 ACFHHA04 ACFHHA05
Photograph :

Homogeneous Area Name:
Cementious ceiling
Homogeneous Area ID Number: S01
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Material from wire grating in ceiling
Homogeneous Area ID Number: S02
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Cementious ceiling, outside foyer
Homogeneous Area ID Number: S03
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MW Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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:
Crawl space, pipe elbow, 4", mud
Homogeneous Area ID Number: T02
Field Documents:
Estimated Amount of Material: 12 EA
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP02

Homogeneous Area Name:
Crawl space, pipe elbow, 6", mud
Homogeneous Area ID Number: T03
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Crawl space, pipe elbow, 10", mud
Homogeneous Area ID Number: T04
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:
Photograph :

Homogeneous Area Name:
Boiler room: Boiler #3's jacket
Homogeneous Area ID Number: T05
Field Documents:
Estimated Amount of Material: 1 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Inspector: Mike Wigenton
Signature: MW Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

DETERMINATION OF SAMPLING LOCATIONS

The Following Homogeneous Areas were Identified:

Homogeneous Area Name: Homogeneous Area ID Number: T06
Boiler room: boiler #3, under jacket
Field Documents: Estimated Amount of Material: 3 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T07
Boiler: 6" pipe elbows leading to boilers
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T08
Boiler room, 4" pipe elbow from boilers
Field Documents: Estimated Amount of Material: ~~100 LF~~ 0 LF
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T09
Boiler room: 8" pipe elbow from boiler #3
Field Documents: Estimated Amount of Material: ~~100 LF~~ 0 LF
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: Mike Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: T10
Boiler room, insulation under boiler's door
Field Documents: Estimated Amount of Material: 1 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T13
Boiler room: 10" pipe elbow between boilers
Field Documents: Estimated Amount of Material: 3 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T14
Boiler room: 6" pipe joint between boilers
Field Documents: Estimated Amount of Material: 6 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T15
Boiler room: hot water tank's insulation
Field Documents: Estimated Amount of Material: 1 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: T16
Boiler room: 8" pipe joint from hot water tank
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Homogeneous Area Name: Homogeneous Area ID Number: T19
Boiler room: 6" pipe elbow from cold water pipe
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MW Bigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

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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: Homogeneous Area ID Number: M01
Floor tile, 1' x 1', off white
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM01001	06/23/88	ACFHM01012
06/23/88	ACFHM01043	06/23/88	ACFHM01Q001

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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, 9" x 9", dark green, room ~~139~~ 142

Homogeneous Area ID Number: M02

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph :

Estimated Amount of Material: 300 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM02002		

Homogeneous Area Name:
Floor tile, 9" x 9", blue

Homogeneous Area ID Number: M03

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP03

Estimated Amount of Material: 2,800 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM03003		

Homogeneous Area Name:
Floor tile, 1' x 1', white with brown specks

Homogeneous Area ID Number: M04

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM04004		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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Energy and Facilities Services

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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, 1' x 1', light gray

Homogeneous Area ID Number: M05

Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM05005		

Homogeneous Area Name:
Floor tile, 9" x 9", gray

Homogeneous Area ID Number: M06

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :

Estimated Amount of Material: 100 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM06006		

Homogeneous Area Name:
Floor tile, 9" x 9", brown, room ~~106~~ 108

Homogeneous Area ID Number: M07

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph :

Estimated Amount of Material: 600 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM07007		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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Energy and Facilities Services

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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:
Linoleum, brown

Homogeneous Area ID Number: M08

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph : ACFHP04

Estimated Amount of Material: 3,000 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM08008		

Homogeneous Area Name:
Linoleum, brown with white streaks

Homogeneous Area ID Number: M09

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :

Estimated Amount of Material: 1,050 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM09009		

Homogeneous Area Name:
Gyp board ceiling

Homogeneous Area ID Number: M11

Field Documents:
Sample Area : ACFHSA02 ACFHSA03
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM11011	06/23/88	ACFHM11034

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
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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: Homogeneous Area ID Number: M12
Acoustical ceiling tile, rough surface, 2' x 4'
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM12010	06/23/88	ACFHM12013

Homogeneous Area Name: Homogeneous Area ID Number: M13
2' x 4' acoustical ceiling tile, holes in random pattern
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA03
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM13014		

Homogeneous Area Name: Homogeneous Area ID Number: M14
2' x 4', acoustical ceiling tile, serpentine
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM14015	06/23/88	ACFHM14020

Inspector: Mike Wigenton Signature: MW Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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: 2' x 4', acoustical ceiling tile, very rough surface
Homogeneous Area ID Number: M15
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM15016		

Homogeneous Area Name: 2' x 4', acoustical ceiling tile, fine grain surface
Homogeneous Area ID Number: M16
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM16017		

Homogeneous Area Name: 1' x 1' acoustical ceiling tile, evenly-holed pattern
Homogeneous Area ID Number: M17
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM17018	06/23/88	ACFHM17031
06/23/88	ACFHM17045	06/23/88	ACFHM17Q31

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
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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: 1' x 1' acoustical ceiling tile, rough surface
Homogeneous Area ID Number: M18
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM18019		

Homogeneous Area Name: Crawl space, material lining ceiling
Homogeneous Area ID Number: M19
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM19027	06/23/88	ACFHM19028

Homogeneous Area Name: Adhesive material on ceiling
Homogeneous Area ID Number: M20
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM20033		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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, 9" x 9", beige

Homogeneous Area ID Number: M21

Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM21037		

Homogeneous Area Name:
Floor tile, 9" x 9", green with white specks, auditorium

Homogeneous Area ID Number: M22

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph :

Estimated Amount of Material: 4,500 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM22040	06/23/88	ACFHM22041
06/23/88	ACFHM22Q040		

Homogeneous Area Name:
1' x 1', acoustical ceiling tile, random pattern design

Homogeneous Area ID Number: M23

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM23042		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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, rust with white specks

Homogeneous Area ID Number: M24

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph : ACFHP01

Estimated Amount of Material: 5,000 SF

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHM24044		

Homogeneous Area Name:
Fire doors

Homogeneous Area ID Number: M99

Field Documents:
Sample Area :
Homogeneous Area: ACFHHA01 ACFHHA03 ACFHHA04 ACFHHA05
Photograph :

Estimated Amount of Material: ALL

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID

*** ASSUMED POSITIVE - NO SAMPLES COLLECTED ***

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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: Cementious ceiling
Homogeneous Area ID Number: S01
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHS01029	06/23/88	ACFHS01030

Homogeneous Area Name: Material from wire grating in ceiling
Homogeneous Area ID Number: S02
Field Documents:
Estimated Amount of Material: 0
Sample Area : ACFHSA02
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHS02032		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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 surfacing materials were sampled:

Homogeneous Area Name:
Cementious ceiling, outside foyer

Homogeneous Area ID Number: S03

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHS03046	06/23/88	ACFHS03047
06/23/88	ACFHS03048		

Inspector: Mike Wigenton Signature: MB Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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:
Crawl space, pipe elbow, 4", mud

Homogeneous Area ID Number: T02

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP02

Estimated Amount of Material: 12 EA

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT02022	06/23/88	ACFHT02024
06/23/88	ACFHT02025	06/23/88	ACFHT02026

Homogeneous Area Name:
Crawl space, pipe elbow, 6", mud

Homogeneous Area ID Number: T03

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:
Photograph :

Estimated Amount of Material: 0

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT03023	06/23/88	ACFHT03035
06/23/88	ACFHT03036		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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: Homogeneous Area ID Number: T04
Crawl space, pipe elbow, 10", mud
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT04021	06/23/88	ACFHT04038
06/23/88	ACFHT04039		

Homogeneous Area Name: Homogeneous Area ID Number: T05
Boiler room: Boiler #3's jacket
Field Documents: Estimated Amount of Material: 1 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT05049	06/23/88	ACFHT05050
06/23/88	ACFHT05068		

Homogeneous Area Name: Homogeneous Area ID Number: T06
Boiler room: boiler #3, under jacket
Field Documents: Estimated Amount of Material: 3 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT06051	06/23/88	ACFHT06062

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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DESCRIPTION OF EACH SAMPLE AREA

The following thermal system materials were sampled:

Homogeneous Area Name: Homogeneous Area ID Number: T07
Boiler: 6" pipe elbows leading to boilers
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT07052	06/23/88	ACFHT07056
06/23/88	ACFHT07060	06/23/88	ACFHT07061

Homogeneous Area Name: Homogeneous Area ID Number: T08
Boiler room, 4" pipe elbow from boilers
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT08053	06/23/88	ACFHT08057
06/23/88	ACFHT08066		

Homogeneous Area Name: Homogeneous Area ID Number: T09
Boiler room: 8" pipe elbow from boiler #3
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT09054	06/23/88	ACFHT09058
06/23/88	ACFHT09059		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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: Homogeneous Area ID Number: T10
Boiler room, insulation under boiler's door
Field Documents: Estimated Amount of Material: 1 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT10055		

Homogeneous Area Name: Homogeneous Area ID Number: T13
Boiler room: 10" pipe elbow between boilers
Field Documents: Estimated Amount of Material: 3 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT13065	06/23/88	ACFHT13067
06/23/88	ACFHT13070		

Homogeneous Area Name: Homogeneous Area ID Number: T14
Boiler room: 6" pipe joint between boilers
Field Documents: Estimated Amount of Material: 6 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT14069		

Inspector: Mike Wigenton Signature: M B Wigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

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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: Homogeneous Area ID Number: T15
Boiler room: hot water tank's insulation
Field Documents: Estimated Amount of Material: 1 EA
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT15071	06/23/88	ACFHT15072

Homogeneous Area Name: Homogeneous Area ID Number: T16
Boiler room: 8" pipe joint from hot water tank
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT16063	06/23/88	ACFHT16073
06/23/88	ACFHT16074		

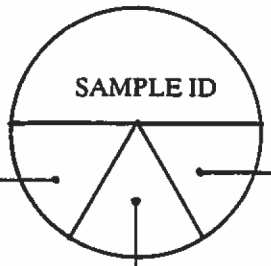
Homogeneous Area Name: Homogeneous Area ID Number: T19
Boiler room: 6" pipe elbow from cold water pipe
Field Documents: Estimated Amount of Material: 0
Sample Area : ACFHSA04
Homogeneous Area:
Photograph :

Samples Collected:

Sample Date	Sample ID	Sample Date	Sample ID
06/23/88	ACFHT19064	06/23/88	ACFHT19075
06/23/88	ACFHT19076	06/23/88	ACFHT19Q076

Inspector: Mike Wigenton Signature: MBWigenton Date: 10/31/88
Accreditation Number: 8802-02-063 Agency: Tufts University

SYMBOLS KEY



MATERIAL TYPES

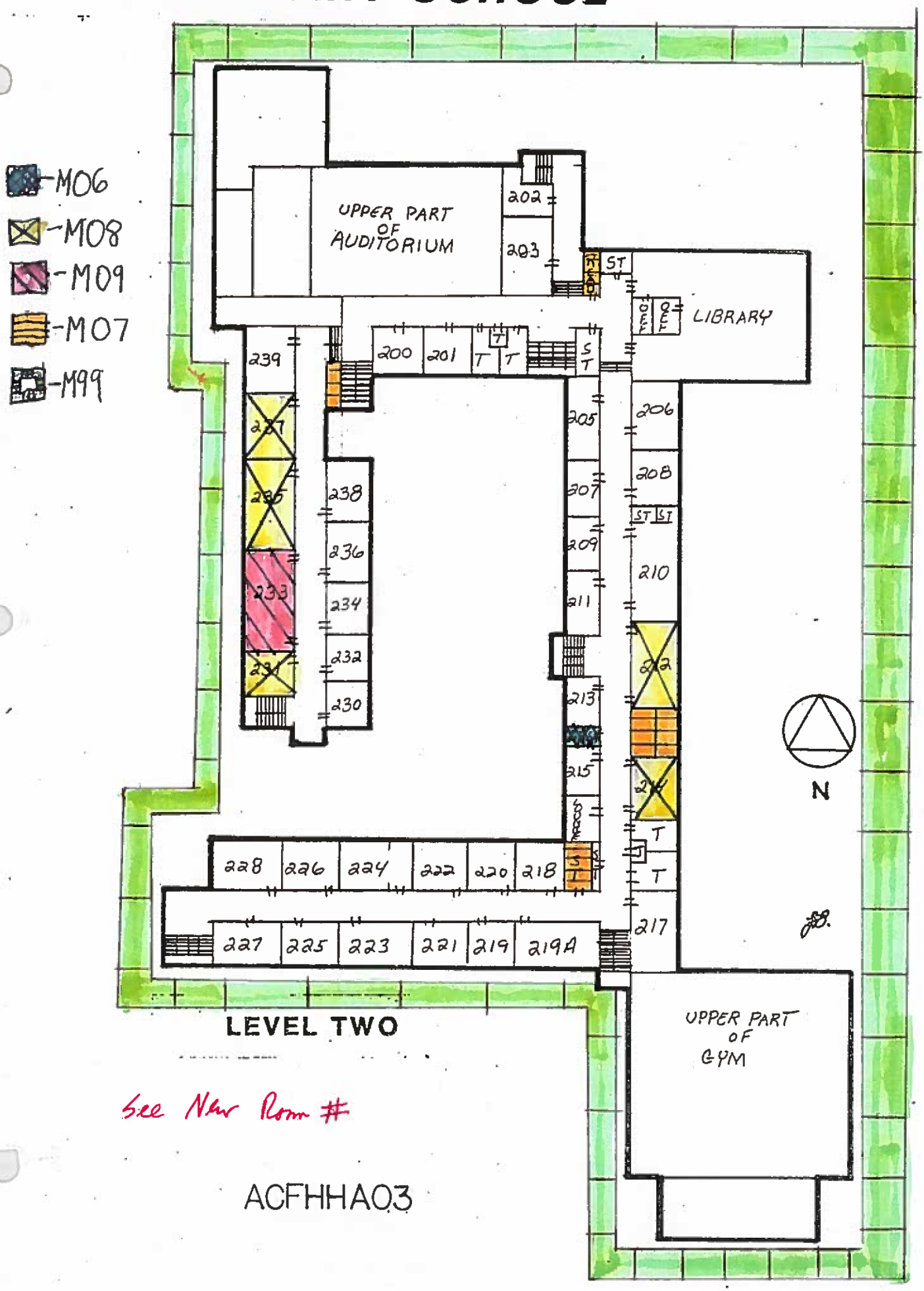
S	SURFACE
T	THERMAL
M	MISCELLANEOUS

LOCATION CODES

C	CEILING
W	WALL
F	FLOOR
B	BASE
I	INSULATION
CP	CRAWL SPACE
SC	SUSPENDED CEILING
CF	CAFETERIA

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

FRANCIS C. HAMMOND SECONDARY SCHOOL

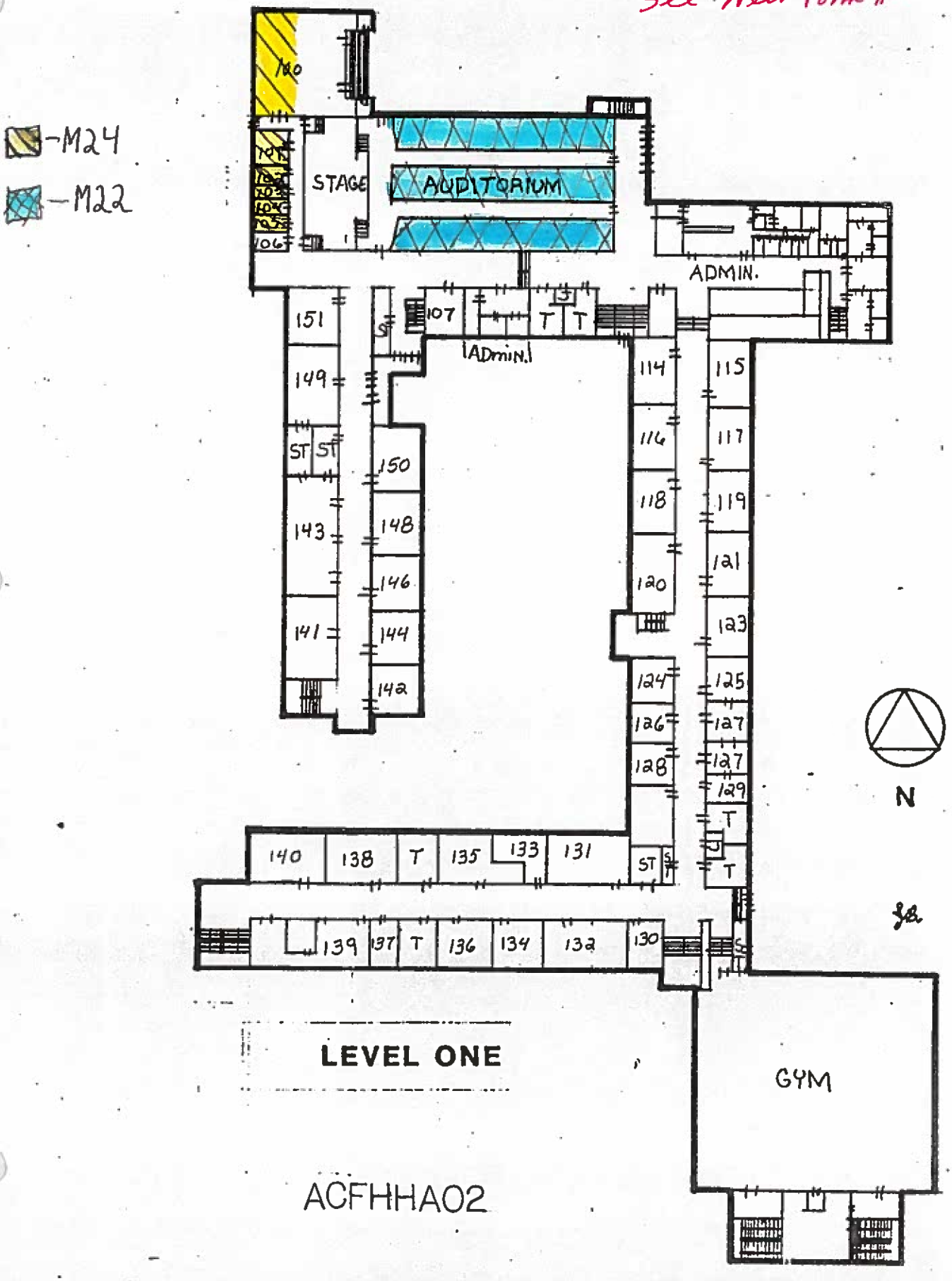


See New Room #

ACFHHA03

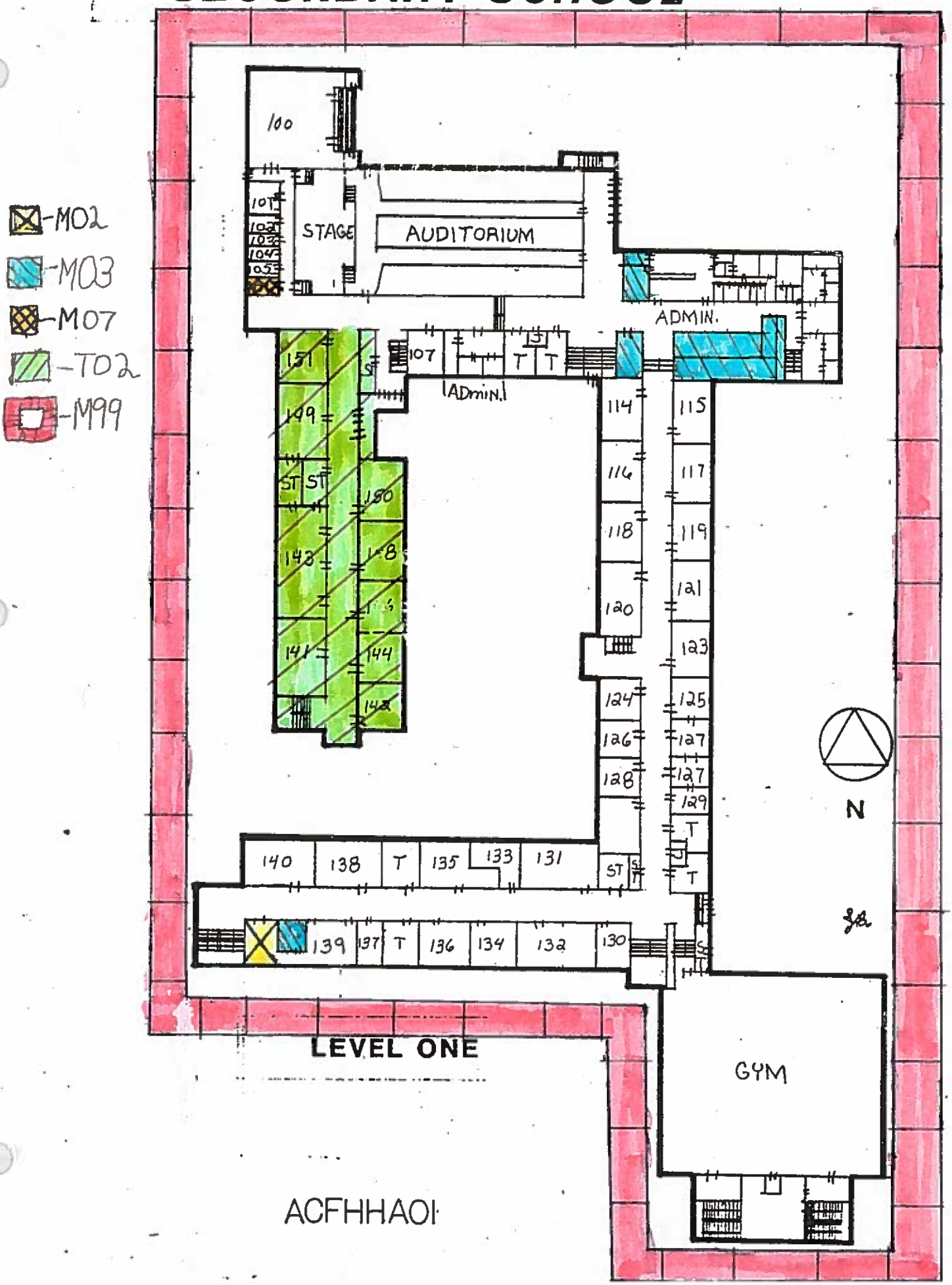
FRANCIS C. HAMMOND SECONDARY SCHOOL

See New Room #



FRANCIS C. HAMMOND SECONDARY SCHOOL

See New Form #

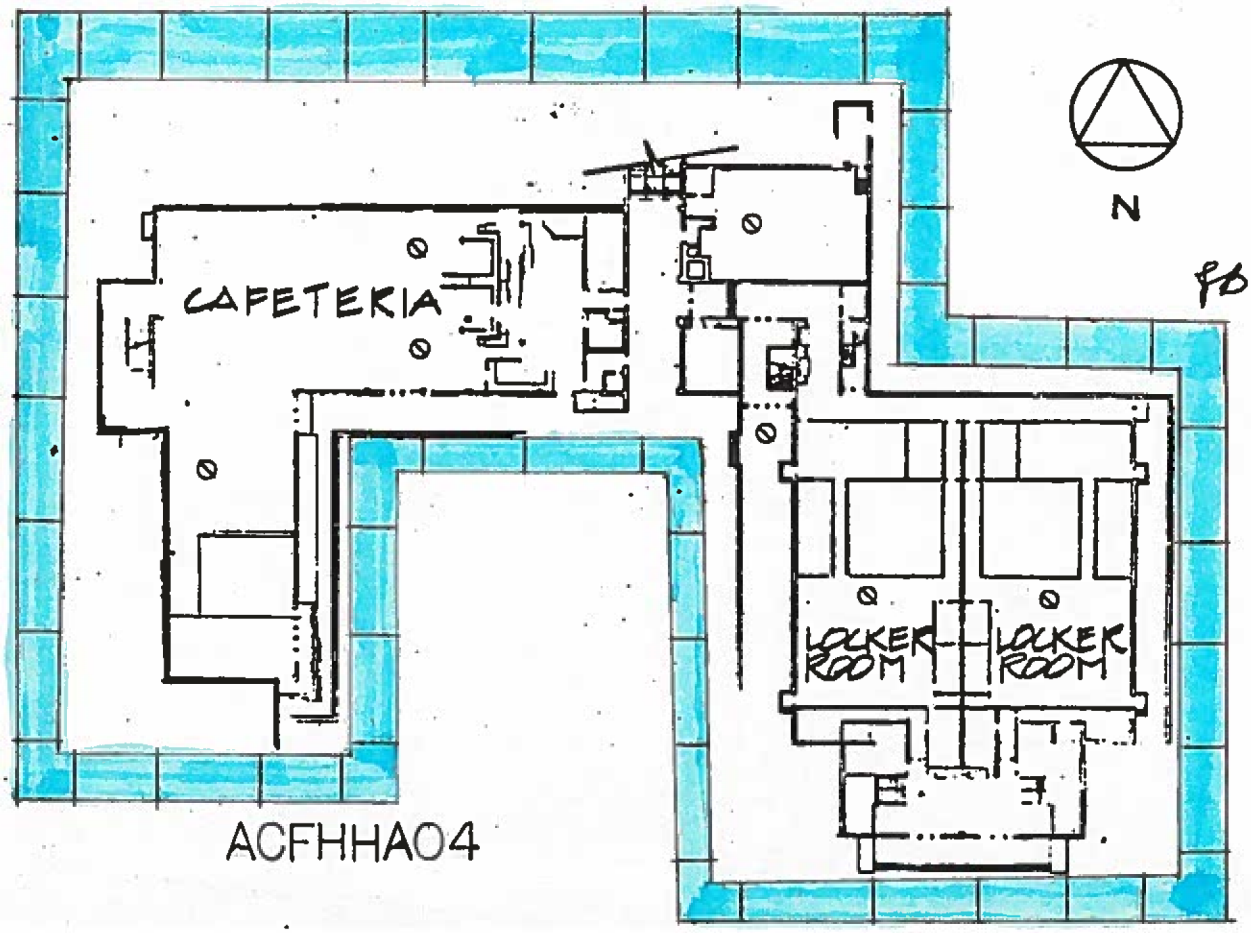


FRANCIS C. HAMMOND SECONDARY SCHOOL

See New Room *

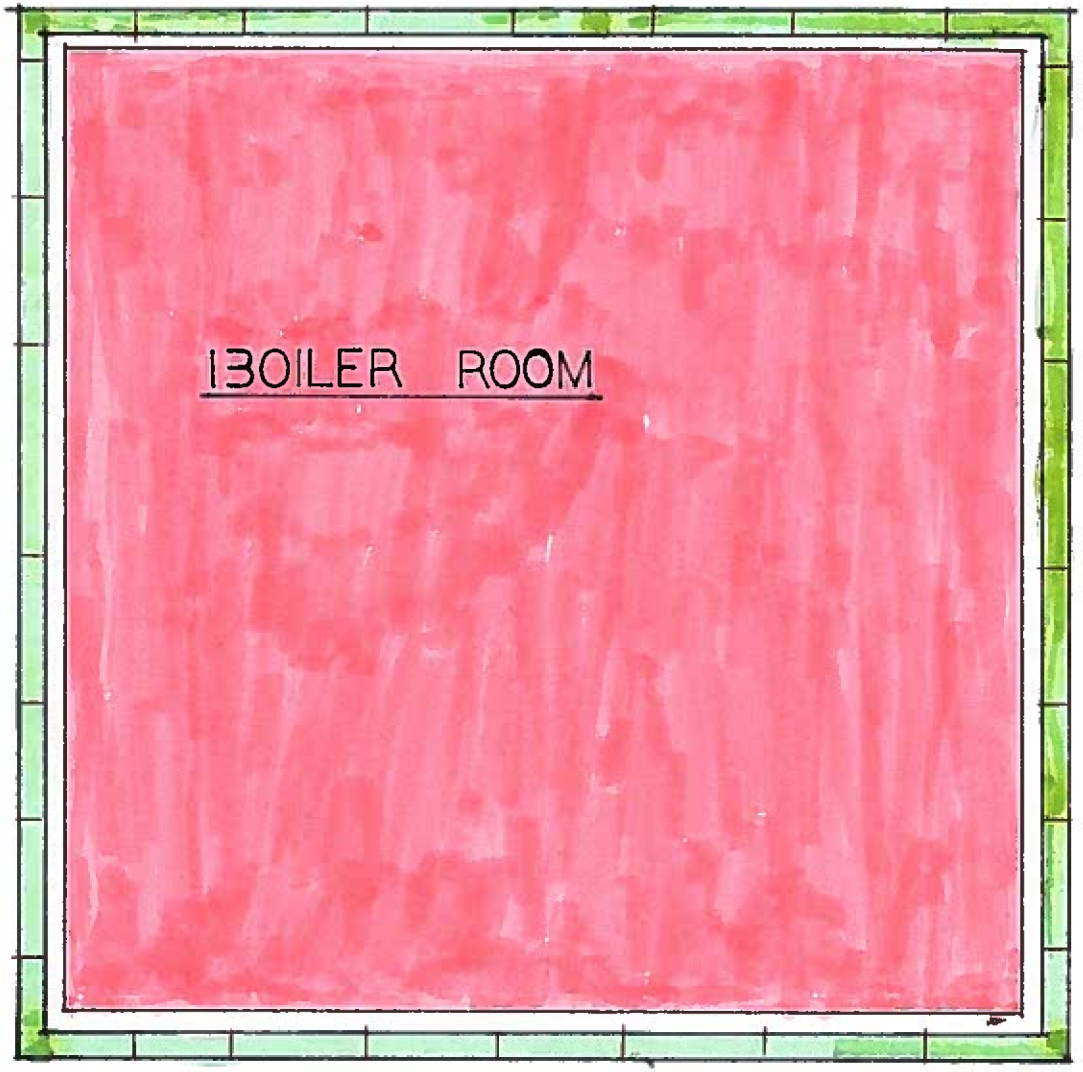
-M99

BASEMENT



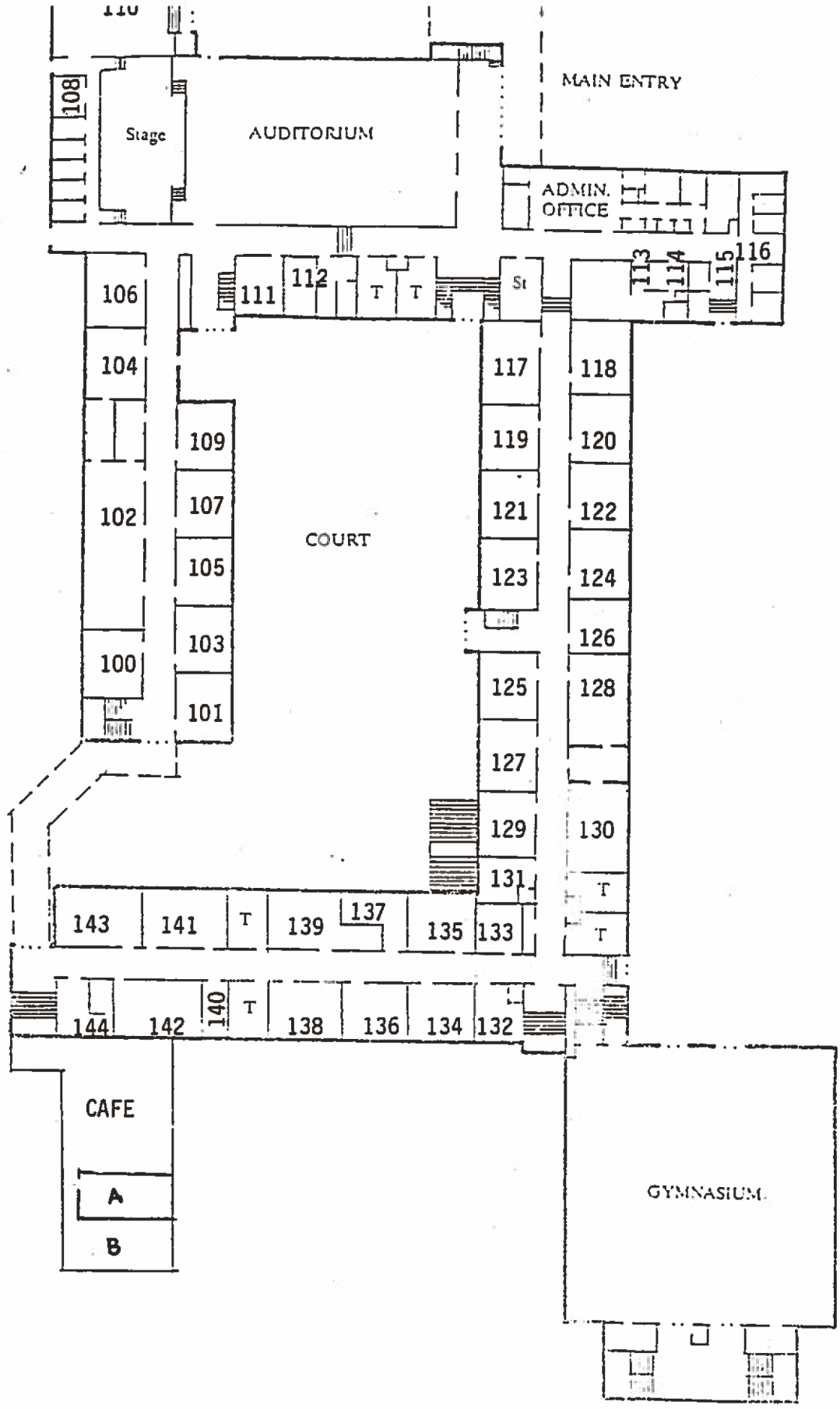
- M99

- T06, T10
  T13, T14
  T15, T10



ACFHHA05

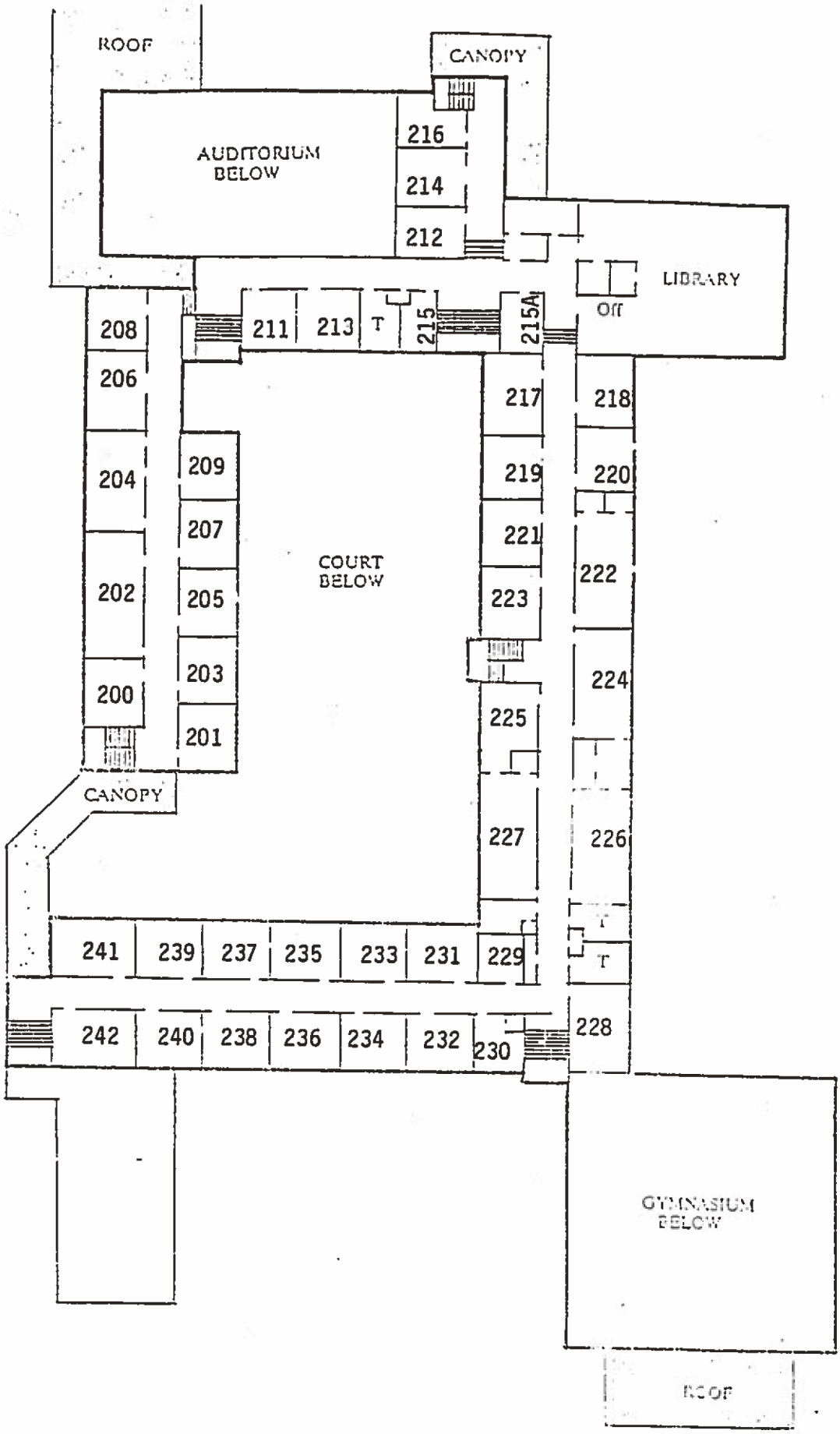
NEW
Room II
9/91



FRANCIS C. HAMMOND
JUNIOR HIGH SCHOOL

First Floor Plan

NEW ROOM # 9/91

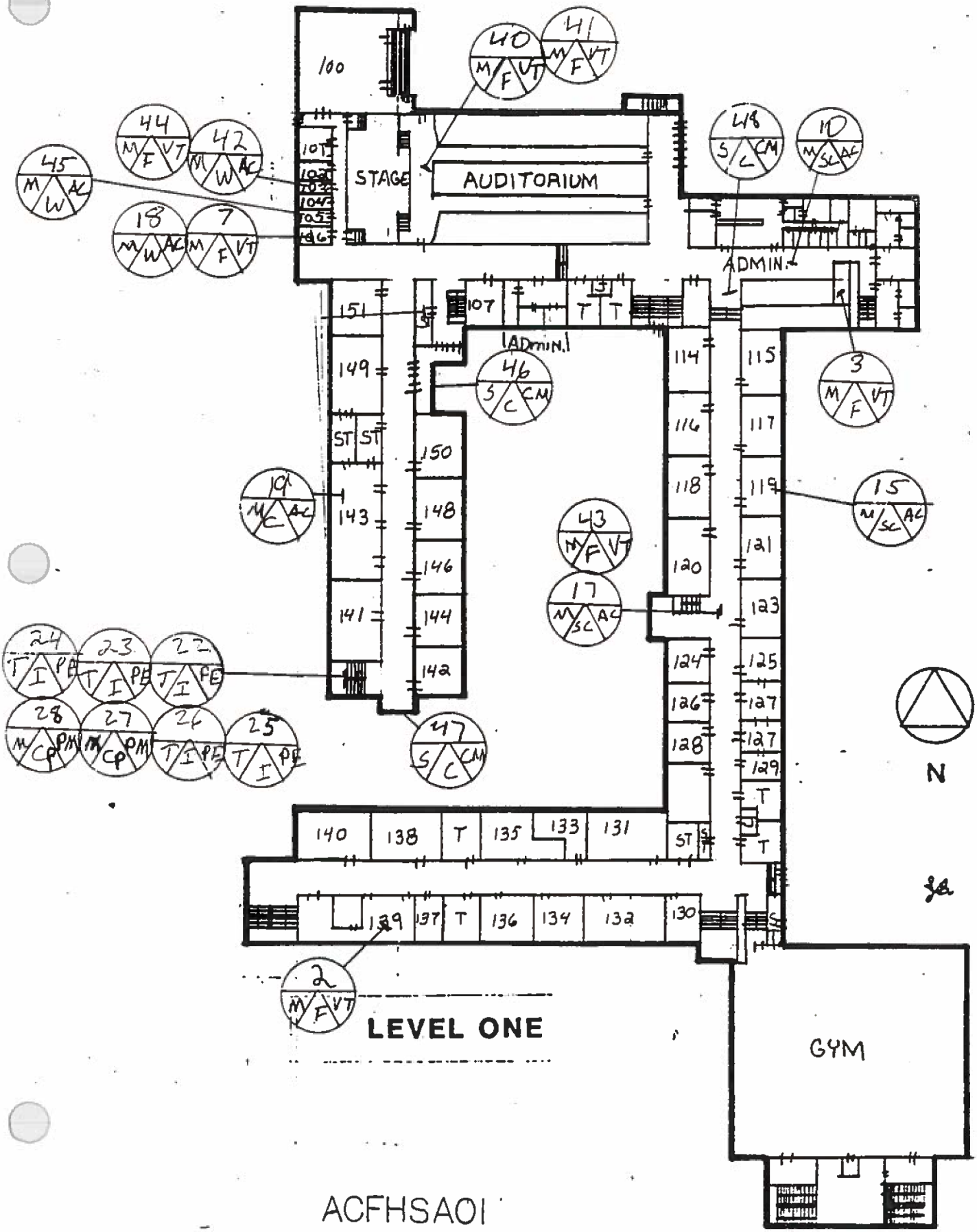


FRANCIS C. HAMMOND
JUNIOR HIGH SCHOOL

Second Floor Plan

FRANCIS C. HAMMOND SECONDARY SCHOOL

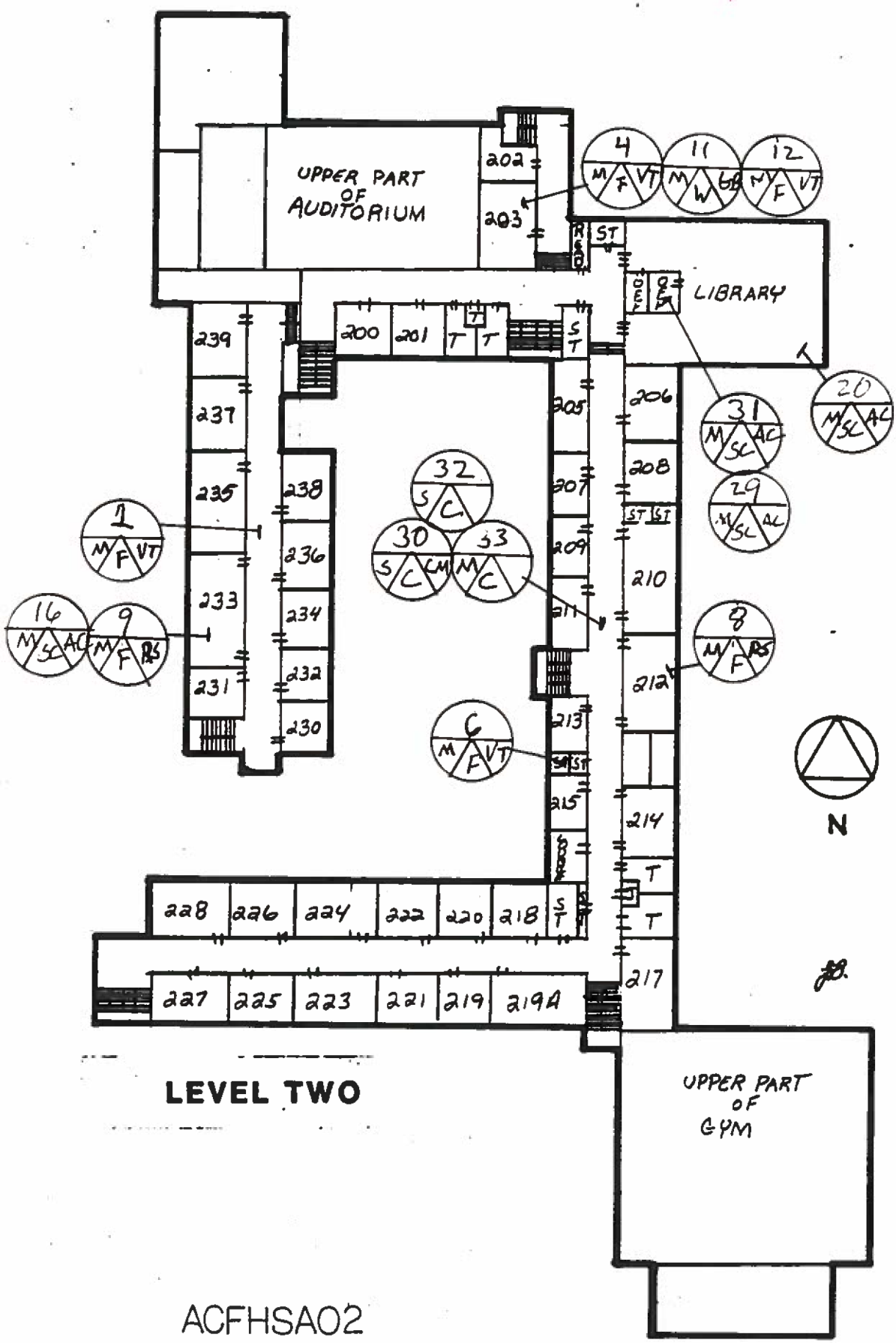
See New Room #



ACFHSA01

FRANCIS C. HAMMOND SECONDARY SCHOOL

See New Room #



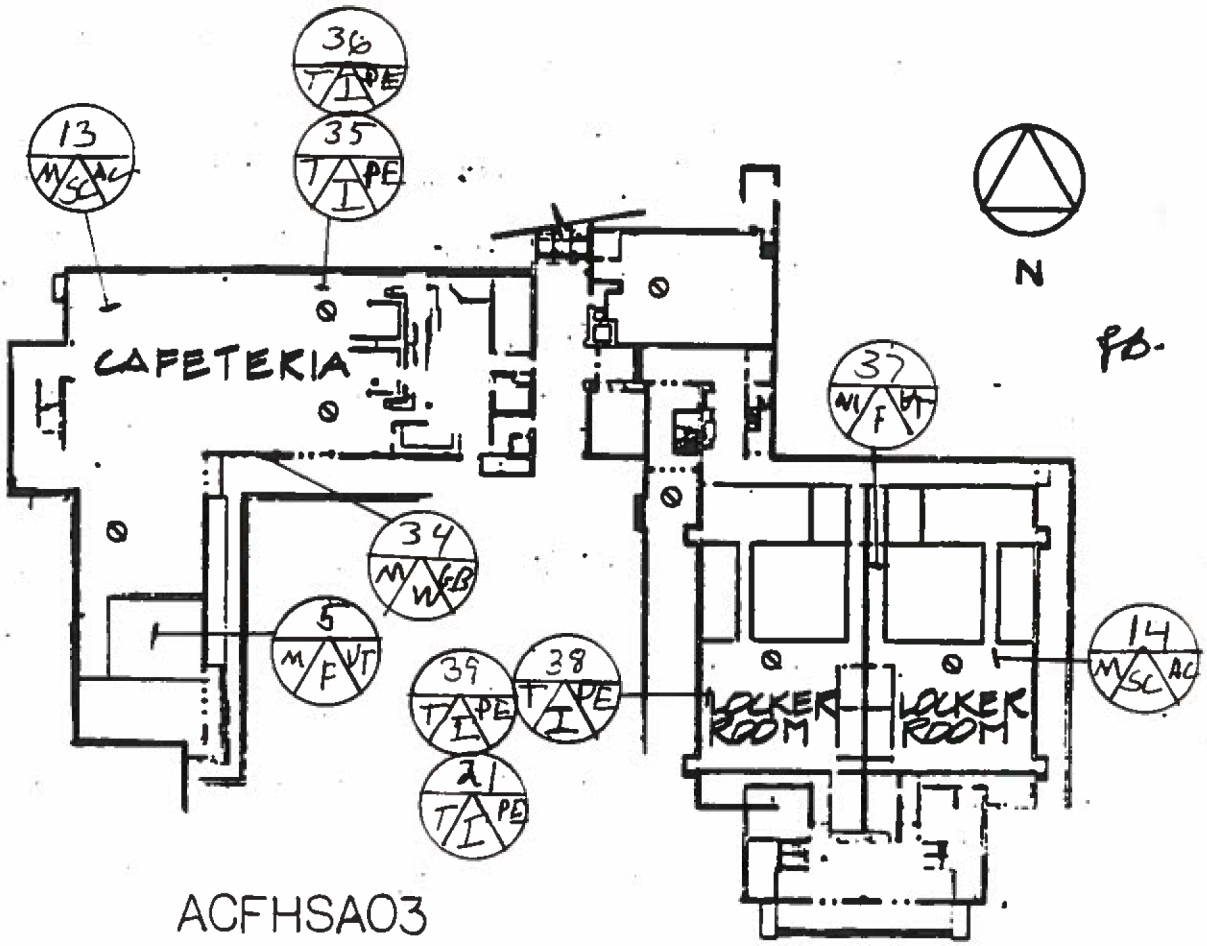
LEVEL TWO

ACFHSA02

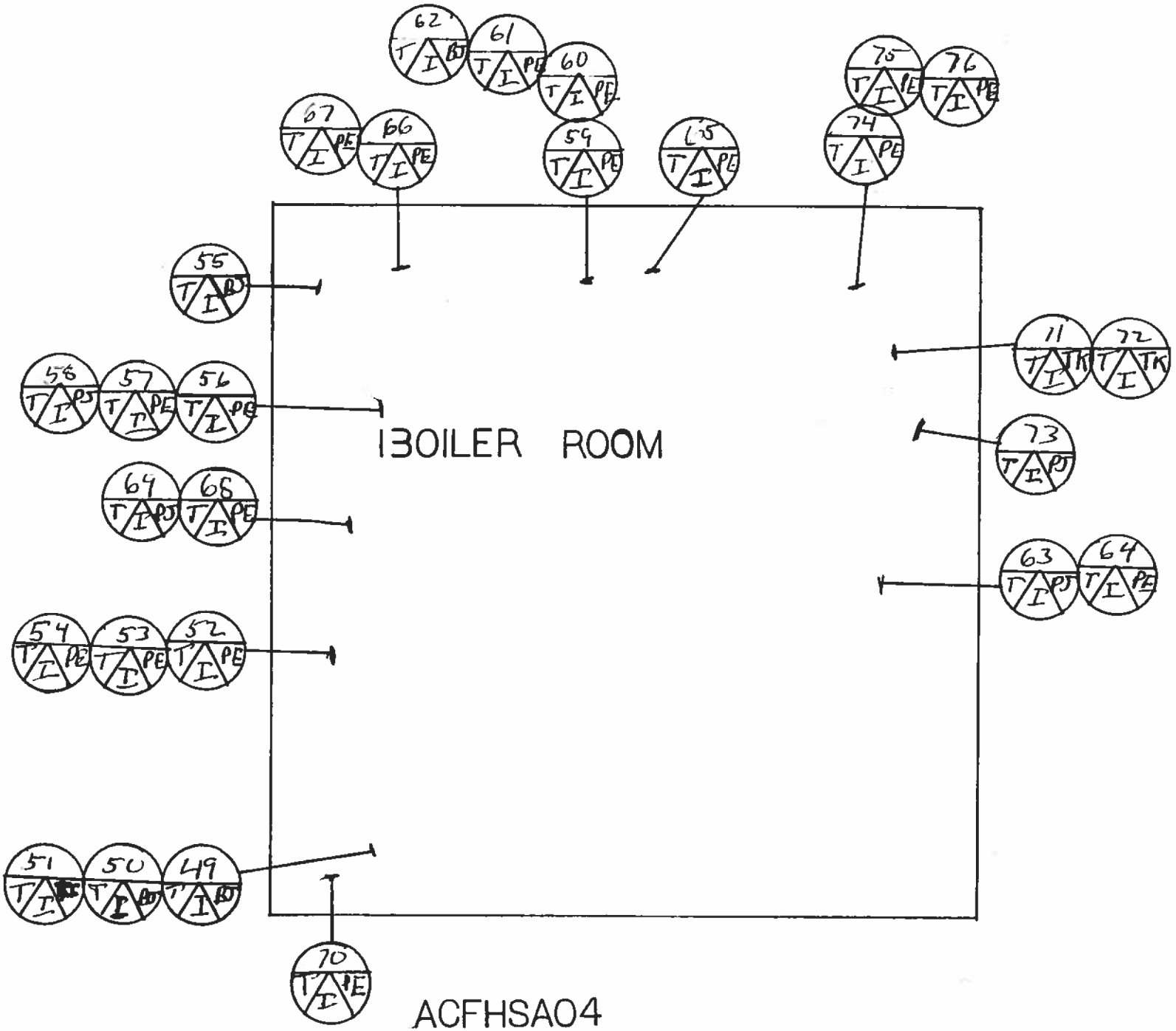
FRANCIS C. HAMMOND SECONDARY SCHOOL

See New Room #

BASEMENT



ACFHSA03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BOILER ROOM
ACFHSA04

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Floor tile, 1' x 1', off white

Homogeneous Area ID Number: M01

Field Documents:
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM01001	8090557-1530			AML	White floor tile
			TOTAL:	<1		
06/23/88	ACFHM01012	8090567-1530			AML	White floor tile
			TOTAL:	<1		
06/23/88	ACFHM01043	8090512-1530			AML	White floor tile
			TOTAL:	<1		

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM01Q001	01A	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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Floor tile, 9" x 9", dark green, room ~~139~~ 142

Homogeneous Area ID Number: M02

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM02002	8090558-1530	Chrysotile	03-05	AML	Green-blue floor tile
			TOTAL:	03-05		

Homogeneous Area Name:
Floor tile, 9" x 9", blue

Homogeneous Area ID Number: M03

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM03003	01A	Chrysotile	02-05	BIO	
			TOTAL:	02-05		

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: M04
Floor tile, 1' x 1', white with brown specks
Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM04004	8090559-1530			AML	White floor tile, cement backing
			TOTAL:	<1		

Homogeneous Area Name: Homogeneous Area ID Number: M05
Floor tile, 1' x 1', light gray
Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM05005	8090560-1530			AML	White-gray floor tile
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Floor tile, 9" x 9", gray

Homogeneous Area ID Number: M06

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM06006	8090561-1530	Chrysotile	05-10	AML	Gray floor tile
			TOTAL:	05-10		

Homogeneous Area Name:
Floor tile, 9" x 9", brown, room ~~106~~ 108

Homogeneous Area ID Number: M07

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM07007	8090562-1530	Chrysotile	01-05	AML	Rust colored floor tile
			TOTAL:	01-05		

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Linoleum, brown

Homogeneous Area ID Number: M08

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM08008	8090563-1530	Chrysotile	05-10	AML	Speckled floor tile, paper-like backing
			TOTAL:	05-10		

Homogeneous Area Name:
Linoleum, brown with white streaks

Homogeneous Area ID Number: M09

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM09009	8090564-1530	Chrysotile	10-15	AML	Speckled floor tile, paper-like backing
			TOTAL:	10-15		

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Gyp board ceiling

Homogeneous Area ID Number: M11

Field Documents:
Sample Area : ACFHSA02 ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM11011	8090566-1530			AML	Loose white powder, some fibers
			TOTAL:	<1		
06/23/88	ACFHM11034	8090589-1530			AML	Soft fiber filler
			TOTAL:	<1		

Homogeneous Area Name:
Acoustical ceiling tile, rough surface, 2' x 4'

Homogeneous Area ID Number: M12

Field Documents:
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM12010	8090565-1530			AML	Pressed fiber chunk of ceiling tile
			TOTAL:	<1		
06/23/88	ACFHM12013	8090568-1530			AML	Pressed fiber chunks of ceiling tile
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: M13
2' x 4' acoustical ceiling tile, holes in random pattern
Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFHA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM13014	8090569-1530			AML	Pressed fiber chunk
			TOTAL:	<1		

Homogeneous Area Name: Homogeneous Area ID Number: M14
2' x 4', acoustical ceiling tile, serpentine
Field Documents:
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFHA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM14015	8090570-1530			AML	Pressed fiber chunk
			TOTAL:	<1		
06/23/88	ACFHM14020	8090575-1530			AML	Pressed fiber chunk of ceiling tile
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: M15
2' x 4', acoustical ceiling tile, very rough surface
Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM15016	8090571-1530			AML	Pressed, layered fiber chunk
			TOTAL:	<1		

Homogeneous Area Name: Homogeneous Area ID Number: M16
2' x 4', acoustical ceiling tile, fine grain surface
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM16017	8090573-1530			AML	Shredded fiber 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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: M17
1' x 1' acoustical ceiling tile, evenly-holed pattern
Field Documents:
Sample Area : ACFHSA01 ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM17018	8090572-1530			AML	Solid white plaster chunk with paper
			TOTAL:	<1		
06/23/88	ACFHM17031	8090586-1530			AML	Large chunk pressed fiber, painted one side
			TOTAL:	<1		
06/23/88	ACFHM17045	8090514-1530			AML	Shredded wood/paper material
			TOTAL:	<1		
Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM17Q31	02A			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: M18
1' x 1' acoustical ceiling tile, rough surface
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

mple Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM18019	8090574-1530			AML	Pressed fiber chunk of ceiling tile
			TOTAL:	<1		

Homogeneous Area Name: Homogeneous Area ID Number: M19
Crawl space, material lining ceiling
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM19027	8090582-1530			AML	Fiber paper
			TOTAL:	<1		
06/23/88	ACFHM19028	8090583-1530			AML	Thin pressed fiber paper
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Adhesive material on ceiling

Homogeneous Area ID Number: M20

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM20033	8090588-1530			AML	Layer fiber hard "glue"
			TOTAL:	<1		

Homogeneous Area Name:
Floor tile, 9" x 9", beige

Homogeneous Area ID Number: M21

Field Documents:
Sample Area : ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM21037	8090592-1530			AML	Tan floor tile
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: M22
Floor tile, 9" x 9", green with white specks, auditorium
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM22040	8090595-1530	Chrysotile	03-05	AML	Green floor tile
			TOTAL:	03-05		
06/23/88	ACFHM22041	8090510-1530	Chrysotile	05-10	AML	Dark green floor tile
			TOTAL:	05-10		

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM22Q040	03A	Chrysotile	02-05	BIO	
			TOTAL:	02-05		

Homogeneous Area Name: Homogeneous Area ID Number: M23
1' x 1', acoustical ceiling tile, random pattern design
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM23042	8090511-1530			AML	Brown yellow shredded 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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Floor tile, rust with white specks

Homogeneous Area ID Number: M24

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM24044	8090513-1530	Chrysotile	03-05	AML	Reddish-brown floor tile
			TOTAL:	03-05		

Homogeneous Area Name:
Cementious ceiling

Homogeneous Area ID Number: S01

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHS01029	8090584-1530			AML	Hard cementitious material (pulverized)
			TOTAL:	<1		
06/23/88	ACFHS01030	8090585-1530			AML	Cement-like chunk (pulverized)
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: S02
Material from wire grating in ceiling
Field Documents:
Sample Area : ACFHSA02
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHS02032	8090587-1530			AML	Hard cementitious chunk (pulverized)
			TOTAL:	<1		

Homogeneous Area Name: Homogeneous Area ID Number: S03
Cementious ceiling, outside foyer
Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHS03046	8090515-1530			AML	Gray cementitious chunk (pulverized)
			TOTAL:	<1		
06/23/88	ACFHS03047	8090516-1530	Chrysotile	Tr. <1	AML	Hard, cementitious dust with chips
			TOTAL:	Tr. <1		(pulverized)
06/23/88	ACFHS03048	8090517-1530			AML	Flat cementitious material (pulverized)
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Crawl space, pipe elbow, 4", mud

Homogeneous Area ID Number: T02

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT02022	8090577-1530			AML	Soft white fiber/filler
			TOTAL:	<1		
06/23/88	ACFHT02024	8090579-1530	Chrysotile	01-05	AML	White soft filler chunk
			TOTAL:	01-05		
06/23/88	ACFHT02025	8090580-1530	Chrysotile	01-05	AML	Soft, white fiber/filler chunks
			TOTAL:	01-05		
06/23/88	ACFHT02026	8090581-1530	Chrysotile	03-05	AML	Soft white filler
			TOTAL:	03-05		

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Crawl space, pipe elbow, 6", mud

Homogeneous Area ID Number: T03

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT03023	8090578-1530			AML	Soft chunk
			TOTAL:	<1		
06/23/88	ACFHT03035	8090590-1530			AML	Soft chunks fiber/filler
			TOTAL:	<1		
06/23/88	ACFHT03036	8090591-1530			AML	Soft chunks fiber/filler
			TOTAL:	<1		

Homogeneous Area Name:
Crawl space, pipe elbow, 10", mud

Homogeneous Area ID Number: T04

Field Documents:
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT04021	8090576-1530			AML	White chunk easily broken filler material
			TOTAL:	<1		
06/23/88	ACFHT04038	8090593-1530			AML	Soft filler chunks
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name:
Crawl space, pipe elbow, 10", mud

Homogeneous Area ID Number: T04

Field Documents:
Sample Area : ACFHSA01 ACFHSA03
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT04039	8090594-1530			AML	Loose dust with fibers
			TOTAL:	<1		

Homogeneous Area Name:
Boiler room: Boiler #3's jacket

Homogeneous Area ID Number: T05

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT05049	8090518-1530			AML	Loose weave material swatch
			TOTAL:	<1		
06/23/88	ACFHT05050	8090519-1530			AML	Woven cloth swatch, paint coated
			TOTAL:	<1		
06/23/88	ACFHT05068	8090537-1530			AML	Gray fibrous chunk with powder
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T06
Boiler room: boiler #3, under jacket
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT06051	8090520-1530	Chrysotile	25-30	AML	Pressed fiber chunk, paint one side
			TOTAL:	25-30		
06/23/88	ACFHT06062	8090531-1530	Chrysotile	40-45	AML	Hard fiber board (transite-like)
			TOTAL:	40-45		

Homogeneous Area Name: Homogeneous Area ID Number: T07
Boiler: 6" pipe elbows leading to boilers
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT07052	8090521-1530			AML	Loose green-gray dust with paint chips
			TOTAL:	<1		
06/23/88	ACFHT07056	8090525-1530	Chrysotile	Tr. <1	AML	Gray powder with fiber balls
			TOTAL:	Tr. <1		
06/23/88	ACFHT07060	8090529-1530			AML	Fibrous powder, woven painted swatch
			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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T07
Boiler: 6" pipe elbows leading to boilers
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT07061	8090530-1530			AML	Gray, loose fiber powder
			TOTAL:	<1		

Homogeneous Area Name: Homogeneous Area ID Number: T08
Boiler room, 4" pipe elbow from boilers
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT08053	8090522-1530			AML	Gray-white plaster dust
			TOTAL:	<1		
06/23/88	ACFHT08057	8090526-1530	Chrysotile	Tr. <1	AML	Gray powder, woven swatch painted one side
			TOTAL:	Tr. <1		
06/23/88	ACFHT08066	8090535-1530			AML	Powder, fiber chunk with painted swatch
			TOTAL:	<1		

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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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T09
Boiler room: 8" pipe elbow from boiler #3
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT09054	8090523-1530			AML	Plaster dust with woven swatch
			TOTAL:	<1		
06/23/88	ACFHT09058	8090527-1530			AML	Gray plaster dust, gray woven swatch
			TOTAL:	<1		green paint
06/23/88	ACFHT09059	8090528-1530			AML	Gray plaster dust, woven swatch green
			TOTAL:	<1		paint

Homogeneous Area Name: Homogeneous Area ID Number: T10
Boiler room, insulation under boiler's door
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT10055	8090524-1530	Chrysotile	65-70	AML	Hard cementitious-like chips
			TOTAL:	65-70		

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T13
Boiler room: 10" pipe elbow between boilers
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT13065	8090534-1530	Chrysotile	05-10	AML	Plaster fiber powder, pressed fiber chunk, woven swatch
			TOTAL:	05-10		
06/23/88	ACFHT13067	8090536-1530	Chrysotile	10-15	AML	Loose gray powder, woven painted swatch
			TOTAL:	10-15		
06/23/88	ACFHT13070	8090539-1530	Chrysotile	05-10	AML	Loose powder, woven painted swatch
			TOTAL:	05-10		

Homogeneous Area Name: Homogeneous Area ID Number: T14
Boiler room: 6" pipe joint between boilers
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT14069	8090538-1530	Chrysotile	10-15	AML	Loose powder, fibrous chunk, woven swatch
			TOTAL:	10-15		

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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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T15
Boiler room: hot water tank's insulation
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT15071	8090540-1530	Chrysotile	01-05	AML	Paint-plaster chip
			TOTAL:	01-05		
06/23/88	ACFHT15072	8090541-1530	Chrysotile	40-45	AML	Fibrous dust, small loose balls, painted swatch
			TOTAL:	40-45		

Homogeneous Area Name: Homogeneous Area ID Number: T16
Boiler room: 8" pipe joint from hot water tank
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT16063	8090532-1530			AML	Fiber plaster powder dust, woven painted swatch
			TOTAL:	<1		
06/23/88	ACFHT16073	8090542-1530			AML	Loose fiber powder dust, fiber chunks and paint chips
			TOTAL:	<1		
06/23/88	ACFHT16074	8090543-1530			AML	Fiber chunk and loose powder, woven swatch
			TOTAL:	<1		

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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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Analysis Method: PLM

Homogeneous Area Name: Homogeneous Area ID Number: T19
Boiler room: 6" pipe elbow from cold water pipe
Field Documents:
Sample Area : ACFHSA04
Homogeneous Area:

Summary of Bulk Sample Analysis:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT19064	8090533-1530			AML	Fibrous wads
			TOTAL:	<1		
06/23/88	ACFHT19075	8090544-1530			AML	Pressed fiber chunk, loose powder
			TOTAL:	<1		
06/23/88	ACFHT19076	8090545-1530			AML	Loose powder and fiber wads
			TOTAL:	<1		
Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT19QQ76	03A			BIO	
			TOTAL:	NAFD		

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RELEASED : 09/14/88
REPORTED : 09/14/88
WORK ORDER: 2510

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
8090557	ACFH M01001	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WHITE FLOOR TILE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	<1	%
	CELLULOSE:	TRACE	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090558	ACFH M02002	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GREEN-BLUE FLOOR TILE		
	TOTAL % ASBESTOS:	3-5	%
	CHRYSOTILE:	3-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	90-95	%
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090559	ACFH M04004	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WHITE FLOOR TILE; CEMENT BACKING		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	<1	%
	CELLULOSE:	TRACE	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

AML NUMBER		VALUE	UNITS
8090560	ACFH M05005	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WHITE-GRAY FLOOR TILE		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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AML NUMBER		VALUE	UNITS
8090561	ACFH M06006	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY FLOOR TILE		
	TOTAL % ASBESTOS:	5-10	%
	CHRYSOTILE:	5-10	%
	NON-FIBROUS:	85-90	%
	UNSPECIFIED:	85-90	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

8090562	ACFH M07007	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	RUST COLORED FLOOR TILE		
	TOTAL % ASBESTOS:	1-5	%
	CHRYSOTILE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	90-95	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090563	ACFH M08008	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SPECKLED FLOOR TILE; PAPER-LIKE BACKING		
	TOTAL % ASBESTOS:	5-10	%
	CHRYSOTILE:	5-10	%
	NON-FIBROUS:	85-90	%
	UNSPECIFIED:	85-90	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	
8090564	ACFH M09009	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SPECKLED FLOOR TILE; PAPER-LIKE BACKING		
	TOTAL % ASBESTOS:	10-15	%
	CHRYSOTILE:	10-15	%
	NON-FIBROUS:	80-85	%
	UNSPECIFIED:	80-85	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

Barbara J Davies

Barbara J Davies

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090565	ACFH M12010	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNK OF CEILING TILE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	55-60	%
	CELLULOSE:	15-20	%
	FIBROUS GLASS:	35-40	%
	NON-FIBROUS:	35-40	%
	UNSPECIFIED:	35-40	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

Barbara J. Davies

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE
[P 2853]-[S 4729]

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RELEASED : 09/14/88
REPORTED : 09/14/88
WORK ORDER: 2546

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ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090566	ACFHM11011 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LOOSE WHITE POWDER;	SOME FIBERS	
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	10-15	%
	CELLULOSE:	10-15	%
	NON-FIBROUS:	80-85	%
	UNSPECIFIED:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

8090567	ACFHM01012 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WHITE FLOOR TILE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	1-5	%
	CELLULOSE:	1-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	90-95	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090568	ACFHM12013 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNKS OF CEILING TILE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	55-60	%
	CELLULOSE:	15-20	%
	FIBROUS GLASS:	35-40	%
	NON-FIBROUS:	35-40	%
	UNSPECIFIED:	35-40	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

8090569	ACFHM13014 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNK		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	60-65	%
	CELLULOSE:	50-55	%
	FIBROUS GLASS:	5-10	%
	NON-FIBROUS:	30-35	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090570	ACFHM14015 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNK		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	45-50	%
	CELLULOSE:	30-35	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	45-50	%
	UNSPECIFIED:	45-50	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

8090571	ACFHM15016 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED, LAYERED FIBER CHUNK		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	65-70	%
	CELLULOSE:	20-25	%
	FIBROUS GLASS:	40-45	%
	NON-FIBROUS:	25-30	%
	UNSPECIFIED:	25-30	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090572	ACFHM17018 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SOLID WHITE PLASTER	CHUNK WITH PAPER	
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	15-20	%
	CELLULOSE:	10-15	%
	OTHER:	3-5	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090573	ACFHM16017 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SHREDDED FIBER MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	80-85	%
	CELLULOSE:	80-85	%
	NON-FIBROUS:	10-15	%
	UNSPECIFIED:	10-15	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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INDUSTRIAL HYGIENE DEPARTMENT

M

RECEIVED : 06/25/88
RELEASED : 09/14/88
REPORTED : 09/14/88
WORK ORDER: 2546

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
8090574	ACFHM18019 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNK OF CEILING TILE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	65-70	%
	CELLULOSE:	15-20	%
	FIBROUS GLASS:	45-50	%
	NON-FIBROUS:	25-30	%
	UNSPECIFIED:	25-30	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

8090575	ACFHM14020 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNK OF CEILING TILE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	45-50	%
	CELLULOSE:	10-15	%
	FIBROUS GLASS:	30-35	%
	NON-FIBROUS:	45-50	%
	UNSPECIFIED:	45-50	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER----------VALUE-----UNITS----------

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE
[P 2853]-[S 4733]

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WORK ORDER: 2547

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
8090576	ACFHT02021 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WHITE CHUNK EASILY BROKEN FILLER MATERIAL		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	10-15	%
	CELLULOSE:	10-15	%
	NON-FIBROUS:	80-85	%
	UNSPECIFIED:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090577	ACFHT02022 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SOFT WHITE FIBER/FILLER		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	10-15	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	80-85	%
	UNSPECIFIED:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090580	ACFHT02025 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SOFT, WHITE FIBER/FILLER CHUNKS		
	TOTAL % ASBESTOS:	1-5	%
	CHRYSOTILE:	1-5	%
	FIBROUS NON-ASBEST:	10-15	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	
8090581	ACFHT02026 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SOFT WHITE FILLER		
	TOTAL % ASBESTOS:	3-5	%
	CHRYSOTILE:	3-5	%
	FIBROUS NON-ASBEST:	10-15	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090584	ACFHS01029 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	HARD CEMENTITIOUS MATERIAL (PULVERIZED)		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	<1	%
	CELLULOSE:	TRACE	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

8090585	ACFHS01030 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	CEMENT-LIKE CHUNK (PULVERIZED)		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	<1	%
	CELLULOSE:	TRACE	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090586	ACFHM17031 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LARGE CHUNK PRESSED FIBER; PAINTED ONE SIDE		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	90-95	%
	CELLULOSE:	90-95	%
	NON-FIBROUS:	1-5	%
	UNSPECIFIED:	1-5	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090587	ACFHS02032 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	HARD CEMENTITIOUS CHUNK (PULVERIZED)		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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MCLEAN , VA
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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090590	ACFHT03035 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SOFT CHUNKS FIBER/FILLER		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	15-20	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090591	ACFHT03036 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	SOFT CHUNKS FIBER/FILLER		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	15-20	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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REPORTED : 09/14/88
WORK ORDER: 2543

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
8090512	ACFHM01043 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WHITE FLOOR TILE		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090513	ACFHM24044 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	REDDISH-BROWN FLOOR TILE		
	TOTAL % ASBESTOS:	3-5	%
	CHRYSOTILE:	3-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	90-95	%
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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ATTN: JORGE RANGEL
#700, 6845 ELM STREET
MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090516	ACFHS03047 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	HARD, CEMENTITIOUS DUST WITH CHIPS (PULVERIZED)		
	TOTAL % ASBESTOS:	<1	%
	CHRYSOTILE:	TRACE	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

AML NUMBER		VALUE	UNITS
8090517	ACFHS03048 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	FLAT CEMENTITIOUS MATERIAL (PULVERIZED)		
	TOTAL % ASBESTOS:	<1	%
	NON-FIBROUS:	95-100	%
	UNSPECIFIED:	95-100	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090518	ACFHT05049 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LOOSE WEAVE MATERIAL SWATCH		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	85-90	%
	CELLULOSE:	85-90	%
	NON-FIBROUS:	5-10	%
	UNSPECIFIED:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090519	ACFHT05050 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	WOVEN CLOTH SWATCH;	PAINT COATED	
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	85-90	%
	CELLULOSE:	85-90	%
	NON-FIBROUS:	5-10	%
	UNSPECIFIED:	5-10	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER	VALUE	UNITS

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE
[P 2853]-[S 4730]

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ATTN: JORGE RANGEL
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MCLEAN , VA
22101

PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090520	ACFHT06051 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PRESSED FIBER CHUNK; PAINT ONE SIDE		
	TOTAL % ASBESTOS:	25-30	%
	CHRYSOTILE:	25-30	%
	NON-FIBROUS:	65-70	%
	UNSPECIFIED:	65-70	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	
8090521	ACFHT07052 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LOOSE GREEN-GRAY DUST WITH PAINT CHIPS		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	3-5	%
	OTHER:	3-5	%
	NON-FIBROUS:	90-95	%
	UNSPECIFIED:	90-95	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

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AML NUMBER		VALUE	UNITS
8090524	ACFHT10055 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	HARD CEMENTITIOUS-LIKE CHIPS		
	TOTAL % ASBESTOS:	65-70	%
	CHRYSOTILE:	65-70	%
	FIBROUS NON-ASBEST:	5-10	%
	CELLULOSE:	5-10	%
	NON-FIBROUS:	15-20	%
	UNSPECIFIED:	15-20	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	
8090525	ACFHT07056 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY POWDER WITH FIBER BALLS		
	TOTAL % ASBESTOS:	<1	%
	CHRYSOTILE:	TRACE	%
	FIBROUS NON-ASBEST:	10-15	%
	CELLULOSE:	1-5	%
	FIBROUS GLASS:	5-10	%
	NON-FIBROUS:	80-85	%
	UNSPECIFIED:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

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PROJECT NAME/JOB ID: ALEXANDRIA CITY

AML NUMBER		VALUE	UNITS
8090526	ACFHT08057 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY POWDER; WOVEN SWATCH PAINTED ONE SIDE		
	TOTAL % ASBESTOS:	<1	%
	CHRYSOTILE:	TRACE	%
	FIBROUS NON-ASBEST:	20-25	%
	CELLULOSE:	1-5	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	70-75	%
	UNSPECIFIED:	70-75	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

09 nw

8090527	ACFHT~~1~~1058 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY PLASTER DUST; GRAY WOVEN SWATCH GREEN PAINT		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	25-30	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	65-70	%
	UNSPECIFIED:	65-70	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

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INDUSTRIAL HYGIENE DEPARTMENT

PAGE 5 M

RECEIVED : 06/25/88
RELEASED : 09/14/88
REPORTED : 09/14/88
WORK ORDER: 2544

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
	mw		
8090528	ACFHT~~1~~2059 09 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY PLASTER DUST; WOVEN SWATCH GREEN PAINT		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	25-30	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	65-70	%
	UNSPECIFIED:	65-70	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

8090529	ACFHT07060 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	FIBROUS POWDER; WOVEN PAINTED SWATCH		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	25-30	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	65-70	%
	UNSPECIFIED:	65-70	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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INDUSTRIAL HYGIENE DEPARTMENT

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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

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE
[P 2853]-[S 4731]

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

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INDUSTRIAL HYGIENE DEPARTMENT

PAGE 1 M

RECEIVED : 06/25/88
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REPORTED : 09/14/88
WORK ORDER: 2545

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
8090530	ACFHT07061 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY, LOOSE FIBER POWDER		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	25-30	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	65-70	%
	UNSPECIFIED:	65-70	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

06 mw

8090531	ACFHT~~1~~3062 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	HARD FIBER BOARD (TRANSITE-LIKE)		
	TOTAL % ASBESTOS:	40-45	%
	CHRYSOTILE:	40-45	%
	NON-FIBROUS:	50-55	%
	UNSPECIFIED:	50-55	%
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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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
8090532	ACFHT16063 BULK (6 mw)	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	FIBER PLASTER POWDER DUST; WOVEN PAINTED SWATCH		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	20-25	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	70-75	%
	UNSPECIFIED:	70-75	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	
8090533	ACFHT07064 BULK (19 mw)	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	FIBROUS WADS		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	30-35	%
	FIBROUS GLASS:	30-35	%
	NON-FIBROUS:	60-65	%
	UNSPECIFIED:	60-65	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

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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
8090534	ACFHT13065 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PLASTER FIBER POWDER; PRESSED FIBER CHUNK; WOVEN SWATCH		
	TOTAL % ASBESTOS:	5-10	%
	CHRYSOTILE:	5-10	%
	FIBROUS NON-ASBEST:	20-25	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	60-65	%
	UNSPECIFIED:	60-65	%
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

Barbara J. Davies

8090535	ACFHT08066 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	POWDER, FIBER CHUNK WITH PAINTED SWATCH		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	25-30	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	15-20	%
	NON-FIBROUS:	65-70	%
	UNSPECIFIED:	65-70	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES LEHIGH VALLEY ANALYTICS	

Barbara J. Davies

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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
8090536	ACFHT13067 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LOOSE GRAY POWDER; WOVEN PAINTED SWATCH		
	TOTAL % ASBESTOS:	10-15	%
	CHRYSOTILE:	10-15	%
	FIBROUS NON-ASBEST:	20-25	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	55-60	%
	UNSPECIFIED:	55-60	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

Barbara J. Davies

8090537	ACFHT07068 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	GRAY FIBROUS CHUNK WITH POWDER		
	TOTAL % ASBESTOS:	<1	%
	FIBROUS NON-ASBEST:	10-15	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	80-85	%
	UNSPECIFIED:	80-85	%
	NOTES:	No asbestiform minerals observed.	
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

Barbara J. Davies

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WORK ORDER: 2545

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
8090538	ACFHT14069 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LOOSE POWDER; FIBROUS CHUNK; WOVEN SWATCH		
	TOTAL % ASBESTOS:	10-15	%
	CHRYSOTILE:	10-15	%
	FIBROUS NON-ASBEST:	20-25	%
	CELLULOSE:	5-10	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	55-60	%
	UNSPECIFIED:	55-60	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

8090539	ACFHT13070 BULK	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	LOOSE POWDER; WOVEN PAINTED SWATCH		
	TOTAL % ASBESTOS:	5-10	%
	CHRYSOTILE:	5-10	%
	FIBROUS NON-ASBEST:	10-15	%
	FIBROUS GLASS:	10-15	%
	NON-FIBROUS:	70-75	%
	UNSPECIFIED:	70-75	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

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REPORTED : 09/14/88
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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----------

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE
[P 28531-[S 47321

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

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INDUSTRIAL HYGIENE DEPARTMENT

M

RECEIVED : 06/25/88
RELEASED : 09/14/88
REPORTED : 09/14/88
WORK ORDER: 2509

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
8090540	ACFH T15 071	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	PAINT-PLASTER CHIP		
	TOTAL % ASBESTOS:	1-5	%
	CHRYSOTILE:	1-5	%
	FIBROUS NON-ASBEST:	10-15	%
	CELLULOSE:	3-5	%
	FIBROUS GLASS:	5-10	%
	NON-FIBROUS:	75-80	%
	UNSPECIFIED:	75-80	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

8090541	ACFH T15 072	BULK SAMPLE	
1530	ASBESTOS BULK ANALYSIS		
	SAMPLE DESCRIPTION		
	GROSS DESCRIPTION:		
	FIBROUS DUST; SMALL LOOSE BALLS, PAINTED SWATCH		
	TOTAL % ASBESTOS:	40-45	%
	CHRYSOTILE:	40-45	%
	NON-FIBROUS:	50-55	%
	UNSPECIFIED:	50-55	%
	ANALYST:	BARBARA DAVIES	
		LEHIGH VALLEY ANALYTICS	

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INDUSTRIAL HYGIENE DEPARTMENT

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REPORTED : 09/14/88
WORK ORDER: 2509

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

NOTATIONS

Analysis performed by trained asbestos analyst using polarized light microscopy with dispersion staining.

*** FINAL REPORT ***

FRED I. GRUNDER
TECHNICAL DIRECTOR, IND. HYGIENE
[P 2853]-[S 4728]

IRA D. GODWIN, M.D.
DIRECTOR OF LABORATORIES

BIOSPHERICS INC REPORT Work Order # 88-06-453
Received: 06/24/88 Results by Sample

mw

SAMPLE ID ~~ACFHMQC001~~ ACFHM01Q001 FRACTION 01A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 07/14/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	TR,<1%
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
FIBROUS GLASS	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 A. BAYLOR

mw

SAMPLE ID ~~ACFHMQC031~~ ACFHM17Q031 FRACTION 02A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 07/14/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	NAD
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	98+%
NANF	1-2%

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 A. BAYLOR

Received: 06/24/88 Results by Sample

mw

SAMPLE ID ~~ACFHM0C040~~ ACFHm22Q040 FRACTION 03A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 07/14/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	2-5%
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
NANF	90-95%

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 A. BAYLOR

mw

SAMPLE ID ~~ACFHT0C076~~ ACFHT19Q076 FRACTION 04A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS
Date & Time Collected not specified Category BULK

DATE ANALYZED 07/14/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	NAD
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	2-5%
FIBROUS GLASS	35-40%
NANF	50-55%

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 A. BAYLOR

BIOSPHERICS INC REPORT

Work Order # 88-07-015

Received: 06/30/88

Results by Sample

SAMPLE ID ACFHM03003 FRACTION 01A TEST CODE ASBULK NAME BULK ASBESTOS ANALYSIS

Date & Time Collected not specified Category BULK

DATE ANALYZED 07/15/88 ANALYST SANDER VERIFIED BY KMD

ASBESTOS	RESULT
% Chrysotile	2-5%
% Amosite	
% Crocidolite	
% Tremolite	

NON-ASBESTOS	RESULT
CELLULOSE FIBER	TRACE
NANF	90-95%

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 A. BAYLOR

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name:
Floor tile, 9" x 9", dark green, room ~~139~~ 142

Homogeneous Area ID Number : M02

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph :

Estimated Amount of Material: 300 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the tile.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the floor tiles is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the floor tiles is not sufficient to cause damage to the floor tiles.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM02002	8090558-1530	Chrysotile	03-05	AML	Green-blue floor tile
			TOTAL:	03-05		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name:
Floor tile, 9" x 9", blue

Homogeneous Area ID Number : M03

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP03

Estimated Amount of Material: 2,800 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the tile.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the floor tiles is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the floor tiles is not sufficient to cause damage to the floor tiles.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM03003	01A	Chrysotile	02-05	BIO	
			TOTAL:	02-05		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name:
Floor tile, 9" x 9", gray

Homogeneous Area ID Number : M06

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :

Estimated Amount of Material: 100 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the tile.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the floor tiles is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the floor tiles is not sufficient to cause damage to the floor tiles.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM06006	8090561-1530	Chrysotile	05-10	AML	Gray floor tile
			TOTAL:	05-10		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name:
Floor tile, 9" x 9", brown, room ~~106~~ 108

Homogeneous Area ID Number : M07

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph :

Estimated Amount of Material: 600 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the tile.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the floor tiles is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the floor tiles is not sufficient to cause damage to the floor tiles.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM07007	8090562-1530	Chrysotile	01-05	AML	Rust colored floor tile
			TOTAL:	01-05		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name:
Linoleum, brown

Homogeneous Area ID Number : M08

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph : ACFHP04

Estimated Amount of Material: 3,000 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the linoleum.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the linoleum is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the linoleum is not sufficient to cause damage to the linoleum.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM08008	8090563-1530	Chrysotile	05-10	AML	Speckled floor tile, paper-like backing
			TOTAL:	05-10		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name: Linoleum, brown with white streaks

Homogeneous Area ID Number : M09

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :

Estimated Amount of Material: 1,050 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the linoleum.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the linoleum is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the linoleum is not sufficient to cause damage to the linoleum.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM09009	8090564-1530	Chrysotile	10-15	AML	Speckled floor tile, paper-like backing
			TOTAL:	10-15		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F
M A T E R I A L S

Homogeneous Area Name: Floor tile, 9" x 9", green with white specks, auditorium

Homogeneous Area ID Number : M22

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph :

Estimated Amount of Material: 4,500 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the tiles.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the floor tiles is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the floor tiles is not sufficient to cause damage to the floor tiles.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM22040	8090595-1530	Chrysotile	03-05	AML	Green floor tile
			TOTAL:	03-05		
06/23/88	ACFHM22041	8090510-1530	Chrysotile	05-10	AML	Dark green floor tile
			TOTAL:	05-10		
Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM22Q040	03A	Chrysotile	02-05	BIO	
			TOTAL:	02-05		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name:
Floor tile, rust with white specks

Homogeneous Area ID Number : M24

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph : ACFHP01

Estimated Amount of Material: 5,000 SF

ASSESSMENT CATEGORY #: 5
SPECIFIC DESCRIPTION : Non-Damaged, Non-Friable Miscellaneous Material

INSPECTOR COMMENTS:

DESCRIPTION OF DAMAGE - None Observed.

POTENTIAL FOR CONTACT/ACCESS DISTURBANCE - Low.
There is no potential of accessing the asbestos fibers or causing their release by the normal traffic which transverses upon the tile.

POTENTIAL FOR VIBRATION DISTURBANCE - Low.
The vibration generated within the floor tiles is not sufficient in causing the release of the asbestos fibers.

POTENTIAL FOR AIR EROSION/DISTURBANCE - None.
The air movement across the floor tiles is not sufficient to cause damage to the floor tiles.

Positive Sample Results:

Sample Date	AFMA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHM24044	8090513-1530	Chrysotile	03-05	AML	Reddish-brown floor tile
			TOTAL:	03-05		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M B Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: ACFHHA01 ACFHHA03 ACFHHA04 ACFHHA05
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: MW Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

A S S E S S M E N T O F M A T E R I A L S

Homogeneous Area Name:
Crawl space, pipe elbow, 4", mud

Homogeneous Area ID Number : T02

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP02

Estimated Amount of Material: 12 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
06/23/88	ACFHT02022	8090577-1530			AML	Soft white fiber/filler
			TOTAL:	<1		
06/23/88	ACFHT02024	8090579-1530	Chrysotile	01-05	AML	White soft filler chunk
			TOTAL:	01-05		
06/23/88	ACFHT02025	8090580-1530	Chrysotile	01-05	AML	Soft, white fiber/filler chunks
			TOTAL:	01-05		
06/23/88	ACFHT02026	8090581-1530	Chrysotile	03-05	AML	Soft white filler
			TOTAL:	03-05		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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 #3's jacket

Homogeneous Area ID Number : T05

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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	AFHA Sample ID	Laboratory ID	Asbestos	Percent	Laboratory	Comments
06/23/88	ACFHT05049	8090518-1530			AML	Loose weave material swatch
			TOTAL:	<1		
06/23/88	ACFHT05050	8090519-1530			AML	Woven cloth swatch, paint coated
			TOTAL:	<1		
06/23/88	ACFHT05068	8090537-1530			AML	Gray fibrous chunk with powder
			TOTAL:	<1		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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 #3, under jacket

Homogeneous Area ID Number : T06

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Estimated Amount of Material: 3 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 in 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
06/23/88	ACFHT06051	8090520-1530	Chrysotile	25-30	AML	Pressed fiber chunk, paint one side
			TOTAL:	25-30		
06/23/88	ACFHT06062	8090531-1530	Chrysotile	40-45	AML	Hard fiber board (transite-like)
			TOTAL:	40-45		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M R Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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, insulation under boiler's door

Homogeneous Area ID Number : T10

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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
06/23/88	ACFHT10055	8090524-1530	Chrysotile	65-70	AML	Hard cementitious-like chips
			TOTAL:	65-70		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: 10" pipe elbow between boilers

Homogeneous Area ID Number : T13

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Estimated Amount of Material: 3 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
06/23/88	ACFHT13065	8090534-1530	Chrysotile	05-10	AML	Plaster fiber powder, pressed fiber
			TOTAL:	05-10		chunk, woven swatch
06/23/88	ACFHT13067	8090536-1530	Chrysotile	10-15	AML	Loose gray powder, woven painted swatch
			TOTAL:	10-15		
06/23/88	ACFHT13070	8090539-1530	Chrysotile	05-10	AML	Loose powder, woven painted swatch
			TOTAL:	05-10		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: M Bd Wigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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: 6" pipe joint between boilers

Homogeneous Area ID Number : T14

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
Photograph :

Estimated Amount of Material: 6 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
06/23/88	ACFHT14069	8090538-1530	Chrysotile	10-15	AML	Loose powder, fibrous chunk, woven swatch
			TOTAL:	10-15		

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MBWigenton Date: 10/31/88
Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High

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 : T15

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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 nad/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
06/23/88	ACFHT15071	8090540-1530	Chrysotile	01-05	AML	Paint-plaster chip
			TOTAL:	01-05		
06/23/88	ACFHT15072	8090541-1530	Chrysotile	40-45	AML	Fibrous dust, small loose balls,
			TOTAL:	40-45		painted swatch

Inspector: Mike Wigenton
Accreditation Number: 8802-02-063

Signature: MB Wigenton Date: 10/31/88
Agency: Tufts University

AHERA MANAGEMENT PLAN
BUILDING FRANCIS C. HAMMOND

ALEXANDRIA CITY PUBLIC SCHOOLS
POSITIVE SAMPLING SUMMARY

MATERIAL DESCRIPTION		TOTAL AMOUNT	MATERIAL LOCATION	HAZARD POTENTIAL	CONDITION	% ASBESTOS	ESTIMATED COST REMOVE	ESTIMATED COST REPLACE	STATUS
9"x9" GREEN FLOOR TILE	M02	300 SF	ROOM # ~~139~~ 142	LOW	NON-FRIABLE	3-5			MONITOR
9"x9" BLUE FLOOR TILE	M03	2800 SF	ADMINISTRATION OFFICES	LOW	NON-FRIABLE	2-5			MONITOR
9"x9" GRAY FLOOR TILE	M06	100 SF	STORE ROOMS 225/227 BETWEEN ~~213 & 215~~	LOW	NON-FRIABLE	5-10			
9"x9" BROWN FLOOR TILE	M07	600 SF	ROOM # ~~106~~ 108	LOW	NON-FRIABLE	1-5			
BROWN LINOLEUM	M08	3,000 SF	ROOM # ~~212, 214, 231, 235, 237~~ 224, 222, 220, 204, 206	LOW	NON-FRIABLE	5-10	$25,900	$7,400	
BROWN & WHITE LINOLEUM	M09	1,050 SF	ROOM # ~~233~~ 202	LOW	NON-FRIABLE	10-15	$18,400	$2,600	
9"x9" GREEN/WHITE FLOOR TILE	M22	4,500 SF	AUDITORIUM	LOW	NON-FRIABLE	5-10			
RUST/WHITE FLOOR TILE	M24	5,000 SF	ROOM # ~~100 - 105~~ 108	LOW	NON-FRIABLE	3-5			
FIRE DOORS	M99	ALL	HALLWAYS	LOW	NON-FRIABLE	?			
4" PIPE ELBOWS	T02	12 EACH	RM ~~141 - 151~~ 100-106 CRAWL SPACE	LOW	NON-FRIABLE	3-5	$3,300	$100	
BOILER #3 JACKET INSULATION	T05	1 EA.	BOILER RM	LOW	NON-FRIABLE	1	$13,200	$1,800	
BOILER #3 INSULATION	T06	3 EA.	BOILER RM	LOW	NON-FRIABLE	40-45	$22,200	$3,300	
BOILER DOOR INSULATION	T10	1 EA	BOILER RM	LOW	NON-FRIABLE	65-70	$13,200	$1800	
10" PIPE ELBOWS	T13	3 EA	BOILER RM	LOW	NON-FRIABLE	10-15	$24,800	$5,400	
6" PIPE ELBOWS	T14	6 EA	BOILER RM	LOW	NON-FRIABLE	10-15	$7,990	$100	MONITOR
HOT WATER TANK INSULATION	T15	1 EA	BOILER RM	LOW	NON-FRIABLE	40-45	$12,500	$1,100	MONITOR
							$111,990	$23,100	$65,590

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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Floor tile, 9" x 9", dark green, room ~~139~~ 142

Homogeneous Area ID Number : M02
Estimated Amount of Material: 300 SF
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
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 Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Floor tile, 9" x 9", blue

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP03

Homogeneous Area ID Number : M03

Estimated Amount of Material: 2,800 SF
LEA Response Action Priority: 8

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. 3 for O&M recommendations.

Management Planner: Mike Wigenton Signature: M B Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Floor tile, 9" x 9", gray

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph :

Homogeneous Area ID Number : M06

Estimated Amount of Material: 100 SF
LEA Response Action Priority: 8

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. 4 for O&M recommendations.

Management Planner: Mike Wigenton Signature: M B Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Floor tile, 9" x 9", brown, room ~~106~~ 108

Homogeneous Area ID Number : M07
Estimated Amount of Material: 600 SF
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
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. 5 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MBWigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Linoleum, brown

Homogeneous Area ID Number : M08

Estimated Amount of Material: 3,000 SF
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
Photograph : ACFHP04

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: $25,904.00
Replacement Cost : $7,380.00

PREVENTIVE MEASURES:
See DOCUMENT I. 6 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MBWigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Linoleum, brown with white streaks

Homogeneous Area ID Number : M09

Estimated Amount of Material: 1,050 SF

Field Documents:
LEA Response Action Priority: 8

Sample Area : ACFHSA02
Homogeneous Area: ACFHHA03
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:	$18,308.75
Replacement Cost :	$2,583.00

PREVENTIVE MEASURES:
See DOCUMENT I. 7 for O&M recommendations.

Management Planner: Mike Wigenton Signature: [signature] Date: 10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Floor tile, 9" x 9", green with white specks, auditorium

Homogeneous Area ID Number : M22
Estimated Amount of Material: 4,500 SF
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
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. 8 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Floor tile, rust with white specks

Homogeneous Area ID Number : M24

Estimated Amount of Material: 5,000 SF

LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA02
Photograph : ACFHP01

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. 9 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MWigenton Date: 10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
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: ACFHHA01 ACFHHA03 ACFHHA04 ACFHHA05
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.10 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Crawl space, pipe elbow, 4", mud

Homogeneous Area ID Number : T02

Estimated Amount of Material: 12 EA
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA01
Homogeneous Area: ACFHHA01
Photograph : ACFHP02

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 Periodic 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: $3,281.70
Replacement Cost : $15.60

PREVENTIVE MEASURES:
See DOCUMENT I.11 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room: Boiler #3's jacket

Homogeneous Area ID Number : T05

Estimated Amount of Material: 1 EA
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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:	$13,201.00
Replacement Cost :	$1,804.00

PREVENTIVE MEASURES:
See DOCUMENT I.12 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room: boiler #3, under jacket

Homogeneous Area ID Number : T06

Estimated Amount of Material: 3 EA

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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:	$22,617.00
Replacement Cost :	$3,252.00

PREVENTIVE MEASURES:
See DOCUMENT I.13 for O&M recommendations.

Management Planner: Mike Wigenton Signature: M B Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room, insulation under boiler's door

Homogeneous Area ID Number : T10
Estimated Amount of Material: 1 EA
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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:	$13,201.00
Replacement Cost :	$1,804.00

PREVENTIVE MEASURES:
See DOCUMENT I.14 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room: 10" pipe elbow between boilers

Homogeneous Area ID Number : T13

Estimated Amount of Material: 3 EA

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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: $24,765.00
Replacement Cost : $5,412.00

PREVENTIVE MEASURES:
See DOCUMENT I.15 for O&M recommendations.

Management Planner: Mike Wigenton Signature: M B Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room: 6" pipe joint between boilers

Homogeneous Area ID Number : T14
Estimated Amount of Material: 6 EA
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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:	$7,982.85
Replacement Cost :	$51.00

PREVENTIVE MEASURES:
See DOCUMENT I.16 for O&M recommendations.

Management Planner: Mike Wigenton Signature: MB Wigenton Date:10/31/88
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: Francis C. Hammond Junior High
Building: Francis C. Hammond Junior High
Total Removal Cost: See Document G.S

Homogeneous Area Name:
Boiler room: hot water tank's insulation

Homogeneous Area ID Number : T15
Estimated Amount of Material: 1 EA
LEA Response Action Priority: 8

Field Documents:
Sample Area : ACFHSA04
Homogeneous Area: ACFHHA05
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.17 for O&M recommendations.

Management Planner: Mike Wigenton Signature: M B Wigenton Date:10/31/88
Accreditation Number: 8802-02-127 Agency: Tufts University

Virginia Department of Education
Energy and Facilities Services

LEA: Alexandria City Public Schools
School: Francis C. Hammond Junior High
Building: See Below

R E M O V A L C O S T
S U M M A R Y

BUILDING NAME: Francis C. Hammond Junior High

HOMOGENEOUS AREA ID	REMOVAL	REPLACEMENT
M08	$25,904.00	$7,380.00
M09	$18,308.75	$2,583.00
T02	$3,281.70	$15.60
T05	$13,201.00	$1,804.00
T06	$22,617.00	$3,252.00
T10	$13,201.00	$1,804.00
T13	$24,765.00	$5,412.00
T14	$7,982.85	$51.00
T15	$12,485.00	$1,084.00
TOTAL FOR Francis C. Hammond Junior High	$141,746.30	$23,385.60

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: Francis C. Hammond Junior High
Building: See Below

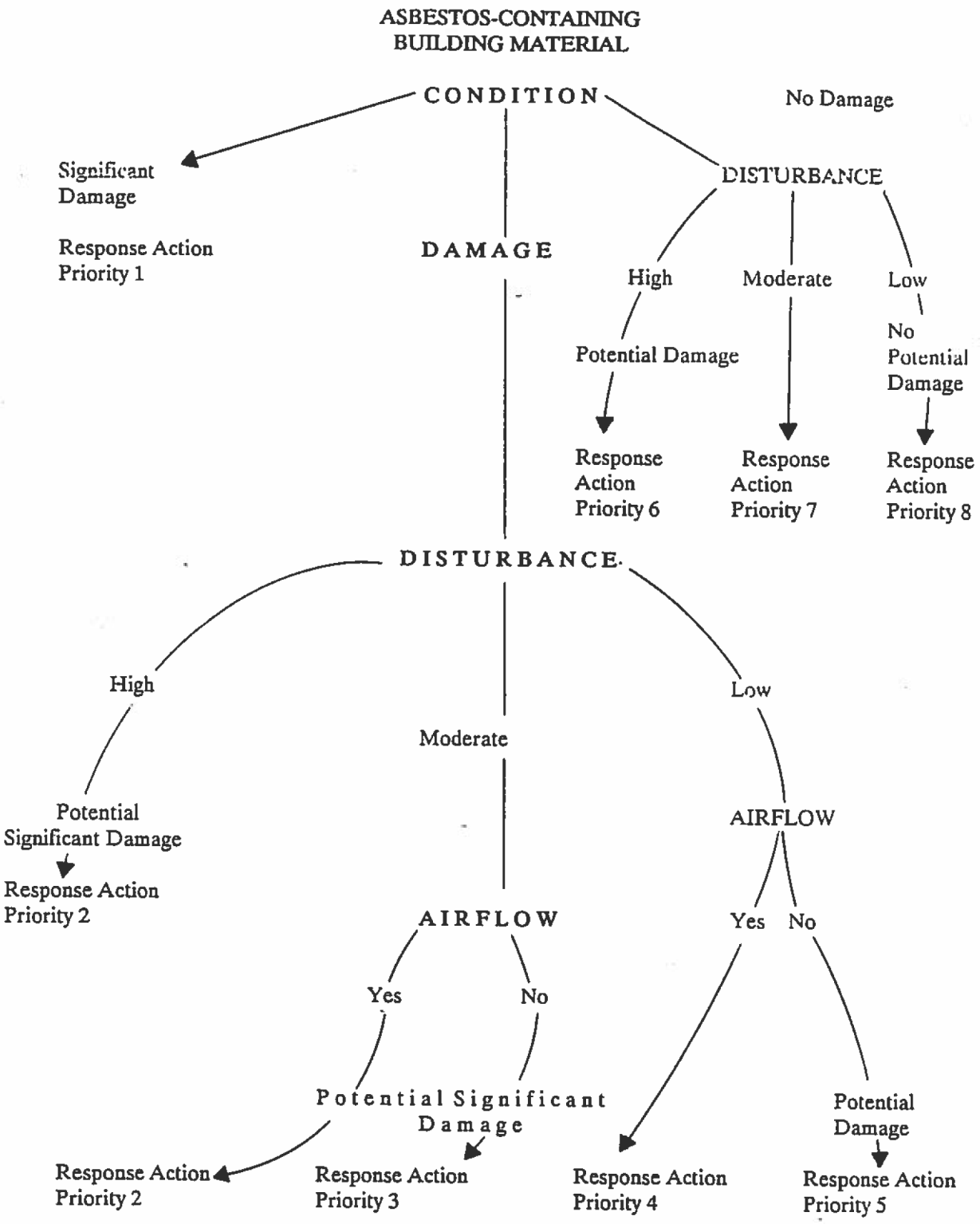
R E M O V A L C O S T S U M M A R Y

BUILDING NAME: Francis C. Hammond Junior High

HOMOGENEOUS AREA ID	EST. AMOUNT OF MATERIAL	REMOVAL	REPLACEMENT
M99-Fire Doors	60 ea	$ 24,000.00	$12,000.00
Floor Tile	17,350 sq ft	69,400.00	34,700.00
TOTAL From Previous Document G.S.1		141,746.30	23,385.60
TOTAL for Francis C. Hammond Junior High		$235,146.30	$70,085.60

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
Hammond Junior High School
April 13, 1992

In accordance with paragraph 763.85(b)(1) of the Asbestos Hazard Emergency Response Act (AHERA), the Hammond Junior High 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 June 23, 1988 were reinspected.

The primary area identified in the original inspection and Management Plan was the floor tile and linoleum in various areas of the school. The tile was all classified as Category 5 (ACBM with Potential for Damage). There is no change in that assessment. Area M02 is covered with carpet and I could not see it. Area M07 had several tiles missing. All other tile was in excellent condition and showed evidence of excellent care.

The next material is various types of thermal system insulation (TSI) in the boiler room. All the TSI is in good condition, painted, and has only small areas of damage in isolated areas (<1%). No change is made in the assessment of Category 5 (ACBM with Potential for Damage).

The last area was the fire doors throughout the building. The doors are metal framed and in good condition. They are nonfriable and the assessment remains Category 5.

All 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

TESTWELL CRAIG
TESTING LABORATORIES, INC

P.O. BOX 477 • 5439 HARDING HIGHWAY, MAYS LANDING, NJ 08330
PHONE (609) 625-1700 • FAX (609) 625-6325

May 5, 1995

Alexandria City Public Schools
2000 N. Beauregard Street
Alexandria, Virginia 22311

ATTN: Mr. John D. Johnson III
Executive Director, Support Services Division

RE: 3 Year Reinspection
Francis C. Hammond Middle School/
Star Program Trailers 3 Classrooms
Lab # 72174

Dear Mr. Johnson:

Pursuant to your request Testwell Craig Testing Laboratories, Inc. conducted a three-year reinspection of the above referenced location on April 11, 1995.

We are enclosing two copies of the report for the school inspected. One copy should be placed with the Management Plan which is kept on file at each location. The second copy should be placed with the copies kept at the Board of Education Office.

If you have any questions or comments regarding the above referenced project please contact us at your earliest convenience.

Respectfully submitted,

William E. Thaw

William E. Thaw
Environmental Technician

WET/lh

MasiMax
Resources, Inc.

THREE-YEAR REINSPECTION OF ASBESTOS-CONTAINING MATERIALS
ALEXANDRIA CITY PUBLIC SCHOOL SYSTEMS (ACPS)
Francis C Hammond Middle 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 Francis C Hammond Middle School on June 19, 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: Francis C. Hammond

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: No date of inspection

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: Did not have record of 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 present.

Yes No

☐ ■ 6-Month O&M Inspections

Comments: _____

Inspector (s): Bjarne Smith and Amy Chang Date: 6/19/2007

Management Planner: _____ Date: 08/21/2007

City of Alexandria - AHERA Inspection

School Francis C. Hammond **Date** 6/19/2007 **Inspector(s)** Bjarne Smith & Amy Chang

Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
2nd floor hall	Electrical panelboard, press fiberboard material	ALL	Gray	20	EA	Unable to locate - May have been removed	0	No	No	N/A	N/A	N/A	Verify Repair/Removal
Auditorium	Floor Tile	9x9	Green w/white	4500	SF	Unable to locate/covered with carpet	5	No	No	N/A	N/A	N/A	O & M
Auditorium stage	Elec wire insulation on stage lights	0.25 in	White	ALL	ALL	Unable to locate	4	Yes	Yes	Distributed	ALL	Age/Deterioration	O & M
Band room E, room 229	Floor Tile	9x9	Brown	200	SF	Under carpet	5	No	No	N/A	N/A	N/A	O & M
Boiler Room	TSI-boiler breeching	ALL	White	250	SF	Some removed	5	No	No	N/A	N/A	N/A	O & M

City of Alexandria - AHERA Inspection

School Francis C. Hammond **Date** 6/19/2007 **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	TSI-elbows, joints	10 in	N/A	20	EA	Between boilers	5	No	No	N/A	N/A	N/A	O & M
Boiler Room	TSI-boiler insulation	ALL	N/A	400	SF	Boiler #1,2,3	1	Yes	Yes	Distributed	3 SF	Deterioration	Repair
Boiler Room	TSI-tank insulation	ALL	N/A	2	EA	Large & small tanks	1	Yes	Yes	Throughout	2 SF	Deterioration	Repair
Boiler Room	TSI-elbows, joints	6 in	N/A	40	EA	Debris on floor (Removed)	1	Yes	Yes	Throughout	6 EA	Impact	Repair/O & M
Boiler Room	Chips at boiler door	ALL	N/A	1	EA	Unable to locate	5	No	No	N/A	N/A	N/A	O & M

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Boiler Room	TSI-boiler insulation	ALL	N/A	N/A	n/a	Same as T06	1	Yes	Yes	Distributed	3 SF	Deterioration	Repair
Boiler Room	TSI-boiler breeching	ALL	N/A	250	SF	Not listed in orig survey	5	No	No	N/A	N/A	N/A	O & M
Boiler Room crawlspace	TSI-elbows, joints	ALL	N/A	50	EA	Damaged Crawlspace #2	1	Yes	Yes	Throughout	20 EA	Impact	Repair/O & M
Crawlspace under admin.offices	TSI-elbows, joints	ALL	N/A	150	EA	Crawlspace #4	1	Yes	Yes	Throughout	35 EA	Impact	Repair/O & M
Crawlspace under gym	Floor Tile Good Condition	9x9 50 SF	Green w/ white streaks			PACM	5	Yes	No	No	No	N/A	O & M

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Crawlspace under gym	TSI-elbows, joints	ALL	N/A	150	EA	Crawlspace #3	1	Yes	Yes	Throughout	35 EA	Impact	Repair/O & M
Crawlspace under room100-106	TSI-elbows, joints	ALL	N/A	100	EA	Inaccessible -unable to verify damage repair	1	Yes	Yes	Throughout	25 EA	Deterioration	Verify Repair
Crawlspaces	Wrap over FG pipe insulation	ALL	Black	ALL	ALL	Damaged	0	No	Yes	Distributed	5%	Impact	Repair
Electrical Closet/Store Room across from B229	Floor Tile	9x9	Brown			Good Condition	5	No	No	N/A	N/A	N/A	O & M
Entire 2nd floor	Duct mastic	ALL	Red-brown	ALL	ALL	Good Condition	0	No	No	N/A	N/A	N/A	O & M

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Gym	Mastic on FG collar end	ALL	White	50	EA	Unable to locate	0	No	No	N/A	N/A	N/A	O & M
Hallways	Fire Doors	door	Various	All	ALL	Replaced 2003	5	No	No	N/A	N/A	N/A	Verify Removal
Office copier room	Floor Tile	9x9	Blue	433	SF	Black floor tile - removed. Now white floor tile- PACM	5	No	No	N/A	N/A	N/A	O & M
Office storeroom	Floor Tile	9x9	Blue	433	SF	Across from Admin Office. Good Condition	5	No	No	N/A	N/A	N/A	O & M
Room 100	Floor Tile	ALL	White/ rust	5000	SF	Band rm E-blue carpet, Unable to locate Rm 100,108-red tile	5	No	No	N/A	N/A	N/A	O & M

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Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Room 106	Fiberboard		Gray	30	SF	Fiberboard bulletin board, BS061907-001, 002, 003	0	No	Yes	Left wall	5 SF	Damaged surface	O & M
Room 106	Spray-on insulation	ALL	orange	500	SF	Unable to locate -- may have been removed	0	No	Yes	Above drop ceiling	ALL	Air erosion	Verify Repair/Removal
Room 106 & throughout	Celing Tile		Brown			Glue dots, ceiling tile mastic & wall tile mastic		Yes	No	N/A	N/A	N/A	O & M
Room 108	Floor Tile	ALL	White/ rust			Unable to locate Rm 100, 108-red ceramic tile	5	No	No	N/A	N/A	N/A	O & M
Room 115	Floor Tile	9x9	Blue			Unable to locate/may be under carpet	5	No	No	N/A	N/A	N/A	O & M

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Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Room 142	Floor Tile	9x9	Blue			Unable to locate/may be under carpet	5	No	No	N/A	N/A	N/A	O & M
Room 144	Floor Tile	9x9	Dark green	300	SF	Under carpet	5	No	No	N/A	N/A	N/A	O & M
Room 202	Duct seam tape	ALL	White	ALL	ALL	Unable to locate	0	No	No	N/A	N/A	N/A	O & M
Room 202	Surfacing	ALL	Brown	1050	SF	Unable to locate	5	Yes	Yes	Center of rm	2 SF	Impact	Verify Repair
Room 222 B	Floor Tile	9x9	Green	150	SF	Under carpet	5	No	No	N/A	N/A	N/A	O & M

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Location	Material	Size	Color	Amount	Unit	Comment	Class	Friable	Damage	Damage Location	Damage Amount	Damage Description	Recommend-ation
Room 223 B	Lab sink	ALL	Gray	10	SF	Good Condition	0	No	No	N/A	N/A	N/A	O & M
Room 226	Fiberboard		Gray	30	SF	Beneath glue dots	0	No	No	N/A	N/A	N/A	O & M
Room 226	Ceiling plaster		White	80	SF	Plaster above suspended ceiling tiles	0	No	No	N/A	N/A	N/A	O & M
Room A,B,C,D - Band Rooms	Floor Tile	ALL	White/ rust			Band room E- blue carpet	5	No	No	N/A	N/A	N/A	O & M
Room113	Floor Tile	9x9	Blue	1732	SF	Unable to locate/may be under carpet	5	No	No	N/A	N/A	N/A	O & M

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Room114	Floor Tile	9x9	Blue			Unable to locate/may be under carpet	5	No	No	N/A	N/A	N/A	O & M
Room215B /215C	Floor Tile	9x9	Brown	200	SF	Under carpet	5	No	No	N/A	N/A	N/A	O & M
Rooms. 204	Surfacing	ALL	Brown			Unable to locate	5	No	No	N/A	N/A	N/A	O & M
Rooms. 206	Surfacing	ALL	Brown			Unable to locate	5	No	No	N/A	N/A	N/A	O & M
Rooms. 224	Surfacing	ALL	Brown			Unable to locate	5	No	No	N/A	N/A	N/A	O & M

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Rooms. 226	Surfacing	ALL	Brown			Unable to locate	5	No	No	N/A	N/A	N/A	O & M
Rooms.200	Surfacing	ALL	Brown	3000	SF	Unable to locate - sampled glue dots in room 200	5	No	No	N/A	N/A	N/A	O & M
Storage for rooms. 223,225	Floor Tile	9x9	Brown	100	SF	Good condition	5	No	No	N/A	N/A	N/A	O & M
Storeroom across from 208	Floor Tile	9x9	Brown	100	SF	Good condition-room by lounge by E213	5	No	No	N/A	N/A	N/A	O & M
Storerooms 225 & 227 (rooms have been combined)	Floor Tile	9x9	Gray	100	SF	Unable to locate/may be under new 12 x 12 tile	5	No	No	N/A	N/A	N/A	O & M

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Throughout school	Mastic on foil wrap duct insulation	ALL	Black	ALL	ALL	Good condition	0	No	No	N/A	N/A	N/A	O & M
Throughout school	Duct mastic	ALL	Green	ALL	ALL	Good Condition	0	No	No	Above drop ceiling	N/A	N/A	O & M
Throughout school	Duct mastic	ALL	White	ALL	ALL	Good Condition	0	No	No	N/A	N/A	N/A	O & M