# AHERA THREE YEAR REINSPECTION




LYLES-CROUCH TRADITIONAL ACADEMY

530 SOUTH SAINT ASAPH STREET
ALEXANDRIA, VIRGINIA 22314

ECS PROJECT NO. 47:11652-E4-14

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

SEPTEMBER 2, 2025

September 2, 2025

Mr. Lee Conroy
Alexandria City Public Schools
1714 North Beauregard Street
Alexandria, Virginia 22311

ECS Project No. 47:11652-E4-14

Reference: AHERA Three Year Reinspection, Lyles-Crouch Traditional Academy, 530 South Saint Asaph Street, Alexandria, Virginia

Dear Mr. Conroy:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the above referenced AHERA Three Year Reinspection performed at Lyles-Crouch Traditional Academy located at 530 South Saint Asaph Street in Alexandria, Virginia.

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

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

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

Sincerely,

ECS Mid-Atlantic, LLC

Adam Truax
Environmental Senior Project Manager
atruax@ecslimited.com

Christopher J. Chapman, CIH
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cchapman@ecslimited.com

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## TABLE OF CONTENTS

PAGE

**1.0 SITE DESCRIPTION . . . . . 1**
**2.0 PURPOSE . . . . . 1**
**3.0 METHODOLOGY . . . . . 1**
3.1 Asbestos Re-Inspection . . . . . 1
**4.0 RESULTS . . . . . 2**
4.1 Asbestos-Containing Materials . . . . . 2
**5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS . . . . . 2**
5.1 Asbestos-Containing Materials . . . . . 3
**6.0 LIMITATIONS . . . . . 3**

## TABLE OF APPENDICES

Appendix I: AHERA ACBM Tables

Appendix II: Floor Plan

Appendix III: Certifications/Licenses

Appendix IV: Previous Reports

## 1.0 SITE DESCRIPTION

The subject property consists of Lyles-Crouch Traditional Academy, a three-story brick school building located at 530 South Saint Asaph Street in Alexandria, Virginia. The school was originally constructed in 1958 and encompasses approximately 80,180 square feet of space. 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 Tile and associated Black Mastic from Rooms 105, 106, 107, 109, 110, 111, 112, 113, 114, and 117; and the hallway adjoining the previously referenced rooms (ECS Project No. 47:1519-P).
- Asbestos-containing Floor Tile and associated Mastic from a stairwell closet (ECS Project No. 47:11652-D).
- Asbestos-containing Floor Tile and associated Mastic from Rooms 115, 116, 117, and associated hallway, stage, and multi-purpose room, as well as, Rooms 200, 201, 202, 204 and associated hallway, 205, 206, 208, 209, 210, 211, 212, 213, 214, 215, and the elevator lobby (ECS Project No. 47:11652-D1).
- Asbestos-containing Floor Tile and associated Mastic from the Kitchen and Cafeteria; along with Pipe Insulation in Room 9 (ECS project No. 47:11652-D3).

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 suspect materials observed during this survey.

## 4.0 RESULTS

The following is a summary of our findings and observations.

### 4.1 Asbestos-Containing Materials

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

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

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

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

## 5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

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

### 5.1 Asbestos-Containing Materials

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

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

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

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

## 6.0 LIMITATIONS

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

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

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

# Appendix I: AHERA ACBM Tables

# Lyles Crouch Elementary School
## ACPS Asbestos Containing Materials Summary

Last updated July 16, 2025

| Material | Location | Friability | Condition | Comments | Last Inspection Date | Recommendation | Semi-Annual Inspection Date | Remarks |
|---|---|---|---|---|---|---|---|---|
| **Materials Reported As Asbestos-Containing Materials on Prior Surveys** | | | | | | | | |
| Black Window Sills | Classrooms | NF | Inact | None | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Fire Doors | Throughout Building | F | Intact | None | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| **Materials Reported as Asbestos-Containing Materials on Prior Surverys That Were Not Observed By ECS on July 16, 2025.** | | | | | | | | |
| Mudded Pipe Fitting | Janitor Closet | F | N/A | Not Observed | 07.16.25 | Add to O & M Plan | | 5% Chrysotile |
| 9" x 9" Brown Floor Tiles (assumed under 12" x 12" existing floor tiles) | Kitchen and Cafeteria | NF | N/A | Abated ECS Project No. 47:11652-D3 | 07.16.25 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |
| 9" x 9" Tan Floor Tile and associated Brown Mastic | Electrical Room on Ground Floor | NF | N/A | Not Observed | 07.16.25 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |
| 9" x 9" Medium Red Floor Tiles (assumed under 12" x 12" existing floor tiles) | Cafeteria and Kitchen on Ground Floor | NF | N/A | Abated ECS Project No. 47:11652-D3 | 07.16.25 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |

# Lyles Crouch Elementary School
## ACPS Asbestos Containing Materials Summary

Last updated July 16, 2025

| Material | Location | Friability | Condition | Comments | Last Inspection Date | Recommendation | Semi-Annual Inspection Date | Remarks |
|---|---|---|---|---|---|---|---|---|
| 9" x 9" Green Floor Tile(assumed under 12" x 12" existing floor tiles) | Throughout Building | NF | N/A | Abated from the majority of the Building (1st and 2nd floors) | 07.16.25 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |
| 9" x 9" Brown Floor Tiles (assumed under 12" x 12" existing floor tiles) | Throughout Building | NF | N/A | Abated from the majority of the Building (1st and 2nd floors) | 07.16.26 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |
| 9" x 9" Green Floor Tiles (assumed under 12" x 12" existing floor tiles) | Health Center (reported as Nurses area) | NF | N/A | Abated from the majority of the Building (1st and 2nd floors) | 07.16.25 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |
| 9" x 9" Red Floor Tiles (assumed under 12" x 12" existing floor tiles) | Cafeteria and Kitchen on Ground Floor | NF | N/A | Abated ECS Project No. 47:11652-D3 | 07.16.26 | Maintain in O & M Plan | | Assumed to be concealed beaneath newer flooring materials or in inaccessable areas |

Lyles Crouch Elementary School
ACPS Asbestos Containing Materials Summary

Last updated July 16, 2025

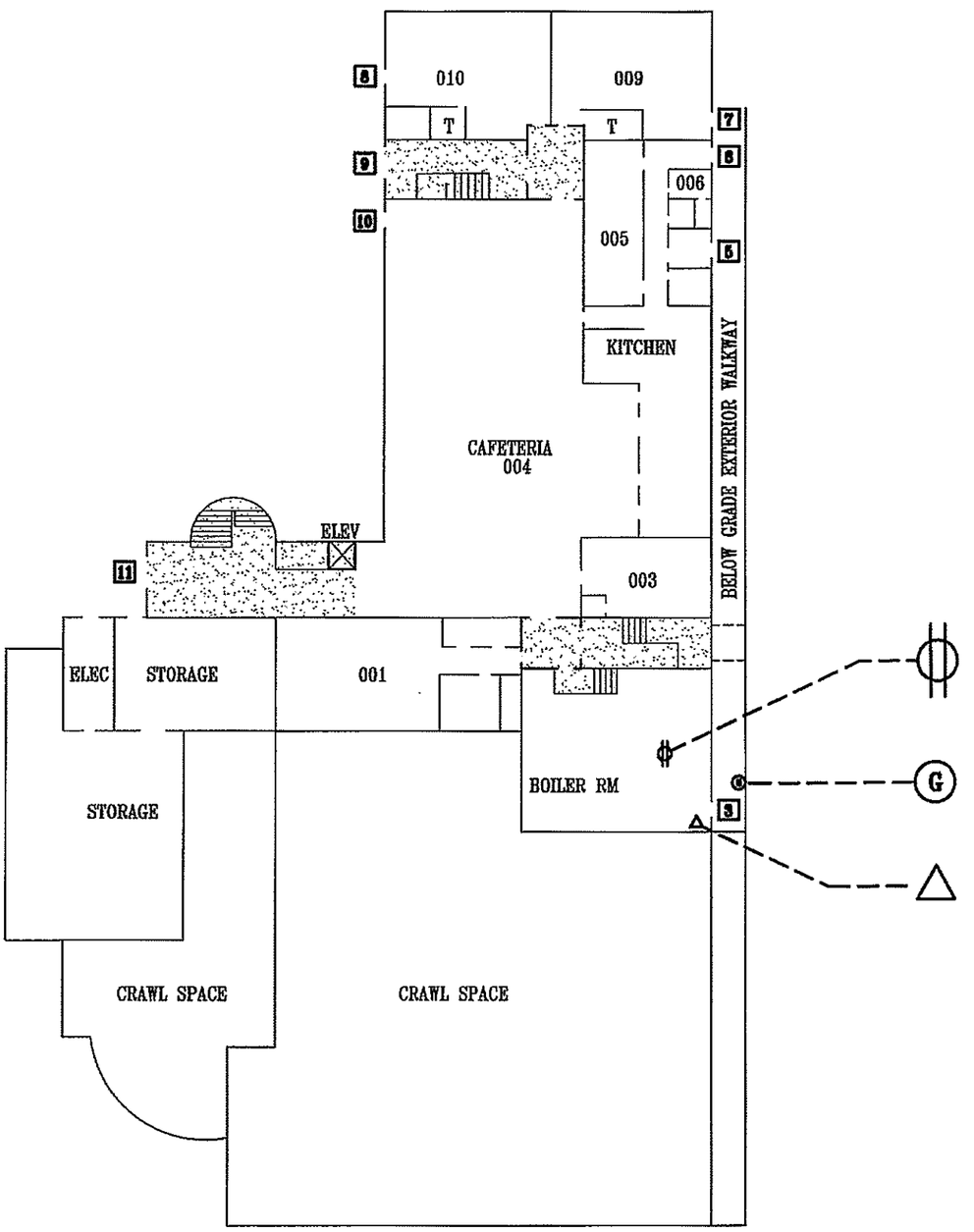
| Material | Location | Friability | Condition | Comments | Last Inspection Date | Recommendation | Semi-Annual Inspection Date | Remarks |
|---|---|---|---|---|---|---|---|---|
| **Materials Assumed To Contain Asbestos** | | | | | | | | |
| Hardwood Floor Underlayment and assoicated Mastic | Multipurpose Room 101 and on 1st Floor | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Boards above Windows | Classrooms | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Boards and associated Mastic | Hallways | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Incentor Door Insulation | Boiler Room on Ground Floor | F | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Fire Rated Window Frame Insulation | Ramp from Room 105 to Main Office, 1st Floor Hallway | F | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Pipe Flange Gaskets | Throughout Building | Unknown | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Electrical Panels: Transite Components | Mechanical Room | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |

# Lyles Crouch Elementary School
## ACPS Asbestos Containing Materials Summary

Last updated July 16, 2025

| Material | Location | Friability | Condition | Comments | Last Inspection Date | Recommendation | Semi-Annual Inspection Date | Remarks |
|---|---|---|---|---|---|---|---|---|
| Thermal Sysm Insulation | Thoughout Building, Behind Solid Walls and Ceiling | F | N/A | Not Observed | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Mirror Mastic | Bathrooms | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Chalkboards and associated Mastic | Classrooms | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Interior Pipe Wrap associated with Water Fountain and Radiators | Throughout Building | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Waterproofing Membranes/ Mastic | Behind Interior Finishes, Exterior Veneer and/or Subgrade Walls, and Under Ceramic Flooring | NF | Intact | PACM until Tested | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| Asphalet-Based Roofing Material and Caulks/Sealants | Roof | NF | N/A | Not Observed | 07.16.25 | Maintain in O & M Plan | | Sample if proposed to be disturbed |

# Appendix II: Floor Plan



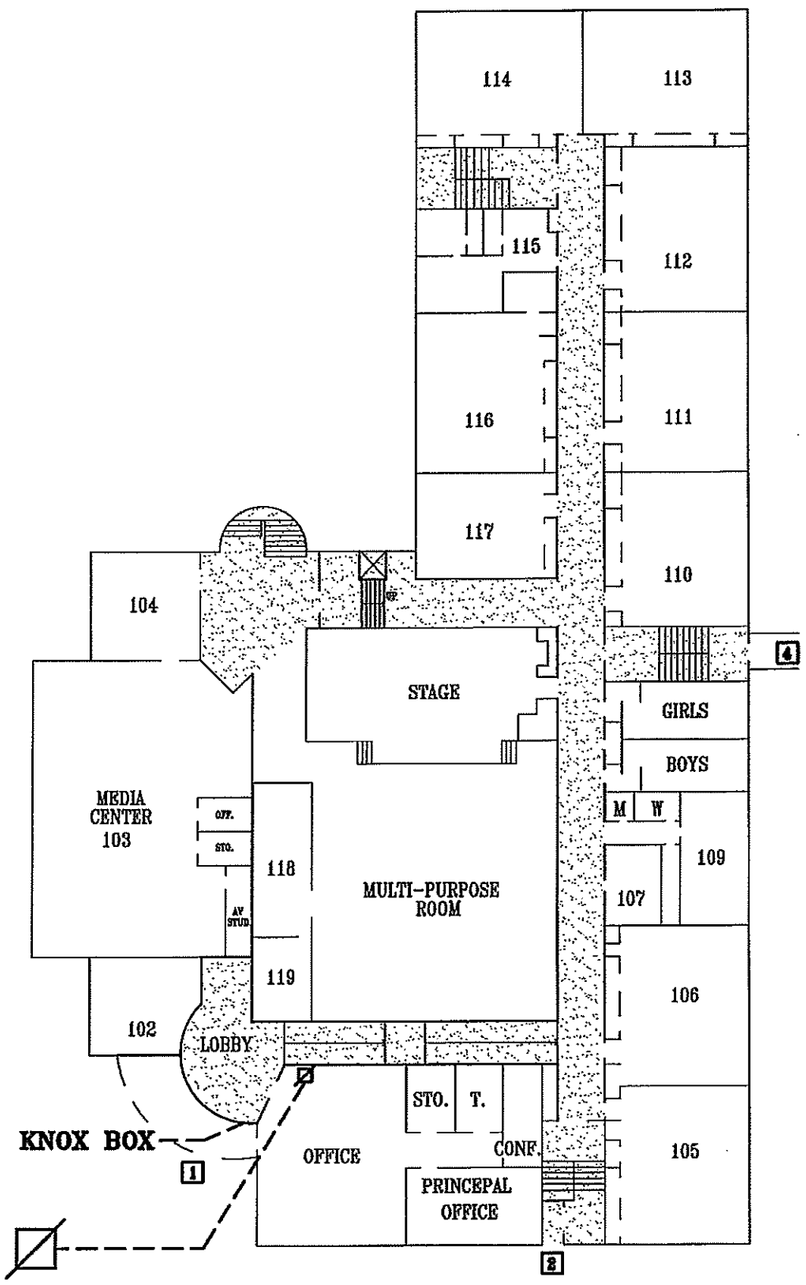

Superceded

FIRE ANNUNCIATOR PANEL  ELECTRIC SHUT OFF  WATER SHUT OFF  GAS SHUT OFF

**LYLES-CROUCH ELEMENTARY SCHOOL**
530 S. Saint Asaph Street
Alexandria, Va 22314
(T) 703-706-4430 (F) 703-684-0252

**GROUND FLOOR PLAN**

**Alexandria City Public Schools**
2000 North Beauregard Street
Alexandria, Va 22311
(T) 703-824-6600
(TDD) 703-824-6666
(EMER.) 703-866-5300




Supersedes

FIRE ANNUNCIATOR PANEL  ELECTRIC SHUT OFF  WATER SHUT OFF  GAS SHUT OFF

**LYLES-CROUCH ELEMENTARY SCHOOL**

530 S. Saint Asaph Street
Alexandria, Va 22314

(T) 703-706-4430 (F) 703-684-0252

**1ST FLOOR PLAN**

**Alexandria City Public Schools**

2000 North Beauregard Street
Alexandria, Va 22311
(T) 703-824-6600
(TDD) 703-824-6666
(EMER.) 703-866-5300

Sandy Gayler

**Alexandria City Public Schools**
2000 North Beauregard Street
Alexandria, Va 22311
(T) 703-824-6600
(TDD) 703-824-6666
(EMER.) 703-866-5300

**2nd FLOOR PLAN**

**LYLES-CROUCH ELEMENTARY SCHOOL**
530 S. Saint Asaph Street
Alexandria, Va 22314
(T) 703-706-4490 (F) 703-684-0252

# Appendix III: Certifications/ Licenses

# DPOR License Lookup License Number 3303005057

## License Details

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

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

# DPOR License Lookup License Number 3304001722

## License Details

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

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

# Appendix IV: Previous Reports

# AHERA ASBESTOS-CONTAINING MATERIALS SURVEY




LYLES-CROUCH TRADITIONAL ACADEMY

530 SOUTH STREET ASAPH STREET
ALEXANDRIA, VIRGINIA 22314

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, Lyles-Crouch Traditional Academy, 530 South Street Asaph Street, Alexandria, Virginia

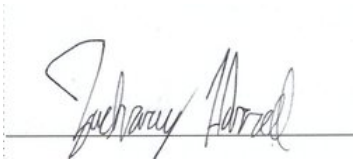
Dear Mr. Contreras:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the above referenced AHERA Asbestos-Containing Materials Survey performed at Lyles-Crouch Traditional Academy located at 530 South Street Asaph Street in Alexandria, Virginia. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:16069-EP and the terms and conditions of the agreement authorizing those services.

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

Sincerely,

ECS Mid-Atlantic, LLC



Zach Harrell
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571-220-9941

**EXECUTIVE SUMMARY**

The subject property is improved with a 80,180 square foot, school building reportedly originally constructed in 1958.

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 the Asbestos Hazard Emergency Response Act (AHERA) management plan.

Based on the laboratory analysis of the bulk samples collected during the survey, the none of materials were reported to contain asbestos.

Based on a review of historical documentation the following materials were previously identified as asbestos-containing and have not been abated.

- 9" x 9" Vinyl Floor Tiles may be concealed in other areas of the school that were not included in previous abatements or renovations, notably, the cafeteria.
- Fire Door Insulation throughout the building
- Black Window Sills present in the kitchen, and throughout classrooms.
- Roofing Components
- Vibration Cloth present in Room 007. Materia may be present throughout the system in other concealed areas.

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

- Upon reviewing historical documentation, ACM floor tile abatements have taken place in, a stairwell closet (reference ECS Project No. 47:11652-D), Rooms 105, 106, 107, 109, 110, 111, 112, 113, 114, and 117; and the hallway adjoining the previously referenced rooms (ECS Project No. 47:1519-P), and Rooms 115, 116, 117, and associated hallway, stage, and multi-purpose room, as well as, Rooms 200, 201, 202, 204 and associated hallway, 205, 206, 208,209, 210, 211, 212, 213, 214, 215, and elevator lobby (ECS Project No. 47:11652-D1).

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

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.

## TABLE OF CONTENTS

**PAGE**


**1.0 SITE DESCRIPTION ..... 1**

**2.0 PURPOSE ..... 1**

**3.0 METHODOLOGY ..... 1**

3.1 Asbestos-Containing Materials ..... 1

**4.0 RESULTS ..... 2**

4.1 Asbestos-Containing Materials ..... 2

4.2 Suspect or Assumed Asbestos-Containing Materials ..... 8

**5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS ..... 9**

5.1 Asbestos-Containing Materials ..... 9

**6.0 LIMITATIONS ..... 10**

## TABLE OF APPENDICES

Appendix I: Figures

Appendix II: Site Photographs

Appendix III: Asbestos Bulk Sample Results

Appendix IV: Laboratory Report(s)

Appendix V: Certifications/Licenses

Appendix VI: AHERA ACBM and Suspect ACBM Categories Document

Appendix VII: Previous Reports

## 1.0 SITE DESCRIPTION

The subject property consists of Lyles-Crouch Traditional Academy, a three-story brick school building located at 530 South Asaph Street in Alexandria, Virginia. The school was originally constructed in 1958 and encompasses approximately 80,180 square feet. 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 an AHERA management plan.

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/non-invasive asbestos survey was performed by asbestos inspectors who have received EPA accredited training and is licensed by the Commonwealth of Virginia. Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to Scientific Analytical Institute, Inc. (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, 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. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

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

## 4.0 RESULTS

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

### 4.1 Asbestos-Containing Materials

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

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

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

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

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

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

Scientific Analytical Institute, Inc. (SAI) submitted a signed final laboratory report to ECS on December 3, 2021. 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, 43 bulk samples from homogeneous areas were submitted to the laboratory of which 59 layers were analyzed.

**Summary of Previously Identified Asbestos-Containing Materials**

| Location | Material Description | Analytical Results | EPA Category | AHERA Category | Abatement History |
|---|---|---|---|---|---|
| Electrical Room | 9" x 9" Tan Floor Tile and Associated Brown Mastic | Floor Tile – 5% Chrysotile Mastic – NAD | Category I Non-Friable | Not Applicable | Not Observed Abated from Majority of the Building/Assumed to be concealed beneath wall mount HVAC Units, partition walls, etc. |
| Cafeteria and Kitchen on Ground Floor (Assumed under 12" x 12" Existing Floor Tiles in other Areas) | 9" x 9" Medium Red Floor Tiles (Assumed under 12" x 12" Various Colors Floor Tiles) | Unknown | Category I Non-Friable | Not Applicable | None |

| Location | Material Description | Analytical Results | EPA Category | AHERA Category | Abatement History |
|---|---|---|---|---|---|
| Throughout the Building | 9" x 9" Green Floor Tiles (Assumed under 12" x 12" Existing Floor Tiles | Unknown | Category I Non-Friable | Not Applicable | Not Observed Abated from Majority of the Building (1st and 2nd Floors)/Assumed to be concealed beneath wall mount HVAC Units, partition walls, etc. |
| Throughout the Building | 9" x 9" Light Brown Floor Tiles (Assumed under 12" x 12" Existing Floor Tiles) | Unknown | Category I Non-Friable | Not Applicable | Not Observed Abated from Majority of the Building (1st and 2nd Floors)/Assumed to be concealed beneath wall mount HVAC Units, partition walls, etc. |
| Health Center (Reported as Nurses Area) | 9" x 9" Medium Green Floor Tiles (Assumed under 12" x 12" Existing Floor Tiles) | Unknown | Category I Non-Friable | Not Applicable | Not Observed Abated from Majority of the Building (1st and 2nd Floors)/Assumed to be concealed beneath wall mount HVAC Units, partition walls, etc. |

| Location | Material Description | Analytical Results | EPA Category | AHERA Category | Abatement History |
|---|---|---|---|---|---|
| Cafeteria and Kitchen on Ground Floor (Assumed under 12" x 12" Existing Floor Tiles in other Areas) | 9" x 9" Red Floor Tiles (Assumed under 12" x 12" Various Colors Floor Tiles) | Unknown | Category I Non-Friable | Not Applicable | None |
| Classrooms | Black Window Sill | Unknown | Category II Non-Friable | Not Applicable | Observed in Kitchen |
| Throughout the Building | Fire Door Insulation | Unknown | Friable | (5) ACBM with potential for damage. | Observed throughout |

**Notes:**
**1. Upon review of historical documentation, ACM floor tile abatements have taken place in a stairwell closet (ECS Project No. 47:11652-D), Rooms 105, 106, 107, 109, 110, 111, 112, 113, 114, and 117; and the hallway adjoining the previously referenced rooms (ECS Project No. 47:1519-P), and Rooms 115, 116, 117, and associated hallway, stage, and multi-purpose room, as well as, Rooms 200, 201, 202, 204 and associated hallway, 205, 206, 208,209, 210, 211, 212, 213, 214, 215, and elevator lobby (ECS Project No. 47:11652-D1).**
**2. New installed 12" x 12" Vinyl Floor Tile may be concealing old floor tile in parts throughout the building, notably, the Cafeteria area.**

**Summary of Non Asbestos-Containing Materials Identified**

| Location | Material Description | Analytical Results |
|---|---|---|
| **Materials Sampled in 2021 AHERA Survey** | | |
| Mechanical Room by Elevator and Cafeteria | 12" x 12" White with Blue Streak Floor Tile and associated Brown Mastic | Both NAD |
| Mechanical Room by Elevator and Cafeteria | 4" Blue Cove Base and associated Mastic | Both NAD |

| Location | Material Description | Analytical Results |
|---|---|---|
| 001 Art Room | White Interior Window Caulk | NAD |
| Foyer by Exit door 4 and Stairwell | 18" x 10" Gray Self-Stick Floor Tile | NAD |
| Foyer by Exit door 4 and Stairwell | 6" Light Gray Cove Base and associated Yellow Mastic | Both NAD |
| Foyer by Exit door 4 and Stairwell | Green Vinyl Stair Tread and associated Yellow Mastic | Both NAD |
| 003 Lounge- Teachers Work Room | 6" Blue Cove Base and associated Cream Mastic | Both NAD |
| 004 Cafeteria | 12" x 12" Blue with Blue Streak Floor Tile and associated Mastic | Both NAD |
| 005 Kitchen | Gray Interior Window Caulk | NAD |
| Custodial Closet next to 008 | 9"x 9" White Smooth Finish Ceiling Tile (aged yellow/ brown) | NAD |
| Custodial Closet next to 008 | Fibrous Pipe Insulation and associated Metallic Paper Wrap (damaged) | Both NAD |
| 007 Storage | Fibrous Pipe Insulation and associated Paper Wrap (damaged) | Both NAD |
| Hallway outside 007 and 008 | 2' x 2' Smooth Finish White Ceiling Tile | NAD |
| 005 Kitchen | 2' x 4' Smooth Finish White Ceiling Tile | NAD |
| Entrance to 101A Stage from 100 Hallway | 2' x 2' Light Gray Self-Stick Floor Tile (throughout hallways) | NAD |
| 101A Stage | 4" Black Cove Base and associated Mastic | Both NAD |
| 103 Library | 18" x 10" Dark Blue Self-Stick Floor Tile (throughout classrooms) | NAD |

| Location | Material Description | Analytical Results |
|---|---|---|
| Main Office Bathroom | 6" Brown Cove Base and associated Mastic | Both NAD |
| Main Office Bathroom | 24" x 12" Peach Stone-Pattern Self-Stick Floor Tile | NAD |
| 100 Main Office | Dark Gray Interior Door Caulk | NAD |
| 2nd Floor Elevator Lobby, the Stairwell Landing between 212 and 213, and the Stairwell Landing between 201 and 204 | Gray Concrete Masonry Unit (CMU) Block Filler | NAD |
| **Previously Sampled Materials** | | |
| Elevator Foyer at Stairs to Exit Door 11 | 2' x 2' White Textured Ceiling Tile | NAD |
| Exit Door 11 | Gray Stair Tread and associated Yellow Mastic | NAD |
| Stairs at Exit Door 1, Kitchen, & Classroom 211 | Light Gray Interior Window Caulk | NAD |
| Elevator Foyer at Stairs to Exit Door 11 | Blue Cove Base and associated Yellow Mastic | NAD |
| Storage Room Outside Exit Door 11 | Gray Mastic on Metal Duct | NAD |
| Teacher Lounge Room on Ground Floor | Gray Sink Undercoat | NAD |
| Kitchen | Plaster Wall | NAD |
| Custodial Closet in Kitchen | White Wrap on Fiberglass Pipe Insulation | NAD |
| Exit Door 4 | Black Stair Tread | NAD |
| Classroom 105 | Beige Mastic on Fiberglass Duct Insulation | NAD |
| Electrical Room | 2' x 4' White Fissured Ceiling Tile | NAD |
| Cafeteria, Hallway on 1st Floor at Classroom 105, & Classroom 202 (NRT Office) | Drywall | NAD |
| Cafeteria, Hallway on 1st Floor at Classroom 105, & Classroom 202 (NRT Office) | Joint Compound | NAD |

| Location | Material Description | Analytical Results |
|---|---|---|
| **Notes:**<br>**NAD = No Asbestos Detected**<br>**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.**<br>**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:

- **Elevator Components**
- **Vibration Dampeners** associated with the HVAC Units.
- **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/ chalk boards.
- **Water Fountain Components** in water fountains (mastics, pipe cloth, etc).
- **Waterproofing Membrane/Mastics/Vapor Barriers/Sub-grade Pipe Conduit** within exterior wall cavities, behind interior finishes, exterior veneer and/or subgrade walls.
- **Thermal System Insulation (TSI)** on pipes within chases behind solid walls, within the inaccessible regions of crawl spaces, above the visible ductwork, or below subgrade.
- **Pipe Flange Gaskets** in heating and plumbing systems.
- **Air Handler Components** in the air handlers (interior components).
- **Freezer Components** and insulation.
- **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.
- **Gym floors**
- **Light shields**
- **Locker caulking**

## 5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

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

### 5.1 Asbestos-Containing Materials

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

If the identified ACMs are scheduled to be disturbed in the future, it is recommended that this work be performed by a Commonwealth of Virginia licensed asbestos abatement contractor.

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

Suspect ACMs not observed due to inaccessibility or not sampled due to the destructive means that sampling would require may also be encountered during construction activities. At the time of the survey, only limited destructive means were used to locate or sample suspect ACMs; therefore, additional suspect ACMs may remain within inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, exterior areas, sub-grade sealants, flooring located below underlayments, vapor barriers, pipe trenches and other subsurface utilities, etc. If additional suspect ACMs are uncovered which were not accessible during this survey, it is

recommended that these materials either be assumed to contain asbestos or be sampled prior to disturbance upon discovery for asbestos content by an asbestos inspector in accordance with 29 CFR 1926.1101.

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

## 6.0 LIMITATIONS

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

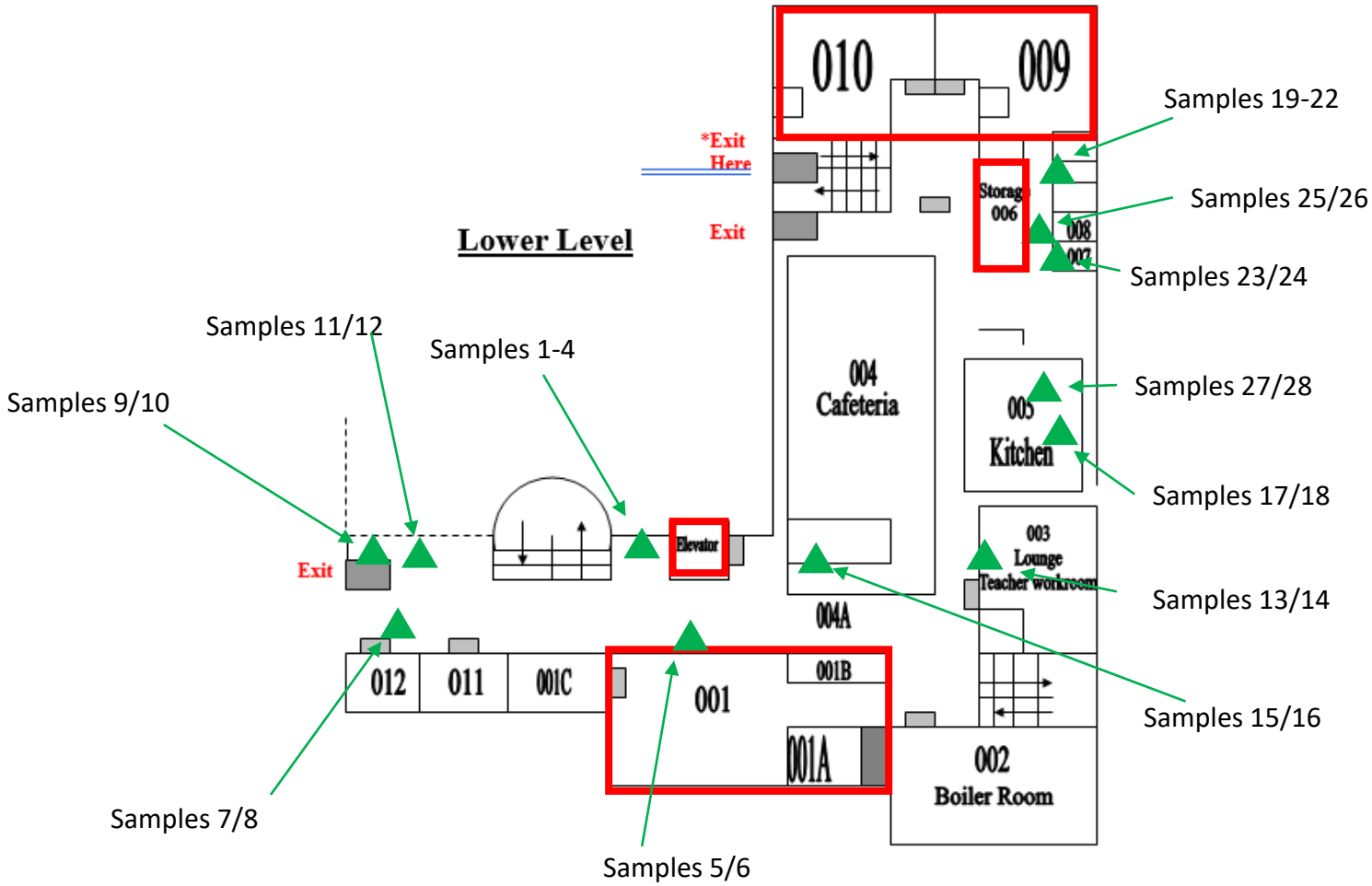
During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling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

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

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

# Appendix I: Figures

# Lyles-Crouch Traditional Academy Map




▲ Sample Areas

□ Inaccessible Areas (during survey)

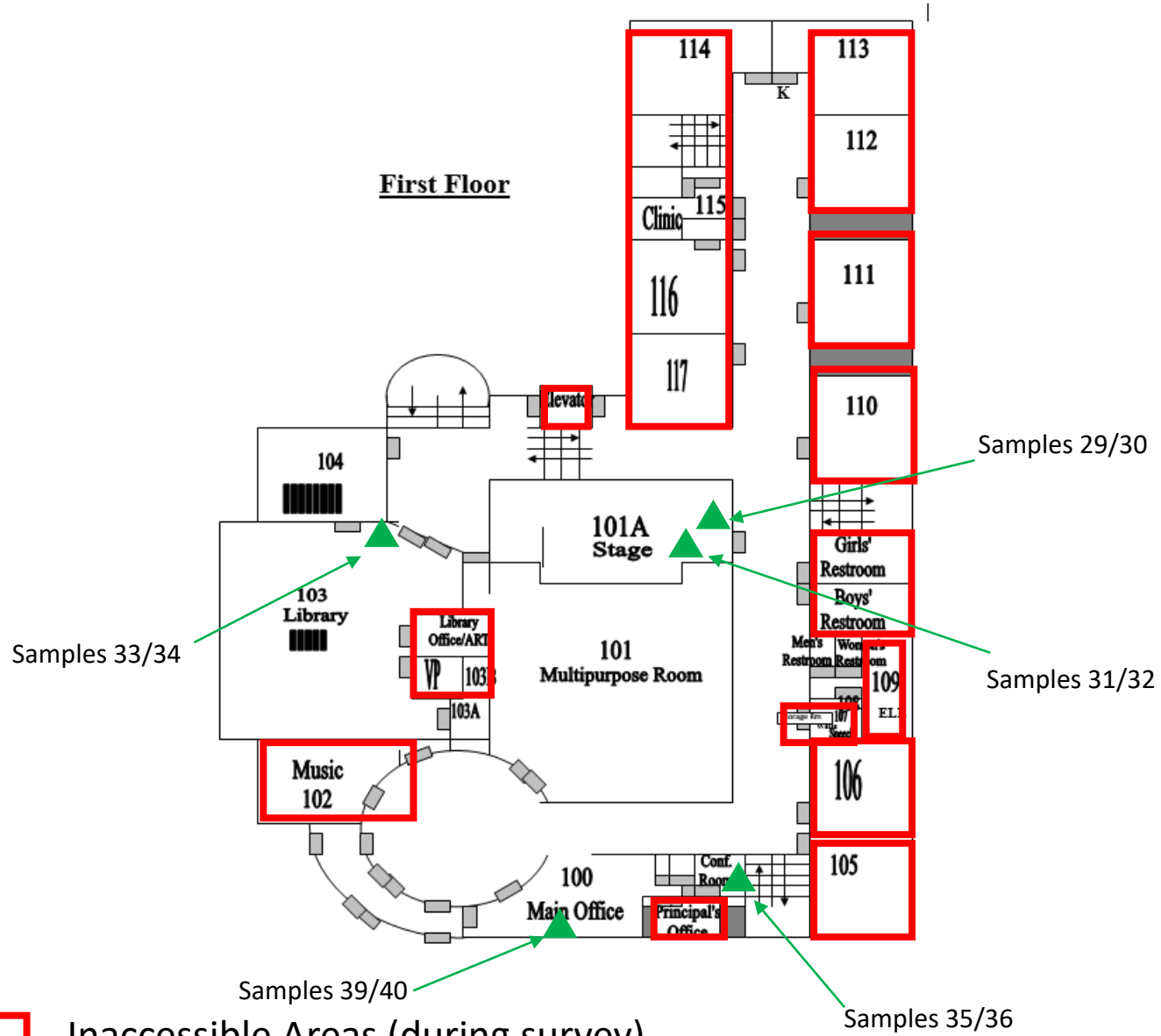
Lyles-Crouch Traditional Academy
530 S Asaph Street,
Alexandria, Virginia, 22314

Sample Location Sketch
Lower Level

Scale: NTS

Project No.
11652-E2

Site Visit:
11/15-16/21




▲ Sample Areas

□ Inaccessible Areas (during survey)

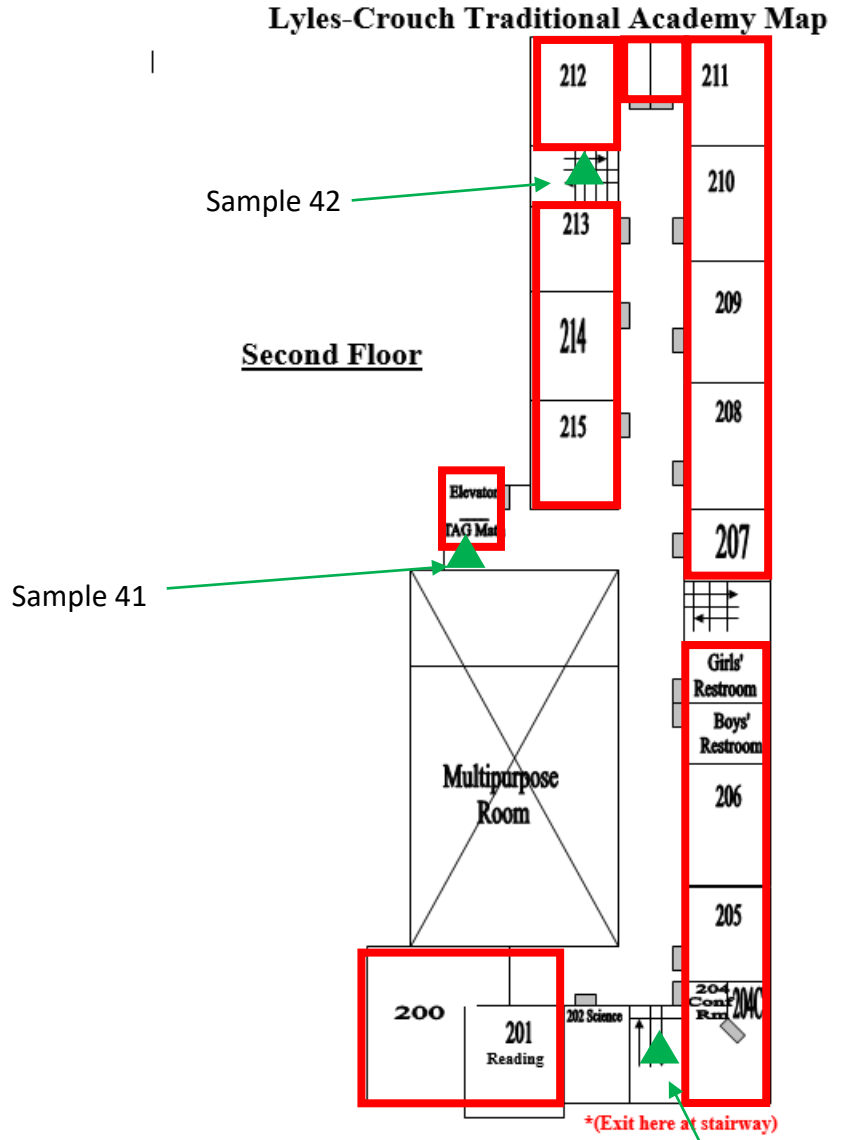
Lyles-Crouch Traditional Academy
530 S Asaph Street,
Alexandria, Virginia, 22314

Sample Location Sketch
First Floor

Scale: NTS

Project No.
11652-E2

Site Visit:
11/15-16/21




▲ Sample Areas

□ Inaccessible Areas (during survey)

Lyles-Crouch Traditional Academy
530 S Asaph Street,
Alexandria, Virginia, 22314

Sample Location Sketch
Second Floor

Scale: NTS

Project No.
11652-E2

Site Visit:
11/15-16/21

# Appendix II: Site Photographs



1 - View of 005 Kitchen 2




2 - View of 008 Custodial Closet




3 - View of 100 Main Office



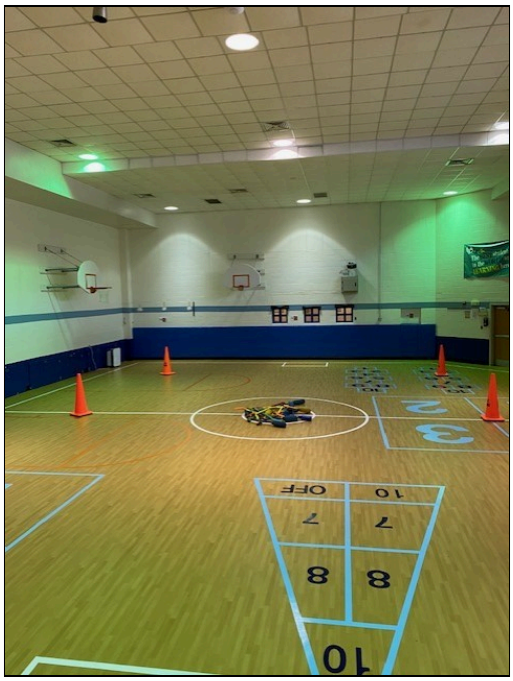
4 - View of 101A Stage




5 - View of 101A Stage Curtain Tag 1



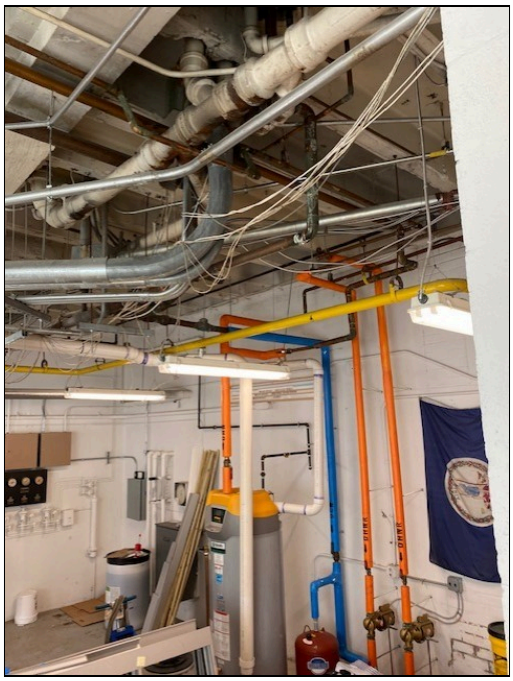

6 - View of 101A Stage Curtain Tag 2




7 - View of 101 Multi-purpose Room



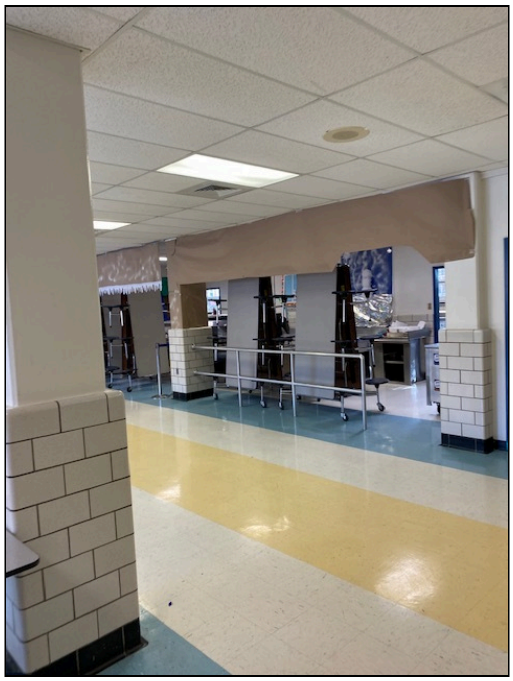
8 - View of 103 Library



9 - View of Boiler Room



10 - View of Cafeteria



11 - View of Cafeteria Floor tile



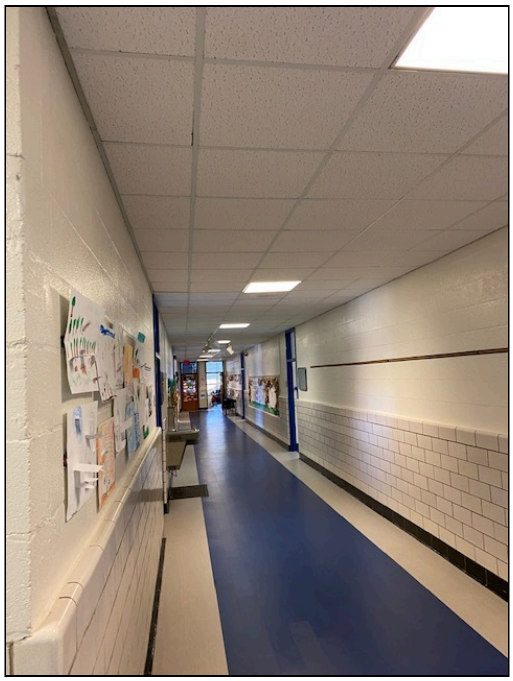
12 - View of Duct And Roof Hatch



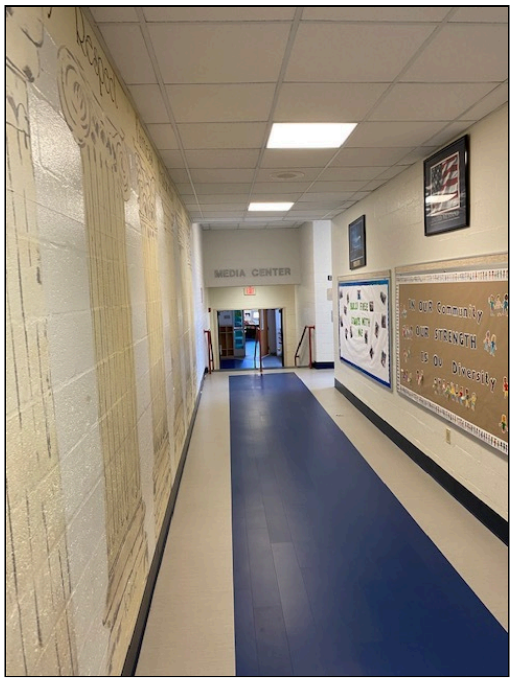
13 - View of Duct In Custodial Closet



14 - View of Entrance to Cafeteria from Exit Door 8



15 - View of First Floor Hallway




16 - View of Hallway to 103 Library



17 - View of Roof Access



18 - View of Roof Access 2

# Appendix III: Asbestos Bulk Sample Results

## SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

| Sample # | Sampling Location | Material/Description | Analytical Results |
|---|---|---|---|
| 1-A | cal Room by Elevator and C | 2" White with Blue Streak Floor Tile and associated Brown Mas | NAD |
| 1-B | cal Room by Elevator and C | ' White with Blue Streak Floor Tile and associated Brown Mastic | NAD |
| 2-A | cal Room by Elevator and C | 2" White with Blue Streak Floor Tile and associated Brown Mas | NAD |
| 2-B | cal Room by Elevator and C | ' White with Blue Streak Floor Tile and associated Brown Mastic | NAD |
| 3-A | cal Room by Elevator and C | 4" Blue Cove Base and associated Mastic- Cove Base | NAD |
| 3-B | cal Room by Elevator and C | 4" Blue Cove Base and associated Mastic- Mastic | NAD |
| 4-A | cal Room by Elevator and C | 4" Blue Cove Base and associated Mastic- Cove Base | NAD |
| 4-B | cal Room by Elevator and C | 4" Blue Cove Base and associated Mastic- Mastic | NAD |
| 5 | 001 Art Room | White Interior Window Caulk | NAD |
| 6 | 001 Art Room | White Interior Window Caulk | NAD |
| 7 | Foyer by Exit Door 4 and Stairwell | 18" x 10" Gray Self-Stick Floor Tile | NAD |
| 8 | Foyer by Exit Door 4 and Stairwell | 18" x 10" Gray Self-Stick Floor Tile | NAD |
| 9-A | Foyer by Exit Door 4 and Stairwell | Light Gray Cove Base and associated Yellow Mastic- Cove Ba | NAD |
| 9-B | Foyer by Exit Door 4 and Stairwell | 6" Light Gray Cove Base and associated Yellow Mastic-Mastic | NAD |
| 10-A | Foyer by Exit Door 4 and Stairwell | Light Gray Cove Base and associated Yellow Mastic- Cove Ba | NAD |
| 10-B | Foyer by Exit Door 4 and Stairwell | 6" Light Gray Cove Base and associated Yellow Mastic-Mastic | NAD |
| 11-A | Foyer by Exit Door 4 and Stairwell | Green Vinyl Stair Tread and associated Yellow Mastic- Tread | NAD |
| 11-B | Foyer by Exit Door 4 and Stairwell | Green Vinyl Stair Tread and associated Yellow Mastic- Mastic | NAD |
| 12-A | Foyer by Exit Door 4 and Stairwell | Green Vinyl Stair Tread and associated Yellow Mastic- Tread | NAD |
| 12-B | Foyer by Exit Door 4 and Stairwell | Green Vinyl Stair Tread and associated Yellow Mastic- Mastic | NAD |
| 13-A | Lounge- Teachers Work R | 6" Blue Cove Base and associated Cream Mastic- Cove Base | NAD |
| 13-B | Lounge- Teachers Work R | 6" Blue Cove Base and associated Cream Mastic- Mastic | NAD |
| 14-A | Lounge- Teachers Work R | 6" Blue Cove Base and associated Cream Mastic- Cove Base | NAD |
| 14-B | Lounge- Teachers Work R | 6" Blue Cove Base and associated Cream Mastic- Mastic | NAD |
| 15-A | 004 Cafeteria | ' x 12" Blue with Blue Streak Floor Tile and associated Mastic- T | NAD |
| 15-B | 004 Cafeteria | x 12" Blue with Blue Streak Floor Tile and associated Mastic- M | NAD |
| 16-A | 004 Cafeteria | ' x 12" Blue with Blue Streak Floor Tile and associated Mastic- T | NAD |
| 16-B | 004 Cafeteria | x 12" Blue with Blue Streak Floor Tile and associated Mastic- M | NAD |

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

## SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLING RESULTS

| Sample # | Sampling Location | Material/Description | Analytical Results |
|---|---|---|---|
| 17 | 005 Kitchen | Gray Interior Window Caulk | NAD |
| 18 | 005 Kitchen | Gray Interior Window Caulk | NAD |
| 19 | Custodial Closet next to 008 | 9"x 9" White Smooth Finish Ceiling Tile (aged yellow/brown) | NAD |
| 20 | Custodial Closet next to 008 | 9"x 9" White Smooth Finish Ceiling Tile (aged yellow/brown) | NAD |
| 21 | Custodial Closet next to 008 | ous Pipe Insulation and associated Metallic Paper Wrap (dama | NAD |
| 22 | Custodial Closet next to 008 | ous Pipe Insulation and associated Metallic Paper Wrap (dama | NAD |
| 23 | 007 Storage | Fibrous Pipe Insulation and associated Paper Wrap (damaged) | NAD |
| 24 | 007 Storage | Fibrous Pipe Insulation and associated Paper Wrap (damaged) | NAD |
| 25 | Hallway outside 007 and 008 | 2' x 2' Smooth Finish White Ceiling Tile | NAD |
| 26 | Hallway outside 007 and 008 | 2' x 2' Smooth Finish White Ceiling Tile | NAD |
| 27 | Hallway outside 007 and 008 | 2' x 4' Smooth Finish White Ceiling Tile | NAD |
| 28 | Hallway outside 007 and 008 | 2' x 4' Smooth Finish White Ceiling Tile | NAD |
| 29 | 005 Kitchen | 2' x 2' Light Gray Self-Stick Floor Tile (throughout hallways) | NAD |
| 30 | 005 Kitchen | 2' x 2' Light Gray Self-Stick Floor Tile (throughout hallways) | NAD |
| 31-A | 101A Stage | 4" Black Cove Base and associated Mastic- Cove Base | NAD |
| 31-B | 101A Stage | 4" Black Cove Base and associated Mastic- Mastic | NAD |
| 32-A | 101A Stage | 4" Black Cove Base and associated Mastic- Cove Base | NAD |
| 32-B | 101A Stage | 4" Black Cove Base and associated Mastic- Mastic | NAD |
| 33 | 103 Library | 8" x 10" Dark Blue Self-Stick Floor Tile (throughout classrooms | NAD |
| 34 | 103 Library | 8" x 10" Dark Blue Self-Stick Floor Tile (throughout classrooms | NAD |
| 35-A | Main Office Bathroom | 6" Brown Cove Base and associated Mastic- Cove Base | NAD |
| 35-B | Main Office Bathroom | 6" Brown Cove Base and associated Mastic-Mastic | NAD |
| 36-A | Main Office Bathroom | 6" Brown Cove Base and associated Mastic- Cove Base | NAD |
| 36-B | Main Office Bathroom | 6" Brown Cove Base and associated Mastic-Mastic | NAD |
| 37 | Main Office Bathroom | 24" x 12" Peach Stone-Pattern Self-Stick Floor Tile | NAD |
| 38 | Main Office Bathroom | 24" x 12" Peach Stone-Pattern Self-Stick Floor Tile | NAD |
| 39 | 100 Main Office | Dark Gray Interior Door Caulk | NAD |
| 40 | 100 Main Office | Dark Gray Interior Door Caulk | NAD |
| 41 | 2nd Floor Elevator Lobby Stairwell Landing between 212 and 213 | Gray Concrete Masonry Unit (CMU) Block Filler | NAD |
| 42 | | Gray Concrete Masonry Unit (CMU) Block Filler | NAD |
| 43 | Stairwell Landing between 201 and 204 | Gray Concrete Masonry Unit (CMU) Block Filler | 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:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 1 - A | 12"x12" white with blue streak floor tile and associated brown mastic | None Detected | | 100% Other | White<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_1* | *tile* | | | | Dissolved |
| 1 - B | 12"x12" white with blue streak floor tile and associated brown mastic | None Detected | | 100% Other | Brown<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_44* | *mastic* | | | | Dissolved |
| 2 - A | 12"x12" white with blue streak floor tile and associated brown mastic | None Detected | | 100% Other | White<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_2* | *tile* | | | | Dissolved |
| 2 - B | 12"x12" white with blue streak floor tile and associated brown mastic | None Detected | | 100% Other | Brown<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_45* | *mastic* | | | | Dissolved |
| 3 - A | 4" blue cove base and associated mastic | None Detected | | 100% Other | Blue<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_3* | *cove base* | | | | Dissolved |
| 3 - B | 4" blue cove base and associated mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_46* | *mastic* | | | | Dissolved |
| 4 - A | 4" blue cove base and associated mastic | None Detected | | 100% Other | Blue<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_4* | *cove base* | | | | Dissolved |
| 4 - B | 4" blue cove base and associated mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_47* | *mastic* | | | | Dissolved |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

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

NVLAP TESTING NVLAP LAB CODE 200664-0

AIHA ACCREDITED LABS.ORG Lab ID # 173190

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 5 | White interior window caulk | None Detected | | 100% Other | White<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_5* | | | | | Dissolved |
| 6 | White interior window caulk | None Detected | | 100% Other | White<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_6* | | | | | Dissolved |
| 7 | 18"x10" Gray self-stick floor tile | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_7* | | | | | Dissolved |
| 8 | 18"x10" Gray self-stick floor tile | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_8* | | | | | Dissolved |
| 9 - A | 6" light gray cove base and associated yellow mastic | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_9* | *cove base* | | | | Dissolved |
| 9 - B | 6" light gray cove base and associated yellow mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_48* | *mastic* | | | | Dissolved |
| 10 - A | 6" light gray cove base and associated yellow mastic | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_10* | *cove base* | | | | Dissolved |
| 10 - B | 6" light gray cove base and associated yellow mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_49* | *mastic* | | | | Dissolved |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

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

NVLAP TESTING NVLAP LAB CODE 200664-0

AIHA ACCREDITED LABS.ORG Lab ID # 173190

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 11 - A | Green vinyl stair tread and associated yellow mastic | None Detected | | 100% Other | Green<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_11* | *stair tread* | | | | Dissolved |
| 11 - B | Green vinyl stair tread and associated yellow mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_50* | *mastic* | | | | Dissolved |
| 12 - A | Green vinyl stair tread and associated yellow mastic | None Detected | | 100% Other | Green<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_12* | *stair tread* | | | | Dissolved |
| 12 - B | Green vinyl stair tread and associated yellow mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_51* | *mastic* | | | | Dissolved |
| 13 - A | 6" blue cove base and associated cream mastic | None Detected | | 100% Other | Blue<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_13* | *cove base* | | | | Dissolved |
| 13 - B | 6" blue cove base and associated cream mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_52* | *mastic* | | | | Dissolved |
| 14 - A | 6" blue cove base and associated cream mastic | None Detected | | 100% Other | Blue<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_14* | *cove base* | | | | Dissolved |
| 14 - B | 6" blue cove base and associated cream mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_53* | *mastic* | | | | Dissolved |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

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

NVLAP TESTING NVLAP LAB CODE 200664-0

Lab ID # 173190

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 15 - A<br>*71979749PLM_15* | 12"x12" blue with blue streak floor tile and associated mastic<br>*tile* | **None Detected** | | **100% Other** | Blue<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 15 - B<br>*71979749PLM_54* | 12"x12" blue with blue streak floor tile and associated mastic<br>*mastic* | **None Detected** | | **100% Other** | Yellow<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 16 - A<br>*71979749PLM_16* | 12"x12" blue with blue streak floor tile and associated mastic<br>*tile* | **None Detected** | | **100% Other** | Blue<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 16 - B<br>*71979749PLM_55* | 12"x12" blue with blue streak floor tile and associated mastic<br>*mastic* | **None Detected** | | **100% Other** | Yellow<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 17<br>*71979749PLM_17* | Gray Interior window caulk | **None Detected** | | **100% Other** | Gray<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 18<br>*71979749PLM_18* | Gray Interior window caulk | **None Detected** | | **100% Other** | Gray<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 19<br>*71979749PLM_19* | 9"x9" white smooth finish ceiling tile (aged yellow/brown) | **None Detected** | **95% Fiber Glass** | **5% Other** | White<br>Fibrous<br>Homogeneous<br>Teased |
| 20<br>*71979749PLM_20* | 9"x9" white smooth finish ceiling tile (aged yellow/brown) | **None Detected** | **95% Fiber Glass** | **5% Other** | White<br>Fibrous<br>Homogeneous<br>Teased |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

P-F-002 r15 1/16/2021

# Bulk Asbestos Analysis

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

NVLAP TESTING NVLAP LAB CODE 200664-0

AIHA ACCREDITED LABS.ORG Lab ID # 173190

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 21<br>*71979749PLM_21* | Fibrous pipe insulation and associated metallic paper wrap (damaged) | **None Detected** | **60% Fiber Glass**<br>**30% Cellulose** | **10% Other** | White, Yellow<br>Fibrous<br>Homogeneous<br>Ashed |
| 22<br>*71979749PLM_22* | Fibrous pipe insulation and associated metallic paper wrap (damaged) | **None Detected** | **60% Fiber Glass**<br>**30% Cellulose** | **10% Other** | White, Yellow<br>Fibrous<br>Homogeneous<br>Ashed |
| 23<br>*71979749PLM_23* | Fibrous pipe insulation and associated paper wrap (damaged) | **None Detected** | **60% Fiber Glass**<br>**30% Cellulose** | **10% Other** | Gray, Yellow<br>Fibrous<br>Homogeneous<br>Ashed |
| 24<br>*71979749PLM_24* | Fibrous pipe insulation and associated paper wrap (damaged) | **None Detected** | **60% Fiber Glass**<br>**30% Cellulose** | **10% Other** | Gray, Yellow<br>Fibrous<br>Homogeneous<br>Ashed |
| 25<br>*71979749PLM_25* | 2'x2' Smooth finish white ceiling tile | **None Detected** | **75% Mineral Wool** | **25% Other** | White<br>Fibrous<br>Homogeneous<br>Teased |
| 26<br>*71979749PLM_26* | 2'x2' Smooth finish white ceiling tile | **None Detected** | **75% Mineral Wool** | **25% Other** | White<br>Fibrous<br>Homogeneous<br>Teased |
| 27<br>*71979749PLM_27* | 2'x4' Smooth finish white ceiling tile | **None Detected** | **75% Mineral Wool** | **25% Other** | White<br>Fibrous<br>Homogeneous<br>Teased |
| 28<br>*71979749PLM_28* | 2'x4' Smooth finish white ceiling tile | **None Detected** | **75% Mineral Wool** | **25% Other** | White<br>Fibrous<br>Homogeneous<br>Teased |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

P-F-002 r15 1/16/2021

# Bulk Asbestos Analysis

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

NVLAP TESTING NVLAP LAB CODE 200664-0

AIHA ACCREDITED LABS.ORG Lab ID # 173190

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 29<br>*71979749PLM_29* | 2'x2' Light gray self-stick floor tile (throughout hallways) | **None Detected** | | **100% Other** | Gray<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 30<br>*71979749PLM_30* | 2'x2' Light gray self-stick floor tile (throughout hallways) | **None Detected** | | **100% Other** | Gray<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 31 - A<br>*71979749PLM_31* | 4" black cove base and associated mastic<br>*cove base* | **None Detected** | | **100% Other** | Black<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 31 - B<br>*71979749PLM_56* | 4" black cove base and associated mastic<br>*mastic* | **None Detected** | | **100% Other** | Yellow<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 32 - A<br>*71979749PLM_32* | 4" black cove base and associated mastic<br>*cove base* | **None Detected** | | **100% Other** | Black<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 32 - B<br>*71979749PLM_57* | 4" black cove base and associated mastic<br>*mastic* | **None Detected** | | **100% Other** | Yellow<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 33<br>*71979749PLM_33* | 18"x10" Dark Blue self-stick floor tile (throughout classrooms) | **None Detected** | | **100% Other** | Blue<br>Non Fibrous<br>Homogeneous<br>Dissolved |
| 34<br>*71979749PLM_34* | 18"x10" Dark Blue self-stick floor tile (throughout classrooms) | **None Detected** | | **100% Other** | Blue<br>Non Fibrous<br>Homogeneous<br>Dissolved |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

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

NVLAP TESTING NVLAP LAB CODE 200664-0

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

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 35 - A | 6" brown cove base and associated mastic | None Detected | | 100% Other | Brown<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_35* | *cove base* | | | | Dissolved |
| 35 - B | 6" brown cove base and associated mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_58* | *mastic* | | | | Dissolved |
| 36 - A | 6" brown cove base and associated mastic | None Detected | | 100% Other | Brown<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_36* | *cove base* | | | | Dissolved |
| 36 - B | 6" brown cove base and associated mastic | None Detected | | 100% Other | Yellow<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_59* | *mastic* | | | | Dissolved |
| 37 | 24"x12" Peach stone-pattern self-stick floor tile | None Detected | | 100% Other | Beige<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_37* | | | | | Dissolved |
| 38 | 24"x12" Peach stone-pattern self-stick floor tile | None Detected | | 100% Other | Beige<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_38* | | | | | Dissolved |
| 39 | Dark Gray interior door caulk | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_39* | | | | | Dissolved |
| 40 | Dark Gray interior door caulk | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous |
| *71979749PLM_40* | | | | | Dissolved |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

P-F-002 r15 1/16/2021

# Bulk Asbestos Analysis

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

NVLAP TESTING
NVLAP LAB CODE 200664-0

Lab ID # 173190

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

**Attn:** Lauren Kesslak

**Project:** 11652-E2/ AHERA ACPS Lyles-Crouch Traditional Academy (11/15-16/21) Survey

**Lab Order ID:** 71979749
**Analysis ID:** 71979749_PLM
**Date Received:** 11/18/2021
**Date Reported:** 12/3/2021

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| 41<br>*71979749PLM_41* | Gray concrete masonry unit (CMU) block filler | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous<br>Crushed |
| 42<br>*71979749PLM_42* | Gray concrete masonry unit (CMU) block filler | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous<br>Crushed |
| 43<br>*71979749PLM_43* | Gray concrete masonry unit (CMU) block filler | None Detected | | 100% Other | Gray<br>Non Fibrous<br>Homogeneous<br>Crushed |

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Charmel Dozier (59)

**Analyst**

**Approved Signatory**

| | |
|---|---|
| **Client:** | ECS Mid-Atlantic, LLC |
| **Contact:** | Lauren Kesslak |
| **Address:** | 14026 Thunderbolt Place, Suite |
| **Phone:** | (703)-471-8400 |
| **Fax:** | |
| **Email:** | Lkesslak@ecslimited.com |
| **Project:** | 11652-E2/ AHERA ACPS Lyles-Cro |
| **Client Notes:** | |
| **P.O. #.** | 11652-E2/ AHERA ACPS Lyles-Cro |
| **Date Submitted:** | 11/16/2021 0:00 |
| **Analysis:** | PLM EPA 600/R-93/116 |
| **TurnAroundTime:** | 3-Day |

***Instructions:***

*Use Column "B" for your contact info*

*To See an Example Click the bottom Example Tab.*

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

*Only Enter your data on the first sheet "Sheet1"*

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


Scientific Analytical Institute

**4604 Dundas Drive**
**Greensboro, NC 27407**
**Phone: 336.292.3888**
**Fax: 336.292.3313**


| Sample Number | Data 1 | Sample Description | Data 2 |
|---|---|---|---|
| << | | | |
| 1 | | 12"x12" white with blue streak floor tile and associated brown mastic | Mechanical Room by elevator and cafeteria |
| 2 | | 12"x12" white with blue streak floor tile and associated brown mastic | Mechanical Room by elevator and cafeteria |
| 3 | | 4" blue cove base and associated mastic | Mechanical Room by elevator and cafeteria |
| 4 | | 4" blue cove base and associated mastic | Mechanical Room by elevator and cafeteria |
| 5 | | White interior window caulk | 001 Art Room |
| 6 | | White interior window caulk | 001 Art Room |
| 7 | | 18"x10" Gray self-stick floor tile | Foyer by Exit door 4 and stairwell |
| 8 | | 18"x10" Gray self-stick floor tile | Foyer by Exit door 4 and stairwell |
| 9 | | 6" light gray cove base and associated yellow mastic | Foyer by Exit door 4 and stairwell |
| 10 | | 6" light gray cove base and associated yellow mastic | Foyer by Exit door 4 and stairwell |
| 11 | | Green vinyl stair tread and associated yellow mastic | Foyer by Exit door 4 and stairwell |
| 12 | | Green vinyl stair tread and associated yellow mastic | Foyer by Exit door 4 and stairwell |
| 13 | | 6" blue cove base and associated cream mastic | 003 Lounge- Teachers Work Room |
| 14 | | 6" blue cove base and associated cream mastic | 003 Lounge- Teachers Work Room |
| 15 | | 12"x12" blue with blue streak floor tile and associated mastic | 004 Cafeteria |
| 16 | | 12"x12" blue with blue streak floor tile and associated mastic | 004 Cafeteria |
| 17 | | Gray Interior window caulk | 005 Kitchen |
| 18 | | Gray Interior window caulk | 005 Kitchen |
| 19 | | 9"x9" white smooth finish ceiling tile (aged yellow/brown) | Custodial Closet next to 008 |
| 20 | | 9"x9" white smooth finish ceiling tile (aged yellow/brown) | Custodial Closet next to 008 |
| 21 | | Fibrous pipe insulation and associated metallic paper wrap (damaged) | Custodial Closet next to 008 |
| 22 | | Fibrous pipe insulation and associated metallic paper wrap (damaged) | Custodial Closet next to 008 |
| 23 | | Fibrous pipe insulation and associated paper wrap (damaged) | 007 Storage |
| 24 | | Fibrous pipe insulation and associated paper wrap (damaged) | 007 Storage |
| 25 | | 2'x2' Smooth finish white ceiling tile | Hallway outside 007 and 008 |
| 26 | | 2'x2' Smooth finish white ceiling tile | Hallway outside 007 and 008 |
| 27 | | 2'x4' Smooth finish white ceiling tile | 005 Kitchen |
| 28 | | 2'x4' Smooth finish white ceiling tile | 005 Kitchen |
| 29 | | 2'x2' Light gray self-stick floor tile (throughout hallways) | Entrance to 101A Stage from 100 hallway |
| 30 | | 2'x2' Light gray self-stick floor tile (throughout hallways) | Entrance to 101A Stage from 100 hallway |
| 31 | | 4" black cove base and associated mastic | 101A Stage |
| 32 | | 4" black cove base and associated mastic | 101A Stage |
| 33 | | 18"x10" Dark Blue self-stick floor tile (throughout classrooms) | 103 Library |
| 34 | | 18"x10" Dark Blue self-stick floor tile (throughout classrooms) | 103 Library |
| 35 | | 6" brown cove base and associated mastic | Main Office Bathroom |
| 36 | | 6" brown cove base and associated mastic | Main Office Bathroom |
| 37 | | 24"x12" Peach stone-pattern self-stick floor tile | Main Office Bathroom |
| 38 | | 24"x12" Peach stone-pattern self-stick floor tile | Main Office Bathroom |
| 39 | | Dark Gray interior door caulk | 100 Main Office |
| 40 | | Dark Gray interior door caulk | 100 Main Office |
| 41 | | Gray concrete masonry unit (CMU) block filler | 2nd floor elevator lobby |
| 42 | | Gray concrete masonry unit (CMU) block filler | Strairwell landing between 212 and 213 |
| 43 | | Gray concrete masonry unit (CMU) block filler | Stairwell landing between 201 and 204 |
| << | | | |

Accepted ☒ 11/18 11AM

Rejected ☐

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 PROJECT MONITORING SUMMARY REPORT



LYLES CROUCH ELEMENTARY SCHOOL

530 S. ST. ASPAPH STREET
ALEXANDRIA, VIRGINIA 22314

ECS PROJECT NO. 47:1519-P

FOR

ALEXANDRIA CITY PUBLIC SCHOOLS

AUGUST 31, 2020

August 31, 2020

Mr. John Finnigan
Alexandria City Public Schools
1340 Braddock Place
Sixth Floor
Alexandria, Virginia 22314
John.Finnigan@acps.k12.va.us

ECS Project No. 47:1519-P

Reference: Asbestos Project Monitoring Summary Report, Lyles Crouch Elementary School, 530 S. St. Aspaph Street, 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





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

Diana Krass
Senior Project Manager
dkrass@ecslimited.com
703-471-8400

## TABLE OF CONTENTS

**PAGE**


**1.0 PROJECT DESCRIPTION . . . . . 1**

**2.0 ECS SCOPE OF WORK . . . . . 1**

**3.0 ASBESTOS ABATEMENT ACTIVITIES . . . . . 1**

3.1 Asbestos Removal . . . . . 1

3.2 Daily Air Sampling . . . . . 1

3.3 ECS Observations . . . . . 1

**4.0 FINAL CLEARANCE AIR SAMPLING . . . . . 2**

**5.0 CLOSING . . . . . 2**

**6.0 LIMITATIONS . . . . . 2**

## TABLE OF APPENDICES

Appendix I: Abatement Diagram

Appendix II: TEM Air Sample Results

Appendix III: Daily Field Reports with PCM Air Sample Results

Appendix IV: Certifications/Licenses

## 1.0 PROJECT DESCRIPTION

The asbestos abatement work was performed by WACO, Inc. (Waco), in general from July 17, 2020 through July 31, 2020, and included the removal of the following asbestos-containing materials (ACMs):

- Floor tile and associated black mastic from Rooms 105, 106, 107, 109, 110, 111, 112, 113, 114, and 117; and the hallway adjoining the previously referenced rooms.

An abatement diagram which depicts the approximate locations of the the abatement activities is attached in the report appendices. Please note that the above-referenced ACMs and other identified and assumed ACMs are most likely present in other areas of the school.

## 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 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 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. Note that due to a glitch in the report processing system, the report number starts at "Field Report #2". Field Report #2 from July 17, 2020 documents the first day of abatement for this project.

### 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 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 Waco.

Final clearance air samples were collected from the first floor work area in general 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.

## 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.

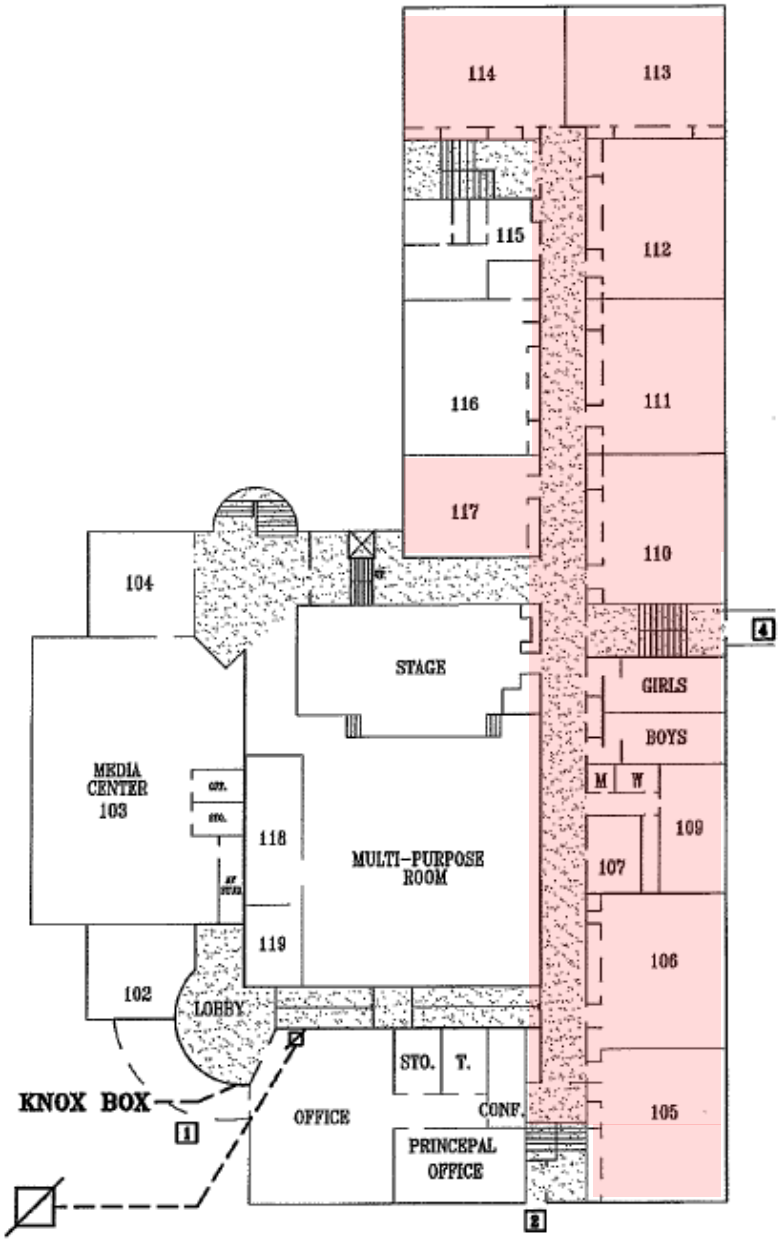
The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and 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: Abatement Diagram

Approximate Abatement Locations

Please note that asbestos-containing mastic and other identified and assumed ACMs are most likely present in other areas of the school.




**Abatement Summary Report**
**530 S. St. Asaph Street**
**Alexandria, VA**

**Approximate Abatement Locations**
Alexandria Public Schools

SCALE NTS

Project No. 47:1519-P

Date August 2020

# Appendix II: TEM Air Sample Results

# 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: 192007448
Customer ID: ECMA78
Customer PO:
Project ID:

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

**Project:** 47:1519 P LYLES CROUCH

**Phone:** (703) 471-8400
**Fax:** (703) 471-8400
**Received Date:** 07/31/2020 12:01 PM
**Analysis Date:** 07/31/2020
**Collected Date:** 07/31/2020

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

| Sample | Location | Volume (Liters) | Area Analyzed (mm²) | Non Asb | Asbestos Type(s) | #Structures ≥0.5µ < 5µ | #Structures ≥5µ | Analytical Sensitivity (S/cc) | Asbestos Concentration (S/mm²) | Asbestos Concentration (S/cc) |
|---|---|---|---|---|---|---|---|---|---|---|
| 07312001ED<br>*192007448-0001* | IWA ROOM 105 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312002ED<br>*192007448-0002* | IWA ROOM 110 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312003ED<br>*192007448-0003* | IWA ROOM 110 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312004ED<br>*192007448-0004* | IWA ROOM 113 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312005ED<br>*192007448-0005* | IWA ROOM 113 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |

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. Measurement of uncertainty available upon request.

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


Initial report from: 07/31/2020 18:04 PM

OrderID: 192007448

# Asbestos Chain of Custody

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

**EMSL Order Number** *(lab use only)*: 192007448

PHONE:
FAX:

| | | | |
|---|---|---|---|
| **Company Name :** ECS Mid Atlantic | | **EMSL Customer ID:** | |
| **Street:** 14026 Thunderbolt Place | | **City:** | **State or Province:** |
| **Zip/Postal Code:** 20151 | **Country:** USA | **Telephone #:** | **Fax #:** |
| **Report To (Name):** Eric Davidoff & Michael Hamill | | **Please Provide Results via:** ☐ Fax ☐ Email | |
| **email Address:** edavidoff@ecslimited.com, Mhamill@ecslimited.com | | **Purchase Order Number:** | |
| **Client Project ID:** 47:1519-P/ Lyles-Crouch | | **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:** Eric Davidoff **Sampler's Signature:**

| Sample # | Sample Description/Location | Volume, Area or Homogenous Area | Date/Time Sampled |
|---|---|---|---|
| 073120016D | IWA - Room 105 - FC | 1260 | 7/31/20 |
| 073120026D | IWA Room 110 - FC | 1260 | 7/31/20 |
| 073120036D | IWA Room 110 - FC | 1260 | 7/31/20 |
| 073120046D | IWA Room 115 - FC | 1260 | 7/31/20 |
| 073120056D | IWA Room 113 FC | 1260 | 7/31/20 |

**Client Sample # (s):** 073120016D → 073120013ED **Total # of Samples:** 13

**Relinquished by (Client):** **Date:** 7/31/20 **Time:**

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

**Comments/Special Instructions:**
Agressive air sampling was preformed, only analyze the IWA samples

RECEIVED
EMSL ANALYTICAL, INC
BELTSVILLE, MD
2020 JUL 31 P 12:01



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: 192007448

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

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

PHONE:
FAX:

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

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 07312006ED | OWA - Final Clearance First Floor | 1260 | 7/31/20 |
| 07312007ED | OWA - Final Clearance First Floor | 1260 | 7/31/20 |
| 07312008ED | OWA - Final Clearance First Floor | 1260 | 7/31/20 |
| 07312009ED | OWA - Final Clearance First Floor | 1260 | 7/31/20 |
| 07312010ED | OWA - Final Clearance First Floor | 1260 | 7/31/20 |
| 07312011ED | Field Blank (opened 30 sec for Final) | N/A | 7/31/20 |
| 07312012ED | Field Blank (opened 30 sec in Asbestos) | N/A | 7/31/20 |
| 07312013ED | Field Blank (Not Opened) | N/A | 7/31/20 |
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***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 Con... if custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

Page 2 of 2

# Appendix III: 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 21, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 2 7/17/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for 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 | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

| | |
|---|---|
| Project No. | **1519-P** |
| Report No. | **2** |
| Day & Date | **Friday 7/17/2020** |
| Weather | **90 °/ Sunny** |
| On-Site Time | **10.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **7:00A** | **5:00P** |

* 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 is the carpet over asbestos-containing floor tile and associated mastic from Rooms 110, 111, 112, 113, 114, and 117.

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

FIRST FLOOR WORK AREA - ROOMS 110, 111, 112, 113, 114, and 117

Carpet in the classrooms was located on top of the asbestos-containing materials. The abatement contractor removed the carpet within a regulated work area. The carpet was able to be removed from the rooms without disturbing the floor tiles and the carpet was disposed of as non-asbestos waste.

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

Between 8:20 am and 8:24 am, PCM air samples were started inside and outside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 1:00 pm and 1:05 pm, the sampling pumps were checked using a rotameter. The flow rates were 2.0 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area.

FIRST FLOOR WORK AREA - ROOMS 107, 109, 106, and 105

The abatement contractor also continued setting up the work area for Rooms 107, 109, 106, and 105.

**By Catey Bourne**

GENERAL

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

The US EPA and Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The PCM samples collected today were reported below the re-occupancy limit which meets the project requirements.

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

**WORK AREA SAMPLES**

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/18/2020
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07172001CB | IWA- Rooms 110-117 | 8:20 AM | 1:00 PM | 2.0 | 2.0 | 2.0 | 280 | 560.0 | 3.0 | 100 | 0.003 |
| 07172002CB | OWA- Rooms 110-117 | 8:20 AM | 1:00 PM | 2.0 | 2.0 | 2.0 | 280 | 560.0 | 3.0 | 100 | 0.003 |
| 07172003CB | OWA- Rooms 110-117 | 8:24 AM | 1:05 PM | 2.0 | 2.0 | 2.0 | 281 | 562.0 | 2.0 | 100 | 0.002 |
| 07172004CB | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07172005CB | 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 Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The PCM samples collected today were reported below the re-occupancy limit which meets the project requirements.

**ECS Technician:** Catey Bourne **Date:** 7/18/2020

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 1519-P **Date:** 7/18/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor Work Area

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor Work Area |
| **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 APR |
| | Type of Filters Used | P-100 |
| | Disposable Protective Clothing | Satisfactory |
| | Work Area Acceptable | Yes |

**Notes:**

**ECS Technician:** Michael P. Hamill **Date:** 7/18/2020

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

# LETTER OF TRANSMITTAL

July 23, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 3 7/21/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for 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-P** |
| Report No. | **3** |
| Day & Date | **Tuesday 7/21/2020** |
| Weather | **95 °/ Sunny** |
| On-Site Time | **10.25** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.25** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:30A** | **4:45P** |

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

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

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials specified to be removed today are asbestos-containing floor tile and associated mastic within Rooms 117, 114, 113, 112, 111, and 110.

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

ROOMS 117, 114, 113, 112, 111, and 110 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.

At 7:10 am, a PCM air sample was started inside the work area near Room 116. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 7:29 am, a PCM air sample was started inside the work area near the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 7:29 am, a PCM air sample was started outside the work area near the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

Between 11:45 am and 11:48 am, the IWA sampling pumps were checked using a rotameter. The flow rate

was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis. Two new PCM air samples were started in a similar locations. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

At 11:45 am, the OWA sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started in a similar location. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 4:22 pm the OWA sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air sample was stopped and gathered for analysis.

Between 4:22 pm and 4:24 pm, the IWA sampling pumps were checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis.

GENERAL

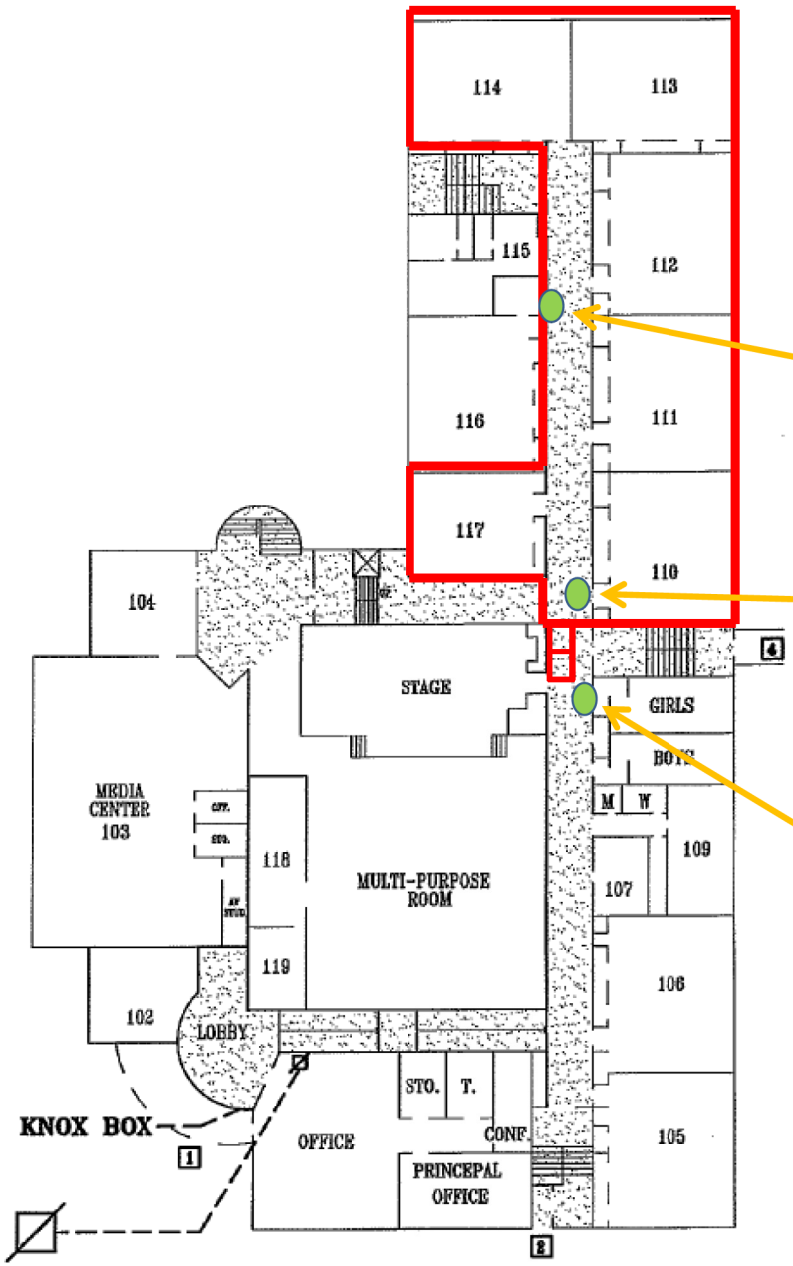
The work area was surveyed to evaluate general compliance with the applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




# Asbestos Abatement Monitoring
# Lyles-Crouch Elementary School
# Alexandria, VA

## SAMPLE LOCATIONS

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/21/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/21/2020
**Page:** 1 of 1

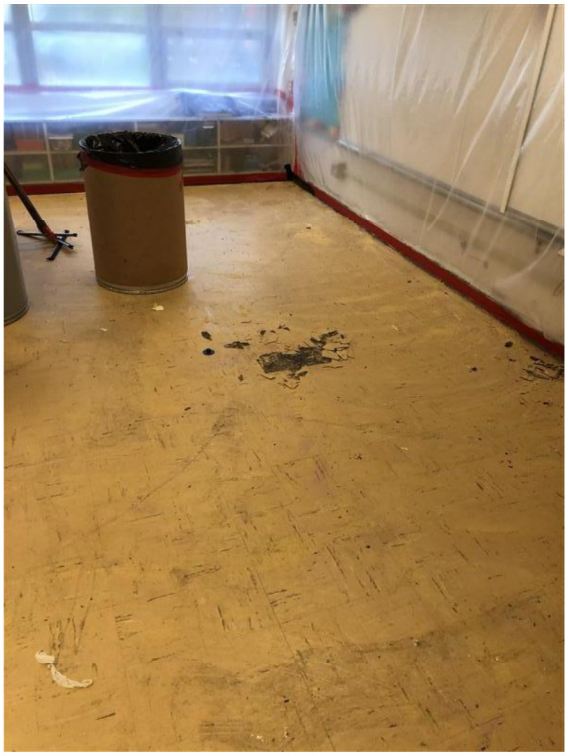
| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07212001ED | IWA-Hallway by Room 116 | 7:10 AM | 11:48 AM | 1.5 | 1.5 | 1.5 | 278 | 417.0 | 3.5 | 100 | 0.004 |
| 07212002ED | IWA-Near Decontamination Unit | 7:29 AM | 11:45 AM | 1.5 | 1.5 | 1.5 | 256 | 384.0 | 2.0 | 100 | 0.003 |
| 07212003ED | OWA-Next to the Decontamination Unit | 7:29 AM | 11:45 AM | 1.5 | 1.5 | 1.5 | 256 | 384.0 | 2.0 | 100 | 0.003 |
| 07212004ED | OWA-Next to Decontamination Unit | 11:45 AM | 4:22 PM | 1.5 | 1.5 | 1.5 | 277 | 415.5 | 2.0 | 100 | 0.002 |
| 07212005ED | IWA-Near the Decontamination Unit | 11:45 AM | 4:22 PM | 1.5 | 1.5 | 1.5 | 277 | 415.5 | 1.0 | 100 | 0.001 |
| 07212006ED | IWA-Hallway by Room 116 | 11:48 AM | 4:24 PM | 1.5 | 1.5 | 1.5 | 276 | 414.0 | 3.5 | 100 | 0.004 |
| 07212007ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07212008ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The PCM samples collected today were reported to be below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/21/2020

# Attachments



View of Room 110 prior abatement activities.

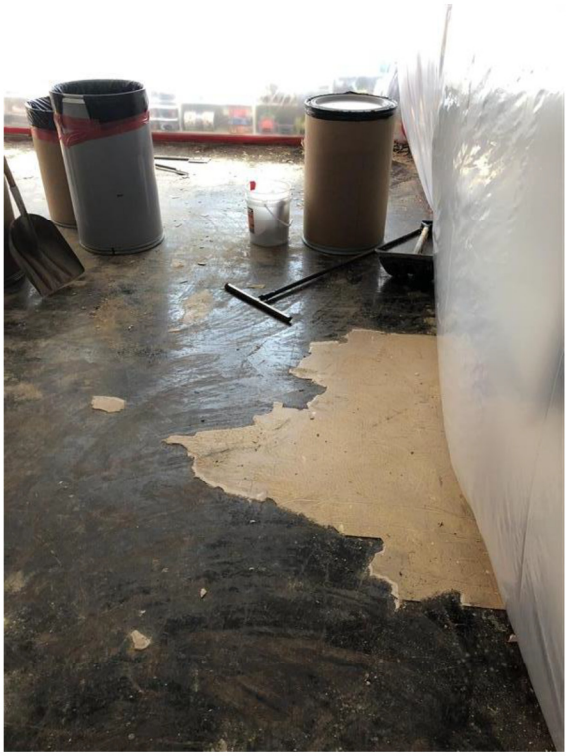
Figure 1



View of Room 113 prior to abatement activities.

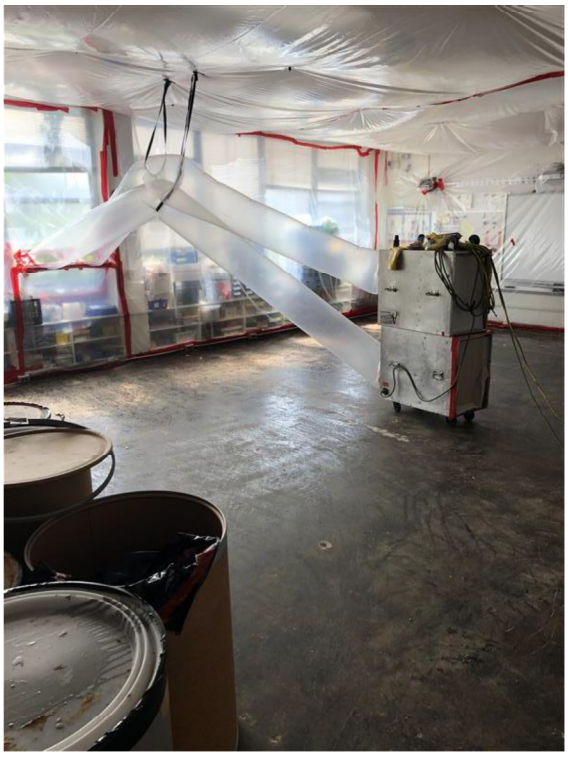
Figure 2

# Attachments



View of Room 114 during abatement activities.

Figure 3



View of Room 113 during abatement activities.

Figure 4

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 1519-P **Date:** 7/21/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, and 110

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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 | 12 |
| | 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:** Michael P. Hamill **Date:** 7/21/2020

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/21/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, and 110

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | Satisfactory |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | All Critical Barriers Intact | Satisfactory |
| | Wet Methods In-Use | Satisfactory |
| | Prompt Clean-Up | Satisfactory |
| | Adequate Lighting | Satisfactory |
| | Respiratory Protection | Satisfactory |
| | Disposable Clothing Worn Properly | Satisfactory |
| | No Respirators Stored in Work Area | Satisfactory |
| | Negative Air Filtration In-Use | Satisfactory |
| | Pre-Filters Clean | Satisfactory |
| | Exhaust Properly Vented | Satisfactory |
| | No Eating/Drinking/Smoking in Work Area | Satisfactory |
| **End of Shift Checklist** | Negative Air Filtration Machines Operating | Satisfactory |
| | Debris Bagged/Sealed | Satisfactory |
| | Work Area Secured from Public Access | Satisfactory |
| **Air Samples Collected** | Number of PCM Air Samples | 6 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**

**ECS Technician:** Michael P. Hamill **Date:** 7/21/2020

**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 25, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 4 7/22/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for 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-P** |
| Report No. | **4** |
| Day & Date | **Wednesday 7/22/2020** |
| Weather | **95 °/ Sunny** |
| On-Site Time | **9.75** |
| Lab Time | **0.00** |
| Travel Time* | **0.50** |
| Total | **10.25** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| | | | | | | |
|---|---|---|---|---|---|---|
| Trip Charges* | Tolls/Parking* | Mileage* | **3** | Times of | Arrival | Departure |
| Chargeable Items | | | | | **6:15A** | **7:15A** |
| | | | | | **7:45A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials specified to be removed today are carpet, floor tile, and associated mastic within Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 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.

At 7:00 am, a PCM air sample was started inside the work area near Room 109. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 7:10 am, a PCM air sample was started inside the work area next to the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 7:10 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

Between 11:33 am and 11:35 am, the IWA sampling pumps were checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis. A new PCM air sample was started next to the decontamination unit. The sampling pumps were calibrated using a rotameter to 1.5 liters per minute.

At 11:35 am, the OWA sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started in a similar location. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 4:20 pm, the IWA 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 OWA sampling pump was checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air sample was stopped and gathered for analysis.

GENERAL

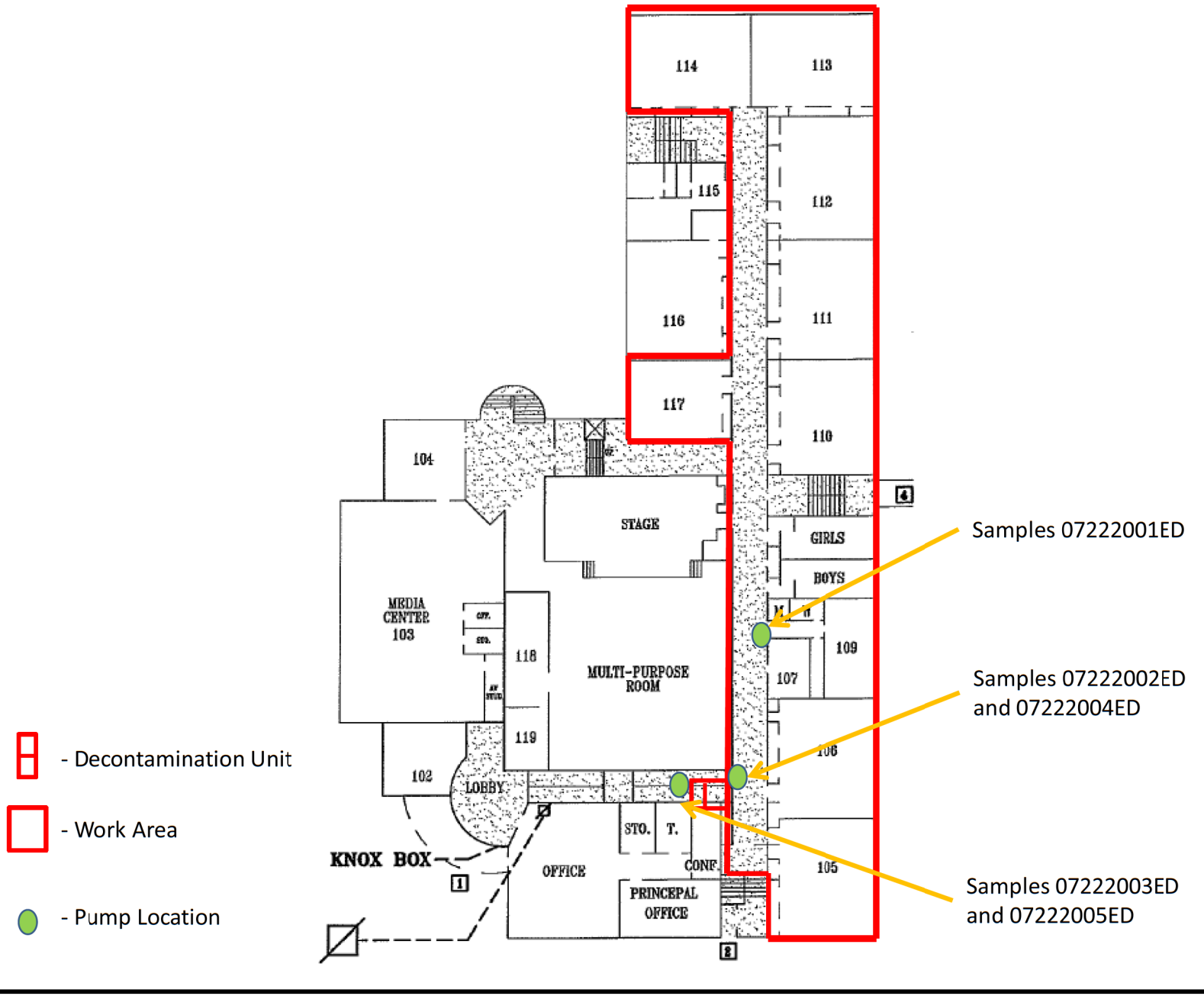
The work area was surveyed to evaluate general compliance with the applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




# Asbestos Abatement Monitoring
# Lyles-Crouch Elementary School
# Alexandria, VA

## SAMPLE LOCATIONS

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/22/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/22/2020
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07222001ED | IWA-Hallway by Room 107 | 7:00 AM | 11:33 AM | 1.5 | 1.5 | 1.5 | 273 | 409.5 | 5.5 | 100 | 0.007 |
| 07222002ED | IWA-Next to the Decontamination Unit | 7:10 AM | 11:35 AM | 1.5 | 1.5 | 1.5 | 265 | 397.5 | 7.5 | 100 | 0.009 |
| 07222003ED | OWA-Next to the Decontamination Unit | 7:10 AM | 11:35 AM | 1.5 | 1.5 | 1.5 | 265 | 397.5 | 1.5 | 100 | 0.002 |
| 07222004ED | IWA-Next to the Decontamination Unit | 11:35 AM | 4:20 PM | 1.5 | 1.5 | 1.5 | 285 | 427.5 | 7.0 | 100 | 0.008 |
| 07222005ED | OWA-Next to the Decontamination Unit | 11:35 AM | 4:20 PM | 1.5 | 1.5 | 1.5 | 285 | 427.5 | 2.0 | 100 | 0.002 |
| 07222006ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07222007ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The PCM samples collected today were reported below the re-occupancy limit.

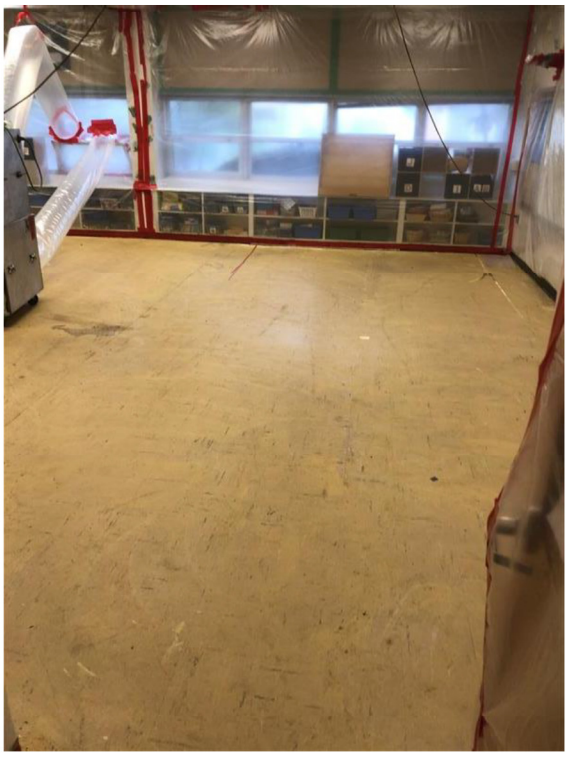
**ECS Technician:** Eric Davidoff **Date:** 7/22/2020

# Attachments



View of Room 106 prior to abatement activities.

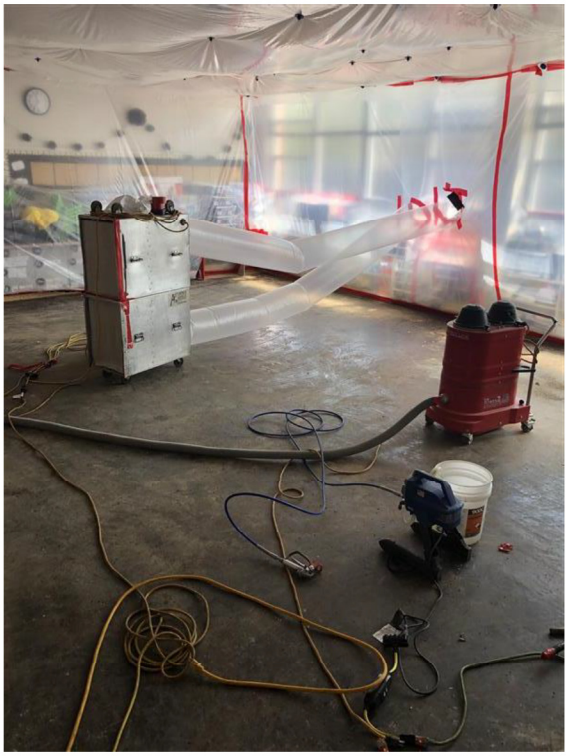
Figure 1



View of Room 105 prior to abatement activities.

Figure 2

# Attachments



View of Room 114 during to abatement activities.

Figure 3



View of Room 106 during abatement activities.

Figure 4

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 1519-P **Date:** 7/22/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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 | 18 |
| | 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:** Michael P. Hamill **Date:** 7/22/2020

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/22/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | Satisfactory |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | All Critical Barriers Intact | Satisfactory |
| | Wet Methods In-Use | Satisfactory |
| | Prompt Clean-Up | Satisfactory |
| | Adequate Lighting | Satisfactory |
| | Respiratory Protection | Satisfactory |
| | Disposable Clothing Worn Properly | Satisfactory |
| | No Respirators Stored in Work Area | Satisfactory |
| | Negative Air Filtration In-Use | Satisfactory |
| | Pre-Filters Clean | Satisfactory |
| | Exhaust Properly Vented | Satisfactory |
| | No Eating/Drinking/Smoking in Work Area | Satisfactory |
| **End of Shift Checklist** | Negative Air Filtration Machines Operating | Satisfactory |
| | Debris Bagged/Sealed | Satisfactory |
| | Work Area Secured from Public Access | Satisfactory |
| **Air Samples Collected** | Number of PCM Air Samples | 5 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**

**ECS Technician:** Michael P. Hamill **Date:** 7/22/2020

**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 28, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 5 7/23/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

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

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

# FIELD REPORT

| | |
|---|---|
| Project No. | **1519-P** |
| Report No. | **5** |
| Day & Date | **Thursday 7/23/2020** |
| Weather | **90 °/ Cloudy** |
| On-Site Time | **9.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.50** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | **7** | Times of | Arrival | Departure |
|---|---|---|---|---|---|---|
| Chargeable Items | | | | | **6:30A** | **7:15A** |
| | | | | | **7:45A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The material specified to be removed today is mastic associated with floor tile in Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 WORK AREAS

At 6:56 am, a PCM air sample was started inside the work area next to the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 6:56 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 10:49 am, the IWA and OWA sampling pumps were checked using a rotameter. The flow rate was 1.5 liters per minute. The PCM air samples were stopped and gathered for analysis. A new PCM air sample was started OWA next to the decontamination unit. The sampling pump was calibrated using a rotameter to 2.0 liters per minute.

At 4:31 pm, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per

minute. The PCM air sample was stopped and gathered for analysis.

GENERAL

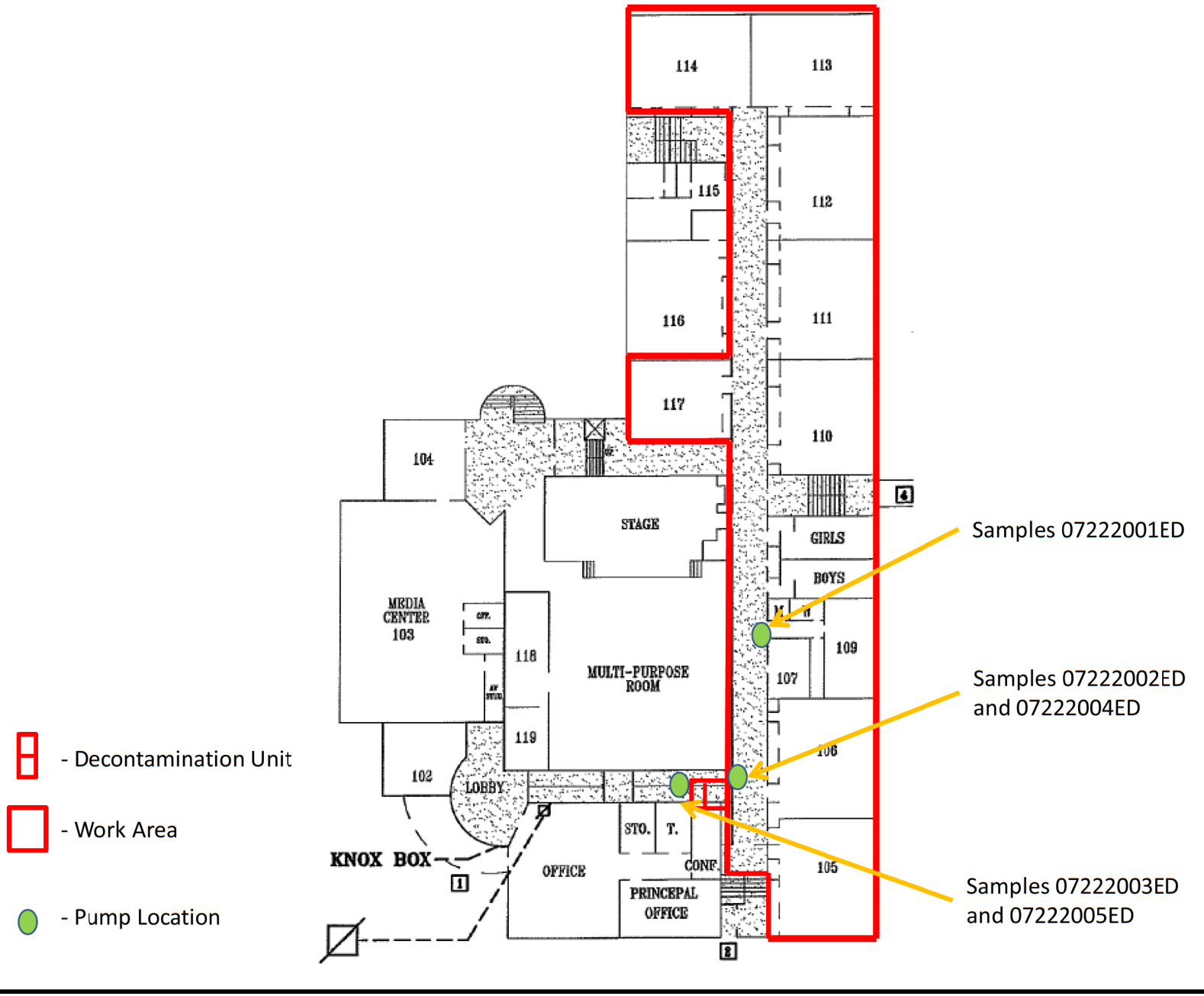
The work area was surveyed to evaluate general compliance with the applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




# Asbestos Abatement Monitoring
# Lyles-Crouch Elementary School
# Alexandria, VA

## SAMPLE LOCATIONS

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/22/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/23/2020
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07232001ED | OWA-Next to Decontamination Unit | 6:56 AM | 10:49 AM | 1.5 | 1.5 | 1.5 | 233 | 349.5 | 2.5 | 100 | 0.004 |
| 07232002ED | IWA-Next to Decontamination Unit | 6:56 AM | 10:49 AM | 1.5 | 1.5 | 1.5 | 233 | 349.5 | 3.5 | 100 | 0.005 |
| 07232003ED | OWA-Next to Decontamination Unit | 10:49 AM | 4:31 PM | 2.0 | 2.0 | 2.0 | 342 | 684.0 | 1.5 | 100 | 0.001 |
| 07232005ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07232006ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/23/2020

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/23/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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:** Michael P. Hamill **Date:** 7/23/2020

**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 28, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 6 7/24/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

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

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**Chantilly, VA 20151-3232**
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**(703) 834-5527 [Fax]**

# FIELD REPORT

| | |
|---|---|
| Project No. | **1519-P** |
| Report No. | **6** |
| Day & Date | **Friday 7/24/2020** |
| Weather | **85 °/ Rain** |
| On-Site Time | **10.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:30A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The material specified to be removed today is asbestos-containing mastic associated with floor tile in Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 WORK AREA

At 6:48 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 11:29 am, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started OWA next to the decontamination unit. The sampling pump was calibrated using a rotameter to 2.0 liters per minute.

At 4:01 pm, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis.

Note that air samples were not collected inside the work area due to sand blasting activities.

**By Eric Davidoff** 1825

GENERAL

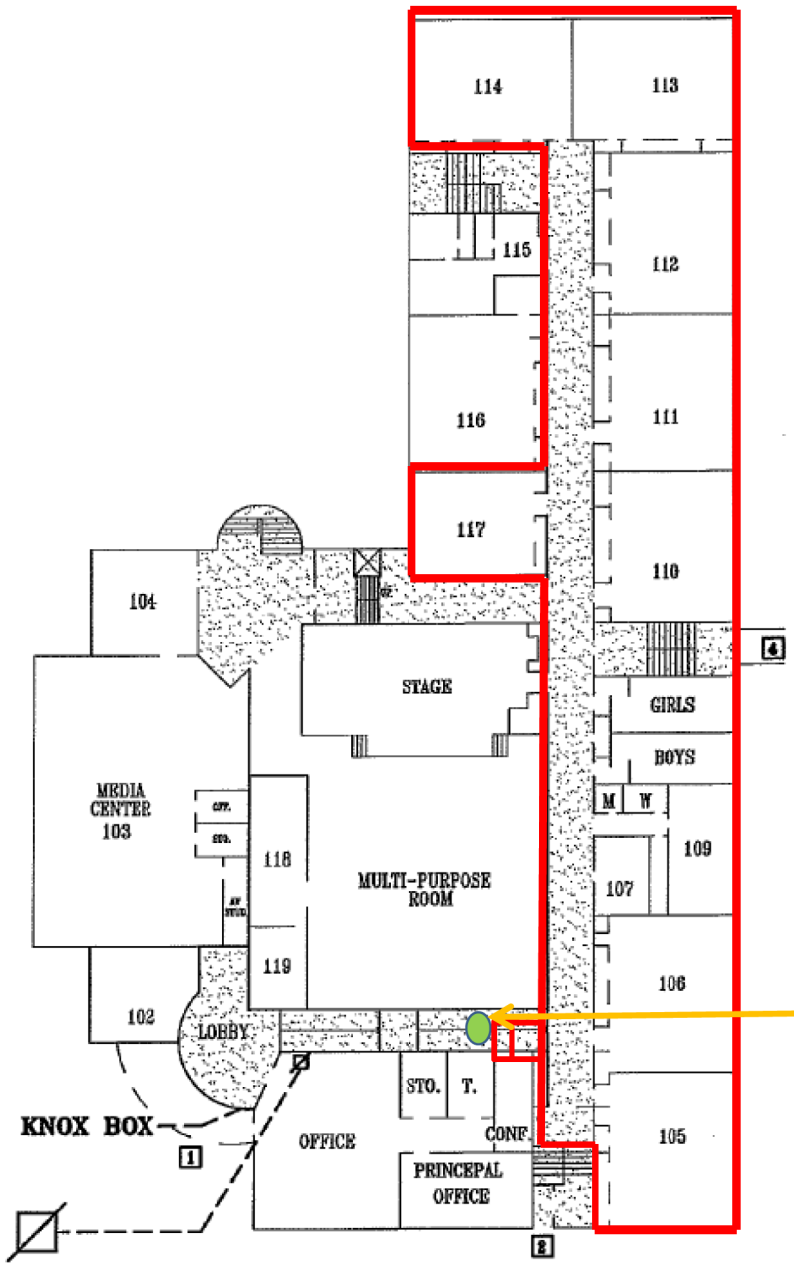
The work area was surveyed to evaluate general compliance with the applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




- Decontamination Unit
- Work Area
- Pump Location

Samples 07242001ED and 07242002ED

**Asbestos Abatement Monitoring**
**Lyles-Crouch Elementary School**
**Alexandria, VA**

**SAMPLE LOCATIONS**

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/24/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/24/2020
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07242001ED | OWA-Next to Decontamination Unit | 6:48 AM | 11:29 AM | 2.0 | 2.0 | 2.0 | 281 | 562.0 | 3.5 | 100 | 0.003 |
| 07242002ED | OWA-Next to Decontamination Unit | 11:29 AM | 4:01 PM | 2.0 | 2.0 | 2.0 | 272 | 544.0 | 1.5 | 100 | 0.001 |
| 07242003ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07242004ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/24/2020

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/24/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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:** Michael P. Hamill **Date:** 7/24/2020

**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 28, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 7 7/27/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

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**(703) 471-8400 [Phone]**
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# FIELD REPORT

| | |
|---|---|
| Project No. | **1519-P** |
| Report No. | **7** |
| Day & Date | **Monday 7/27/2020** |
| Weather | **95 °/ Sunny** |
| On-Site Time | **10.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:30A** | **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.**

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 WORK AREA

At 6:52 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 11:36 am, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started OWA next to the decontamination unit. The sampling pump was calibrated using a rotameter to 2.0 liters per minute.

At 4:12 pm, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis.

Note that samples were not collect inside the work are due to sand blasting activities.

**By Eric Davidoff** 1825

GENERAL

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

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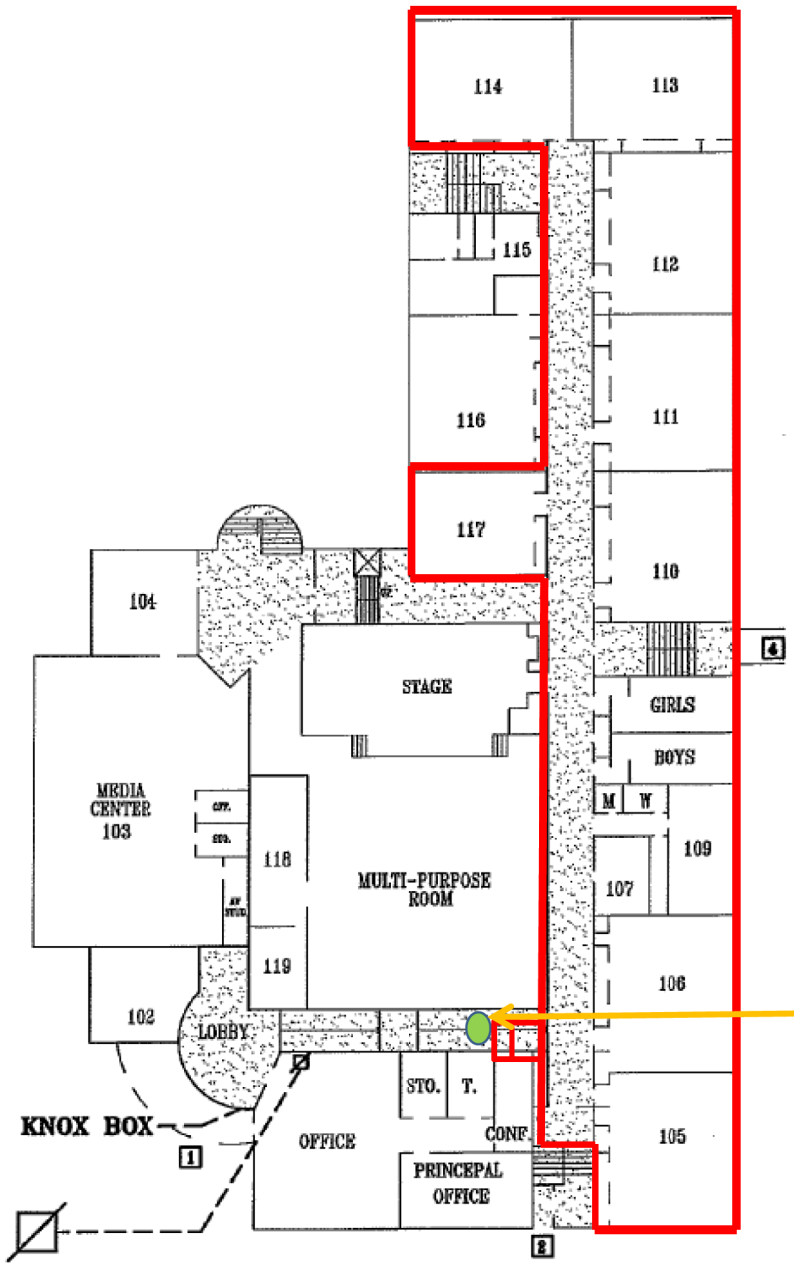
The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




- Decontamination Unit
- Work Area
- Pump Location

Samples 07272001ED and 07272002ED

**Asbestos Abatement Monitoring**
**Lyles-Crouch Elementary School**
**Alexandria, VA**

**SAMPLE LOCATIONS**

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/27/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/27/2020
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07272001ED | OWA-Next to Decontamination Unit | 6:52 AM | 11:36 AM | 2.0 | 2.0 | 2.0 | 284 | 568.0 | 3.5 | 100 | 0.003 |
| 07272002ED | OWA-Next to Decontamination Unit | 11:36 AM | 4:12 PM | 2.0 | 2.0 | 2.0 | 276 | 552.0 | 1.5 | 100 | 0.001 |
| 07272003ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07272004ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/27/2020

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/27/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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:** Michael P. Hamill **Date:** 7/27/2020

**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 29, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 8 7/28/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for 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-P** |
| Report No. | **8** |
| Day & Date | **Tuesday 7/28/2020** |
| Weather | **90 °/ Sunny** |
| On-Site Time | **8.75** |
| Lab Time | **0.00** |
| Travel Time* | **1.25** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | **66** | Times of | Arrival | Departure |
|---|---|---|---|---|---|---|
| Chargeable Items | | | | | **6:30A** | **11:15A** |
| | | | | | **12:30P** | **4:30P** |

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

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

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The material specified to be removed today is mastic associated with floor tile in Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 WORK AREA

At 6:48 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 11:09 am, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started OWA next to the decontamination unit. The sampling pump was calibrated using a rotameter to 2.0 liters per minute.

At 4:06 pm, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis.

GENERAL

**By Eric Davidoff**

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

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

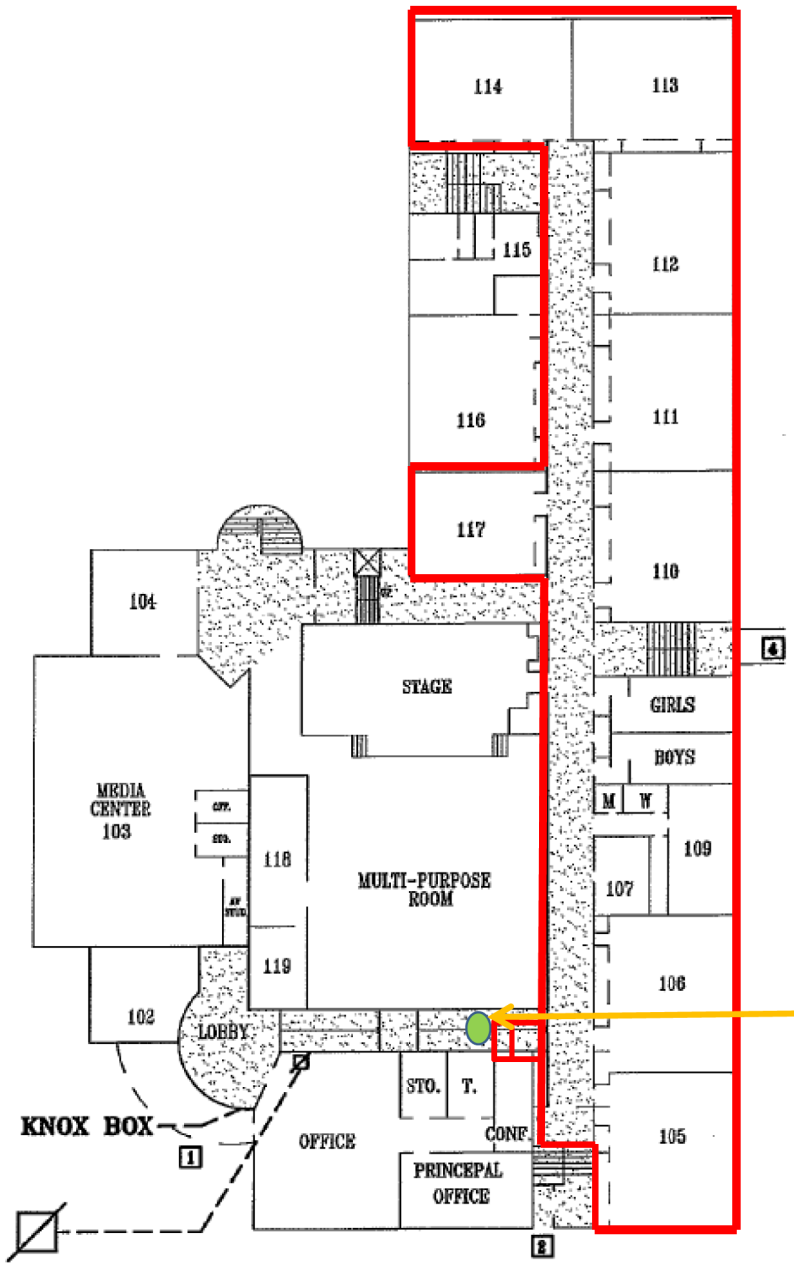
The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.

At Mr. John Finnigan's request, ECS sampled select flooring materials located in Rooms 102, 104, 118, 119, and the media center. The undersigned is an asbestos inspector who has received EPA accredited training. Samples of suspect asbestos-containing materials were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect asbestos-containing material bulk samples were shipped on this day to EMSL Analytical, Inc. (EMSL) in Beltsville, Maryland for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology.

Based on the laboratory results, asbestos was not detected in any of the above-referenced bulk samples submitted to EMSL. A copy of the laboratory results and chain of custody are attached to this report.




- Decontamination Unit
- Work Area
- Pump Location

Samples 07282001ED and 07282002ED

**Asbestos Abatement Monitoring**
**Lyles-Crouch Elementary School**
**Alexandria, VA**

**SAMPLE LOCATIONS**

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/28/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/28/2020
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07282001ED | OWA-Next to Decontamination Unit | 6:48 AM | 11:09 AM | 2.0 | 2.0 | 2.0 | 261 | 522.0 | 1.5 | 100 | 0.001 |
| 07282002ED | OWA-Next to Decontamination Unit | 11:09 AM | 4:06 PM | 2.0 | 2.0 | 2.0 | 297 | 594.0 | 2.5 | 100 | 0.002 |
| 07282003ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07282004ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/28/2020

# EMSL Analytical, Inc.

**10768 Baltimore Avenue Beltsville, MD 20705**

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

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


| | |
|---|---|
| **EMSL Order:** | 192007290 |
| **Customer ID:** | ECMA78 |
| **Customer PO:** | |
| **Project ID:** | |

| | | | |
|---|---|---|---|
| **Attention:** | Michael Hamill<br>ECS Mid-Atlantic, LLC<br>14026 Thunderbolt Pl<br>Chantilly, VA | **Phone:** | (703) 471-8400 |
| | | **Fax:** | (703) 471-8400 |
| | | **Received Date:** | 07/28/2020 12:21 PM |
| | | **Analysis Date:** | 07/28/2020 |
| | | **Collected Date:** | 07/28/2020 |
| **Project:** | 47:1519 PLYES CROUCH | | |

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

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 01-Floor Tile<br>*192007290-0001* | WHITE TILE W/ BLUE STREAKS (12X12) | White/Various<br>Non-Fibrous<br>Homogeneous | | 45% Ca Carbonate<br>55% Non-fibrous (Other) | None Detected |
| 01-Mastic<br>*192007290-0001A* | WHITE TILE W/ BLUE STREAKS (12X12) | Various/Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 02-Floor Tile<br>*192007290-0002* | 12X12 WHITE TILE W/ BLUE STREAKS | White/Various<br>Non-Fibrous<br>Homogeneous | | 45% Ca Carbonate<br>55% Non-fibrous (Other) | None Detected |
| 02-Mastic<br>*192007290-0002A* | 12X12 WHITE TILE W/ BLUE STREAKS | Various/Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 03-Floor Tile<br>*192007290-0003* | 12X12 BLUE TILE W/ DARK BLUE STREAKS | Blue<br>Non-Fibrous<br>Homogeneous | | 45% Ca Carbonate<br>55% Non-fibrous (Other) | None Detected |
| 03-Mastic<br>*192007290-0003A* | 12X12 BLUE TILE W/ DARK BLUE STREAKS | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 04-Floor Tile<br>*192007290-0004* | 12X12 BLUE TILE W/ DARK BLUE STREAKS | Blue<br>Non-Fibrous<br>Homogeneous | | 45% Ca Carbonate<br>55% Non-fibrous (Other) | None Detected |
| 04-Mastic<br>*192007290-0004A* | 12X12 BLUE TILE W/ DARK BLUE STREAKS | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 05<br>*192007290-0005* | CARPET ADHESIVE FROM MEDIA | Blue<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 06<br>*192007290-0006* | CARPET ADHESIVE FROM SIDE ROOM | Blue<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Analyst(s)

*William Chrobak (10)*

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. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

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


Initial report from: 07/28/2020 16:29:45

OrderID: 192007290

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

**EMSL Order Number** *(Lab Use Only)*: 192007290

EMSL ANALYTICAL, INC.
10768 BALTIMORE AVE
BELTSVILLE, MD 20705
PHONE: (301) 937-5700
FAX: (301) 937-5701

Mhamill@ECSmd.com

| | |
|---|---|
| Company: ECS-Md-Atlantic | EMSL-Bill to: ☒ Same ☐ Different<br>If Bill to is Different note instructions in Comments**<br>*Third Party Billing requires written authorization from third party* |
| Street: 14026 Thunderbolt Place | |
| City: Chantilly State/Province: VA | Zip/Postal Code: Country: |
| Report To (Name): Eric Davidoff Michael Hamill | Telephone #: |
| Email Address: edavidoff@ECSLabs.com | Fax #: Purchase Order: |
| Project Name/Number: 47:1519-Pyles-Crawl | Please Provide Results: ☐ Fax ☐ Email |
| U.S. State Samples Taken: VA | CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt |

**Turnaround Time (TAT) Options* – Please Check**

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

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

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

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

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

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

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

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

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

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

**Soil/Rock/Vermiculite**
- ☐ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ TEM Qual. via Filtration Technique
- ☐ TEM Qual. via Drop-Mount Technique

**Other:**
- ☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** | **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

**Samplers Name:** Eric Davidoff **Samplers Signature:**

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 01 | White tile w/ Blue Streaks (12x12) | | 7/28/20 |
| 02 | 12x12 white tile w/ Blue Streaks | | 7/28/20 |
| 03 | 12x12 Blue tile w/ Dark blue Streaks | | 7/28/20 |
| 04 | 12x12 Blue tile w/ Dark blue Streaks | | 7/28/20 |
| 05 | Carpet & Adhesive from Media | | 7/28/20 |
| 06 | Carpet Adhesive from side room | | 7/28/20 |
| | | | |
| | | | |

**Client Sample # (s):** **Total # of Samples:** 6

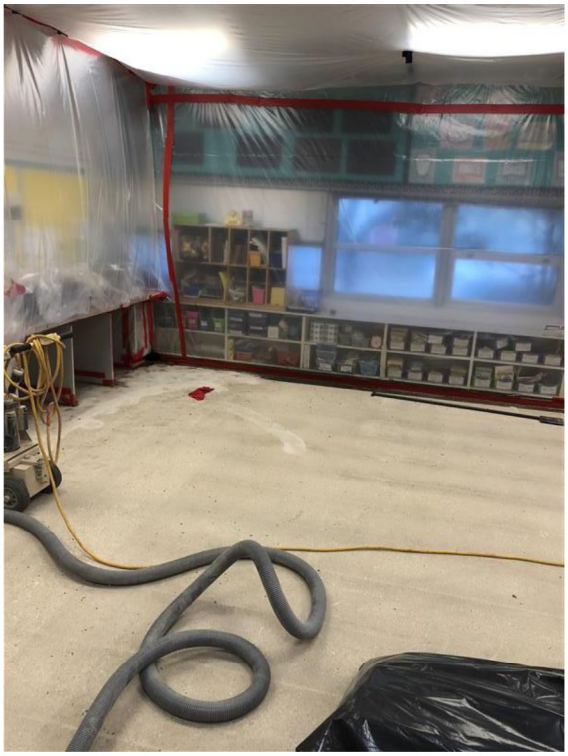
**Relinquished (Client):** Eric Davidoff **Date:** 7/28/20 **Time:**

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

**Comments/Special Instructions:**

RECEIVED
EMSL ANALYTICAL, INC.
BELTSVILLE, MD
JUL 28 2020
12: 2

# Attachments



View of Room 117 during abatement activities.

Figure 1



View of Room 111 during abatement activities.

Figure 2

# Attachments




View of Room 105 during abatement activities.

Figure 3

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/28/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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:** Michael P. Hamill **Date:** 7/28/2020

**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 30, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 9 7/29/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

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

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

# FIELD REPORT

| | |
|---|---|
| Project No. | **1519-P** |
| Report No. | **9** |
| Day & Date | **Wednesday 7/29/2020** |
| Weather | **90 °/ Sunny** |
| On-Site Time | **10.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:30A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The material specified to be removed today is asbestos-containing mastic associated with floor tile within Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 WORK AREA

At 7:01 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 11:31 am, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started OWA next to the decontamination unit. The sampling pump was calibrated using a rotameter to 2.0 liters per minute.

At 4:07 pm, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis.

GENERAL

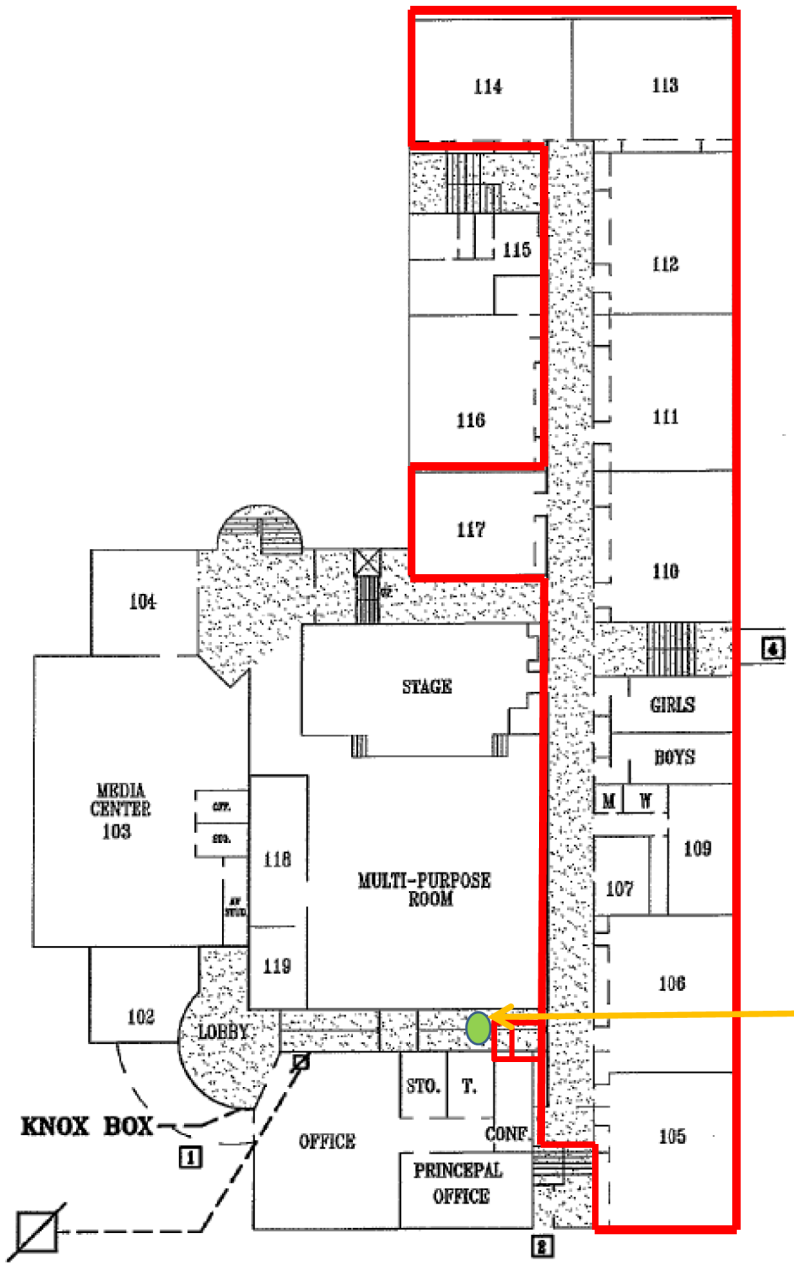
The work area was surveyed to evaluate general compliance with the applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




- Decontamination Unit
- Work Area
- Pump Location

Samples 07292001ED and 07292002ED

**Asbestos Abatement Monitoring**
**Lyles-Crouch Elementary School**
**Alexandria, VA**

**SAMPLE LOCATIONS**

Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/29/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/29/2020
**Page:** 1 of 1

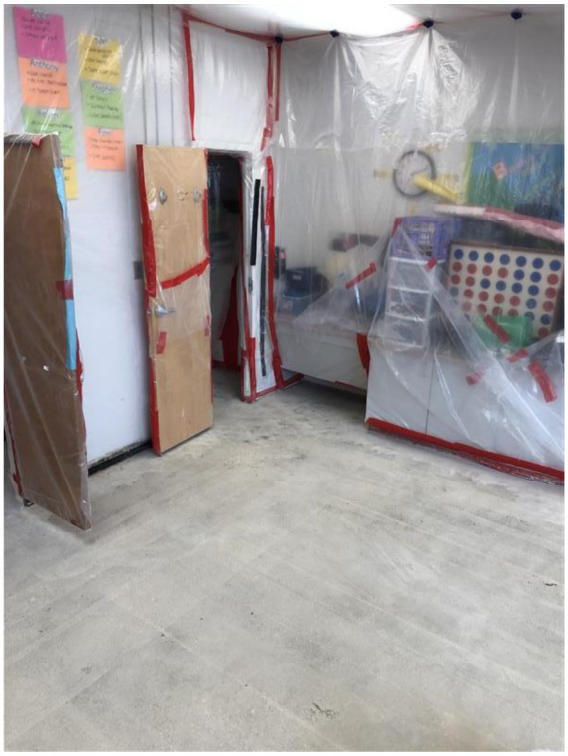
| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07292001ED | OWA-Next to Decontamination Unit | 7:01 AM | 11:31 AM | 2.0 | 2.0 | 2.0 | 270 | 540.0 | 2.0 | 100 | 0.002 |
| 07292002ED | OWA-Next to Decontamination Unit | 11:31 AM | 4:07 PM | 2.0 | 2.0 | 2.0 | 276 | 552.0 | 2.5 | 100 | 0.002 |
| 07292003ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07292004ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/29/2020

# Attachments



View of Room 117 following abatement activities.

Figure 1



View of Room 110 during abatement activities.

Figure 2

# Attachments



View of Room 107 during abatement activities.

Figure 3

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/29/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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:** Michael P. Hamill **Date:** 7/29/2020

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

# LETTER OF TRANSMITTAL

August 3, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 10 7/30/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for 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-P** |
| Report No. | **10** |
| Day & Date | **Thursday 7/30/2020** |
| Weather | **90 °/ Sunny** |
| On-Site Time | **9.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **9.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:00A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The material specified to be removed today is asbestos-containing mastic associated with floor tile in Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

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

ROOMS 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107 WORK AREA

At 6:19 am, a PCM air sample was started outside the work area next to the exit of the decontamination unit. The sampling pump was calibrated using a rotameter to 1.5 liters per minute.

At 11:17 am, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis. A new PCM air sample was started OWA next to the decontamination unit. The sampling pump was calibrated using a rotameter to 2.0 liters per minute.

At 3:26 pm, the OWA sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis.

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

completed and is attached to this report.

GENERAL

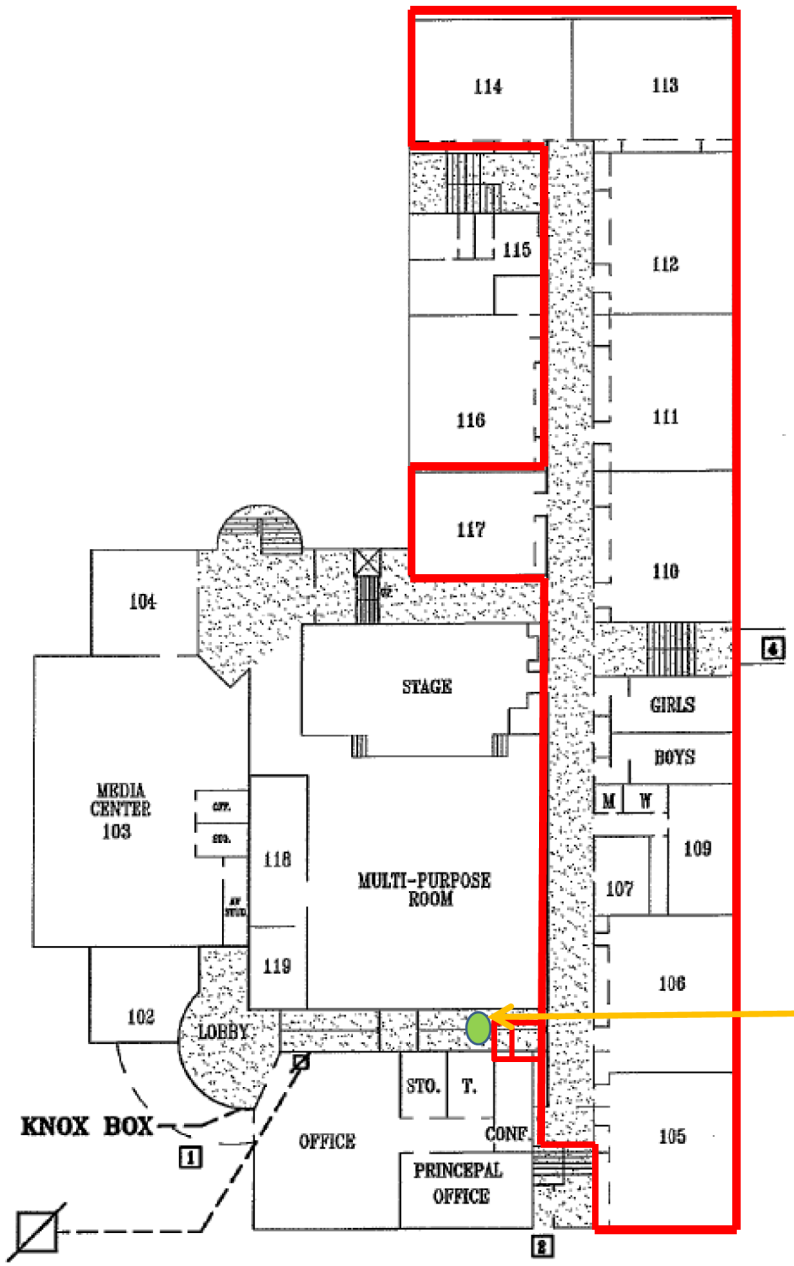
The work area was surveyed to evaluate general compliance with the applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




- Decontamination Unit
- Work Area
- Pump Location

Samples 07302001ED and 07302002ED

**Asbestos Abatement Monitoring**
**Lyles-Crouch Elementary School**
**Alexandria, VA**

**SAMPLE LOCATIONS**
Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/30/2020

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 1519-P
**Project Address:** 530 S. St. Asaph Street
Alexandria, VA-22314

**Date:** 7/30/2020
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07302001ED | OWA-Next to Decontamination Unit | 6:19 AM | 11:17 AM | 2.0 | 2.0 | 2.0 | 298 | 596.0 | 2.5 | 100 | 0.002 |
| 07302002ED | OWA-Next to Decontamination Unit | 11:17 AM | 3:26 PM | 2.0 | 2.0 | 2.0 | 249 | 498.0 | 4.0 | 100 | 0.004 |
| 07302003ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07302004ED-FB | FIELD BLANK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fiber per cubic centimeter. The samples collected today were reported below the re-occupancy limit.

**ECS Technician:** Eric Davidoff **Date:** 7/30/2020

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 1519-P **Date:** 7/30/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **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:** Michael P. Hamill **Date:** 7/30/2020

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 1519-P **Date:** 7/30/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | Satisfactory |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | Floors | Satisfactory |
| | Walls | Satisfactory |
| | Ceiling | Satisfactory |
| | Windows | Satisfactory |
| | Mechanical Equipment | Satisfactory |
| | Ducts | Satisfactory |
| | Pipes | Satisfactory |
| | Lighting | Satisfactory |
| | Other Surfaces | Satisfactory |
| | Specified ACM Removed | Satisfactory |
| | Work Area Encapsulated | Satisfactory |
| | Negative Air Filtration Functioning | Satisfactory |
| | Waste Bags Removed | Satisfactory |
| | Final Clearance Air Sample Type | N/A |
| | Number of Samples Collected | 0 |
| | Sample Volume (liters) | 0 |
| | Work Area Acceptable | Yes |

**Notes:** Final clearance samples are scheduled to be collected on the following business day.

**ECS Technician:** Michael P. Hamill **Date:** 7/30/2020

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

# LETTER OF TRANSMITTAL

August 3, 2020

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

ATTN: John Finnigan

RE: **ACPS - Lyles Crouch ES - 1st Floor Abatement Monitoring**
ECS Job # **1519-P**

Permits:
Location: **530 S. St. Aspaph Street Alexandria, VA 22314**

CC: Waco Inc. - Chris Lanham

ENCL: Field Report # 11 7/31/2020

Diana D. Krass
Environmental Senior Project Manager

Michael P. Hamill, CIH
Environmental Senior Project Manager

*Disclaimer*

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for 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-P** |
| Report No. | **11** |
| Day & Date | **Friday 7/31/2020** |
| Weather | **90 °/ Cloudy** |
| On-Site Time | **4.25** |
| Lab Time | **0.00** |
| Travel Time* | **0.75** |
| Total | **5.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **ACPS - Lyles Crouch ES - 1st Floor Abatement** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | **29** | Time of | Arrival | Departure |
|---|---|---|---|---|---|---|
| Chargeable Items | | | | | **7:00A** | **11:15A** |

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

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

The undersigned arrived onsite, as requested, to perform final clearance sampling for the first floor work area, which included Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107.

FIRST FLOOR WORK AREA

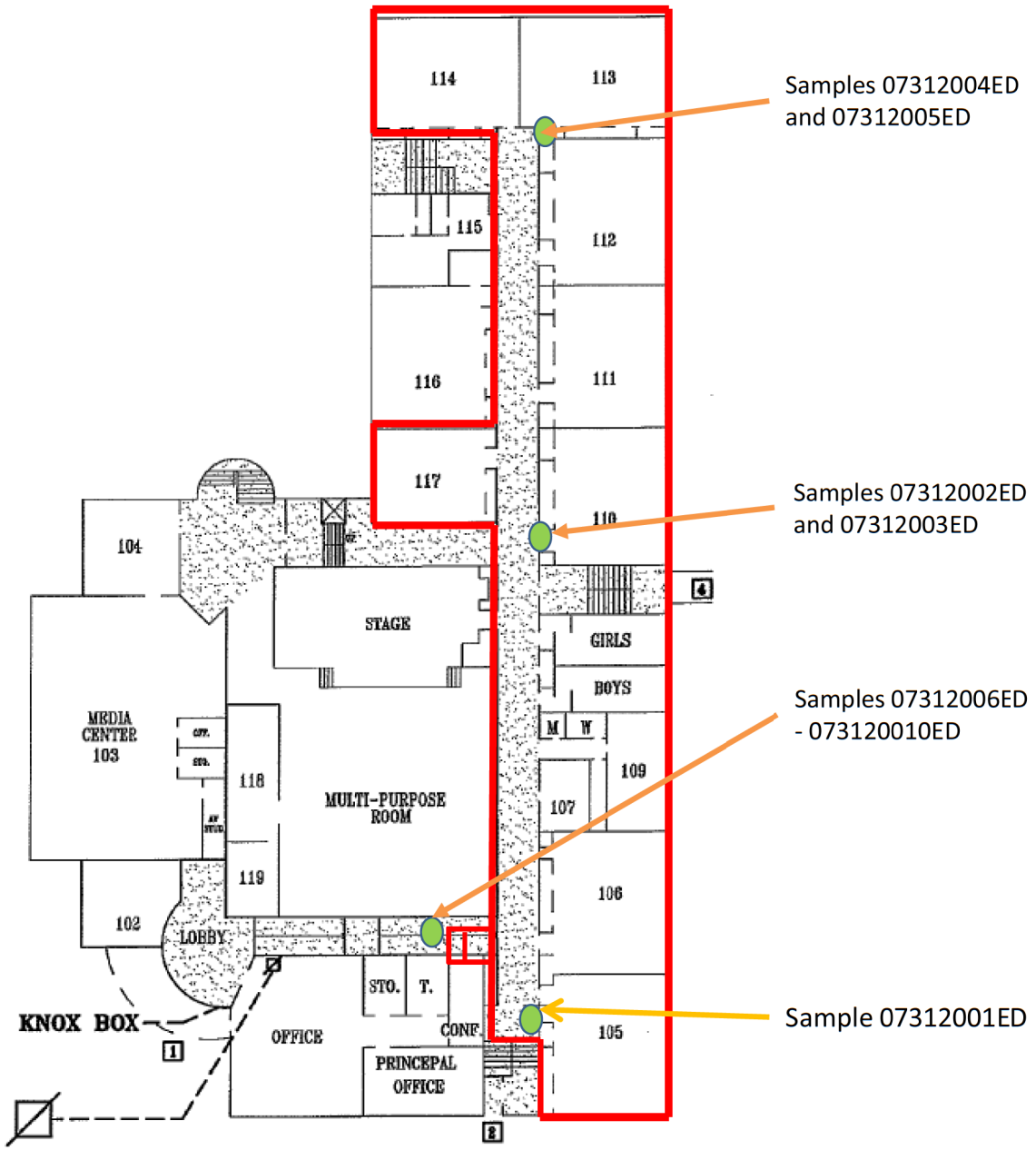
Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area. After waiting for the encapsulant to dry, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 7.0 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 10:45 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 180 minutes at 7.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. (EMSL) for asbestos analysis. A copy of the chain of custody has been attached.

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

The sample results reflect the conditions where the air samples were collected at the times and dates of

collection.




**Asbestos Abatement Monitoring**
**Lyles-Crouch Elementary School**
**Alexandria, VA**

**Final Clearance Sample Locations**
Alexandria City Public Schools

SCALE NTS

Project No. 47:1519-P

Date 7/31/2020

# EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705
Tel/Fax: (301) 937-5700 / (301) 937-5701
http://www.EMSL.com / beltsvillelab@emsl.com


EMSL Order: 192007448
Customer ID: ECMA78
Customer PO:
Project ID:

**Attention:** Michael Hamill
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
**Project:** 47:1519 P LYLES CROUCH

**Phone:** (703) 471-8400
**Fax:** (703) 471-8400
**Received Date:** 07/31/2020 12:01 PM
**Analysis Date:** 07/31/2020
**Collected Date:** 07/31/2020

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

| Sample | Location | Volume (Liters) | Area Analyzed ($mm^2$) | Non Asb | Asbestos Type(s) | #Structures ≥0.5μ < 5μ | #Structures ≥5μ | Analytical Sensitivity (S/cc) | Asbestos Concentration ($S/mm^2$) | Asbestos Concentration (S/cc) |
|---|---|---|---|---|---|---|---|---|---|---|
| 07312001ED<br>*192007448-0001* | IWA ROOM 105 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312002ED<br>*192007448-0002* | IWA ROOM 110 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312003ED<br>*192007448-0003* | IWA ROOM 110 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312004ED<br>*192007448-0004* | IWA ROOM 113 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |
| 07312005ED<br>*192007448-0005* | IWA ROOM 113 FC | 1260.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0047 | <15.00 | <0.0047 |

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. Measurement of uncertainty available upon request.

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


Initial report from: 07/31/2020 18:04 PM

OrderID: 192007448

# Asbestos Chain of Custody

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

**EMSL Order Number** *(lab use only)*: 192007448

PHONE:
FAX:

| | | | |
|---|---|---|---|
| **Company Name :** ECS Mid Atlantic | | **EMSL Customer ID:** | |
| **Street:** 14026 Thunderbolt Place | | **City:** | **State or Province:** |
| **Zip/Postal Code:** 20151 | **Country:** USA | **Telephone #:** | **Fax #:** |
| **Report To (Name):** Eric Davidoff & Michael Hamill | | **Please Provide Results via:** ☐ Fax ☐ Email | |
| **email Address:** edavidoff@ecslimited.com, Mhamill@ecslimited.com | | **Purchase Order Number:** | |
| **Client Project ID:** 47:1519-P/ Lyles-Crouch | | **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:** Eric Davidoff **Sampler's Signature:**

| Sample # | Sample Description/Location | Volume, Area or Homogenous Area | Date/Time Sampled |
|---|---|---|---|
| 07312001ED | IWA - Room 105 - f C | 1260 | 7/31/20 |
| 07312002ED | IWA Room 110 - f C | 1260 | 7/31/20 |
| 07312003ED | IWA Room 110 - f C | 1260 | 7/31/20 |
| 07312004ED | IWA Room 115 - f C | 1260 | 7/31/20 |
| 07312005ED | IWA Room 113 f C | 1260 | 7/31/20 |

**Client Sample # (s):** 07312001ED → 07312013ED **Total # of Samples:** 13

**Relinquished by (Client):** **Date:** 7/31/20 **Time:**

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

RECEIVED
EMSL ANALYTICAL, INC
BELTSVILLE, MD
2020 JUL 31 P 12:02

**Comments/Special Instructions:**

Agressive air sampling was preformed, only analyze the IWA samples



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

OrderID: 192007448

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

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

PHONE:
FAX:

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

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 07312006 ED | OWA - final Clearance first floor | 1260 | 7/31/20 |
| 07312007 ED | OWA - final Clearance first floor | 1260 | 7/31/20 |
| 07312008 ED | OWA - final Clearance first floor | 1260 | 7/31/20 |
| 07312009 ED | OWA - final Clearance first floor | 1260 | 7/31/20 |
| 07312010 ED | OWA - final Clearance first floor | 1260 | 7/31/20 |
| 07312011 ED | Field Blank (opened 30 sec for Final) | N/A | 7/31/20 |
| 07312012 ED | Field Blank (opened 30 sec for Asbestos) | N/A | 7/31/20 |
| 07312013 ED | Field Blank (Not Opened) | N/A | 7/31/20 |
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***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 Con... ...f custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

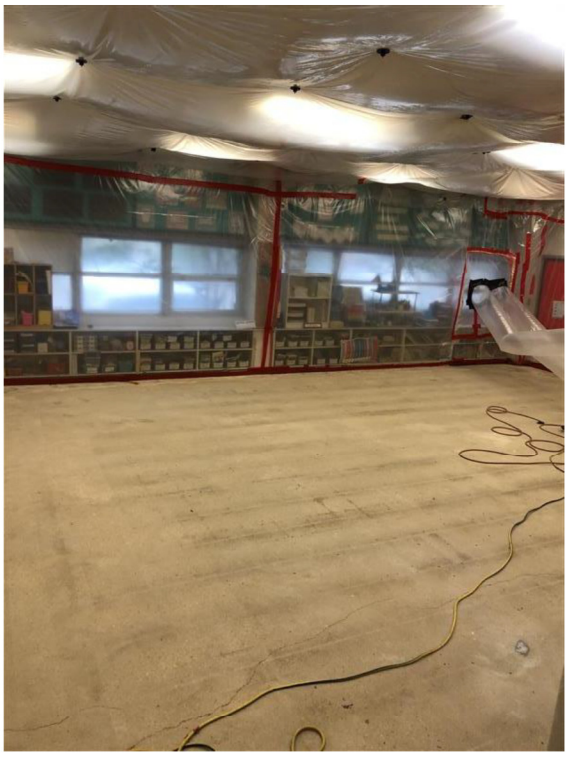
Page 2 of 2

# Attachments



View of Room 114 during the final visual walk-through.

Figure 1



View of Room 105 during the final visual walk-through.

Figure 2

# Attachments



View of Room 113 during the final visual walk-through.

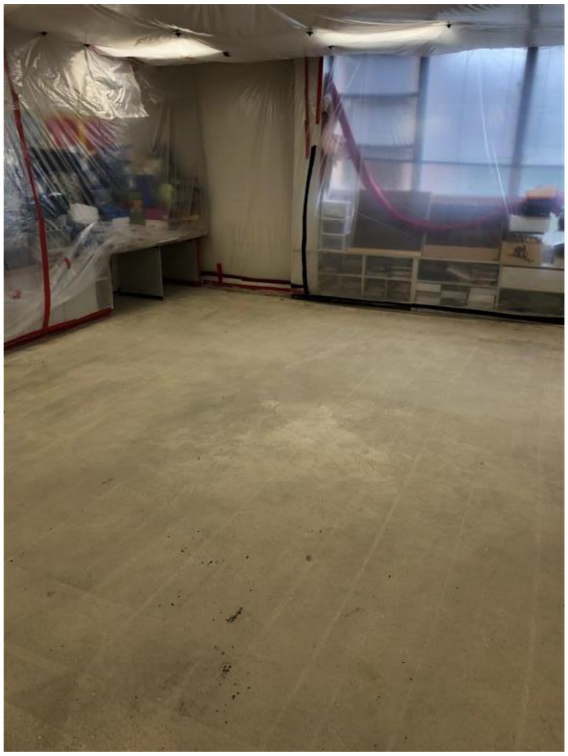
Figure 3



View of Room 112 during the final visual walk-through.

Figure 4

# Attachments



View of Room 111 during the final visual walk-through.

Figure 5



View of Room 110 during the final visual walk-through.

Figure 6

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 1519-P **Date:** 7/31/2020

**Project Address:** 530 S. St. Aspaph Street
Alexandria, VA-22314

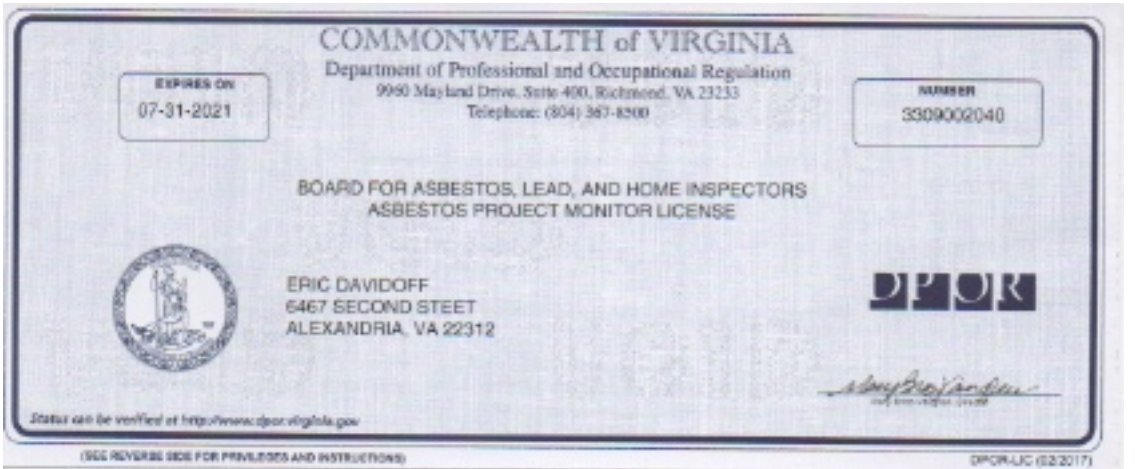
**Work Area Location/Description:** First Floor-Rooms 117, 114, 113, 112, 111, 110, 105, 106, 109, and 107

| | | |
|---|---|---|
| | Work Area Location/Description | First Floor-Rooms 117, 114, 113, |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | Satisfactory |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | Floors | Satisfactory |
| | Walls | Satisfactory |
| | Ceiling | Satisfactory |
| | Windows | Satisfactory |
| | Mechanical Equipment | Satisfactory |
| | Ducts | Satisfactory |
| | Pipes | Satisfactory |
| | Lighting | Satisfactory |
| | Other Surfaces | Satisfactory |
| | Specified ACM Removed | Satisfactory |
| | Work Area Encapsulated | Satisfactory |
| | Negative Air Filtration Functioning | Satisfactory |
| | Waste Bags Removed | Satisfactory |
| | Final Clearance Air Sample Type | TEM |
| | Number of Samples Collected | 10 |
| | Sample Volume (liters) | 1260 |
| | Work Area Acceptable | Yes |

**Notes:**

**ECS Technician:** Michael P. Hamill **Date:** 7/31/2020

# Appendix IV: 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

07-31-2021

NUMBER

3309002040

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS

ASBESTOS PROJECT MONITOR LICENSE

ERIC DAVIDOFF

6467 SECOND STEET

ALEXANDRIA, VA 22312

DPOR

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

Updated as of December 29, 2016

| 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" Medium Red Floor Tiles | Cafeteria and Kitchen on Ground Floor | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Red Floor Tiles | Cafeteria and Kitchen on Ground Floor | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Green Floor Tiles | Assumed under 12" x 12" Existing Floor Tiles throughout the Building | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Light Brown Floor Tiles | Assumed under 12" x 12" Existing Floor Tiles throughout the Building | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Medium Green Floor Tiles | Health Center (Reported as Nurses Area) | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| Black Window Sill | Classrooms | NF | Intact | None | 29-Dec-16 | Maintain in O & M Plan | | Verify Analytical Results |
| Fire Doors | Throughout Building | F | Intact | None | 29-Dec-16 | Maintain in O & M Plan | | Verify Analytical Results |
| **MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS IN NOVEMBER 18, 2013 SURVEY** | | | | | | | | |
| Black Mastic on TSI and Ducts | 2nd Floor Hallway. Room 105 and Throughout Building | NF | N/A | This material is reported as ACM; Not observed in this area. | 29-Dec-16 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| 6" White TSI-Mudded Elbows | Crawl Space under Media Center | F | N/A | This material is reported as ACM; | 29-Dec-16 | Remove from O & M Plan pending verification of removal. | | Verify removal |
| 4" White TSI-Mudded Elbows | Crawl Space | F | N/A | This material is reported as ACM; | 29-Dec-16 | Remove from O & M Plan pending verification of removal. | | Verify removal |
| Fire Doors | Throughout Building | F | N/A | This material is reported as ACM; however it was not observed in this area. | 29-Dec-16 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| 12" x 12" Black Floor Tiles and associated Mastic | Throughout Building | NF | Intact | This material is reported as PACM; | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

| MATERIAL | LOCATION | FRIABILITY | CONDITION | COMMENTS | LAST INSPECTION DATE | RECOMMENDATION | SEMI-ANNUAL INSPECTION DATE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| **ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 6, 2013 SURVEY** | | | | | | | | |
| 9" x 9" Tan Floor Tiles | Electrical Room on Ground Floor | NF | Intact | This material observed to be present in other areas | 29-Dec-16 | Add to O & M Plan | | Asbestos: Floor Tile - 5% Chrysotile |
| **MATERIALS ASSUMED TO CONTAIN ASBESTOS** | | | | | | | | |
| Hardwood Floor Underlayment and associated Mastic | Multipurpose Room 101 on 1st Floor | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Drywall/Joint Compound | Throughout Building | NF | Intact | Sample as NAD in Cafeteria, Hallway on the 1st Floor by Classroom 105, and Classroom 202 | 29-Dec-16 | Remove from O & M Plan | | None |
| Grey Sink Underlayment Mastic | All Classrooms | NF | Intact | Not accessible in classrooms. Sampled as NAD in Teachers Lounge. | 29-Dec-16 | Remove from O & M Plan | | None |
| Interior Window and Door Caulking | Throughout Building | NF | Intact | Various types of caulk were sampled as NAD | 29-Dec-16 | Removed from O & M Plan | | None |
| Boards above Windows | Classrooms | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Boards and associated Mastic | Hallways | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| 4" Blue Cove Base and associated Mastic | Throughout Building | NF | Intact | Sample as NAD by ECS | 29-Dec-16 | Removed from O & M Plan | | None |
| Incinerator Door Insulation | Boiler Room on Ground Floor | F | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Fire Rated Window Frame Insulation | Ramp from Room 105 to Main Office in 1st Floor Hallway | F | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Pipe Flange Gaskets | Throughout the Building | Unknown | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Electrical Panels: Transite Components | Mechanical Rooms | NF | Intact | PACM until tested | 29-Dec-16 | 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 | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Mirror Mastic | Bathrooms | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Chalkboards and associated Mastics | Classrooms | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

| MATERIAL | LOCATION | FRIABILITY | CONDITION | COMMENTS | LAST INSPECTION DATE | RECOMMENDATION | SEMI-ANNUAL INSPECTION DATE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| Interior Pipe Wrap associated with Water Fountain and Radiators | Throughout the Building | NF | Intact | PACM until tested | 29-Dec-16 | 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 | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Asphalt-Based Roofing Material and Caulks/Sealants | Roof | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| **NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 6, 2013 SURVEY** | | | | | | | | |
| Brown Mastic associated with 9' x 9" Tan Floor Tiles | Electrical Room | N/A | N/A | The floor tile associated wit this material is ACM, and is listed as such in the corresponding section of this table. | N/A | N/A | N/A | Mastic - NAD |
| 2' x 4' White Fissured Ceiling Tiles | Throughout Building | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Drywall | Cafeteria, Hallway on the 1st Floor by Classroom 105, and Classroom 202 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Joint Compound | Cafeteria, Hallway on the 1st Floor by Classroom 105, and Classroom 203 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| 2' x 2' White Textured Ceiling Tile | Elevator Foyer at Stairs to Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Gray Stair Tread and associated Yellow Mastic | Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | Floor Tile - NAD<br>Mastic - NAD |
| Light Gray Interior Window Caulk | Stairs at Exit Door 11, Kitchen, and Classroom 211 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Blue Cove Base and associated Yellow Mastic | Elevator Foyer at Stairs to Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | Floor Tile - NAD<br>Mastic - NAD |
| Gray Mastic on Metal Duct | Storage Room by Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Gray Sink Undercoat | Teacher's Lounge Room on Ground Floor | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Plaster Wall | Kitchen | N/A | N/A | N/A | N/A | N/A | N/A | Finish - NAD<br>Base - NAD |
| White Wrap on Fiberglass Pipe Insulation | Custodial Closet in the Kitchen | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Black Stair Tread | Exit Door 4 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

| MATERIAL | LOCATION | FRIABILITY | CONDITION | COMMENTS | LAST INSPECTION DATE | RECOMMENDATION | SEMI-ANNUAL INSPECTION DATE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| Beige Mastic on Fiberglass Duct Insulation | Classroom 105 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| **NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN DECEMBER 29, 2016 SURVEY** | | | | | | | | |
| Black Paper/Foil Fiberglass Pipe Insulation Wrap with Black Mastic | Crawl Space Adjacent to Boiler Room | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Brown Fireproofing | Crawl Space Adjacent to Boiler Room | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| White Ceramic Chair Rail Caulk | Stairwell | N/A | N/A | N/A | N/A | N/A | N/A | NAD |

Notes: F = Friable; NF = Non-Friable; PACM = Presumed Asbestos Containing Material; O & M Plan = Operations and Maintenance Plan; NAD = No Asbestos Detected, N/A = Not Applicable.

April 7, 2017

Mr. Derrick Fulcher
Alexandria City Public Schools
1340 Braddock Place
Alexandria, Virginia 22314

ECS Project No. 47:1519-D

Reference: AHERA Three-Year Re-Inspection Report, Lyles Crouch Elementary School, 530 S. Saint Asaph Street, Alexandria, VA

Dear Mr. Fulcher:

ECS Mid-Atlantic, LLC (ECS), is pleased to provide Alexandria City Public Schools with the results of the above referenced non-invasive AHERA Three-Year Re-Inspection Survey Report for the Lyles Crouch Elementary School. This work was performed in general conformance with ECS Proposal No. 47:1750-EP2, dated October 19, 2016, and ACPS Purchase Order Number 17003633. The following is a summary of results of the above referenced onsite work performed, in general, on December 29, 2016.

ECS appreciates this opportunity to provide these services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

**ECS MID-ATLANTIC, LLC**

Michael Hamill
Asbestos Inspector
3303003941
Virginia License Number

Diana Krass
Asbestos Management Planner
3304001626
Virginia License Number

Attachments:

ACPS Asbestos-Containing Materials (ACMs) Summary
3-Year Re-Inspection ACM Summary Form
Table 1: Bulk Sampling of Suspect Asbestos-Containing Materials
Photographs
Laboratory Results and Chain of Custody

I:_e-projects\1501-1600\1519-D ACPS 3 YR AHERA - O&M Plans\Lyles Crouch \1519-D Lyles Crouch School 3-Yr Survey Report.doc

## SITE DESCRIPTION

The subject property is improved with Lyles Crouch Elementary School and is located at 530 S. Saint Asaph Street in Alexandria, Virginia. The building appears to have various renovations in the past. Most general classroom and common areas were accessible during the survey although some areas were not accessible due to occupancy, on-going maintenance work, or the rooms were locked.

## PURPOSE

In general accordance with Title II, the Asbestos Hazard Emergency Response Act (AHERA) of the Toxic Substance Control ACT (TSCA), this school was re-inspected by an EPA and State of Virginia Accredited Asbestos Inspector and Management Planner. Under this law the local education agency (LEA) for each school system found to contain asbestos-containing materials (ACMs) must have those school buildings re-inspected once every three years.

Prior to renovation and/or demolition of ACMs, facility owners must also comply with the US EPA Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations. ECS was requested to perform an AHERA Three-Year Re-Inspection Survey for the school building to identify ACMs which may require repair, special handling, and/or removal.

## PHYSICAL ASSESSMENT

ECS performed a physical assessment of the asbestos-containing materials (ACMs) that have been previously reported for the school building. A copy of the ACMs identified for the school building is attached to this report. The physical condition of each ACM observed by ECS during our survey is referenced in the attached summary table. Based on our observations of the accessible ACMs, the materials appeared to be generally in good condition.

Various flooring materials were observed to have layering throughout the floor systems of the building. Newer floor tiles and/or carpeting were observed. It is expected that older flooring materials are present beneath newer flooring materials and are likely present under cabinets, partition walls, etc.

## METHODS AND RESULTS

The asbestos survey was performed by a Commonwealth of Virginia licensed asbestos inspector who has received EPA accredited training (VA License No. 3303003941). The survey was performed in general accordance with EPA Standard 40 CFR 763 Subpart E,

Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol.

During our survey on December 29, 2016, ten (10) bulk samples of suspect asbestos-containing materials were collected and submitted to the laboratory for analysis. Based on the analytical results, none of the materials sampled were reported as asbestos-containing. The results are summarized in Table 1 attached to this report.

ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind solid walls and/or ceilings, and/or sub-grade materials) and were not surveyed for suspect ACMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

## FINDINGS AND RECOMMENDATIONS

During our survey, newly identified asbestos-containing materials (ACMs) were not revealed. In general, ACMs that were accessible and observed were noted to be in good condition.

ECS recommends the findings of this report should be implemented into the Asbestos Operations and Maintenance Plan (O&M Plan) for the school building and the materials continued to be managed within the O&M Plan. No additional training or notification is required as a result of adding these materials to the O&M Plan other than informing maintenance staff and outside contractors not to disturb these materials.

Based on our findings during this re-inspection, ECS recommends the following:

1. Notification of the existence and availability of the O&M Plan, which includes information on known and suspect ACMs, should be made available to the school staff, PTA, and parents of children attending the school on an annual basis.

2. Any contractors (electrical, mechanical, etc.) who are to perform a service at the building shall be notified of known and suspect ACMs at the building as identified in the O&M Plan, and be instructed not to disturb these materials in any way.

Federal and local regulations require ACMs be removed prior to disturbance by renovation and/or demolition. ECS recommends the identified ACMs reported to be present within the school building be removed prior to construction activities and disposed of by a licensed Commonwealth of Virginia asbestos abatement contractor if the ACMs are to be impacted.

Suspect ACMs not observed due to inaccessibility during the survey may be encountered during future construction activities and should be tested for asbestos or assumed as asbestos-containing. If any portions of the building outside of the areas surveyed for this

study are to be impacted by construction activities, it is recommended that they also be surveyed for ACMs by a licensed Commonwealth of Virginia asbestos inspector prior to disturbance.

## LIMITATIONS

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

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

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

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

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

# ATTACHMENT

# ACPS ASBESTOS-CONTAINING MATERIALS (ACMS) SUMMARY

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

Updated as of December 29, 2016

| 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" Medium Red Floor Tiles | Cafeteria and Kitchen on Ground Floor | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Red Floor Tiles | Cafeteria and Kitchen on Ground Floor | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Green Floor Tiles | Assumed under 12" x 12" Existing Floor Tiles throughout the Building | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Light Brown Floor Tiles | Assumed under 12" x 12" Existing Floor Tiles throughout the Building | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| 9" x 9" Medium Green Floor Tiles | Health Center (Reported as Nurses Area) | NF | Intact | Material is under 12" x 12" Floor Tile and is assumed under existing flooring materials | 29-Dec-16 | Maintain in O & M Plan | | Assumed beneath newer flooring materials. Verify Analytical Results. |
| Black Window Sill | Classrooms | NF | Intact | None | 29-Dec-16 | Maintain in O & M Plan | | Verify Analytical Results |
| Fire Doors | Throughout Building | F | Intact | None | 29-Dec-16 | Maintain in O & M Plan | | Verify Analytical Results |
| **MATERIALS REPORTED AS ASBESTOS-CONTAINING MATERIALS ON PRIOR SURVEYS THAT WERE NOT IDENTIFIED/OBSERVED BY ECS IN NOVEMBER 18, 2013 SURVEY** | | | | | | | | |
| Black Mastic on TSI and Ducts | 2nd Floor Hallway. Room 105 and Throughout Building | NF | N/A | This material is reported as ACM; Not observed in this area. | 29-Dec-16 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| 6" White TSI-Mudded Elbows | Crawl Space under Media Center | F | N/A | This material is reported as ACM; | 29-Dec-16 | Remove from O & M Plan pending verification of removal. | | Verify removal |
| 4" White TSI-Mudded Elbows | Crawl Space | F | N/A | This material is reported as ACM; | 29-Dec-16 | Remove from O & M Plan pending verification of removal. | | Verify removal |
| Fire Doors | Throughout Building | F | N/A | This material is reported as ACM; however it was not observed in this area. | 29-Dec-16 | Maintain in O & M Plan | | Sample if proposed to be disturbed |
| 12" x 12" Black Floor Tiles and associated Mastic | Throughout Building | NF | Intact | This material is reported as PACM; | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

| MATERIAL | LOCATION | FRIABILITY | CONDITION | COMMENTS | LAST INSPECTION DATE | RECOMMENDATION | SEMI-ANNUAL INSPECTION DATE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| **ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 6, 2013 SURVEY** | | | | | | | | |
| 9" x 9" Tan Floor Tiles | Electrical Room on Ground Floor | NF | Intact | This material observed to be present in other areas | 29-Dec-16 | Add to O & M Plan | | Asbestos: Floor Tile - 5% Chrysotile |
| **MATERIALS ASSUMED TO CONTAIN ASBESTOS** | | | | | | | | |
| Hardwood Floor Underlayment and associated Mastic | Multipurpose Room 101 on 1st Floor | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Drywall/Joint Compound | Throughout Building | NF | Intact | Sample as NAD in Cafeteria, Hallway on the 1st Floor by Classroom 105, and Classroom 202 | 29-Dec-16 | Remove from O & M Plan | | None |
| Grey Sink Underlayment Mastic | All Classrooms | NF | Intact | Not accessible in classrooms. Sampled as NAD in Teachers Lounge. | 29-Dec-16 | Remove from O & M Plan | | None |
| Interior Window and Door Caulking | Throughout Building | NF | Intact | Various types of caulk were sampled as NAD | 29-Dec-16 | Removed from O & M Plan | | None |
| Boards above Windows | Classrooms | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Boards and associated Mastic | Hallways | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| 4" Blue Cove Base and associated Mastic | Throughout Building | NF | Intact | Sample as NAD by ECS | 29-Dec-16 | Removed from O & M Plan | | None |
| Incinerator Door Insulation | Boiler Room on Ground Floor | F | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Fire Rated Window Frame Insulation | Ramp from Room 105 to Main Office in 1st Floor Hallway | F | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Pipe Flange Gaskets | Throughout the Building | Unknown | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Electrical Panels: Transite Components | Mechanical Rooms | NF | Intact | PACM until tested | 29-Dec-16 | 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 | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Mirror Mastic | Bathrooms | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Chalkboards and associated Mastics | Classrooms | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

| MATERIAL | LOCATION | FRIABILITY | CONDITION | COMMENTS | LAST INSPECTION DATE | RECOMMENDATION | SEMI-ANNUAL INSPECTION DATE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| Interior Pipe Wrap associated with Water Fountain and Radiators | Throughout the Building | NF | Intact | PACM until tested | 29-Dec-16 | 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 | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| Asphalt-Based Roofing Material and Caulks/Sealants | Roof | NF | Intact | PACM until tested | 29-Dec-16 | Add to O & M Plan | | Sample if proposed to be disturbed |
| **NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN NOVEMBER 6, 2013 SURVEY** | | | | | | | | |
| Brown Mastic associated with 9' x 9" Tan Floor Tiles | Electrical Room | N/A | N/A | The floor tile associated wit this material is ACM, and is listed as such in the corresponding section of this table. | N/A | N/A | N/A | Mastic - NAD |
| 2' x 4' White Fissured Ceiling Tiles | Throughout Building | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Drywall | Cafeteria, Hallway on the 1st Floor by Classroom 105, and Classroom 202 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Joint Compound | Cafeteria, Hallway on the 1st Floor by Classroom 105, and Classroom 203 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| 2' x 2' White Textured Ceiling Tile | Elevator Foyer at Stairs to Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Gray Stair Tread and associated Yellow Mastic | Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | Floor Tile - NAD<br>Mastic - NAD |
| Light Gray Interior Window Caulk | Stairs at Exit Door 11, Kitchen, and Classroom 211 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Blue Cove Base and associated Yellow Mastic | Elevator Foyer at Stairs to Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | Floor Tile - NAD<br>Mastic - NAD |
| Gray Mastic on Metal Duct | Storage Room by Exit Door 11 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Gray Sink Undercoat | Teacher's Lounge Room on Ground Floor | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Plaster Wall | Kitchen | N/A | N/A | N/A | N/A | N/A | N/A | Finish - NAD<br>Base - NAD |
| White Wrap on Fiberglass Pipe Insulation | Custodial Closet in the Kitchen | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Black Stair Tread | Exit Door 4 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |

## LYLES CROUCH ELEMENTARY SCHOOL
## ACPS ASBESTOS CONTAINING MATERIALS SUMMARY

| MATERIAL | LOCATION | FRIABILITY | CONDITION | COMMENTS | LAST INSPECTION DATE | RECOMMENDATION | SEMI-ANNUAL INSPECTION DATE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| Beige Mastic on Fiberglass Duct Insulation | Classroom 105 | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| **NON-ASBESTOS CONTAINING MATERIALS SAMPLED BY ECS IN DECEMBER 29, 2016 SURVEY** | | | | | | | | |
| Black Paper/Foil Fiberglass Pipe Insulation Wrap with Black Mastic | Crawl Space Adjacent to Boiler Room | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| Brown Fireproofing | Crawl Space Adjacent to Boiler Room | N/A | N/A | N/A | N/A | N/A | N/A | NAD |
| White Ceramic Chair Rail Caulk | Stairwell | N/A | N/A | N/A | N/A | N/A | N/A | NAD |

Notes: F = Friable; NF = Non-Friable; PACM = Presumed Asbestos Containing Material; O & M Plan = Operations and Maintenance Plan; NAD = No Asbestos Detected, N/A = Not Applicable.

# ATTACHMENT

# 3-YEAR RE-INSPECTION ACM SUMMARY FORM

# Lyles-Crouch Elementary School 3-Year AHERA Re-Inspection Survey
# Asbestos-Containing Materials Summary

**Date: December 29, 2016**

**Address: 530 S. Saint Asaph Street, Alexandria, Virginia**

| Room | Material | Condition | Abated |
|---|---|---|---|
| Cafeteria and Kitchen on Ground Floor | 9" x 9" Medium Red Floor Tiles | Intact under Newer Flooring Materials | No |
| Multi-Purpose Room on 1st Floor (Under Existing 12" x 12" Floor Tile) | 9" x 9" Red Floor Tiles | Intact under Newer Flooring Materials | No |
| Assumed under 12" x 12" Existing Floor Tiles throughout the Building | 9" x 9" Green Floor Tiles | Intact under Newer Flooring Materials | No |
| Storage Room by Ground Floor Stairwell | 9" x 9" Light Brown Floor Tiles | Intact under Newer Flooring Materials | No |
| Health Center (Reported as Nurses Area) | 9" x 9" Medium Green Floor Tiles | Intact under Newer Flooring Materials | No |
| Classrooms | Black Window Sill | Intact | No |
| Throughout Building | Fire Doors | Intact | No |
| 2nd Floor Hallway. Room 105 and Throughout Building | Black Mastic on TSI and Ducts | Not Observed | No |
| Electrical Room on Ground Floor | 9" x 9" Tan Floor Tiles | Intact | No |
| Throughout Building | 12" x 12" Black Floor Tiles and associated Mastic | Intact | No |
| Crawl Space under Media Center | 6" White TSI-Mudded Elbows | Intact | No |
| Crawl Space | 4" White TSI-Mudded Elbows | Intact | No |

| Room | Material | Condition | Abated |
|---|---|---|---|

**Comments**

1. Older Flooring Materials are assumed to be present in other areas under newer flooring.

**AHERA Inspector:** Michael Hamill **License No:** 3303003941

**Signature of Inspector:** Michael Hamill

# ATTACHMENT

## TABLE 1
## BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS

**TABLE 1**

**BULK SAMPLING OF SUSPECT ASBESTOS-CONTAINING MATERIALS**

| Sample # | Sampling Location | Material/Description | Analytical Results |
|---|---|---|---|
| 1 | Crawl Space Adjacent to Boiler Room | Black Paper/Foil Fiberglass Pipe Insulation Wrap with Black Mastic | NAD |
| 2 | Crawl Space Adjacent to Boiler Room | Black Paper/Foil Fiberglass Pipe Insulation Wrap with Black Mastic | NAD |
| 3 | Crawl Space Adjacent to Boiler Room | Black Paper/Foil Fiberglass Pipe Insulation Wrap with Black Mastic | NAD |
| 4 | Crawl Space Adjacent to Boiler Room | Brown Fireproofing | NAD |
| 5 | Crawl Space Adjacent to Boiler Room | Brown Fireproofing | NAD |
| 6 | Crawl Space Adjacent to Boiler Room | Brown Fireproofing | NAD |
| 7 | Crawl Space Adjacent to Boiler Room | Brown Fireproofing | NAD |
| 8 | Crawl Space Adjacent to Boiler Room | Brown Fireproofing | NAD |
| 9 | Stairwell | White Ceramic Chair Rail Caulk | NAD |
| 10 | Stairwell | White Ceramic Chair Rail Caulk | NAD |

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

# ATTACHMENT

# PHOTOGRAPHS



1. View of the asbestos-containing 9” x 9” red floor tile underneath 12” x 12” floor tile in the multi-purpose room on the 1st floor.



2. View of the asbestos-containing 9” x 9” light brown floor tile in the storage room by a ground floor stairwell.



3. View of the asbestos-containing 9” x 9” tan floor tile in the electrical room on the ground floor.



4. View of the asbestos-containing black mastic on TSI above the suspended ceiling in the 2nd floor hallway.

# ATTACHMENT

# LABORATORY RESULTS AND CHAIN OF CUSTODY

# Bulk Asbestos Analysis

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

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

NVLAP Lab Code: 200664-0

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

**Attn:** Beverly Sedon

**Project:** 47:1519-D John Adams

**Lab Order ID:** 1700661
**Analysis ID:** 1700661_PLM
**Date Received:** 1/12/2017
**Date Reported:** 1/17/2017

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| JA 74 - A | 4" Gray Cove Base with White Mastic | **None Detected** | | **100% Other** | Gray<br>Non Fibrous<br>Homogeneous |
| *1700661PLM_1* | *covebase* | | | | Ashed |
| JA 74 - B | 4" Gray Cove Base with White Mastic | **None Detected** | | **100% Other** | Yellow<br>Non Fibrous<br>Homogeneous |
| *1700661PLM_10* | *mastic* | | | | Ashed |
| JA 75 | 4" Gray Cove Base with White Mastic | **None Detected** | | **100% Other** | Gray<br>Non Fibrous<br>Homogeneous |
| *1700661PLM_2* | *covebase only* | | | | Ashed |
| JA 76 | White Vibration Dampner Cloth | **70% Chrysotile** | | **30% Other** | Gray<br>Fibrous<br>Homogeneous |
| *1700661PLM_3* | | | | | Teased |
| JA 77 | White Vibration Dampner Cloth | **Not Analyzed** | | | |
| *1700661PLM_4* | | | | | |
| JA 78 | White Bridging Mastic on Fiberglass of Hot Water Tank | **None Detected** | **30% Cellulose**<br>**5% Wollastonite** | **65% Other** | White<br>Fibrous<br>Homogeneous |
| *1700661PLM_5* | | | | | Dissolved |
| JA 79 | White Bridging Mastic on Fiberglass of Hot Water Tank | **None Detected** | **5% Wollastonite** | **95% Other** | White<br>Non Fibrous<br>Homogeneous |
| *1700661PLM_6* | | | | | Dissolved |
| JA 80 | White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank | **None Detected** | **50% Cellulose**<br>**10% Fiber Glass** | **40% Other** | White, Silver<br>Fibrous<br>Heterogeneous |
| *1700661PLM_7* | *wrap on fiberglass* | | | | Dissolved |

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

Megan Javonovich (10)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

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

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

NVLAP Lab Code: 200664-0

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

**Attn:** Beverly Sedon

**Project:** 47:1519-D John Adams

**Lab Order ID:** 1700661
**Analysis ID:** 1700661_PLM
**Date Received:** 1/12/2017
**Date Reported:** 1/17/2017

| Sample ID<br>*Lab Sample ID* | Description<br>*Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes<br>Treatment |
|---|---|---|---|---|---|
| JA 81<br>*1700661PLM_8* | White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank<br>*wrap only* | **None Detected** | **50% Cellulose**<br>**10% Fiber Glass** | **40% Other** | White, Silver Fibrous Heterogeneous<br>Dissolved |
| JA 82<br>*1700661PLM_9* | White Mastic/Pipe Wrap TSI on Fiberglass of Hot Water Tank<br>*wrap only* | **None Detected** | **50% Cellulose**<br>**10% Fiber Glass** | **40% Other** | White, Silver Fibrous Heterogeneous<br>Dissolved |

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

Megan Javonovich (10)

**Analyst**

**Approved Signatory**

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

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

*To See an Example Click the bottom Example Tab.*

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

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

1700661

***Scientific Analytical Institute***

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

| Sample Number | Data 1 | Sample Description | Data 2 |
|---|---|---|---|
| << | | | |
| JA 74 | HA1 | 4" Gray Cove Base with White Mastic | 1st FL, Hall at G1 Elec. |
| JA 75 | HA1 | 4" Gray Cove Base with White Mastic | 1st FL, Hall at G1 Elec. |
| JA 76 | HA2 | White Vibration Dampner Cloth | 1st FL, G1 Elec |
| JA 77 | HA2 | White Vibration Dampner Cloth | 1st FL, G1 Elec |
| JA 78 | HA3 | White Bridging Mastic on Fiberglass of Hot Water Tank | Boiler Room |
| JA 79 | HA3 | White Bridging Mastic on Fiberglass of Hot Water Tank | Boiler Room |
| JA 80 | HA4 | White Mastic/Pipe Wrap TSI on Fiberglass of Hot Wate | Boiler Room |
| JA 81 | HA4 | White Mastic/Pipe Wrap TSI on Fiberglass of Hot Wate | Boiler Room |
| JA 82 | HA4 | White Mastic/Pipe Wrap TSI on Fiberglass of Hot Wate | Boiler Room |
| >> | | | |

Accepted ☑

Rejected ☐

M. Ives Poblete
1-12 10:30 am

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

# LETTER OF TRANSMITTAL

May 12, 2021
Alexandria City Public Schools
1340 Braddock Place Suite 620
Alexandria, VA 22314

ATTN: John Finnigan

RE: **Lyles Crouch ACM Abatement Monitoring**
ECS Job # **47:11652-D**

Permits:
Location: **530 S St Asaph Street**
**Alexandria, VA 22314**

| We are enclosing: | X | Field Reports | X | For your use | X | As requested |
|---|---|---|---|---|---|---|

CC:

ENCL: Field Report # 1 5/10/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D** |
| Report No. | **1** |
| Day & Date | **Monday 5/10/2021** |
| Weather | **63 °/ Cloudy** |
| On-Site Time | **8.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **8.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch ACM Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **7:00A** | **3:00P** |

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

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

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials specified to be removed today are floor tile and mastic from a stairwell closet.

STAIRWELL CLOSET WORK AREA

At 9:15 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 9:20 am, a PCM air sample was started outside the work area at the decontamination unit. The sampling pump was calibrated using a rotameter to 3 liters per minute.

At 11:30 am, the sampling pump was calibrated using a rotameter. The flow rate was 3 liters per minute. The PCM air sample was stopped and gathered.

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

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 60 minutes for the encapsulant to dry, 5 PCM air samples were started within the regulated work area. The sampling pumps were calibrated using a rotameter to 10 liters per minute.

At 2:30 pm the sampling pumps were calibrated using a rotameter after the air within the regulated work area was sampled using PCM cassettes for 120 minutes at 10 liters per minute. The air sampling pumps were stopped and the cassettes were gathered for analysis.

**By Tim Wilmot** 1825

The EPA and Virginia re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM final clearance air samples collected from the Stairwell Closet Work Area found the airborne fiber concentrations to be less than the maximum allowable limits set by the applicable regulations which meets the project requirements. The abatement contractor was informed of the results.

GENERAL

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

The abatement contractor was observed placing specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in accordance with applicable regulations. Waste bags were labeled and placed in an approved waste hauling container.

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

The EPA and Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The samples collected were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.

# Attachments



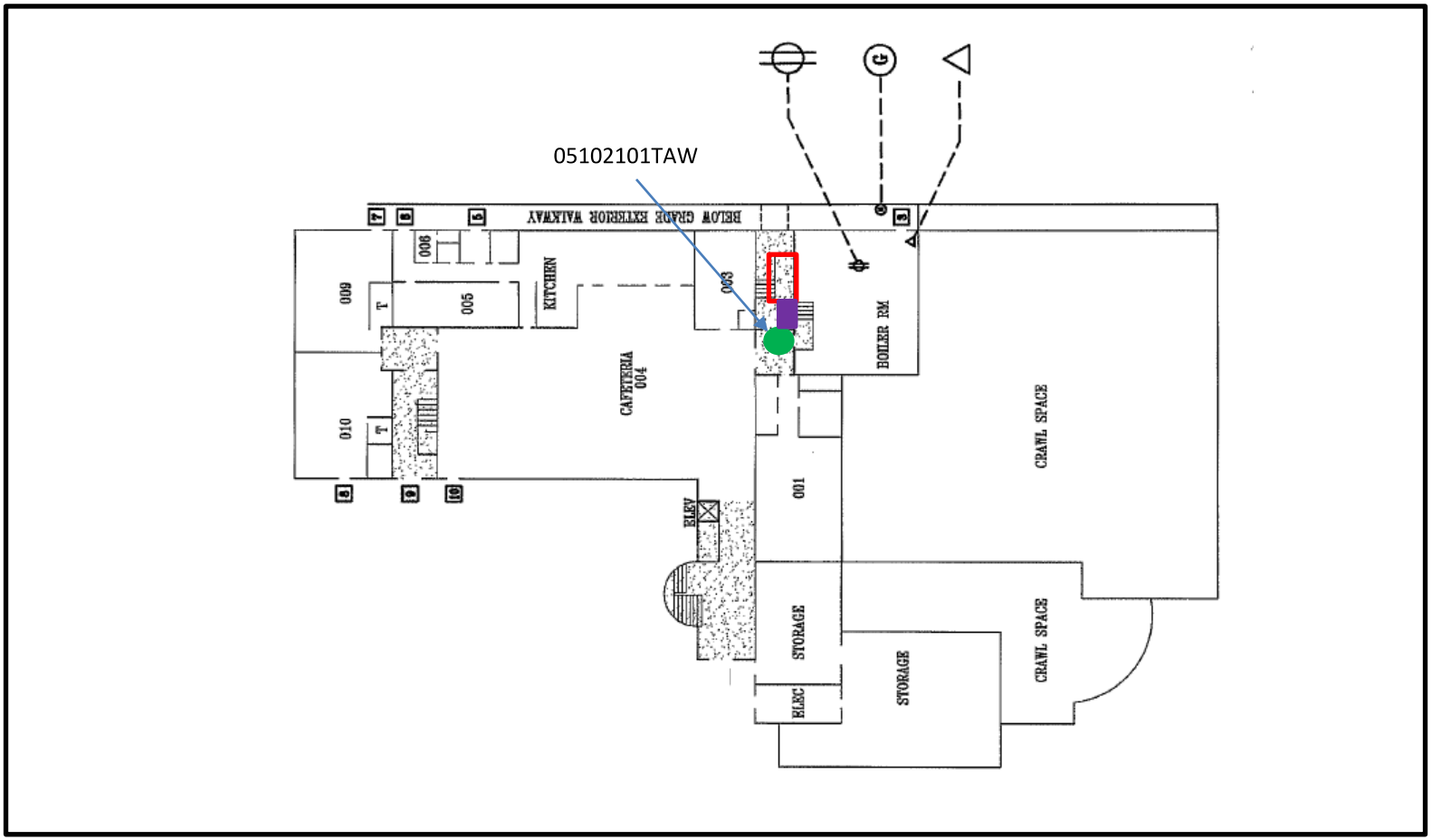
View of floor tile and mastic pre-abatement

Figure 1



View of work area post-abatement

Figure 2




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location
- = Cleared Area
- = Demolition Area

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

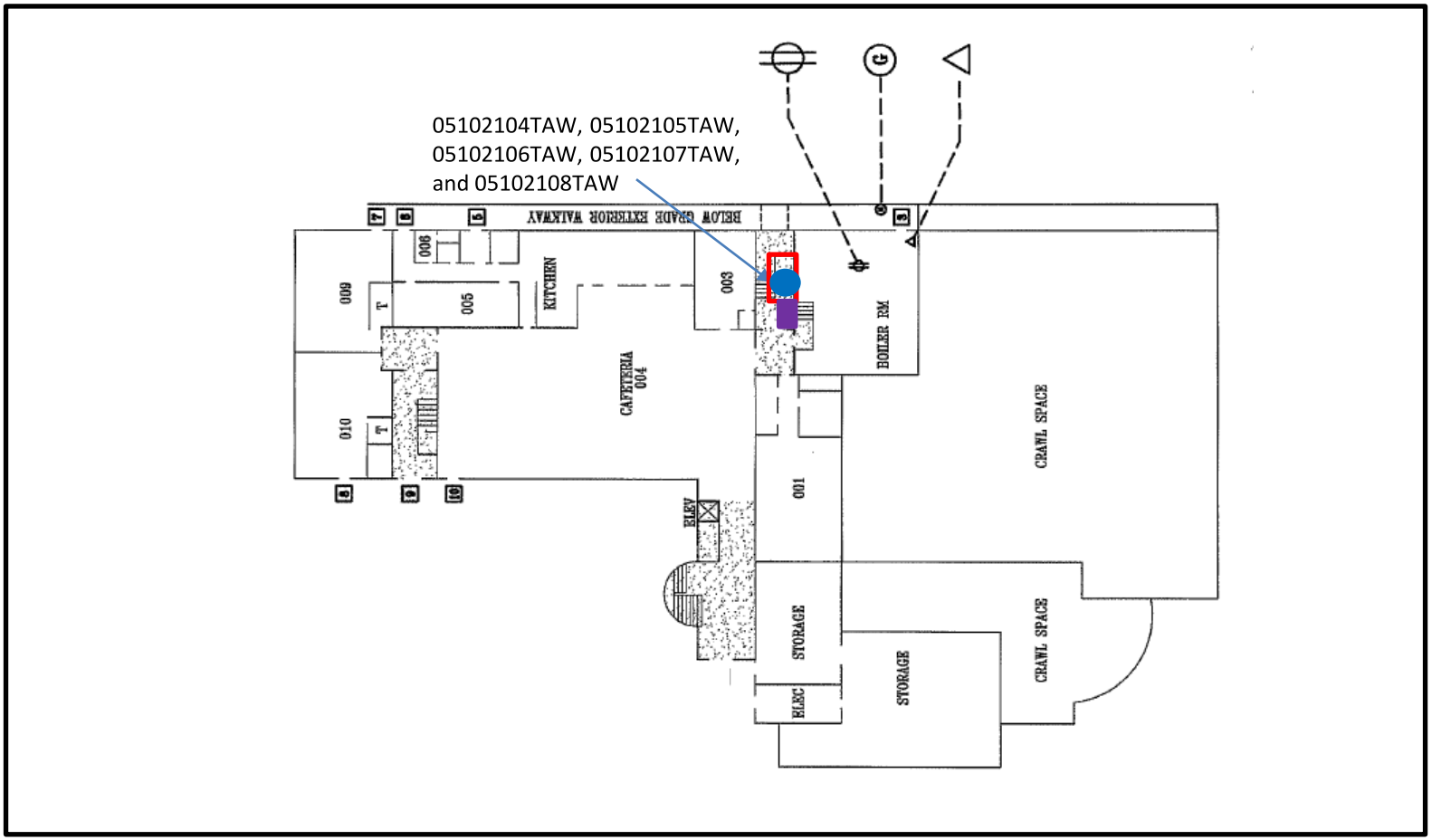
Work Area Sketch

Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D

Date 05/10/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Final Clearance Sample Location
- = IWA Final Clearance Sample Location

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Final Clearance Area Sketch
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D

Date 05/10/21

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 5/10/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 05102101TAW | OWA Decon Unit Stairwell Closet Work Area | 9:20 AM | 11:30 AM | 3.0 | 3.0 | 3.0 | 130 | 390.0 | 0.0 | 100 | 0.000 |
| 05102102TAW | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 05102103TAW | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 05102104TAW | FC- Stairwell Closet Work Area | 12:30 PM | 2:30 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.5 | 100 | 0.000 |
| 05102105TAW | FC - Stairwell Closet Work Area | 12:30 PM | 2:30 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.0 | 100 | 0.000 |
| 05102106TAW | FC - Stairwell Closet Work Area | 12:30 PM | 2:30 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.0 | 100 | 0.000 |
| 05102107TAW | FC - Stairwell Closet Work Area | 12:30 PM | 2:30 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.0 | 100 | 0.000 |
| 05102108TAW | FC - Stairwell Closet Work Area | 12:30 PM | 2:30 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.0 | 100 | 0.000 |

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

**Notes:** The EPA and Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter. The samples collected were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.



**ECS Technician:** Tim Wilmot  **Date:** 5/10/2021

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 47:11652-D **Date:** 5/10/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** Stairwell Closet Work Area

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

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 5/10/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D **Date:** 5/10/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** Stairwell Closet Work Area

| | | |
|---|---|---|
| | Work Area Location/Description | Stairwell Closet Work Area |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | N/A |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | 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 | N/A |
| | Debris Bagged/Sealed | Satisfactory |
| | Work Area Secured from Public Access | Satisfactory |
| **Air Samples Collected** | Number of PCM Air Samples | 1 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:** The work area was cleared and equipment removed before the end of the shift.



**ECS Technician:** Lauren E. Kesslak **Date:** 5/10/2021

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 47:11652-D **Date:** 5/10/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** Stairwell Closet Work Area

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

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 5/10/2021

# ASBESTOS ABATEMENT PROJECT MONITORING SUMMARY REPORT



LYLES CROUCH TRADITIONAL ACADEMY

530 S ASAPH STREET
ALEXANDRIA, VIRGINIA 22314

ECS PROJECT NO. 47:11652-D1

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

AUGUST 19, 2021

August 19, 2021

Mr. John Finnigan
Alexandria City Public Schools
530 S. Asaph Street
Client Address Line 2
Alexandria, Virginia 22314
Client Email

ECS Project No. 47:11652-D1

Reference: Asbestos Abatement Project Monitoring Summary Report, Lyles Crouch Traditional Academy, 530 S Asaph Street, Alexandria, Virginia

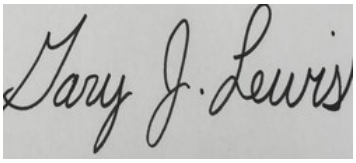
Dear Mr. Finnigan:

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



Gary James Lewis
Project Manager
GJLewis@ecslimited.com
202-400-1652



Michael Hamill, CIH
Senior Project Manager
MHamill@ecslimited.com
202-400-2173

## TABLE OF CONTENTS

PAGE


**1.0 PROJECT DESCRIPTION . . . . . 1**

**2.0 ECS SCOPE OF WORK . . . . . 1**

**3.0 ASBESTOS ABATEMENT ACTIVITIES . . . . . 1**

3.1 Asbestos Removal . . . . . 1

3.2 Daily Air Sampling . . . . . 1

3.3 ECS Observations . . . . . 1

**4.0 FINAL CLEARANCE AIR SAMPLING . . . . . 2**

**5.0 CLOSING . . . . . 2**

**6.0 LIMITATIONS . . . . . 2**

## TABLE OF APPENDICES

Appendix I: Daily Field Reports with PCM Air Sample Results

## 1.0 PROJECT DESCRIPTION

The subject property consists of Lyles Crouch Traditional Academy located at 530 South Asaph Street in Alexandria, Virginia. Based on the information available, the building contains approximately 74,940 square feet and was reportedly constructed in 1935. The asbestos abatement work was performed by Waco, Inc., in general from June 26, through July 14, 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 47:18960-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:

- 1st Floor Floor tile and associated black mastic - Rooms 115, 116, 117, and associated hallway, stage, and multi-purpose room
- 2nd Floor Floor tile and associated black mastic - Rooms 200, 201, 202, 204 and associated hallway, 205, 206, 208, 209, 210, 211, 212, 213, 214, 215, and elevator lobby

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 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 in 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 301-645-6472.

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 building's 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

June 30, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

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

CC:

ENCL: Field Report # 1 6/26/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **1** |
| Day & Date | **Saturday 6/26/2021** |
| Weather | **80 °/ Sunny** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:00A** | **4:30P** |

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

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

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and black mastic from work areas on the second floor rooms 208, 209, 210, 211, 212, 213, 214, and 215.

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

SECOND FLOOR 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.

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.

Between 6:50 to 7:00 AM, PCM air samples were started inside and outside the work area by the 3-stage decontamination unit, the second floor stair well and room 214. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 3:50 to 4:00 PM, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area by the 3-stage decontamination unit, the second floor stairwell and room 214.

**By Jennifer Turner** 1340

GENERAL

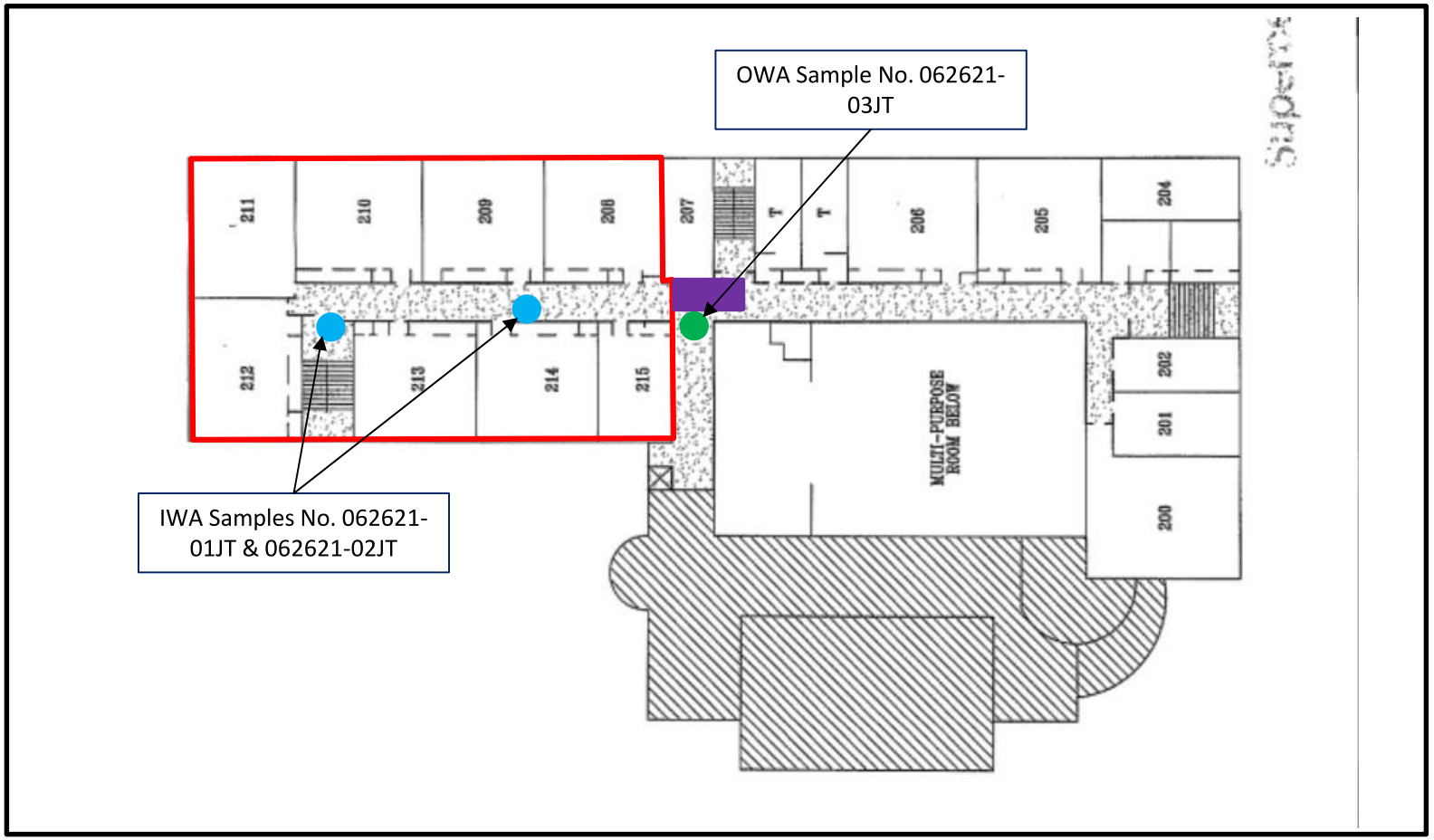
The regulated work area was surveyed to evaluate general compliance with applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags were labeled and stored in room 210.

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 inside and outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations, which meets the project requirements.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

ECS

Work Area Sketch

Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

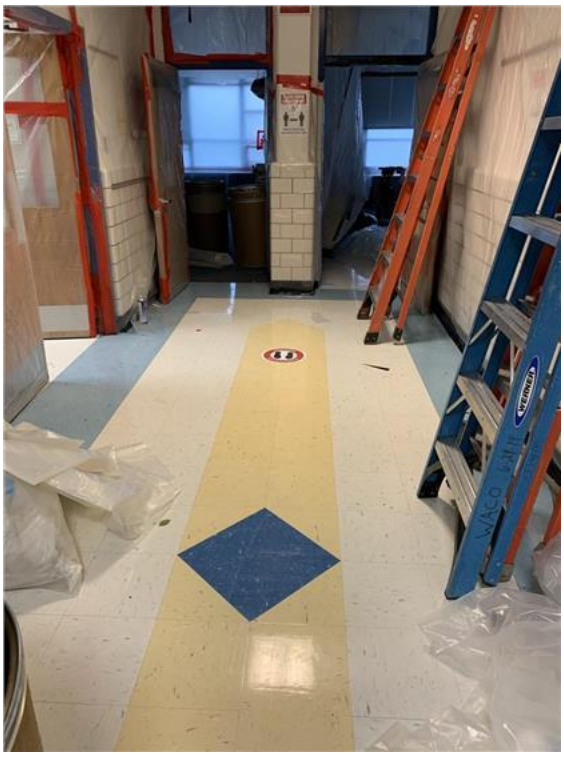
Date 06/26/21

# Attachments



Classroom set up for pre-abatement walkthrough

Figure 1



Floor tile to be removed

Figure 2

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 6/26/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 062621-01JT | IWA By Stairwell | 7:30 AM | 4:00 PM | 2.0 | 2.0 | 2.0 | 510 | 1020.0 | 3.5 | 100 | 0.002 |
| 062621-02JT | IWA by Room 214 | 7:30 AM | 4:00 PM | 2.0 | 2.0 | 2.0 | 510 | 1020.0 | 5.0 | 100 | 0.002 |
| 062621-03JT | OWA by Decon Unit | 7:25 AM | 3:50 PM | 2.0 | 2.0 | 2.0 | 505 | 1010.0 | 0.0 | 100 | 0.000 |
| 062621-FB1 | Field Blank 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 062621-FB2 | Field Blank 2 | 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).



**ECS Technician:** Jennifer Turner **Date:** 6/26/2021

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 6/26/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Hallway and Rooms 208, 209, 210, 211, 212, 213, 214, and 215

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Hallway and Rooms 208, |
| **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 APR |
| | Type of Filters Used | P100 |
| | Disposable Protective Clothing | Satisfactory |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 6/26/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 6/26/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Hallway and Rooms 208, 209, 210, 211, 212, 213, 214, and 215

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Hallway and Rooms 208, |
| **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:** Lauren E. Kesslak **Date:** 6/26/2021

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

# LETTER OF TRANSMITTAL

June 30, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

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

CC:

ENCL: Field Report # 2A 6/27/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **2A** |
| Day & Date | **Sunday 6/27/2021** |
| Weather | **90 °/ Cloudy** |
| On-Site Time | **4.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **4.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:00A** | **10:00A** |

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

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

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and black mastic from work areas on the second floor room 208, 209, 210, 211, 212, 213, 214, and 215.

SECOND FLOOR WORK AREA

At 6:30 AM, PCM air samples were started inside and outside the work area by the 3-stage decontamination unit. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

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. Workers were observed using hand chippers and grinders with HEPA vacuums attached to remove floor tile and black mastic.

At 9:50 AM, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered from inside and outside the work area by the 3-stage decontamination unit.

GENERAL

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

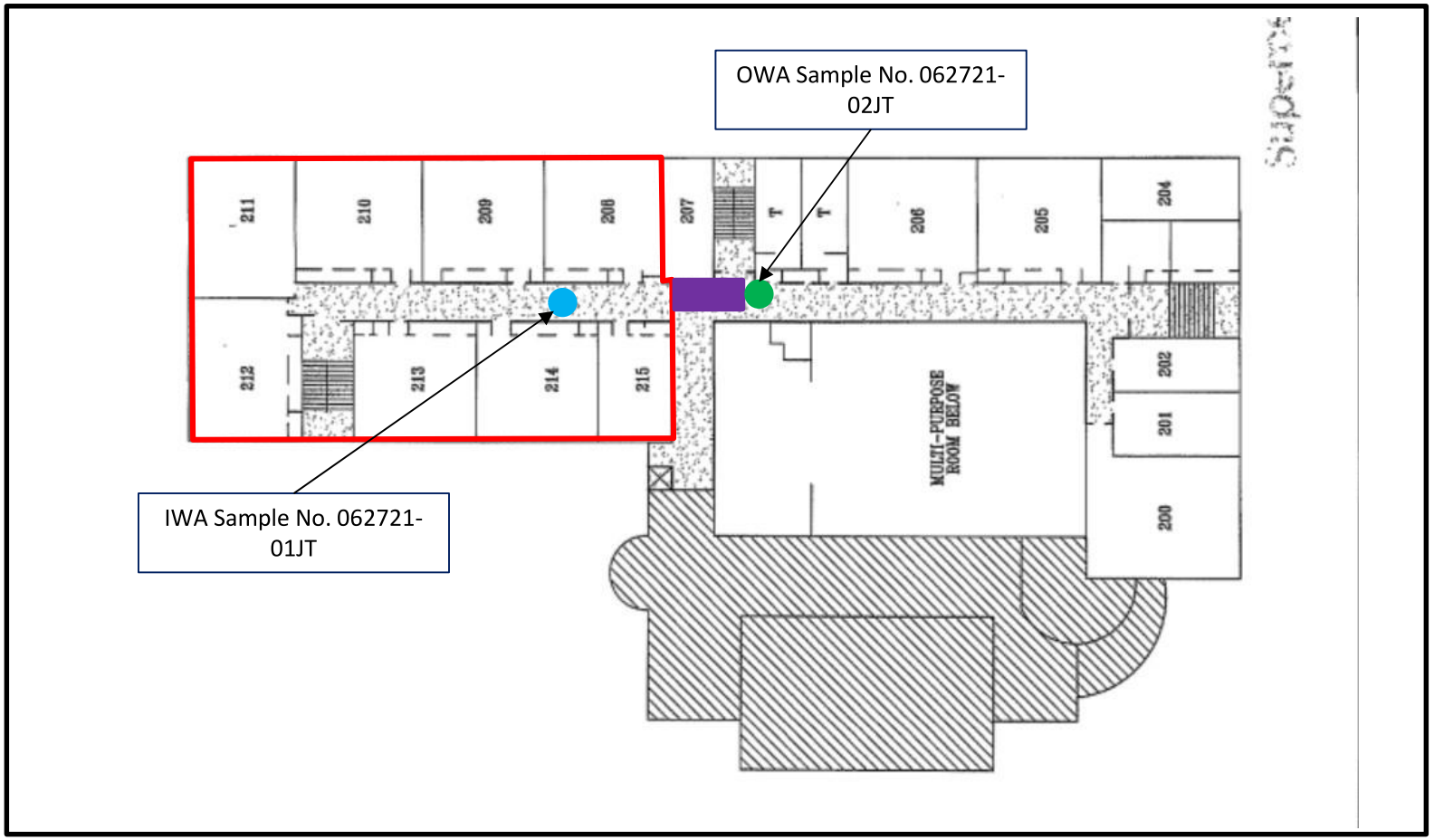
ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags were labeled and stored room 210.

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 inside and outside the work area were reported to be less than the maximum allowable limits set by the applicable regulations, which meets the project requirements.

The sample results reflect the conditions where the air samples were collected at the times and dates of collection.




Legend

= Regulated Work Area

= Decontamination Unit

= OWA Sample Location

= IWA Sample Location

Notes:

Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch

Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21

# Attachments



Amened water sprayer on-site

Figure 1



Barrels for asbestos waste storage

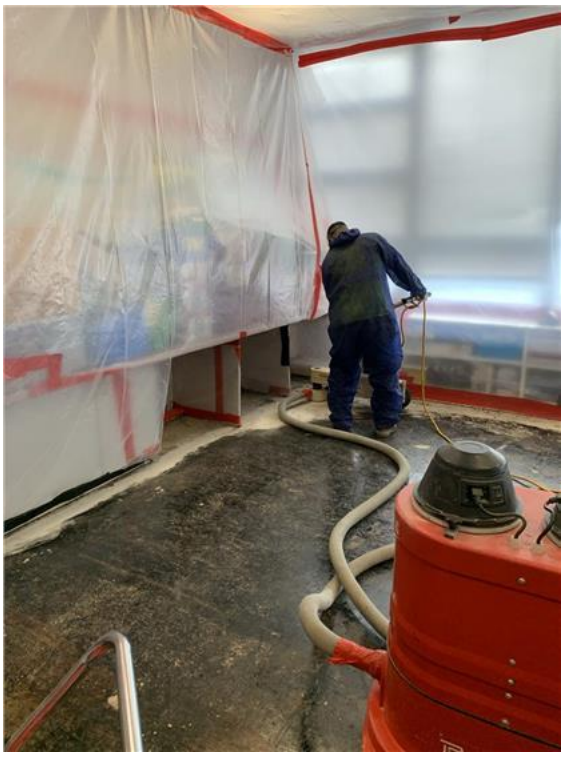
Figure 2

# Attachments



Classroom with floor tiles removed

Figure 3



Grinder with HEPA vac for removal of black mastic

Figure 4

# Attachments



Hallway with floor tile removed

Figure 5

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 6/27/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 062721-01JT | IWA By 3-stage Decon | 6:30 AM | 9:50 AM | 2.0 | 2.0 | 2.0 | 200 | 400.0 | 6.5 | 100 | 0.008 |
| 062721-02JT | OWA By 3-stage Decon | 6:30 AM | 9:50 AM | 2.0 | 2.0 | 2.0 | 200 | 400.0 | 1.5 | 100 | 0.002 |
| 062721-FB1 | Field Blank 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 062721-FB2 | Field Blank 2 | 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).



**ECS Technician:** Jennifer Turner **Date:** 6/27/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 6/27/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Rooms 208, 209, 210, 211, 212, 213, 214, and 215

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Rooms 208, 209, 210, |
| **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:** Lauren E. Kesslak **Date:** 6/27/2021

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

# LETTER OF TRANSMITTAL

June 30, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

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

CC:

ENCL: Field Report # 2B 6/27/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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 | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

| | |
|---|---|
| Project No. | **47:11652-D1** |
| Report No. | **2B** |
| Day & Date | **Sunday 6/27/2021** |
| Weather | **88 °/ Sunny** |
| On-Site Time | **6.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **6.50** |
| Re Obs Time | **0.00** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **10:00A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The undersigned met with Ms. Jennifer Turner of ECS and discussed today's work activities. The materials to be removed today are asbestos-containing floor tiles and associated black mastic on the 2nd floor work area. A floor plan and photographs for today's regulated word area are attached to this report.

GENERAL OBSERVATION

ECS observed the abatement contractor remaining workers were preparing the hallway, classrooms 205 and 206 to include with the current active containment.

2ND FLOOR WORK AREA MONITORING

Between 10:05 am and 10:07 am, PCM air samples were started outside and inside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute. Abatement workers were removing floor tiles using hand tools and black mastic at the rear end of the hallway using grinder attached with HEPA vacuum.

Between 3:30 pm and 3:31 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 for analysis.

GENERAL

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

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

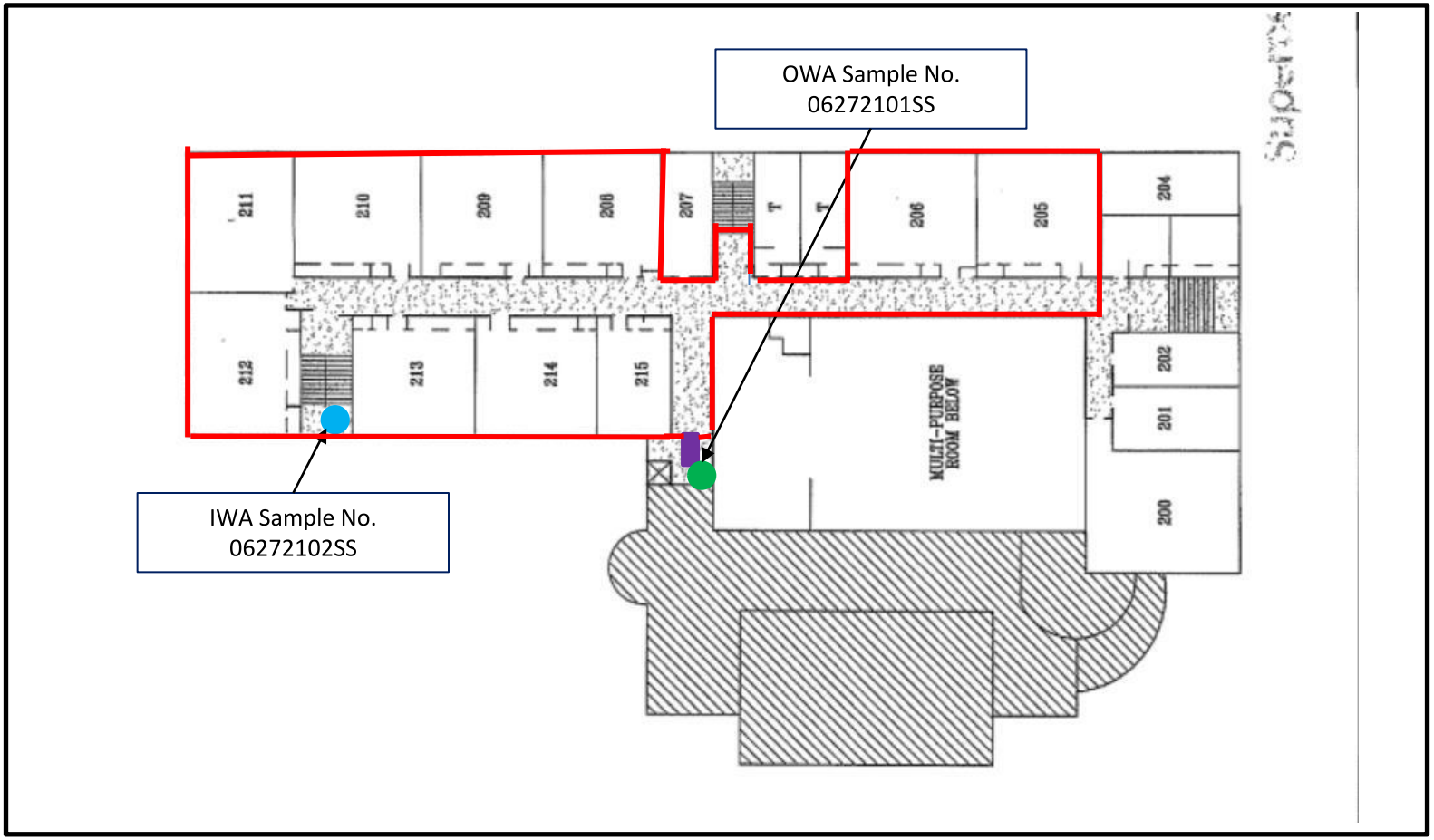
**By Suhel Shafaat** 1825

which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

**Transmittal Page 4/10**

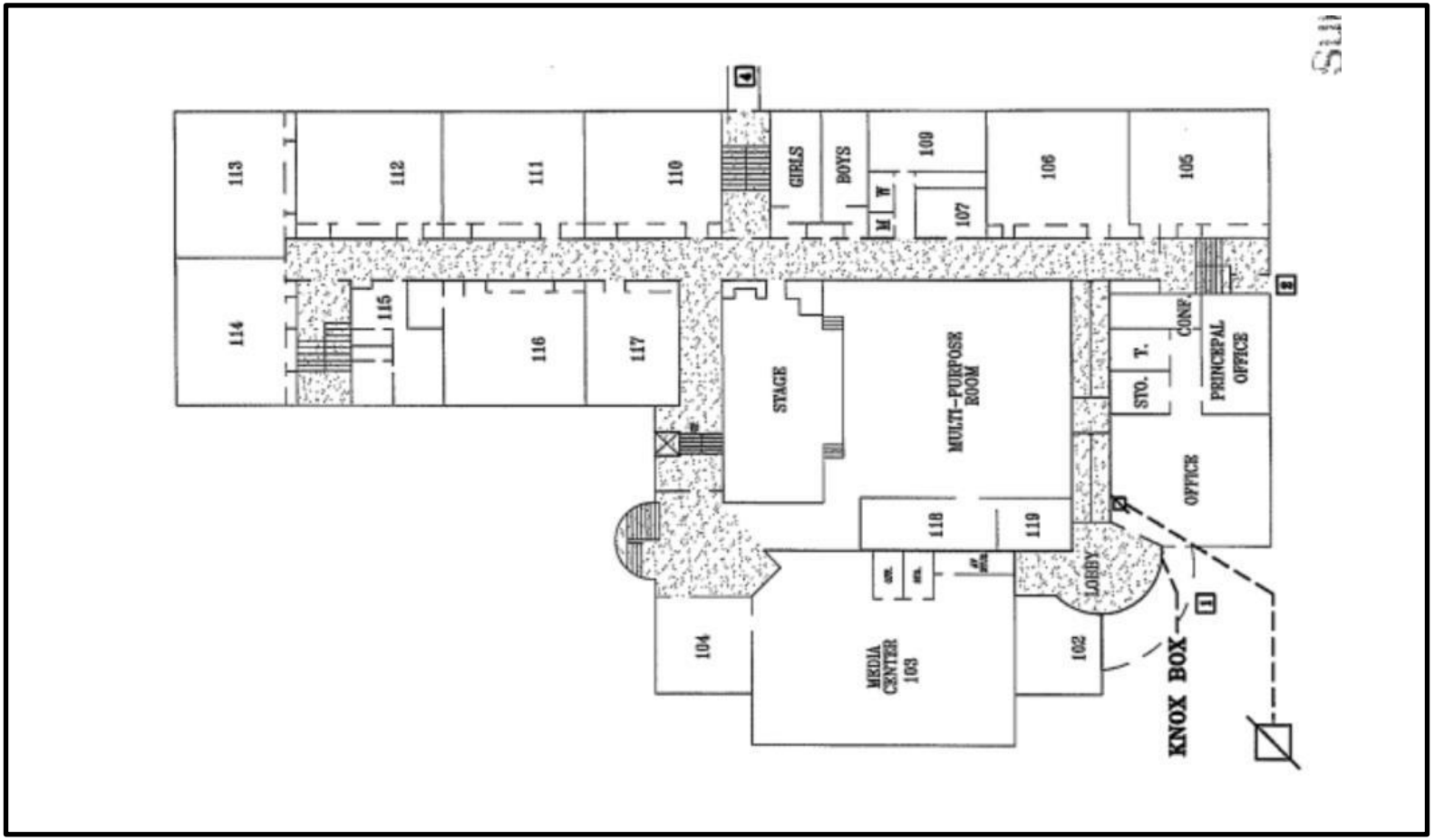
**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**2nd Floor**
**Alexandria City Public Schools**

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**1st Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21

Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
Ground Floor
Alexandria City Public Schools

SCALE NTS
Project No. 47:11652-D1
Date 06/27/21

# Attachments



View of the 2nd floor work area during abatement

Figure 1



View of the floor tiles to be removed in the hallway on the 2nd floor work area

Figure 2

# Attachments



View of the floor tiles and associated black mastic to be removed in the classroom on the 2nd floor work area

Figure 3

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 6/27/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 06272101SS | OWA/ 2nd Floor Work Area, At Decontamination Unit Entry | 10:05 AM | 3:30 PM | 2.0 | 2.0 | 2.0 | 325 | 650.0 | 1.0 | 100 | 0.001 |
| 06272102SS | IWA/ 2nd Floor Work Area | 10:07 AM | 3:32 PM | 2.0 | 2.0 | 2.0 | 325 | 650.0 | 5.0 | 100 | 0.004 |
| 062721FB01SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 062721FB02SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 6/27/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 6/27/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Work Area/ Removal of Carpet, Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Work Area/ Removal of |
| **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:** 2 negative air filtration unit was set up in classrooms 205 and 206.



**ECS Technician:** Lauren E. Kesslak **Date:** 6/27/2021

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

# LETTER OF TRANSMITTAL

July 6, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 6/28/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental 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 No. | **47:11652-D1** |
| Report No. | **3** |
| Day & Date | **Monday 6/28/2021** |
| Weather | **74 °/ Sunny** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black mastic from the 2nd floor work area. A work area sketch and photographs for today's regulated work area are attached to this report.

ECS observed the abatement contractor remaining workers were preparing the hallway, classrooms 200, 201, 202 and 204 to include with the current active containment. Abatement workers were removing floor tile using mechanized floor scraper. Black mastic at the rear end of the hallway was removed using a Blastrac machine and grinders attached with HEPA vacuums.

2ND FLOOR WORK AREA MONITORING

Between 6:38 am and 6:42 am, 2 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier near stairwell and inside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

At 10:02 am, sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample from inside work area was stopped and gathered for analysis. A new sample was started.

At 1:22 pm, sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample from inside work area was stopped and gathered for analysis.

Between 3:00 pm 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 for analysis.

GENERAL

**By Suhel Shafaat** 1825

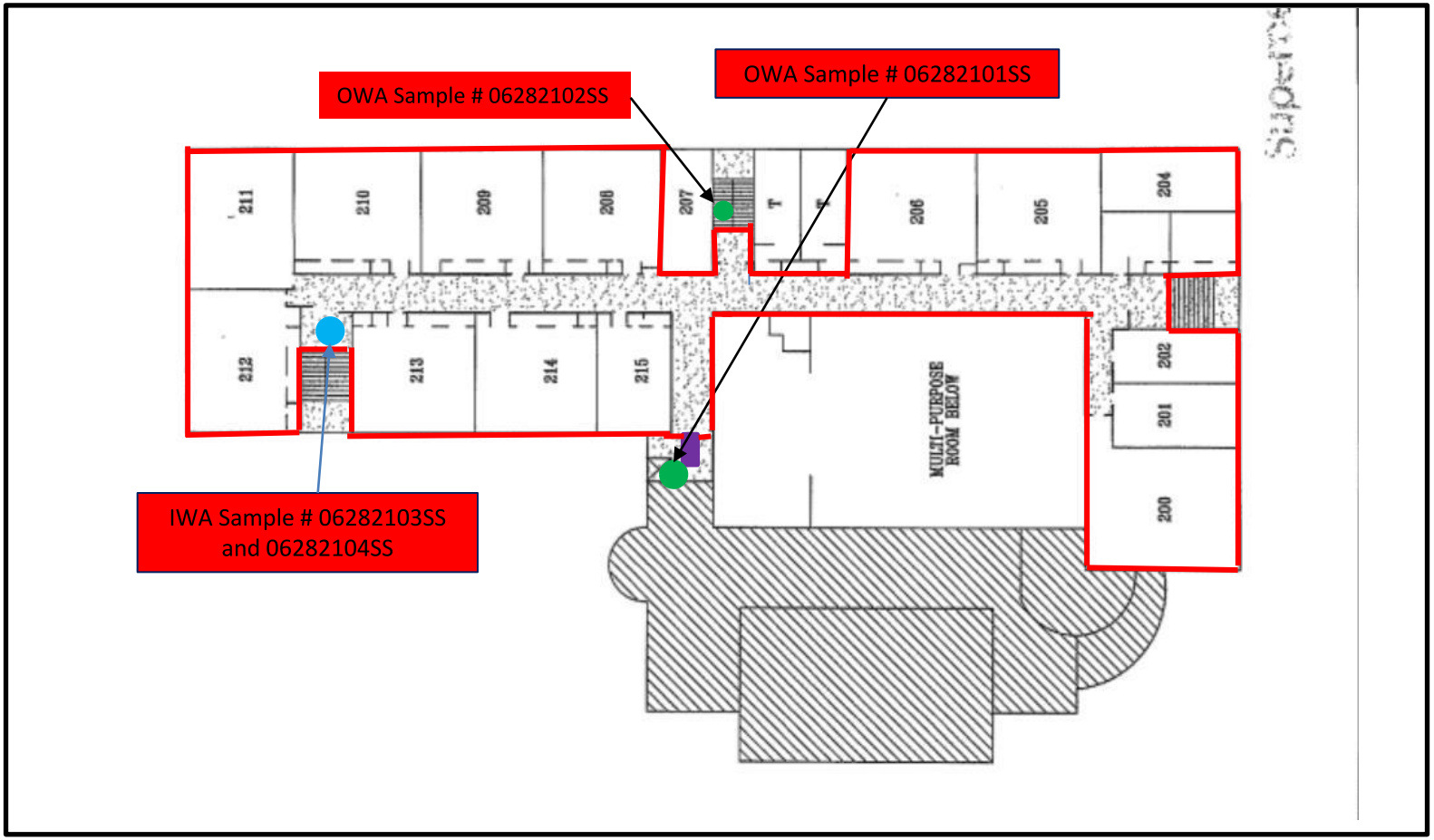
The regulated work area was surveyed to evaluate general compliance applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

**Transmittal Page 4/10**

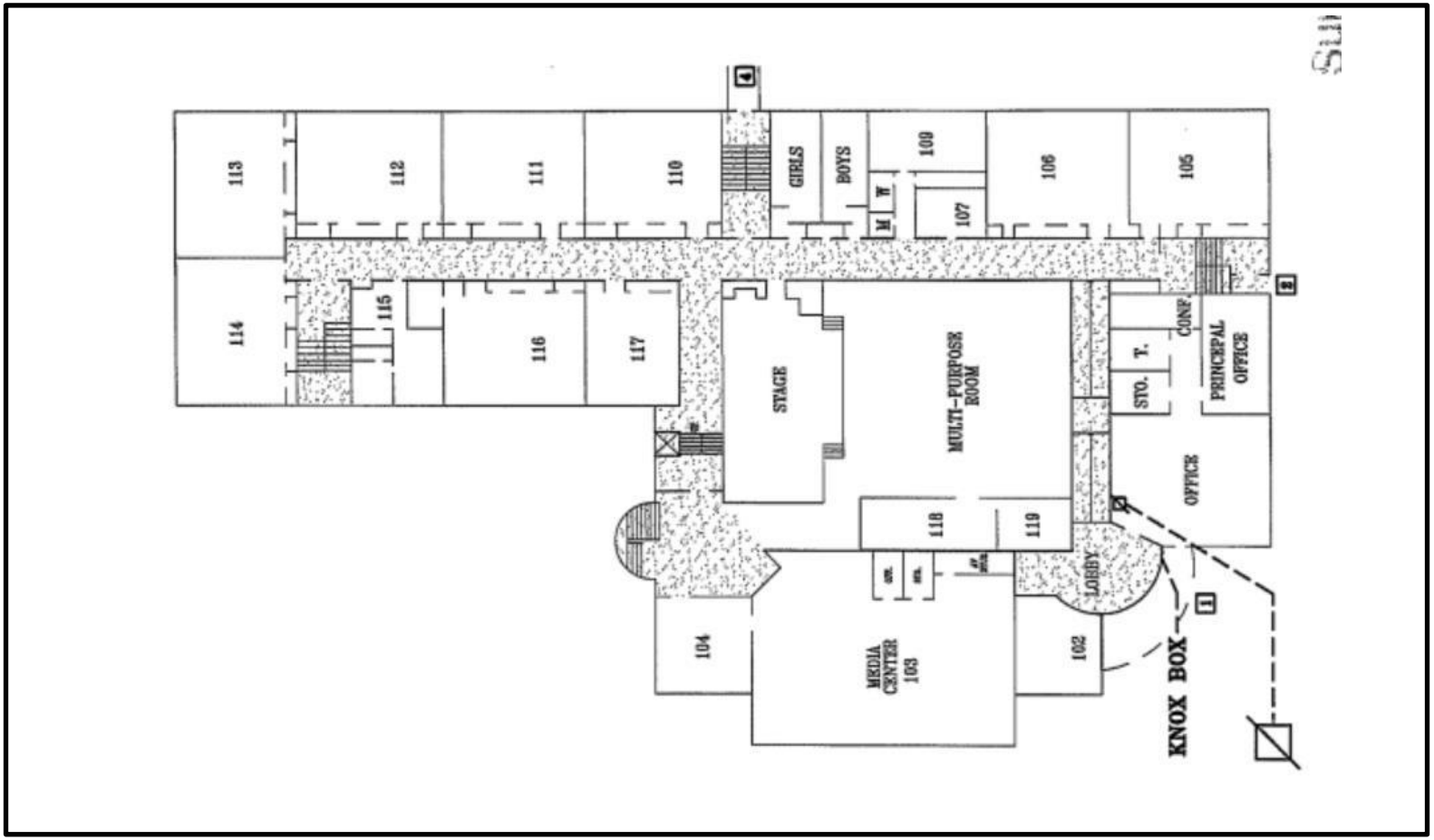
**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**2nd Floor**
**Alexandria City Public Schools**

SCALE NTS

Project No. 47:11652-D1

Date 06/28/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**1st Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21

Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
Ground Floor
Alexandria City Public Schools

SCALE NTS
Project No. 47:11652-D1
Date 06/27/21

# Attachments



View of removing floor tiles within the work area

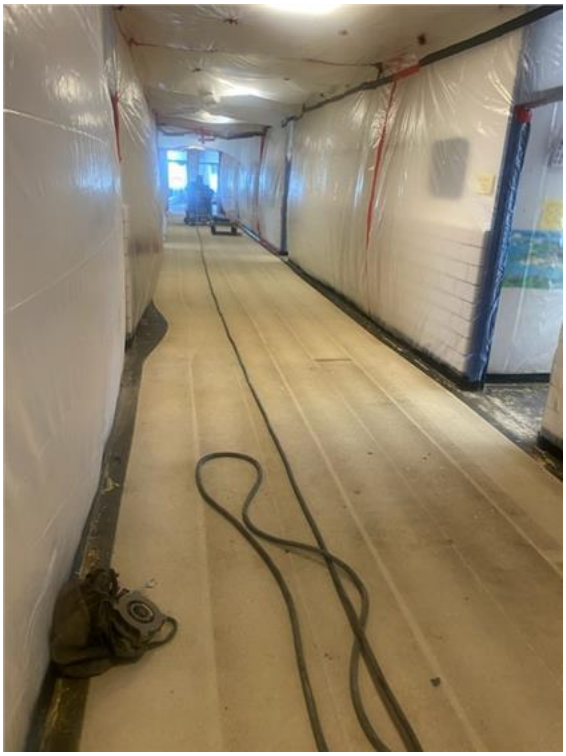
Figure 1



View of removing floor mastic using blastrac machine

Figure 2

# Attachments



View of the hallway following removal of floor mastic

Figure 3



View of the waste barrels placed inside the hallway

Figure 4

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 6/28/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 06282101SS | OWA/2nd Floor Work Area, At Decontamination Unit Entry | 6:38 AM | 3:00 PM | 2.0 | 2.0 | 2.0 | 502 | 1004.0 | 3.0 | 100 | 0.001 |
| 06282102SS | OWA/2nd Floor Work Area, Outside the Critical Barrier near Northeast Stairwell | 6:40 AM | 3:01 PM | 2.0 | 2.0 | 2.0 | 501 | 1002.0 | 0.0 | 100 | 0.000 |
| 06282103SS | IWA/2nd Floor Work Area | 6:42 AM | 10:02 AM | 2.0 | 2.0 | 2.0 | 200 | 400.0 | 7.5 | 100 | 0.009 |
| 06282104SS | IWA/2nd Floor Work Area | 10:02 AM | 1:22 PM | 2.0 | 2.0 | 2.0 | 200 | 400.0 | 2.5 | 100 | 0.003 |
| 062821FB01SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 062821FB02SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 6/28/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 6/28/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Work Area/ Removal of |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:** Bucket of water was provided by the contractor. 3 more negative air filtration unit was set up in the classrooms.



**ECS Technician:** Lauren E. Kesslak **Date:** 6/28/2021

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

# LETTER OF TRANSMITTAL

July 6, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 6/29/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **4** |
| Day & Date | **Tuesday 6/29/2021** |
| Weather | **75 °/ Sunny** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tile and associated black mastic on the 2nd floor work area. A work area sketch and photographs for today's regulated work area are attached to this report.

2ND FLOOR WORK AREA MONITORING

Between 6:26 am and 6:30 am, 2 PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier near northeast stairwell. 1 PCM sample also started inside the work area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

ECS observed the abatement contractor workers were removing floor tile using a mechanized floor scraper and hand tools. Black mastic was removed using a Blastrac machine and grinders with an attached HEPA vacuums.

At 11:43 am, the sampling pump inside work area was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis. A new sample was started.

Between 3:00 pm 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 for analysis.

GENERAL

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

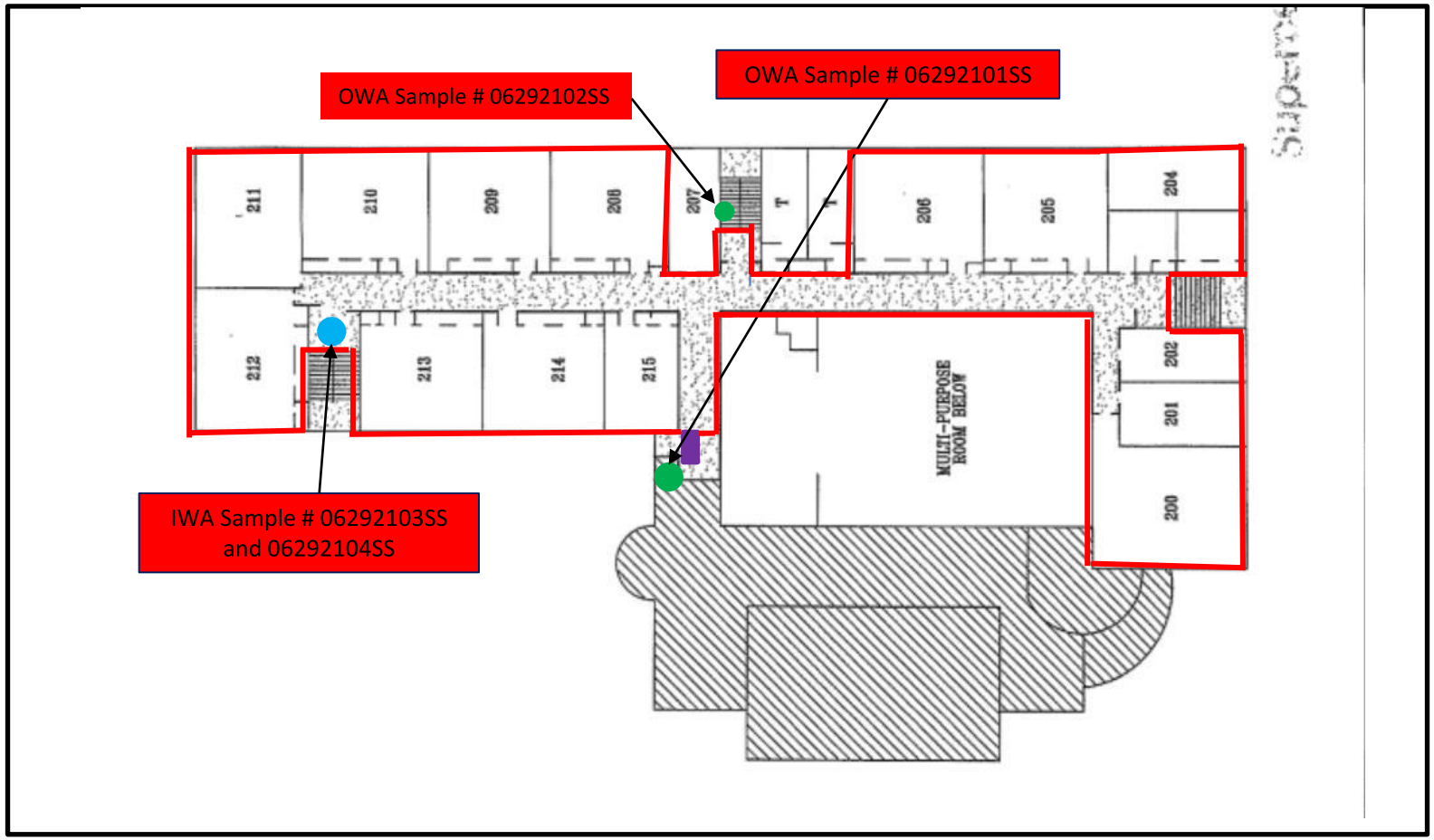
The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in

general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



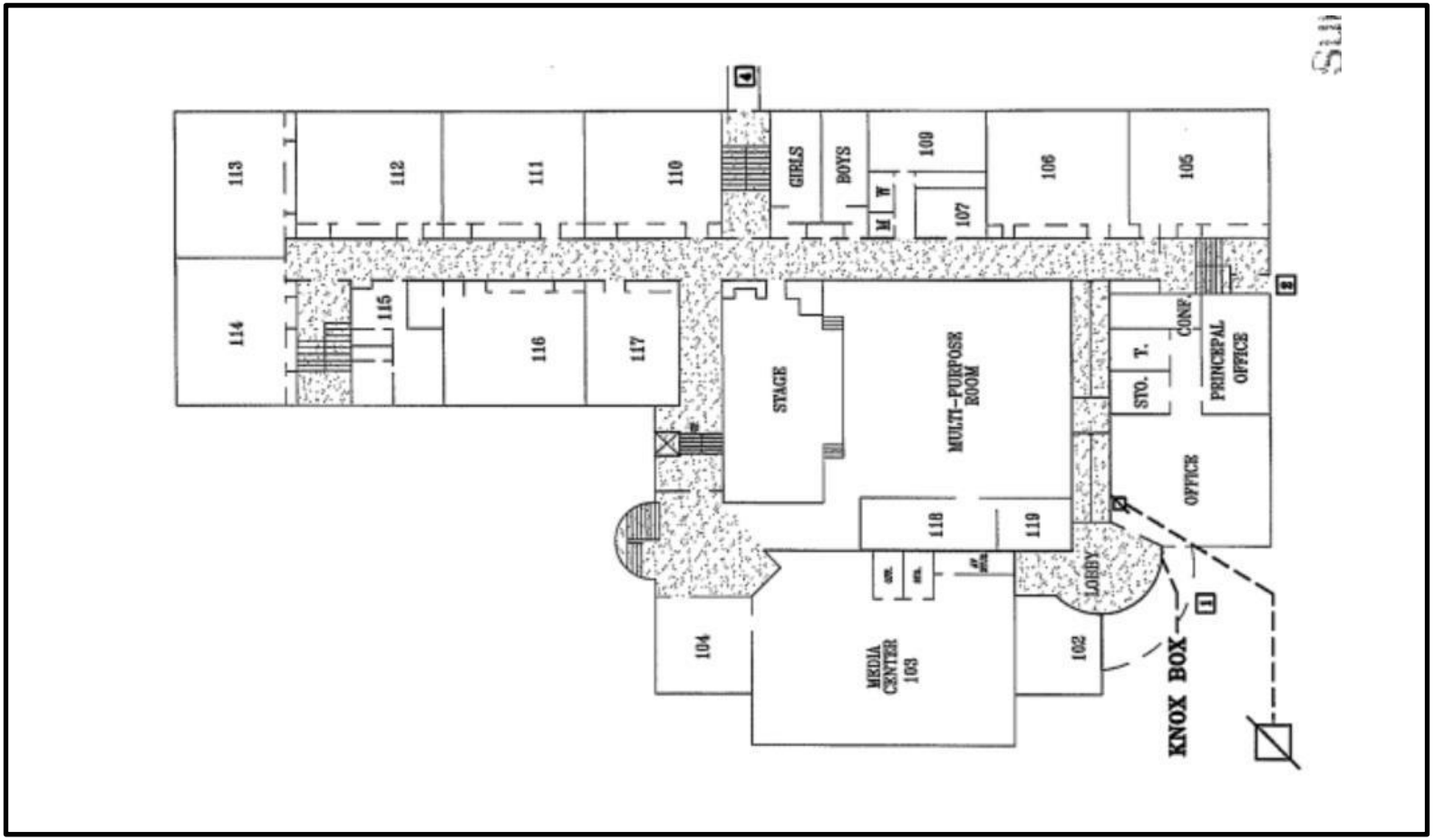
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



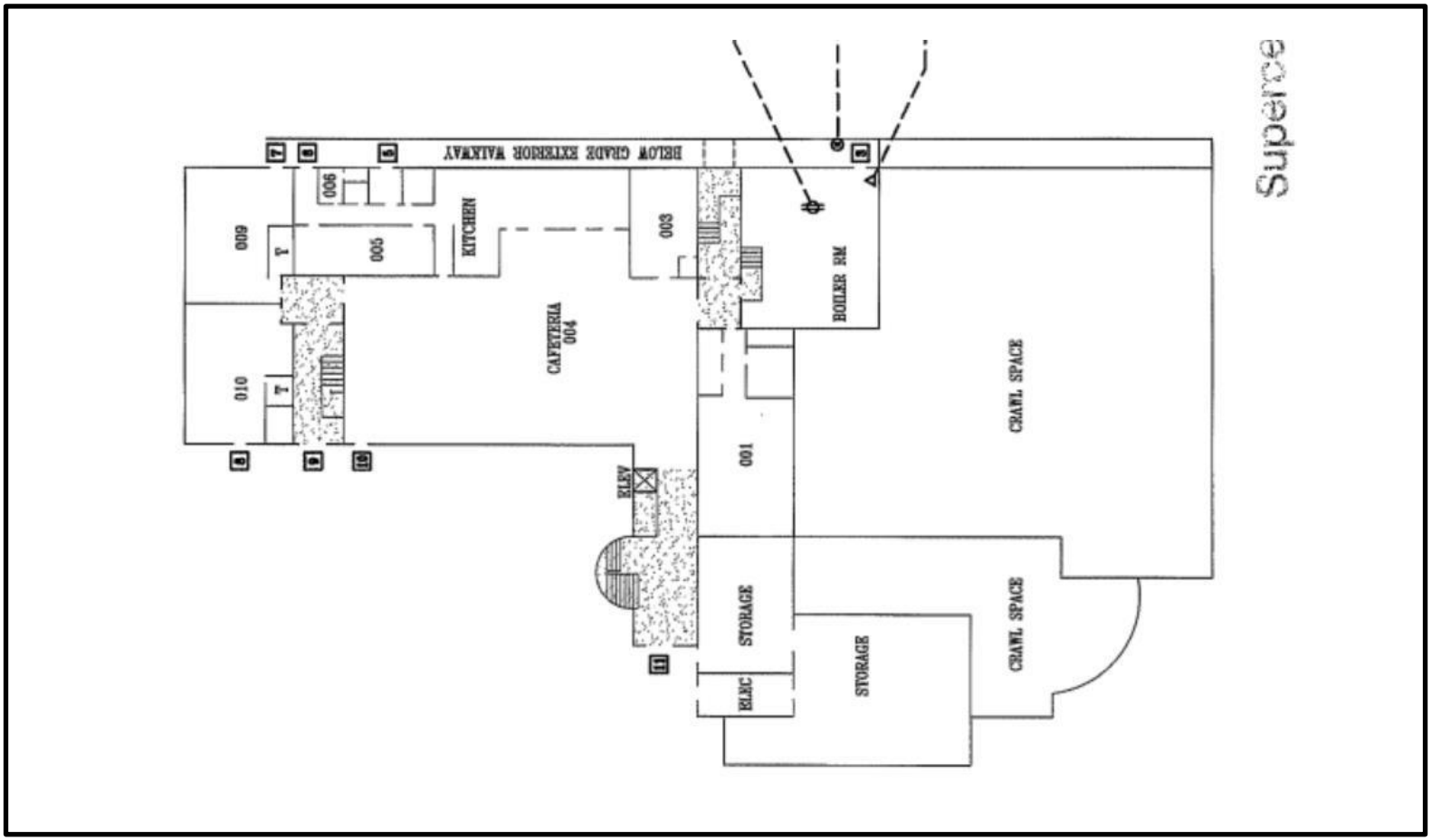
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21

# Attachments



View of the hallway during removal of black mastic

Figure 1



View of the hallway during removal of black mastic

Figure 2

# Attachments



View of the classroom following removal of floor tiles and associated black mastic

Figure 3

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 6/29/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 06292101SS | OWA/ 2nd Floor Work Area, At Decontamination Unit Entry | 6:26 AM | 3:00 PM | 2.0 | 2.0 | 2.0 | 514 | 1028.0 | 2.5 | 100 | 0.001 |
| 06292102SS | OWA/ 2nd Floor Work Area, Outside the Critical Barrier near Northeast Stairwell | 6:28 AM | 3:02 PM | 2.0 | 2.0 | 2.0 | 514 | 1028.0 | 4.0 | 100 | 0.002 |
| 06292103SS | IWA/ 2nd Floor Work Area | 6:30 AM | 11:43 AM | 2.0 | 2.0 | 2.0 | 313 | 626.0 | 5.5 | 100 | 0.004 |
| 06292104SS | IWA/ 2nd Floor Work Area | 11:43 AM | 3:03 PM | 2.0 | 2.0 | 2.0 | 200 | 400.0 | 5.0 | 100 | 0.006 |
| 062921FB01SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 062921FB02SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 6/29/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 6/29/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Work Area/ Removal of |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:** Bucket of water was provided by the contractor.



**ECS Technician:** Lauren E. Kesslak **Date:** 6/29/2021

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

# LETTER OF TRANSMITTAL

July 6, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 6/30/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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 | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

| | |
|---|---|
| Project No. | **47:11652-D1** |
| Report No. | **5** |
| Day & Date | **Wednesday 6/30/2021** |
| Weather | **90 °/ Sunny** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Time of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:00A** | **4:30P** |

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

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

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing black floor mastic on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR WORK AREA MONITORING

Between 6:45 and 7:05 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the stairwell landings. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute. Abatement workers were removing black floor mastic using blast track machine and grinder machines with HEPA vacuum attachments. Air less water sprayer utilized during abatement activities.

Between 12:00 and 12:05 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 12:00 and 12:05 pm, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the stairwell landings. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 3:30 pm and 3:35 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

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

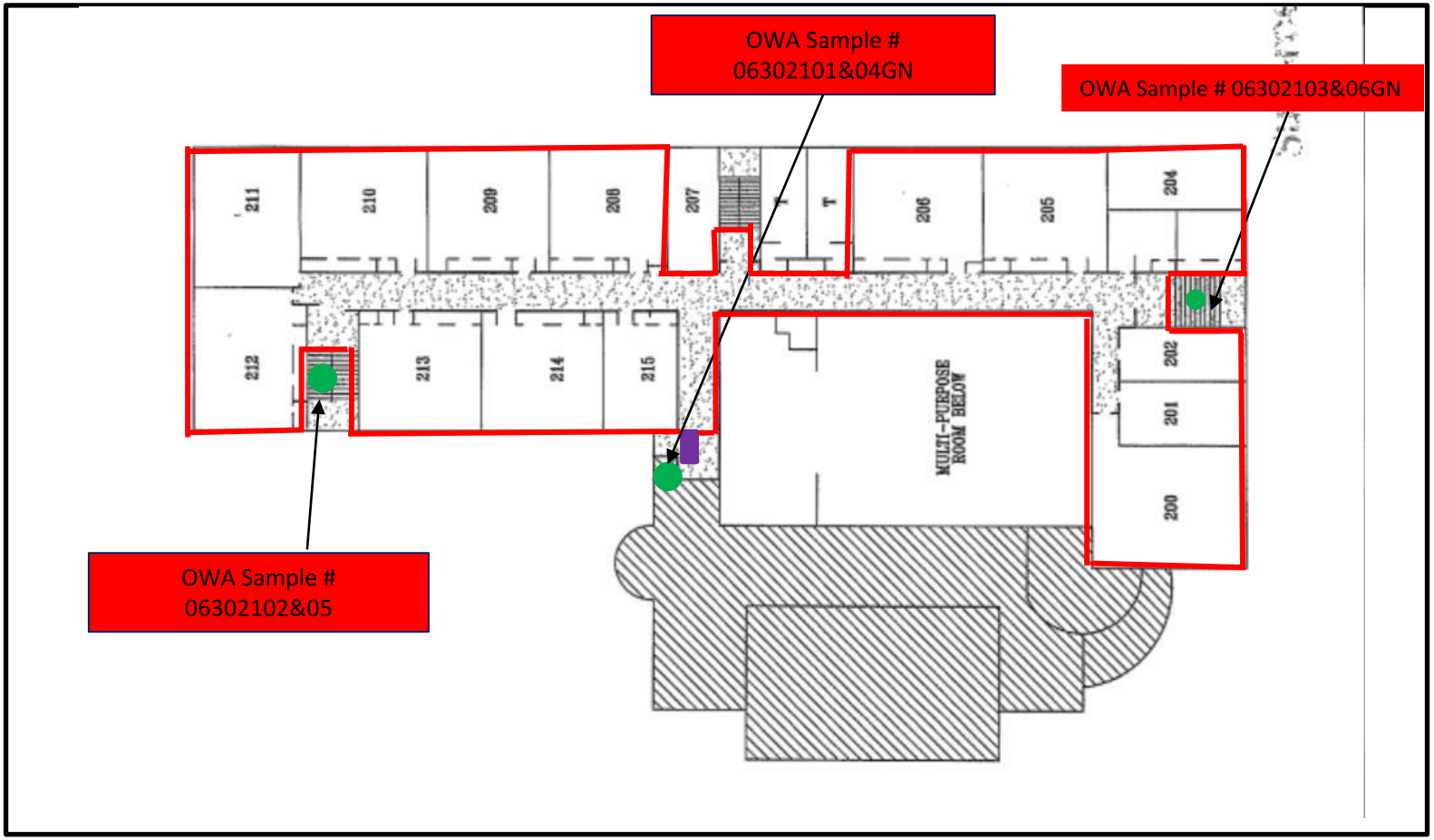
**By JP Nuique** 1825

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/drums were placed in temporary placed inside the work area.

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

The US EPA and Commonwealth of Virginia PCM re-occupancy criteria is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



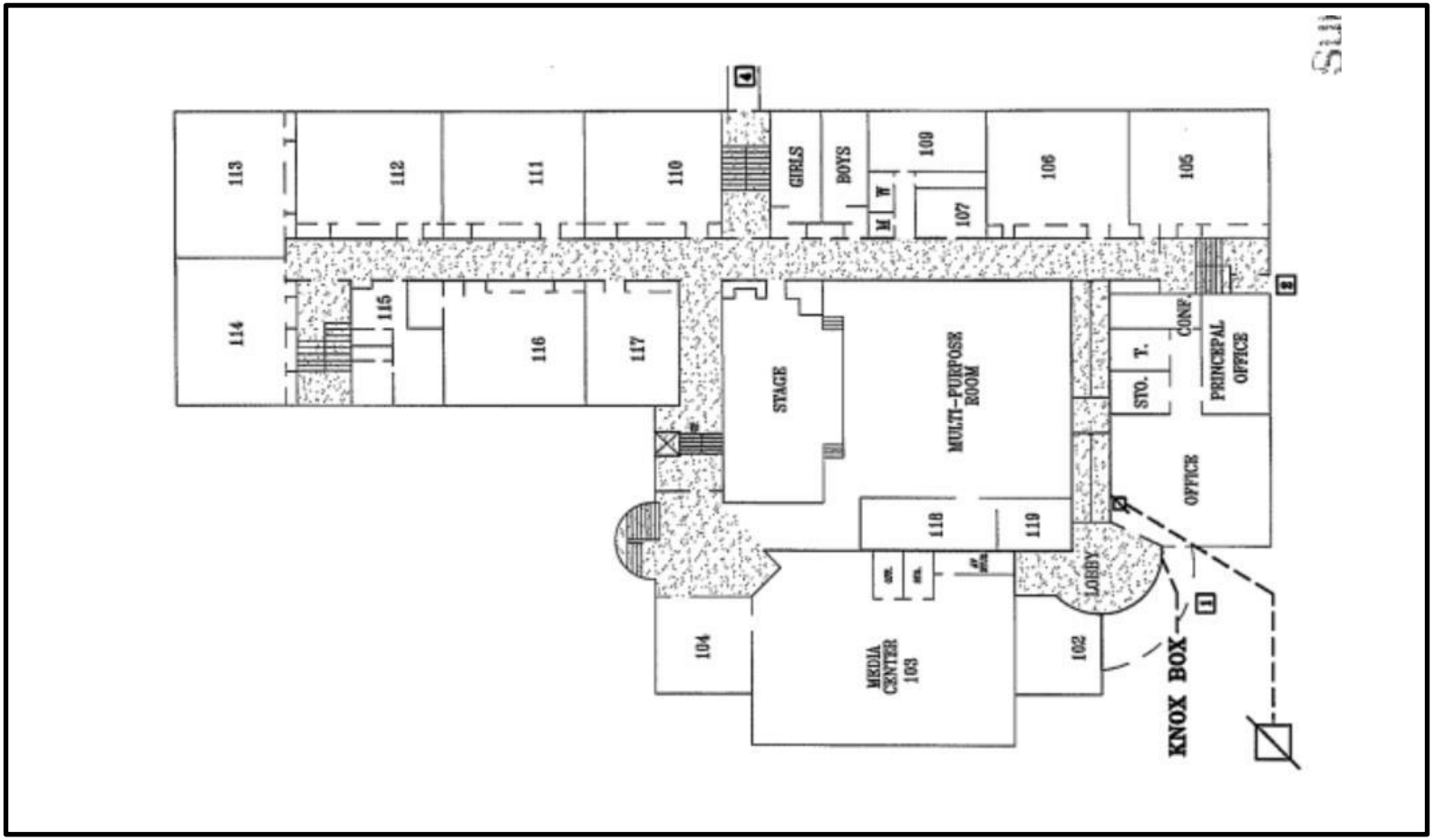
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/30/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



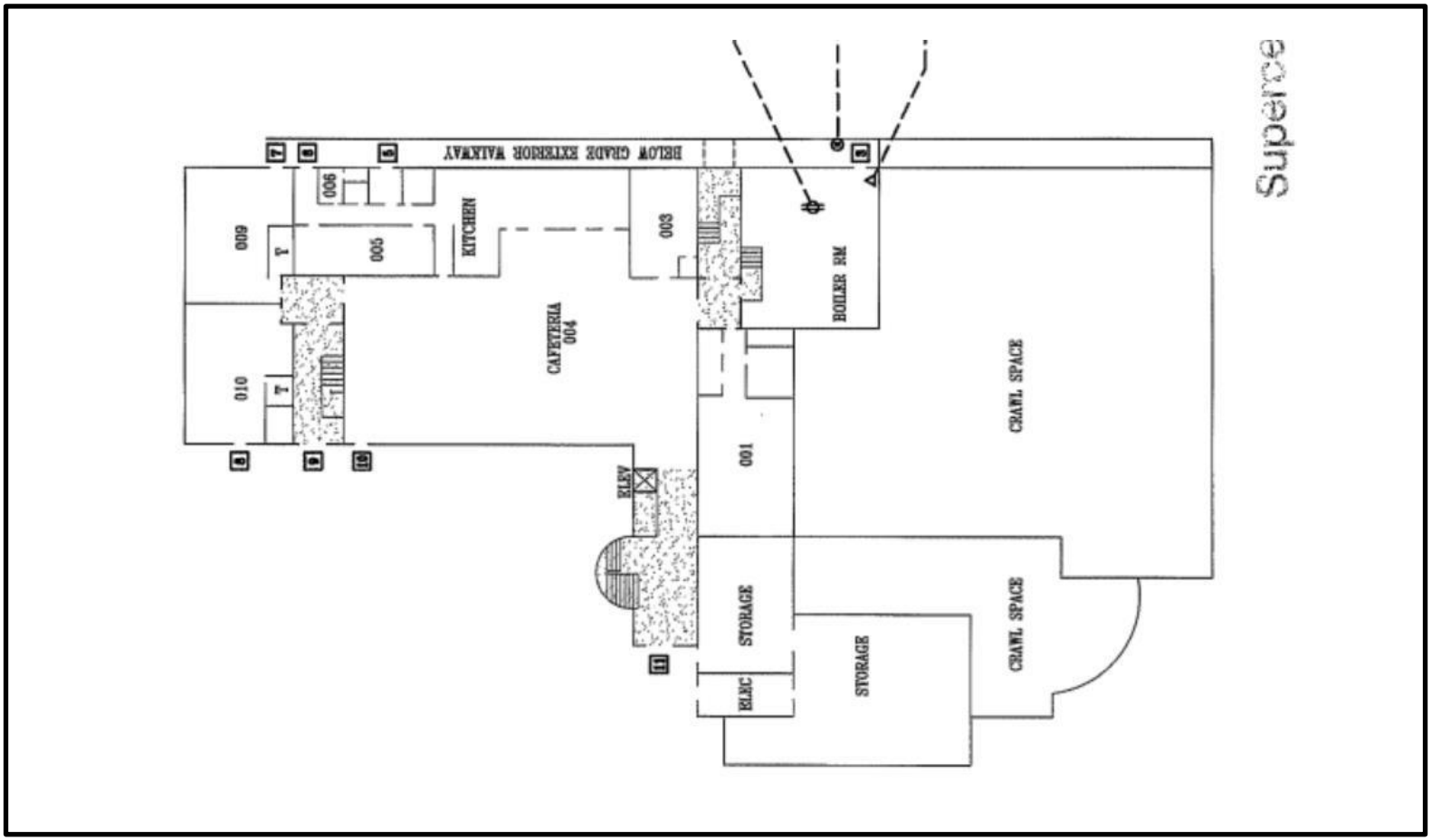
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21

# Attachments



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

Figure 1



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

Figure 2

# Attachments



View of abatement activities in the 2nd floor work area

Figure 3

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 6/30/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 06302101GN | OWA,2nd Floor Work Area at Decontamination Unit | 6:45 AM | 12:00 PM | 2.5 | 2.5 | 2.5 | 315 | 787.5 | 7.0 | 100 | 0.004 |
| 06302102GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 7:00 AM | 12:03 PM | 2.5 | 2.5 | 2.5 | 303 | 757.5 | 0.0 | 100 | 0.000 |
| 06302103GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 7:05 AM | 12:05 PM | 2.5 | 2.5 | 2.5 | 300 | 750.0 | 1.0 | 100 | 0.001 |
| 06302104GN | OWA,2nd Floor Work Area at Decontamination Unit | 12:00 PM | 3:30 PM | 2.5 | 2.5 | 2.5 | 210 | 525.0 | 3.0 | 100 | 0.003 |
| 06302105GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 12:03 PM | 3:33 PM | 2.5 | 2.5 | 2.5 | 210 | 525.0 | 1.0 | 100 | 0.001 |
| 06302106GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 12:05 PM | 3:35 PM | 2.5 | 2.5 | 2.5 | 210 | 525.0 | 1.0 | 100 | 0.001 |
| 063021FB01GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 063021FB02GN | 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 re-occupancy limit.



**ECS Technician:** JP Nuique **Date:** 6/30/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/1/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Work Area

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor 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 | 6 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/1/2021

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

# LETTER OF TRANSMITTAL

July 7, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/1/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental Project Manager

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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 No. | **47:11652-D1** |
| Report No. | **6** |
| Day & Date | **Thursday 7/1/2021** |
| Weather | **80 °/ Cloudy** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

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 scheduled to be removed today are asbestos-containing black floor mastic from the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR WORK AREA MONITORING

Between 6:45 and 6:49 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the stairwell landings. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Abatement workers were removing black floor mastic using grinder machines with HEPA vacuum attachments. Airless water sprayers were utilized during abatement activities.

Between 11:30 and 11:34 am, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

Between 11:30 and 11:34 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the stairwell landings. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Between 3:15 pm and 3:19 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

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

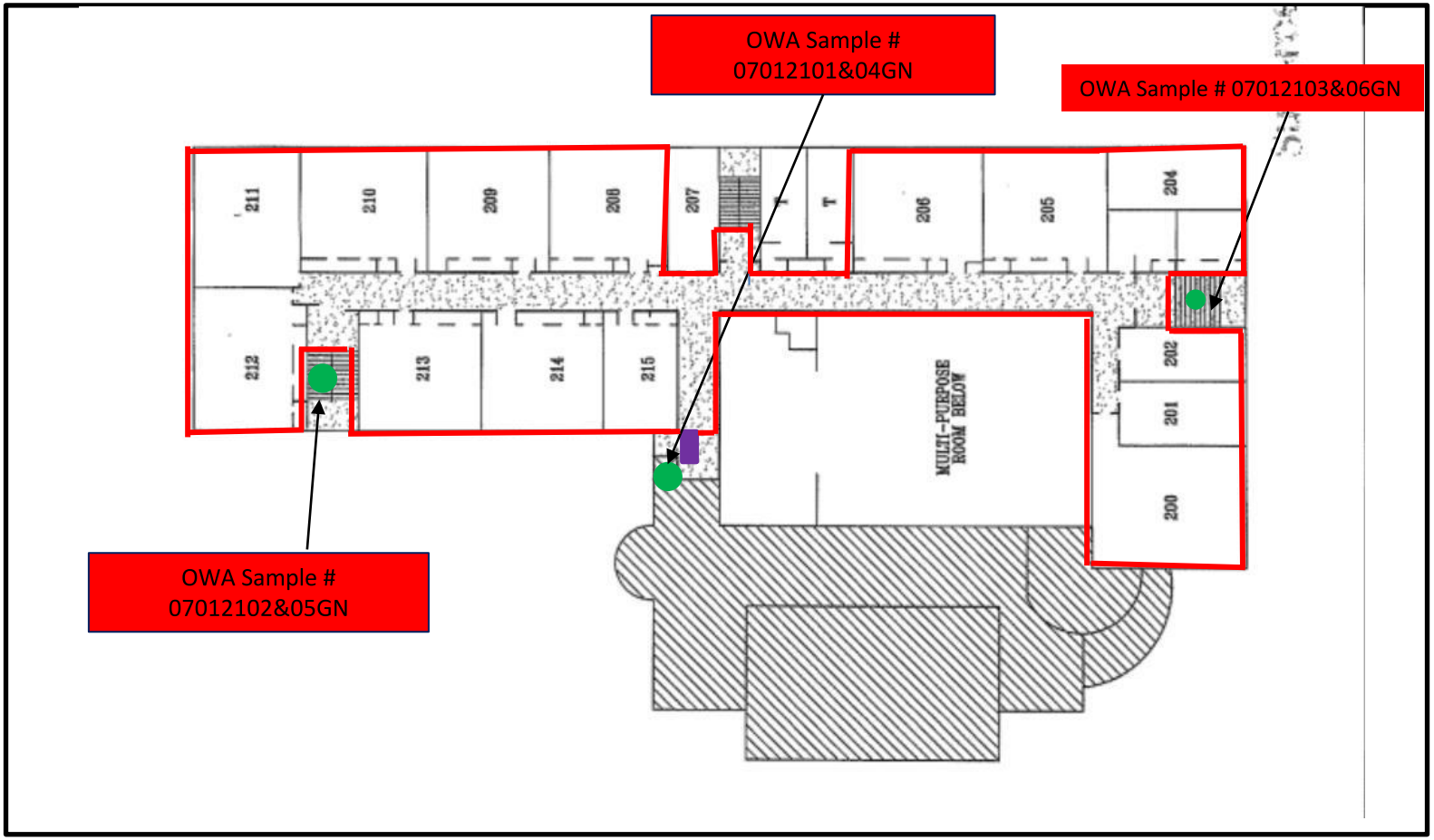
**By JP Nuique** 1825

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/drums were placed in temporary placed inside the work area.

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

**Transmittal Page 4/10**

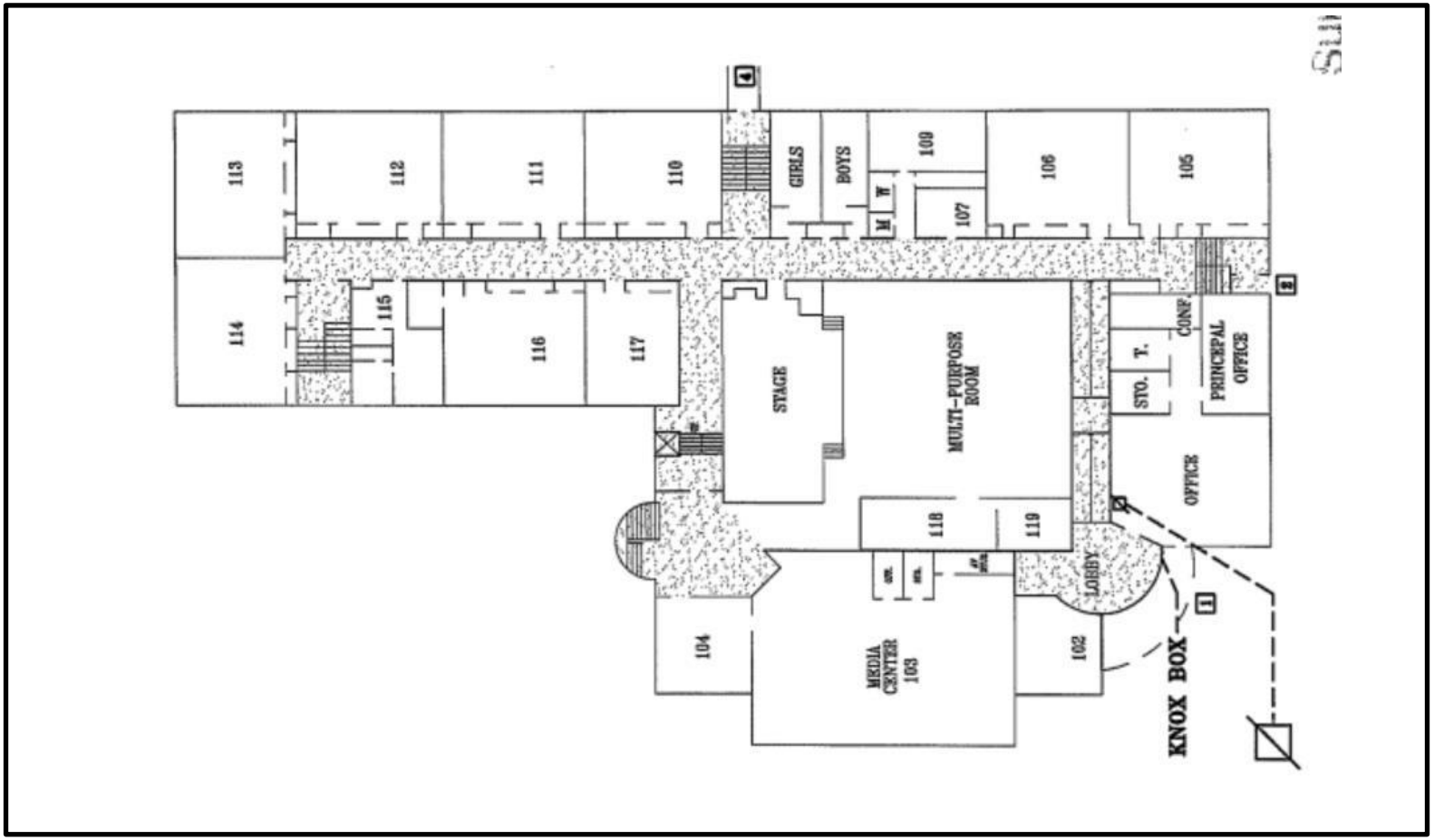
**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**2nd Floor**
**Alexandria City Public Schools**

SCALE NTS

Project No. 47:11652-D1

Date 07/1/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



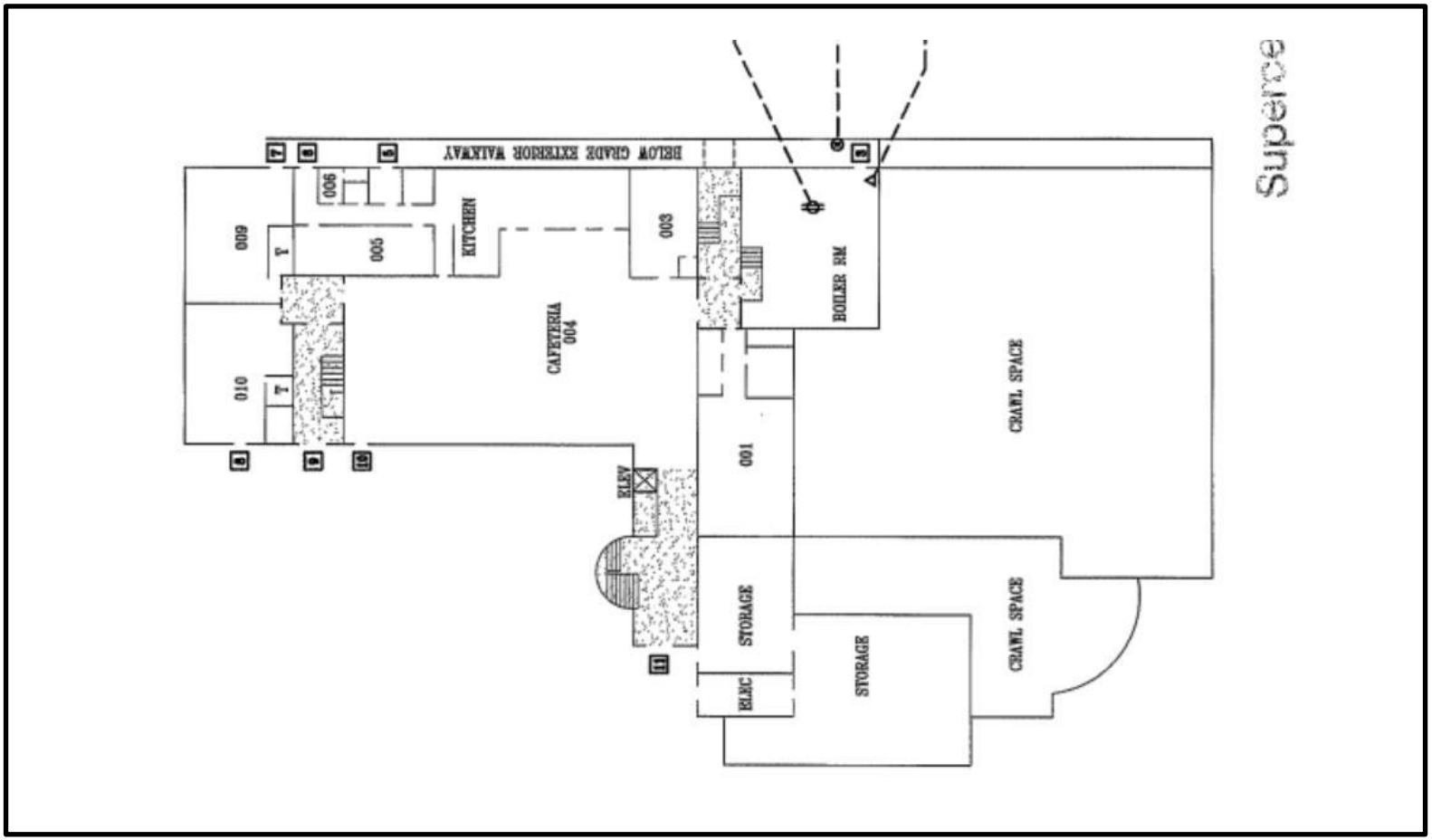
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21

# Attachments



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

Figure 1



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

Figure 2

# Attachments



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

Figure 3



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

Figure 4

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/1/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07012101GN | OWA,2nd Floor Work Area at Decontamination Unit | 6:45 AM | 11:30 AM | 2.5 | 2.5 | 2.5 | 285 | 712.5 | 7.0 | 100 | 0.005 |
| 07012102GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 6:47 AM | 11:32 AM | 2.5 | 2.5 | 2.5 | 285 | 712.5 | 4.0 | 100 | 0.003 |
| 07012103GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 6:49 AM | 11:34 AM | 2.5 | 2.5 | 2.5 | 285 | 712.5 | 4.0 | 100 | 0.003 |
| 07012104GN | OWA,2nd Floor Work Area at Decontamination Unit | 11:30 AM | 3:15 PM | 2.5 | 2.5 | 2.5 | 225 | 562.5 | 6.0 | 100 | 0.005 |
| 07012105GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 11:32 AM | 3:17 PM | 2.5 | 2.5 | 2.5 | 225 | 562.5 | 5.0 | 100 | 0.004 |
| 07012106GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 11:34 AM | 3:19 PM | 2.5 | 2.5 | 2.5 | 225 | 562.5 | 3.0 | 100 | 0.003 |
| 07012107GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07012108GN | 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 re-occupancy limit.



**ECS Technician:** JP Nuique **Date:** 7/1/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/2/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor

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

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/2/2021

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

# LETTER OF TRANSMITTAL

July 7, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/2/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **7** |
| Day & Date | **Friday 7/2/2021** |
| Weather | **80 °/ Rain** |
| On-Site Time | **6.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.50** |
| Total | **6.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | **8** | Times of | Arrival | Departure |
|---|---|---|---|---|---|---|
| Chargeable Items | | | | | **6:00A** | **11:00A** |
| | | | | | **3:30P** | **4:30P** |

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

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

The undersigned arrived on-site, as requested, to perform air monitoring and observe asbestos abatement. The material scheduled to be removed today is asbestos-containing black floor mastic from the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR WORK AREA MONITORING

Between 6:41 am and 6:45 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the stairwell landings. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Abatement workers were removing black floor mastic using grinder machines with HEPA vacuum attachments. Airless water sprayers were utilized during abatement activities.

Between 3:45 pm and 3:49 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.5 liters per minute. The PCM air samples were stopped and gathered from outside the work area.

GENERAL

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

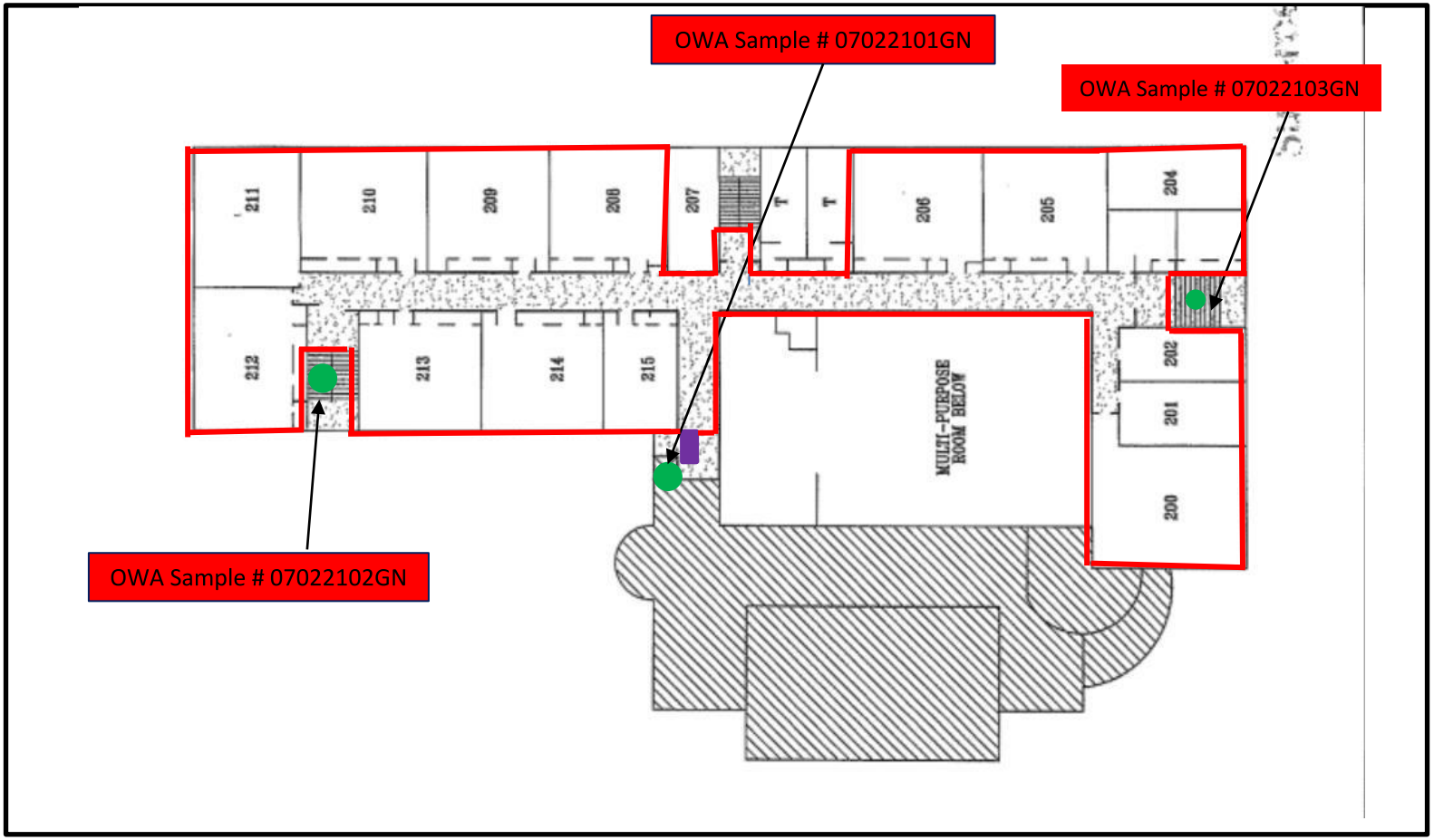
ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with applicable regulations. Waste bags/drums were placed in waste hauling container.

The undersigned prepared and analyzed the PCM air samples cassettes for total fiber concentration in

general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



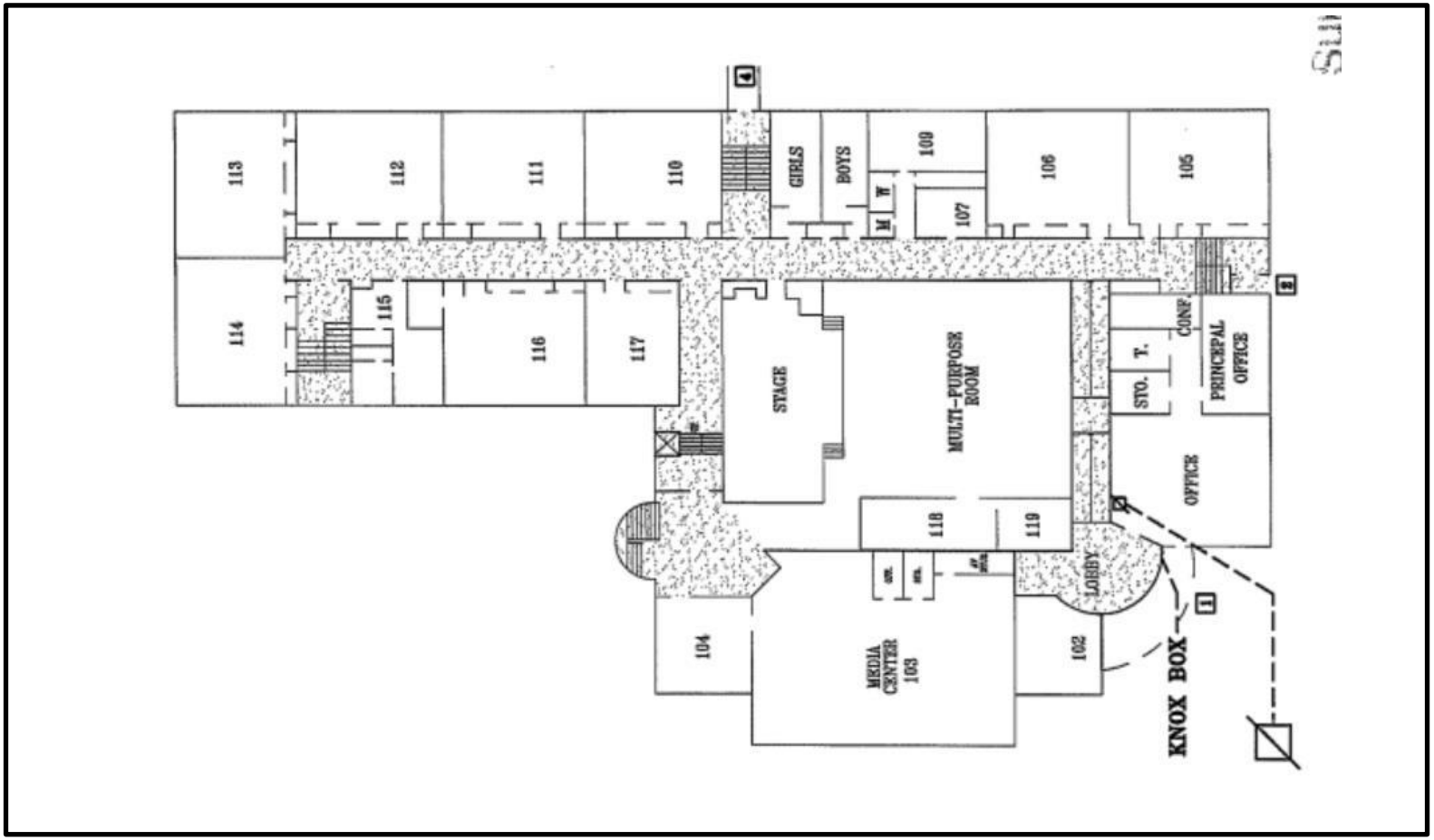
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/2/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

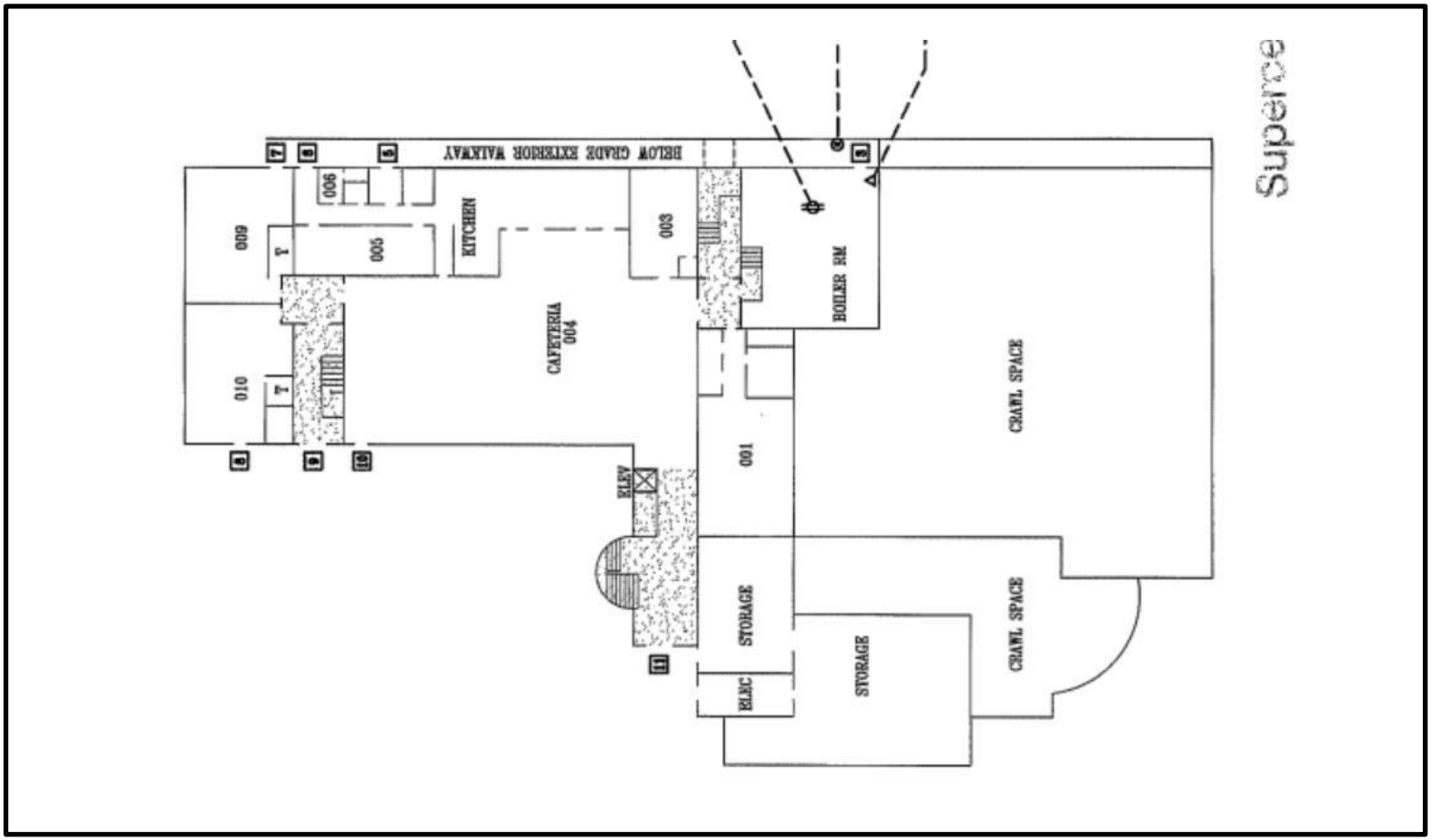
ECS

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21

# Attachments




View of asbestos waste drums were placed in hauling container

Figure 1

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/2/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07022101GN | OWA,2nd Floor Work Area at Decontamination Unit | 6:41 AM | 3:45 PM | 2.5 | 2.5 | 2.5 | 544 | 1360.0 | 8.0 | 100 | 0.003 |
| 07022102GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 6:43 AM | 3:47 PM | 2.5 | 2.5 | 2.5 | 544 | 1360.0 | 3.0 | 100 | 0.001 |
| 07022103GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 6:45 AM | 3:49 PM | 2.5 | 2.5 | 2.5 | 544 | 1360.0 | 3.0 | 100 | 0.001 |
| 070221FB01GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 070221FB02GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.



**ECS Technician:** JP Nuique **Date:** 7/2/2021

## ECS Mid-Atlantic, LLC

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/3/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor

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

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/3/2021

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

# LETTER OF TRANSMITTAL

July 7, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/3/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **8** |
| Day & Date | **Saturday 7/3/2021** |
| Weather | **80 °/ Sunny** |
| On-Site Time | **6.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.50** |
| Total | **7.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| | | | | | | |
|---|---|---|---|---|---|---|
| Trip Charges* | Tolls/Parking* | Mileage* | **8** | Time of | Arrival | Departure |
| Chargeable Items | | | | | **7:00A** | **1:30P** |

* 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 scheduled to be removed today is asbestos-containing black floor mastic on the 2nd floor. Photographs and a sketch for today's regulated work area are attached to this report.

2ND FLOOR WORK AREA MONITORING

Between 7:00 and 7:04 am, PCM air samples were started outside the work area at decontamination unit entry and critical barrier in the stairwell landings. The sampling pumps were calibrated using a rotameter to 2.5 liters per minute.

Following removal of floor tile and associated black floor mastic, abatement workers performed final cleaning of the work area. An airless water sprayer was utilized during abatement activities.

Between 1:00 and 1:04 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.

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

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

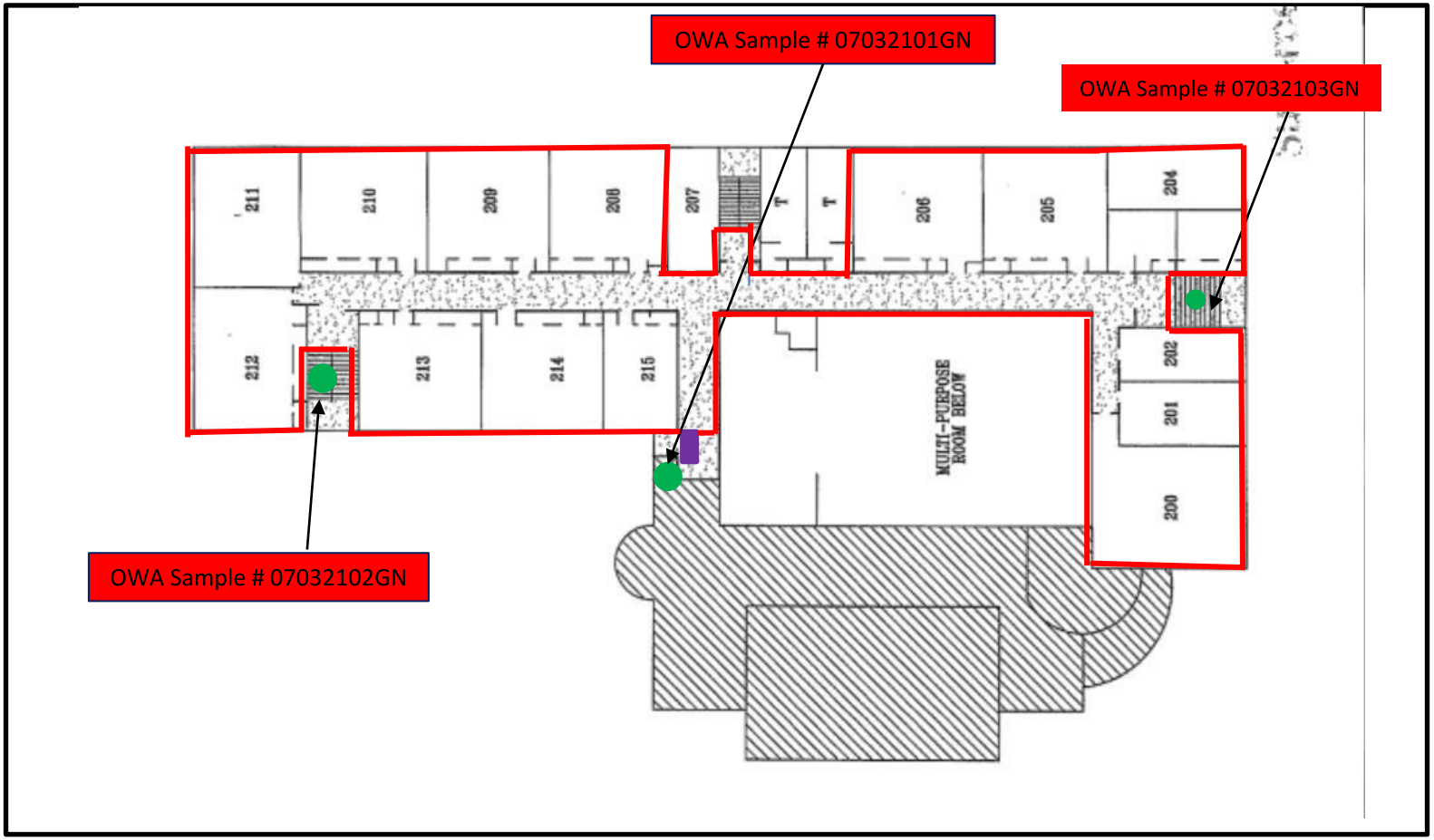
Daily Work Area Survey Checklist was completed and is attached to this report.

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/drums were placed in hauling container.

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

**Transmittal Page 4/11**

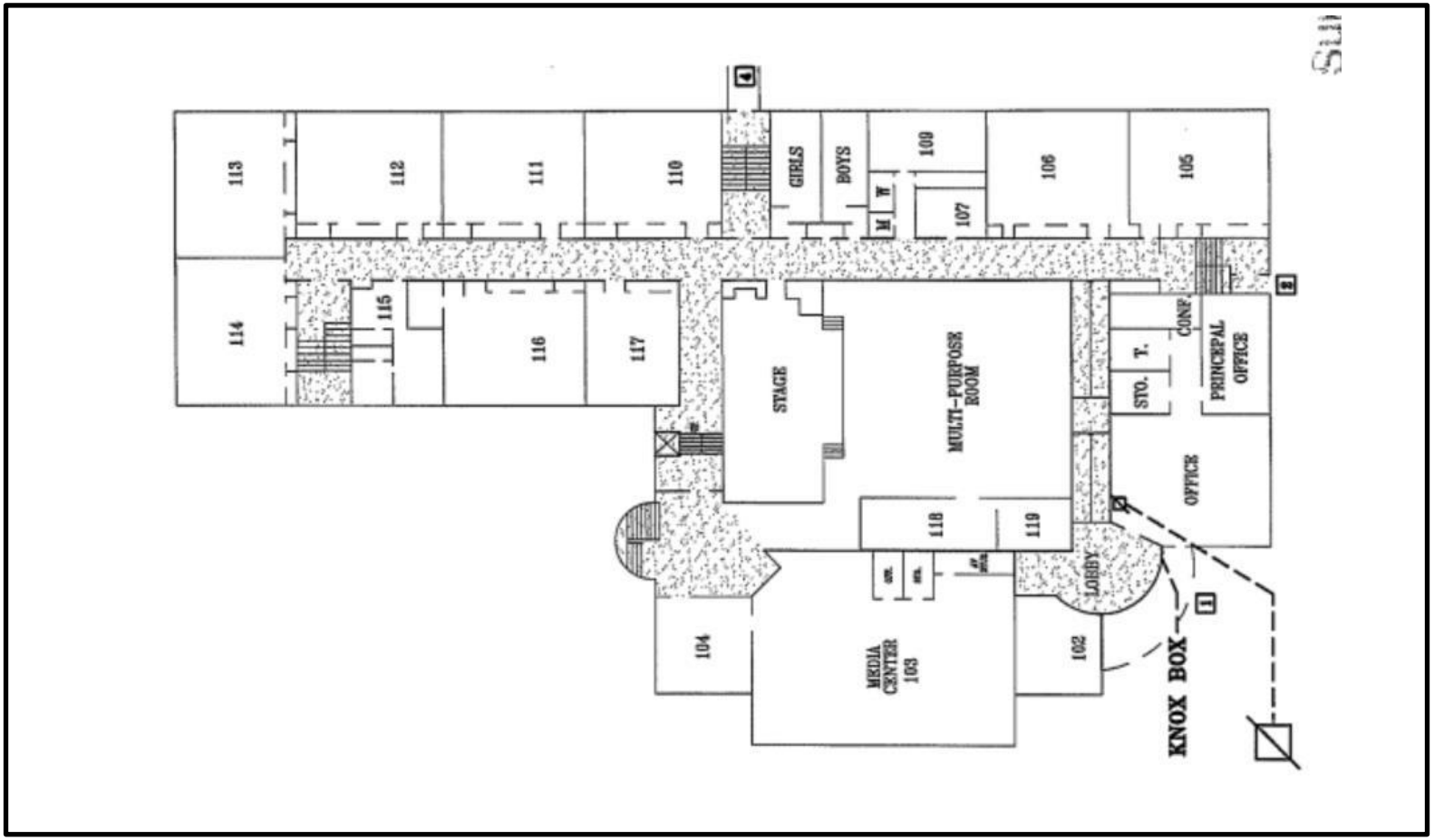
**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**2nd Floor**
**Alexandria City Public Schools**

SCALE NTS

Project No. 47:11652-D1

Date 07/3/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



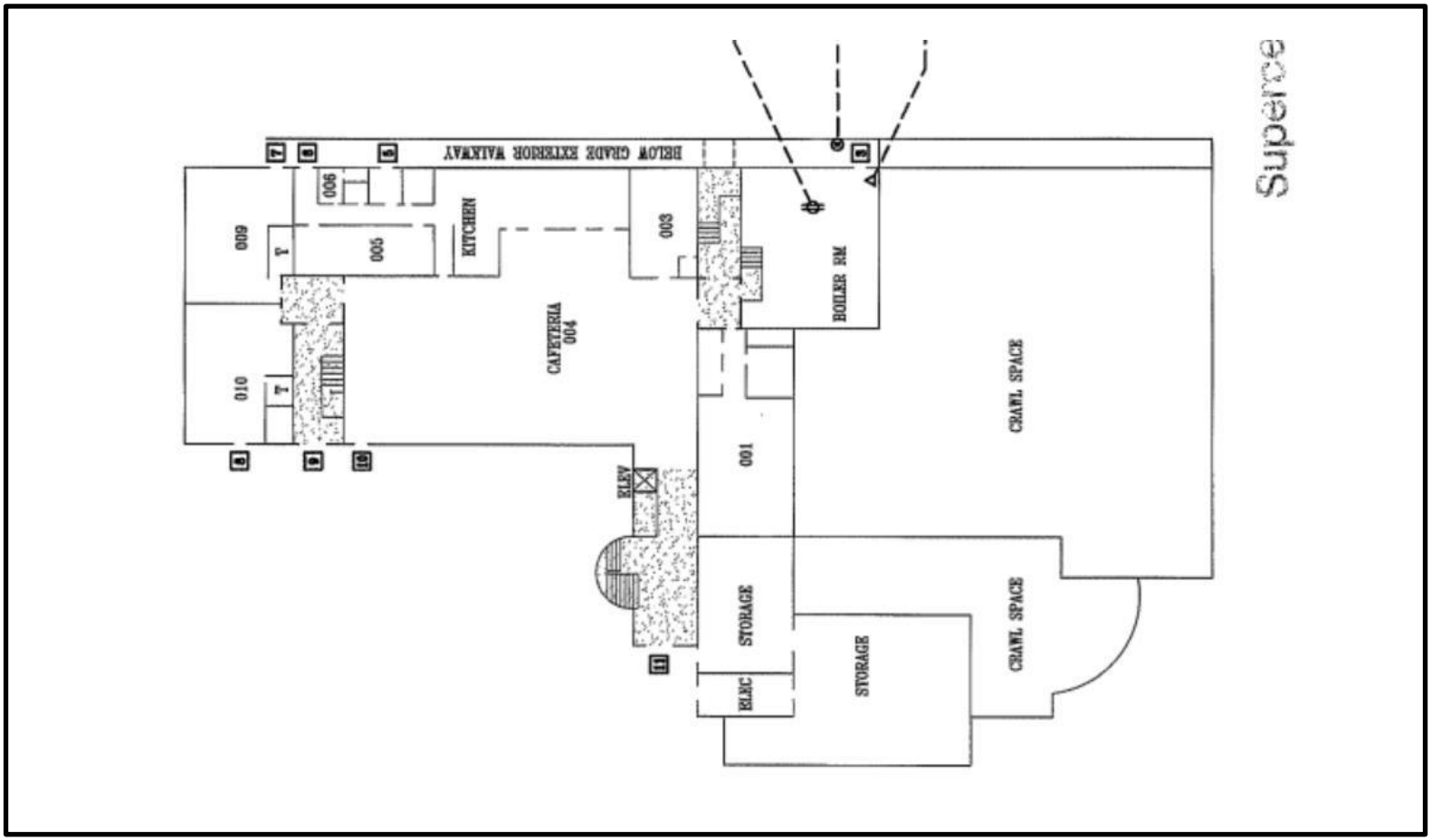
**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**1st Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

**Transmittal Page 6/11**

**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21

# Attachments



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

Figure 1



View of where the floor tile and associated mastic was removed from the 2nd floor work area (3)

Figure 2

# Attachments



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

Figure 3

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/3/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07032101GN | OWA,2nd Floor Work Area at Decontamination Unit | 7:00 AM | 1:00 PM | 2.5 | 2.5 | 2.5 | 360 | 900.0 | 3.5 | 100 | 0.002 |
| 07032102GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 7:02 AM | 1:02 PM | 2.5 | 2.5 | 2.5 | 360 | 900.0 | 2.0 | 100 | 0.001 |
| 07032103GN | OWA,2nd Floor Work Area at Critical Barrier Stairwell Landing | 7:04 AM | 1:04 PM | 2.5 | 2.5 | 2.5 | 360 | 900.0 | 3.0 | 100 | 0.002 |
| 07032104GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07032105GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.



**ECS Technician:** JP Nuique **Date:** 7/3/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/3/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor

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

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/3/2021

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 47:11652-D1 **Date:** 7/3/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | Satisfactory |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | Floors | Satisfactory |
| | Walls | Satisfactory |
| | Ceiling | Satisfactory |
| | Windows | Satisfactory |
| | 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 | N/A |
| | Sample Volume (liters) | N/A |
| | Work Area Acceptable | Yes |

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



**ECS Technician:** Lauren E. Kesslak **Date:** 7/3/2021

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

# LETTER OF TRANSMITTAL

July 7, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/4/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental Project Manager

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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.*
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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 No. | **47:11652-D1** |
| Report No. | **9** |
| Day & Date | **Sunday 7/4/2021** |
| Weather | **68 °/ Sunny** |
| On-Site Time | **1.50** |
| Lab Time | **0.00** |
| Travel Time* | **1.00** |
| Total | **2.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| | | | | | | |
|---|---|---|---|---|---|---|
| Trip Charges* | Tolls/Parking* | Mileage* | **36** | Times of | Arrival | Departure |
| Chargeable Items | | | | | **6:00A** | **7:15A** |
| | | | | | **9:00A** | **9:15A** |

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

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

The undersigned arrived onsite, as requested, to perform final clearance sampling for the 2nd floor work area. A sketch of the final clearance air sampling locations is attached to this report.

ECS observed the abatement contractor workers were preparing the work area on the 1st floor. No abatement work performed on this day.`

FINAL CLEARANCE SAMPLING FOR THE 2ND FLOOR WORK AREA

After waiting for the encapsulant to dry from previous day, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

Between 8:46 am and 8:50 am, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 120 minutes at 10.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. located in Beltsville, Maryland for analysis. A copy of the chain of custody has been attached.

The US EPA and Commonwealth of Virginia maximum allowable airborne asbestos concentration from within the work area is 70 structures per millimeter squared (s/mm2). In order to be deemed acceptable, the average of the interior samples analyzed must have asbestos concentrations of 70 s/mm2 or less. EMSL Analytical, Inc. informed ECS that the analytical results of the TEM final clearance air samples collected from 2nd floor work area found the airborne asbestos fiber concentrations to be less than the maximum allowable concentration. The client and abatement contractor supervisor, Mr. Miguel Sandoval

of Waco, Inc., were informed of the results. A copy of the laboratory report is attached.

**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: 192106315
Customer ID: ECMA78
Customer PO:
Project ID:

**Attention:** Lauren Kesslak
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
**Project:** Lyles Grouch/47:11652-D1

**Phone:** (703) 471-8400
**Fax:** (703) 471-8400
**Received Date:** 07/04/2021 10:30 AM
**Analysis Date:** 07/04/2021
**Collected Date:** 07/04/2021

## 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) |
|---|---|---|---|---|---|---|---|---|---|---|
| 07042101 SS<br>*192106315-0001* | Final Clearance IWA 2nd Floor Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07042102 SS<br>*192106315-0002* | Final Clearance IWA 2nd Floor Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07042103 SS<br>*192106315-0003* | Final Clearance IWA 2nd Floor Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07042104 SS<br>*192106315-0004* | Final Clearance IWA 2nd Floor Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07042105 SS<br>*192106315-0005* | Final Clearance IWA 2nd Floor Work Area | 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: 07/04/2021 13:45 PM

OrderID: 192106315

# Asbestos Chain of Custody

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

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

EMSL ANALYTICAL, INC.
10768 BALTIMORE AVE
BELTSVILLE, MD 20705
PHONE. (301) 937-5700
FAX: (301) 937-5701

| | |
|---|---|
| Company: FCS Mid-Atlantic LLC | **EMSL-Bill to:** ☐ Same ☐ Different<br>If Bill to is Different note instructions in Comments**<br>*Third Party Billing requires written authorization from third party* |
| Street: 14026 Thunderbolt Place, Suite 100 | |
| City: Chantilly / State/Province: VA | Zip/Postal Code: 20151 / Country: USA |
| Report To (Name): Lauren Kesslak | Telephone #: (202) 494-7649 |
| Email Address: LKesslak@ecslimited.com | Fax #: / Purchase Order: |
| Project Name/Number: Lyles Crouch / #7:11652-D1 | Please Provide Results: ☐ Fax ☒ Email |
| U.S. State Samples Taken: VA | CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt |

**Turnaround Time (TAT) Options* – Please Check**

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

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

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

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

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

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

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

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

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

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

**Soil/Rock/Vermiculite**
- ☐ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ TEM Qual. via Filtration Technique
- ☐ TEM Qual. via Drop-Mount Technique

**Other:**
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group | Filter Pore Size (Air Samples): ☐ 0.8µm ☒ 0.45µm

Samplers Name: Sahil Shafaat | Samplers Signature:

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 070421 0155 | Final clearance-IWA, 2nd floor Work Area | 1200 Liters | 7/4/21 |
| 0255 | | | |
| 0355 | | | |
| 0455 | | | |
| 0555 | | | |
| 0655 | Final clearance-OWA, 2nd floor Work Area | | |
| 0755 | | | |
| 0855 | | | |

Client Sample # (s): 070421 0155 - 070421 1355 Total # of Samples: 13

Relinquished (Client): Date: 7/4/21 Time:

Received (Lab): Date: 7/4/21 Time: 1030 am

Comments/Special Instructions: Please only analyze the IWA Samples & Aggressive Sampling method.

OrderID: 192106315

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

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

EMSL ANALYTICAL INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE (800) 220-3675
FAX (856) 786-5974

*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 |
|---|---|---|---|
| 0104210955 | Final clearance-OWA, 2nd Floor Work Area | 1200 Liters | 7/9/21 |
| 1055 | ↓ | ↓ | ↓ |
| 1155 | Field Blank- opened 30 secs by entrance | N/A | |
| 1255 | Field Blank- opened 30 secs in ambient | | |
| 1355 | Sealed Blank - Not opened | ↓ | ↓ |
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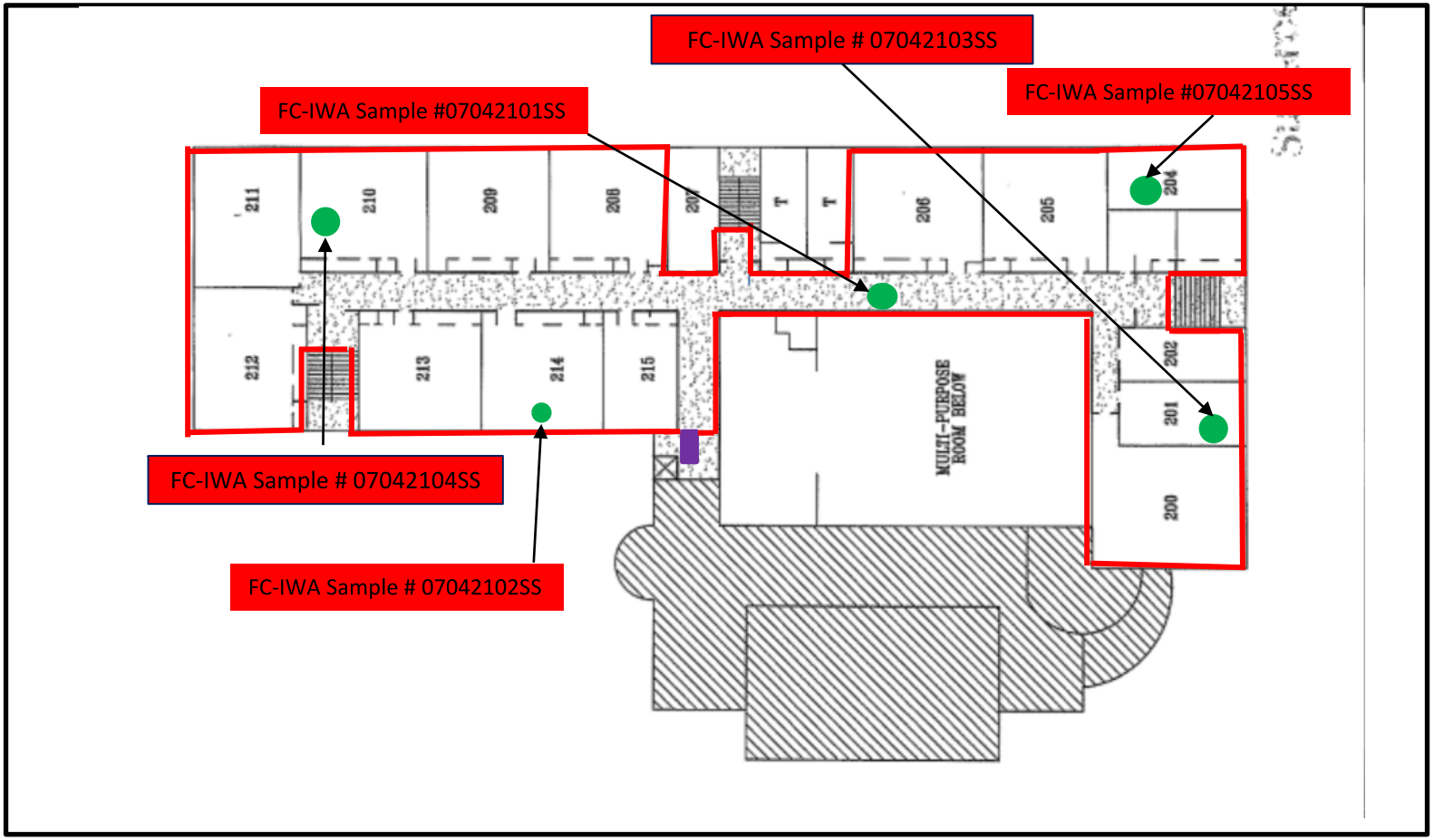
*Comments/Special Instructions:




Legend

= Regulated Work Area

= Decontamination Unit

= FC-IWA Sample Location

Notes:



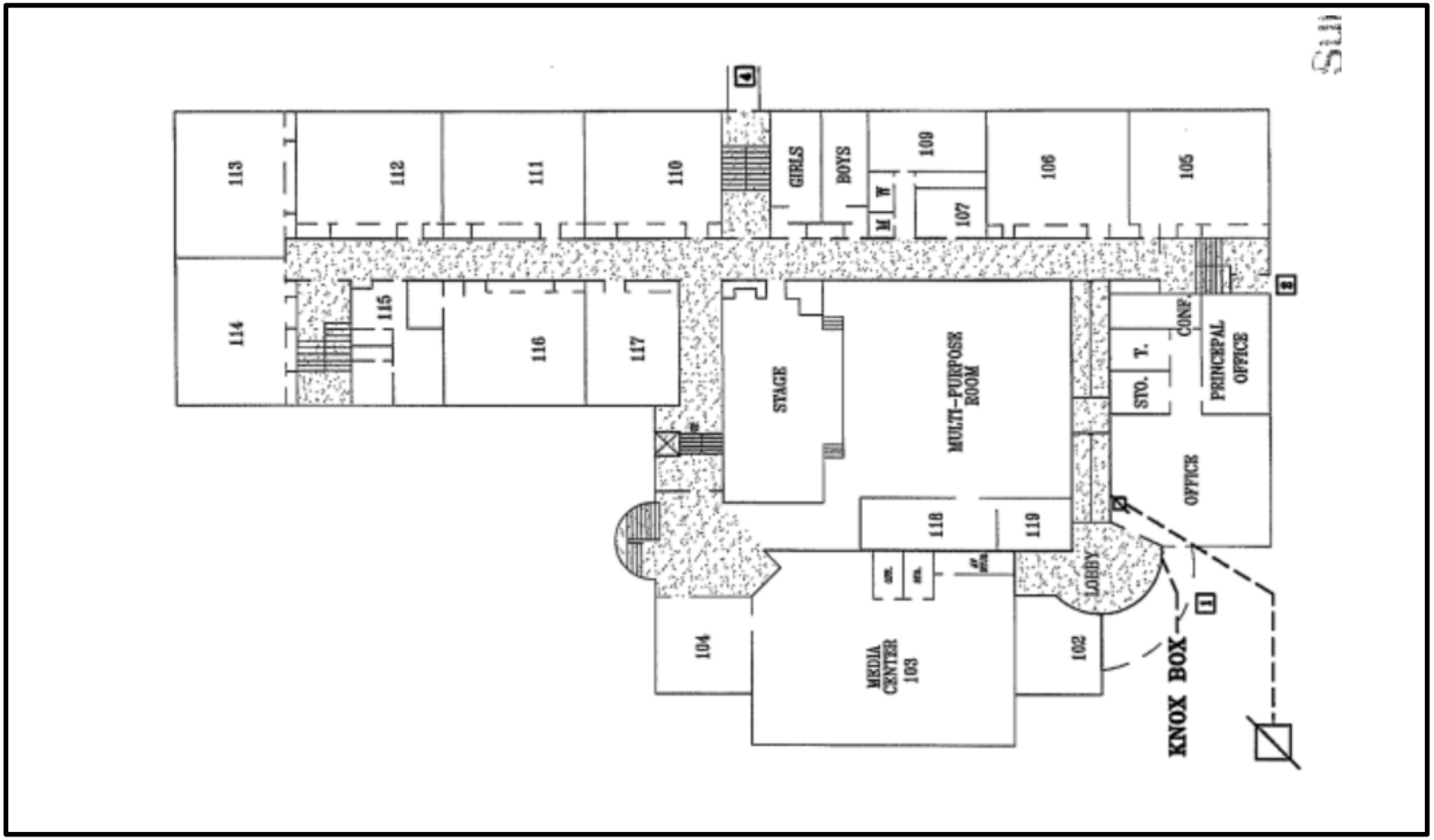
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/4/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



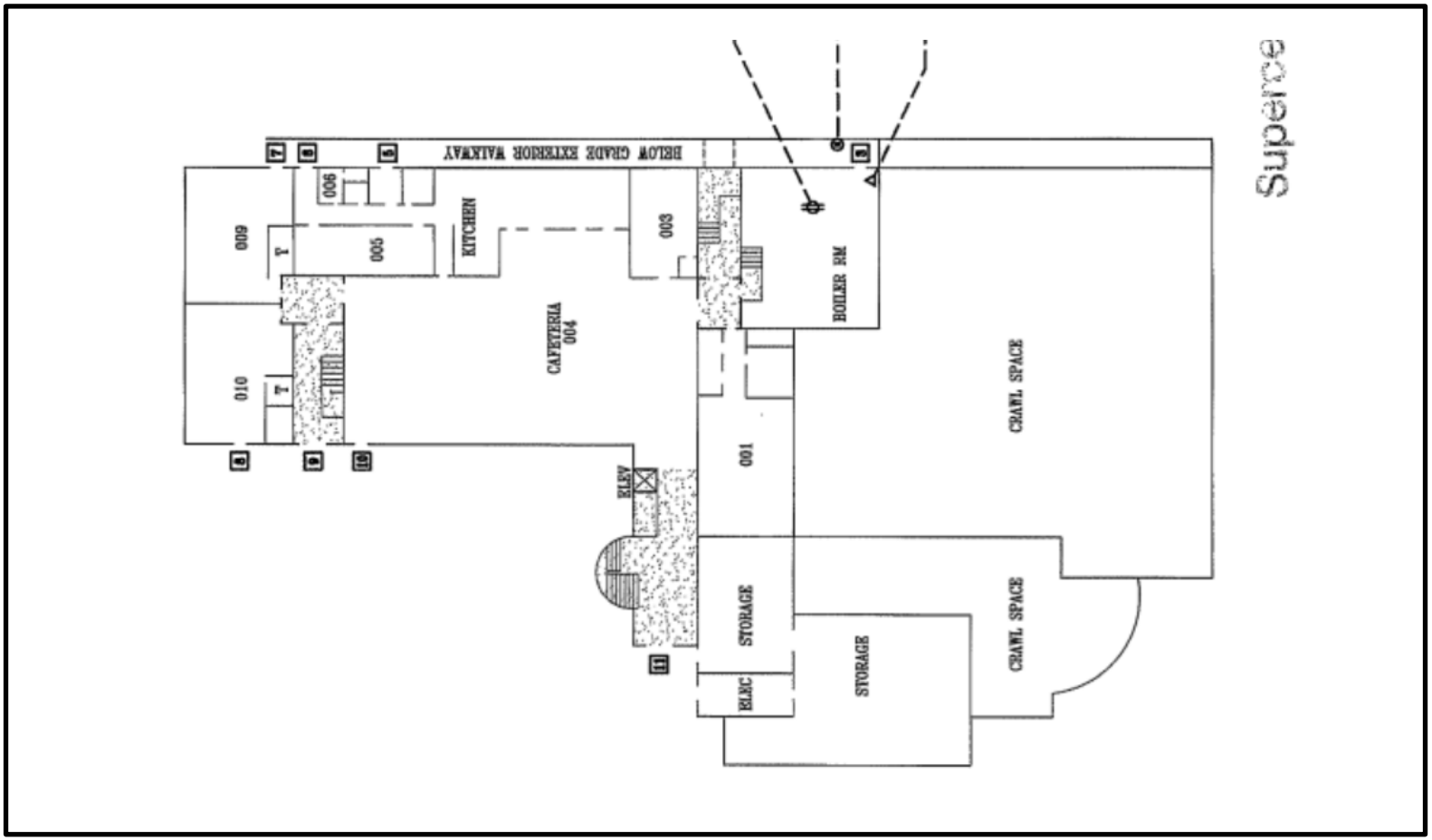
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/27/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 06/29/21

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

# LETTER OF TRANSMITTAL

July 9, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/6/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **10** |
| Day & Date | **Tuesday 7/6/2021** |
| Weather | **74 °/ Sunny** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tiles and associated black mastic in the 1st floor work area. A work area sketch and photographs for today's regulated work area are attached to this report.

1ST FLOOR WORK AREA MONITORING

Between 8:55 am and 9:11 am, 3 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier near southwest and northeast stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

ECS observed the abatement contractor workers were removing floor tiles using motorized floor scraper and hand tools.

Between 2:55 pm and 3:00 pm, the sampling pumps were checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air samples were stopped and gathered for analysis.

GENERAL

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

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

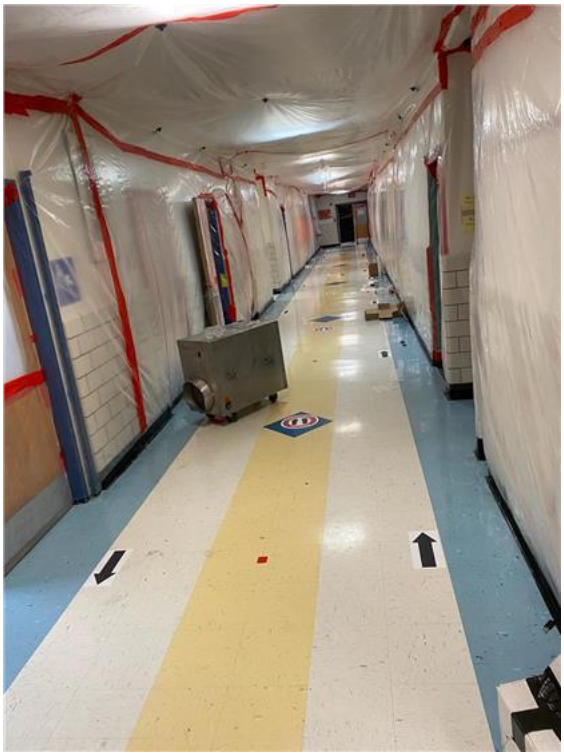
The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic

centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

# Attachments



View of the floor tiles and associated black mastic to be removed in the classroom in the hallway inside the 1st floor work area

Figure 1



View of the classroom during preabatement walkthrough on the 1st floor work area

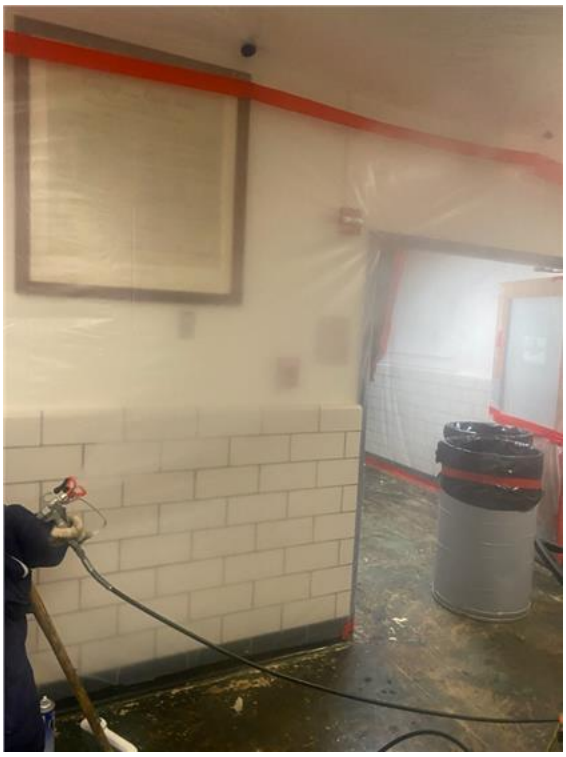
Figure 2

# Attachments



View of the floor tiles removed in the hallway within the 1st floor work area

Figure 3



View of wetting down the regulated work area using airless sprayer

Figure 4

Lyles-Crouch Traditional
Academy
530 S St Asaph St, Alexandria, VA
22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

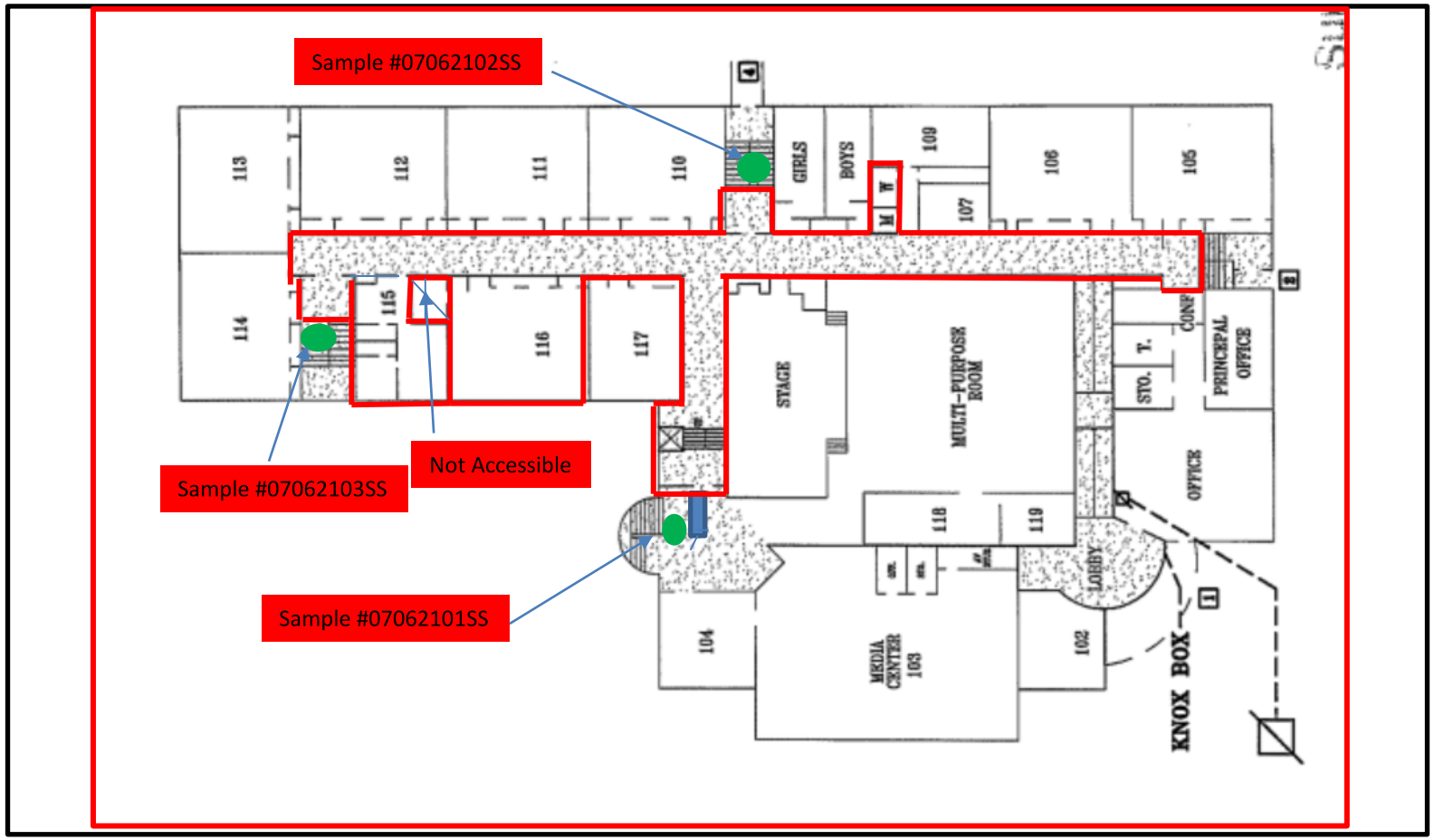
SCALE NTS
Project No. 47:11652-D1
Date 07/06/21

Notes:

Legend
= Cleared Work Area
= Decontamination Unit
= OWA Sample Location
= IWA Sample Location




Transmittal Page 6/11




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



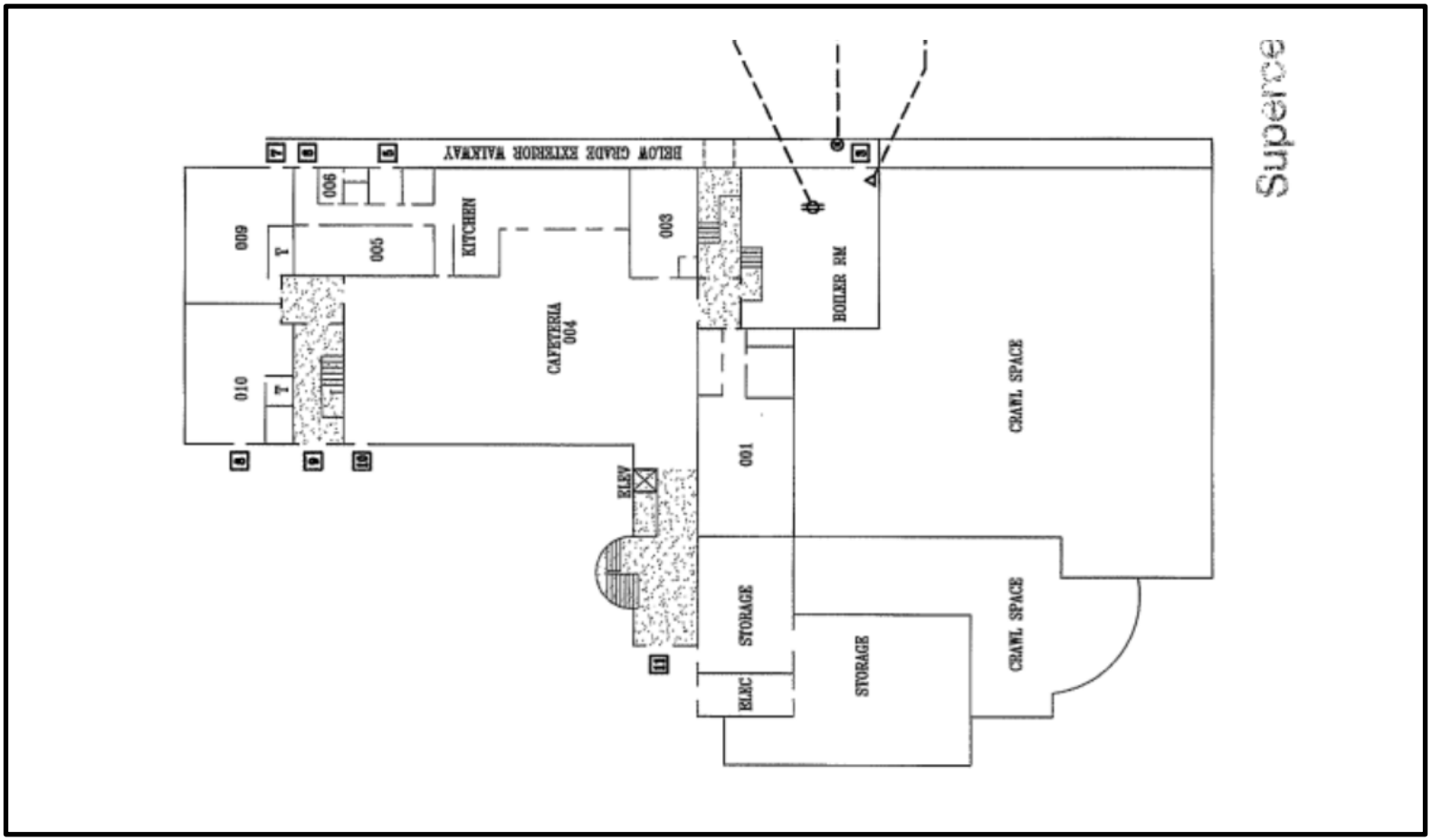
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/06/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/06/21

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/6/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07062101SS | OWA/ 1st Floor Work Area, At Decontamination Unit Entry | 8:55 AM | 2:55 PM | 2.0 | 2.0 | 2.0 | 360 | 720.0 | 3.0 | 100 | 0.002 |
| 07062102SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier near Southwest Stairwell | 9:02 AM | 2:56 PM | 2.0 | 2.0 | 2.0 | 354 | 708.0 | 1.0 | 100 | 0.001 |
| 07062103SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier near Northeast Stairwell | 9:11 AM | 3:00 PM | 2.0 | 2.0 | 2.0 | 349 | 698.0 | 0.0 | 100 | 0.000 |
| 07062104SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07062104SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). OWA samples were reported below the re-occupancy limit.



**ECS Technician:** Suhel Shafaat **Date:** 7/6/2021

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/6/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Removal of |
| **Administrative** | Training Certificates/Licenses | Satisfactory |
| | Permits | N/A |
| | EPA/State/Local Notification | Satisfactory |
| **Work Area** | Public Access Restricted | Satisfactory |
| | Warning Signs/Tape Posted | Satisfactory |
| **Negative Air Filtration** | Number of Units | 10 |
| | 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 | N/A |
| | Disposable Towels | Satisfactory |
| | Soap | N/A |
| | Equipment Room | Satisfactory |
| **Personal Protective Equipment** | Type of Respirator | Half-Face APR |
| | Type of Filters Used | P100 |
| | Disposable Protective Clothing | Satisfactory |
| | Work Area Acceptable | Yes |

**Notes:** Bucket of water was provided by the contractor. Staff storage room inside classroom 115 is not accessible.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/6/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/6/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/Removal of |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/6/2021

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

# LETTER OF TRANSMITTAL

July 12, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/7/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental 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 No. | **47:11652-D1** |
| Report No. | **11** |
| Day & Date | **Wednesday 7/7/2021** |
| Weather | **76 °/ Sunny** |
| On-Site Time | **10.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tiles and associated black mastic on the 1st floor work area. A sketch and photographs for today's regulated work area are attached to this report.

ECS observed the abatement contractor workers were removing floor tiles using a motorized floor scraper and hand tools. Black mastic was removed using an edge grinder with an attached HEPA vacuum. The abatement contractor's remaining workers were also preparing the work area in the multipurpose room. Construction activities were observed outside the building.

1ST FLOOR WORK AREA MONITORING

Between 6:30 am and 6:34 am, 3 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier near southwest and northeast stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 3:00 pm and 3:03 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 for analysis.

GENERAL

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

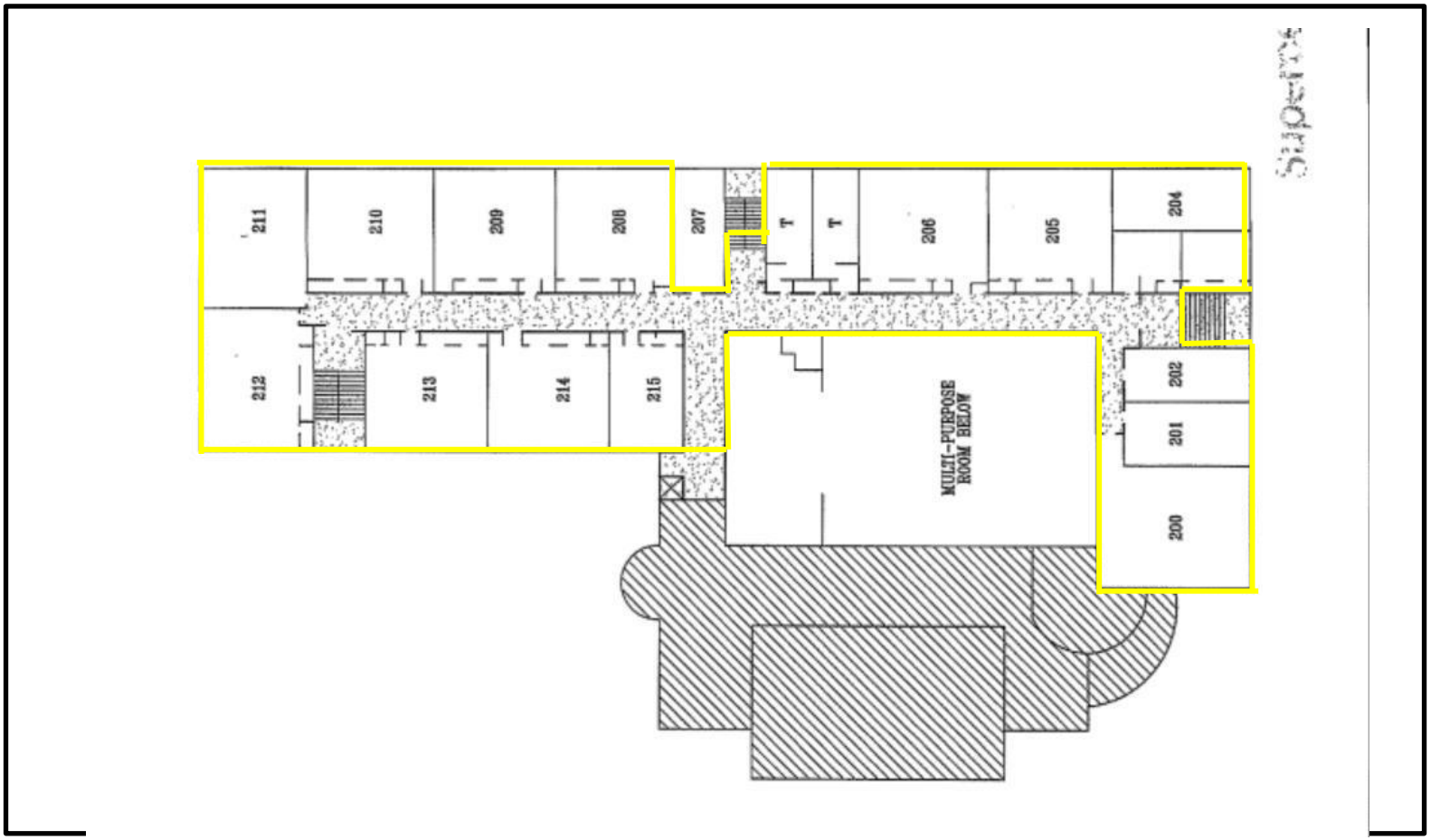
The undersigned prepared and analyzed the PCM air sample cassettes for total fiber concentration in general accordance with NIOSH Method 7400. Results were recorded on the PCM Chain of Custody which is attached.

**By Suhel Shafaat** 1825

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Cleared Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

ECS

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/07/21

| | | | | |
|---|---|---|---|---|
| Lyles-Crouch Traditional Academy<br>530 S St Asaph St, Alexandria, VA<br>22314 | | Work Area Sketch<br>1st Floor<br>Alexandria City Public Schools | SCALE NTS<br>Project No. 47:11652-D1<br>Date 07/07/21 | |




Legend

= Regulated Work Area

= Decontamination Unit

= OWA Sample Location

= IWA Sample Location

Notes:

Transmittal Page 5/9

Lyles-Crouch Traditional
Academy
530 S St Asaph St, Alexandria, VA
22314

Work Area Sketch
Ground Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/07/21

# Attachments



View of the 1st floor work area following removal of floor tiles

Figure 1



View of the waste drums placed within the work area

Figure 2

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

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

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07072101SS | OWA/1st Floor Work Area, At Decontamination Unit Entry | 6:30 AM | 3:00 PM | 2.0 | 2.0 | 2.0 | 510 | 1020.0 | 2.5 | 100 | 0.001 |
| 07072102SS | OWA/1st Floor Work Area, Outside the Critical Barrier Near Southwest Stairwell | 6:32 AM | 3:01 PM | 2.0 | 2.0 | 2.0 | 509 | 1018.0 | 4.5 | 100 | 0.002 |
| 07072103SS | OWA/1st Floor Work Area, Outside the Critical Barrier Near Northeast Stairwell | 6:34 AM | 3:03 PM | 2.0 | 2.0 | 2.0 | 509 | 1018.0 | 0.0 | 100 | 0.000 |
| 07072104SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07072105SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 1007 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 7/7/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/7/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Removal of |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:** Bucket of water was provided by the contractor.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/7/2021

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

# LETTER OF TRANSMITTAL

July 12, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/8/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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 | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

| | |
|---|---|
| Project No. | **47:11652-D1** |
| Report No. | **12** |
| Day & Date | **Thursday 7/8/2021** |
| Weather | **71 °/ Rain** |
| 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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing black mastic from the 1st floor and multipurpose work areas. A sketch and photographs for today's regulated work areas are attached to this report.

ECS observed the abatement contractor workers were observed removing floor mastic using Blastrac machine and grinder with an attached HEPA vacuum.

ECS observed there was no negative pressure within the 1st floor work area. Abatement contractor supervisor Mr. Miguel Sandoval of Waco, Inc. told ECS that one of the units within sealed classroom was still blowing air because the facility did not shut off the whole HVAC unit.

1ST FLOOR WORK AREA MONITORING

Between 6:36 am and 6:38 am, 3 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier in east and west stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 2:00 pm and 2:03 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 for analysis. Abatement work stopped for the day because abatement contractor did not have enough grinders to remove black mastic at the edges of the work area.

MULTIPURPOSE ROOM 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.

**By Suhel Shafaat** 1825

Between 2:37 am and 2:39 pm,  2 PCM air samples were started outside the work area at decontamination unit entry and and outside the critical barrier by the main lobby. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute.

The abatement workers were observed removing floor tiles using a motorized floor scraper and hand tools.

Between 3:37 pm and 3:39 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 for analysis.

GENERAL

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

# Attachments



View of the hallway within the 1st floor work area following removal of black mastic

Figure 1



View of the classroom within the 1st floor work area during removal of black mastic

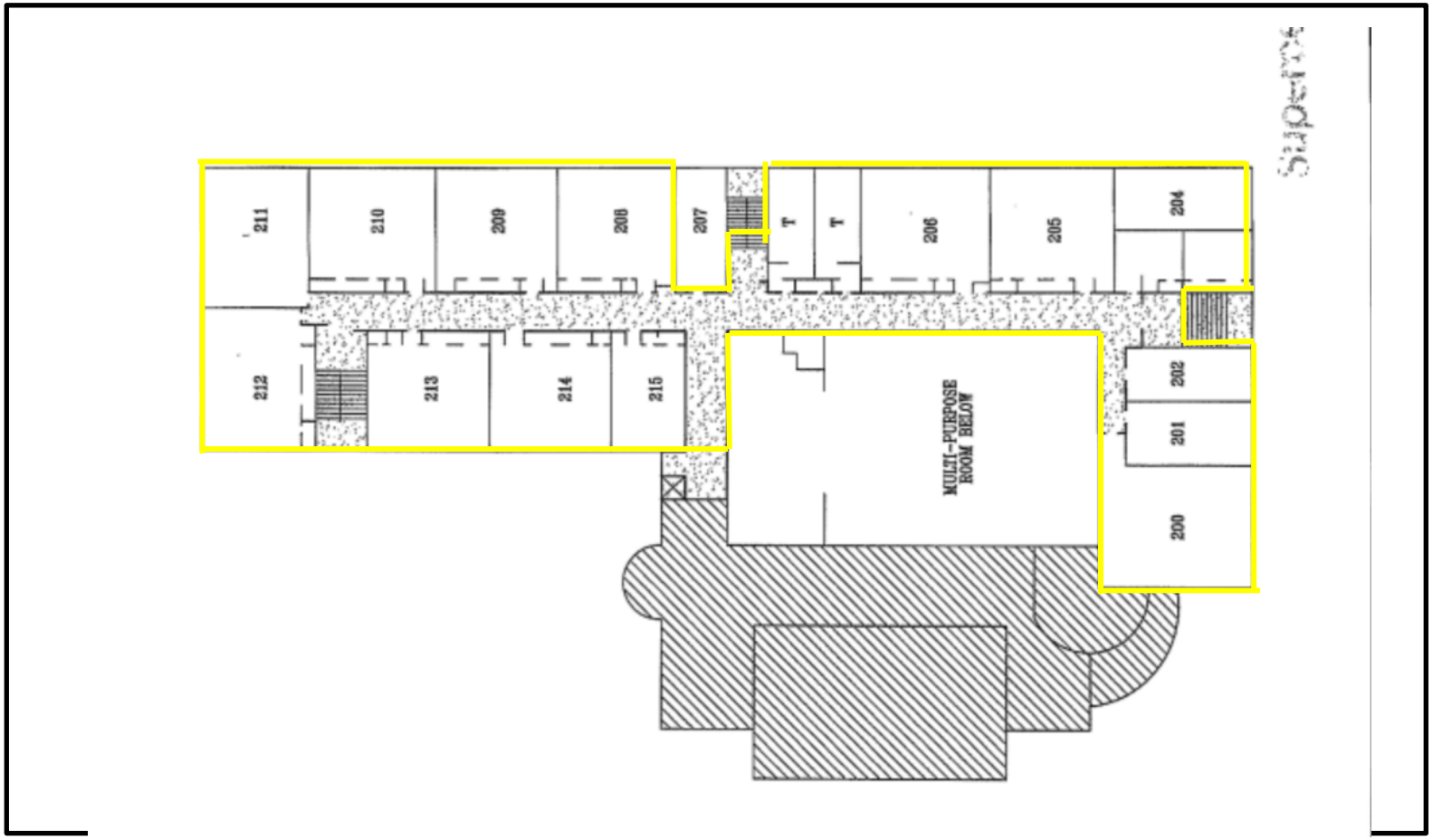
Figure 2

# Attachments



View of the floor tiles and associated black mastic to be removed in the multipurpose room

Figure 3




Legend

- = Cleared Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



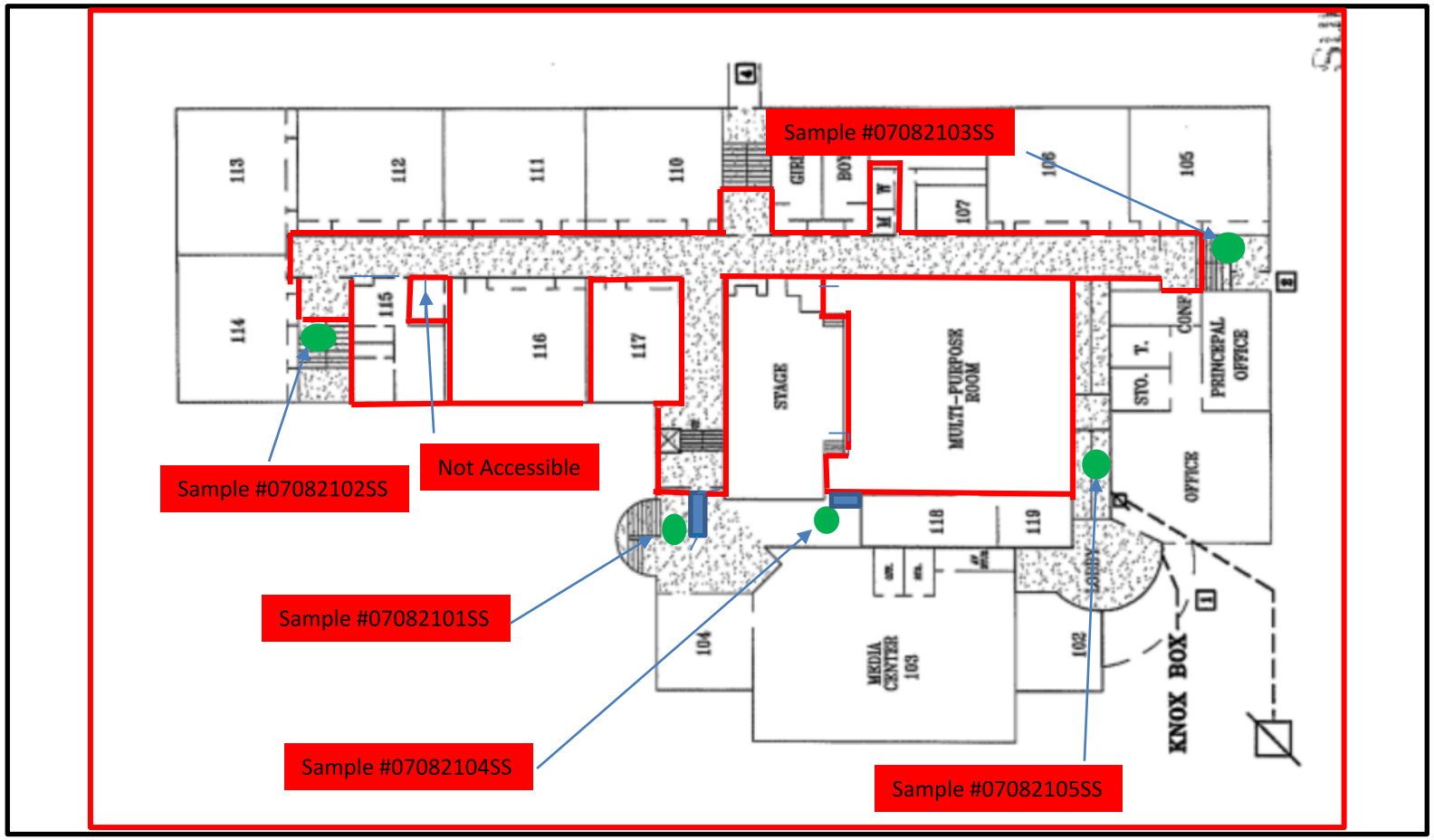
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/08/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



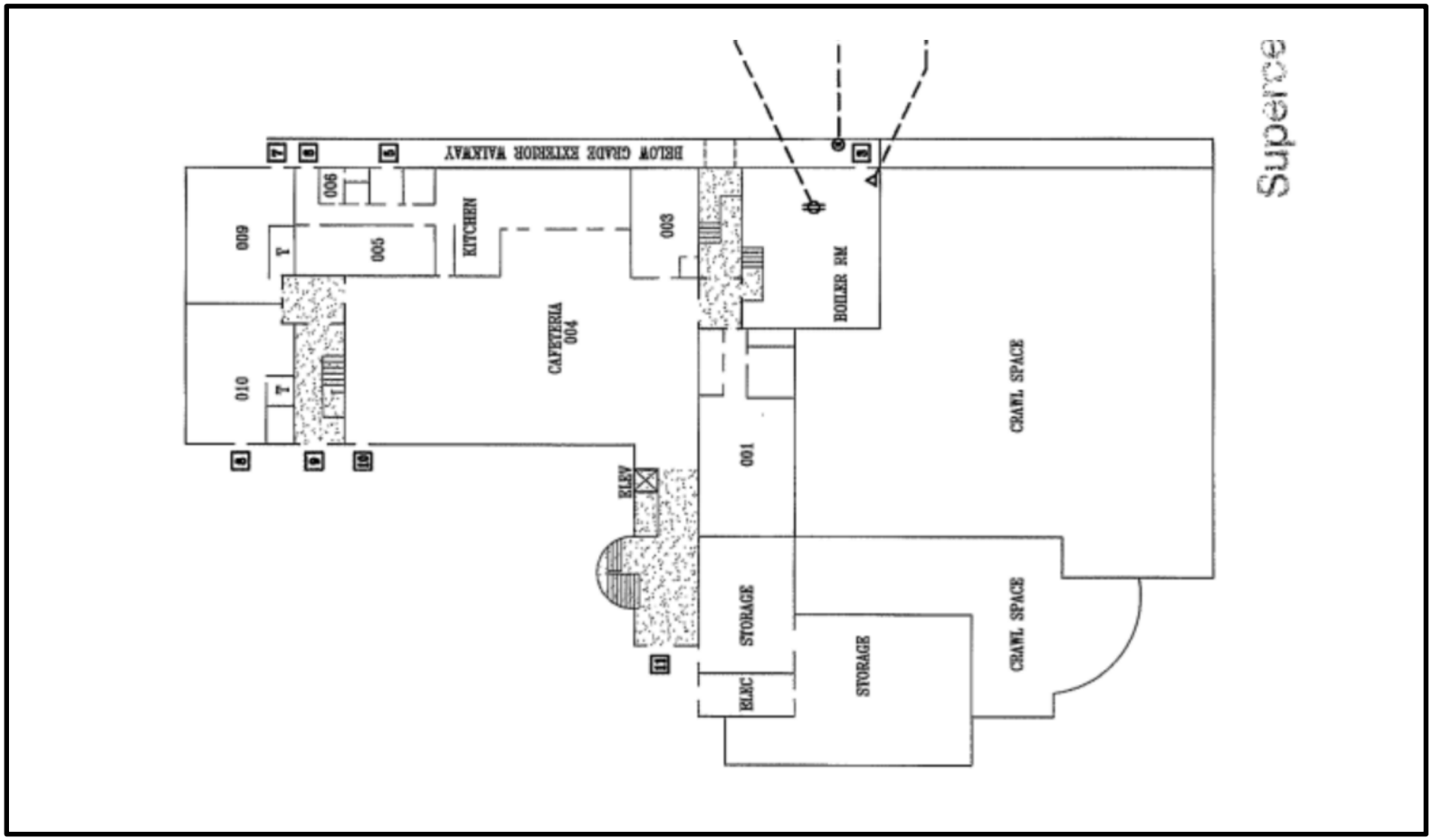
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/08/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/08/21

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/8/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07082101SS | OWA/ 1st Floor Work Area, At Decontamination Unit Entry | 6:36 AM | 2:00 PM | 2.0 | 2.0 | 2.0 | 444 | 888.0 | 5.0 | 100 | 0.003 |
| 07082102SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier in East Stairwell | 6:37 AM | 2:01 PM | 2.0 | 2.0 | 2.0 | 444 | 888.0 | 1.0 | 100 | 0.001 |
| 07082103SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier in West Stairwell | 6:38 AM | 2:03 PM | 2.0 | 2.0 | 2.0 | 445 | 890.0 | 0.0 | 100 | 0.000 |
| 07082104SS | OWA/ Multipurpose Room Work Area, At Decontamination Unit Entry | 2:37 PM | 3:37 PM | 10.0 | 10.0 | 10.0 | 60 | 600.0 | 3.0 | 100 | 0.002 |
| 07082105SS | OWA/ Multipurpose Room Work Area, Outside the Critical Barrier near Main Lobby | 2:39 PM | 3:39 PM | 10.0 | 10.0 | 10.0 | 60 | 600.0 | 0.0 | 100 | 0.000 |
| 07082106SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07082107SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 7/8/2021

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/8/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** Multipurpose Room Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | Multipurpose Room Work Area/ |
| **Administrative** | Training Certificates/Licenses | Satisfactory |
| | Permits | N/A |
| | 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 | N/A |
| | Disposable Towels | Satisfactory |
| | Soap | N/A |
| | Equipment Room | Satisfactory |
| **Personal Protective Equipment** | Type of Respirator | Half-Face APR |
| | Type of Filters Used | P100 |
| | Disposable Protective Clothing | Satisfactory |
| | Work Area Acceptable | Yes |

**Notes:** Bucket of water was provided by the contractor.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/8/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/8/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Removal of |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/8/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/8/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** Multipurpose Room Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | Multipurpose Room Work Area/ |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | N/A |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | 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:** Lauren E. Kesslak **Date:** 7/8/2021

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

# LETTER OF TRANSMITTAL

July 12, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/9/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental 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 | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

| | |
|---|---|
| Project No. | **47:11652-D1** |
| Report No. | **13** |
| Day & Date | **Friday 7/9/2021** |
| Weather | **68 °/ 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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing floor tiles and associated black mastic on the 1st floor multipurpose room work area and black mastic at the edges on the 1st floor work area. A sketch and photographs for today's regulated work area is attached to this report.

ECS observed the abatement contractor workers were observed removing floor tiles using a motorized floor scraper and hand tools in the 1st floor multipurpose room. Black floor mastic was removed using a Blastrac machine in the 1st floor multipurpose room. Black floor mastic located around the edges of rooms was removed using a grinder with an attached HEPA vacuum in the 1st floor work area.

1ST FLOOR MULTIPURPOSE ROOM WORK AREA MONITORING

Between 6:30 am and 6:34 am, 3 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier near lobby area and the hallway. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 3:00 pm 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 for analysis.

1ST FLOOR WORK AREA MONITORING

Between 6:36 am and 6:38 am, 2 PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier in east stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 2:00 pm 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 for analysis.

**By Suhel Shafaat** 1825

Negative pressure reading was -0.027 inches of water after moving one negative air machine towards the decontamination unit.

GENERAL

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

Lyles-Crouch Traditional
Academy
530 S St Asaph St, Alexandria, VA
22314

Work Area Sketch
2nd Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/08/21




Legend

= Cleared Work Area

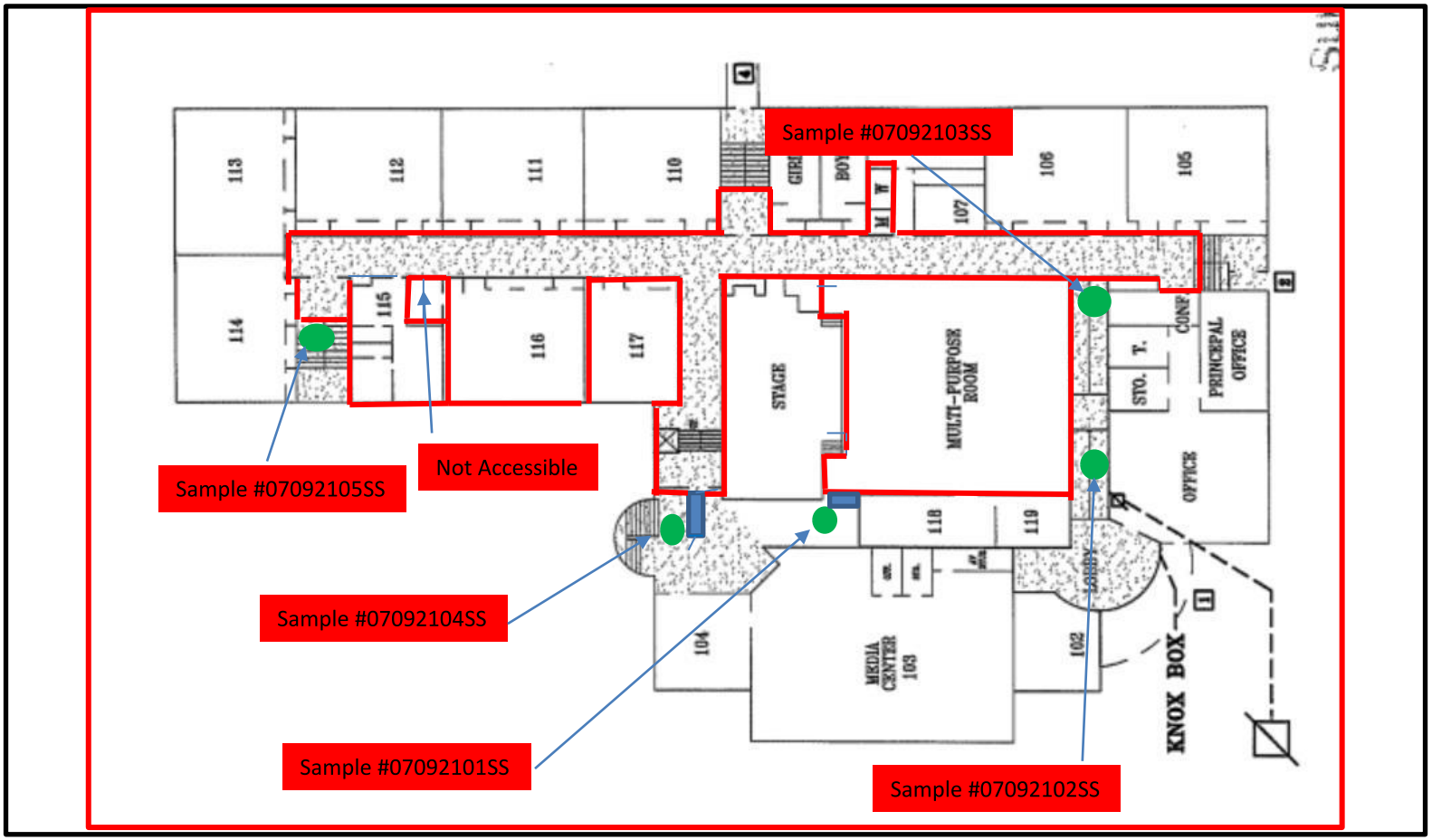
= Decontamination Unit

= OWA Sample Location

= IWA Sample Location

Notes:

Transmittal Page 4/11




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/08/21

Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
Ground Floor
Alexandria City Public Schools

SCALE NTS
Project No. 47:11652-D1
Date 07/08/21

# Attachments



View of the hallway within the 1st floor work area following removal of black mastic

Figure 1



View of the waste barrels placed in the hallway within the 1st floor work area

Figure 2

# Attachments




View of the negative pressure reading on the 1st floor work area

Figure 3

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/9/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07092101SS | OWA/ 1st Floor, Multipurpose Room Work Area, At Decontamination Unit Entry | 6:30 AM | 3:00 PM | 2.0 | 2.0 | 2.0 | 510 | 1020.0 | 2.5 | 100 | 0.001 |
| 07092102SS | OWA/ 1st Floor, Multipurpose Room Work Area, Outside the Critical Barrier near Lobby Area | 6:32 AM | 3:01 PM | 2.0 | 2.0 | 2.0 | 509 | 1018.0 | 1.0 | 100 | 0.000 |
| 07092103SS | OWA/ 1st Floor, Multipurpose Room Work Area, Outside the Critical Barrier in the Hallway | 6:34 AM | 3:02 PM | 2.0 | 2.0 | 2.0 | 508 | 1016.0 | 0.0 | 100 | 0.000 |
| 07092104SS | OWA/ 1st Floor Work Area, At Decontamination Unit Entry | 6:36 AM | 2:00 PM | 2.0 | 2.0 | 2.0 | 444 | 888.0 | 1.0 | 100 | 0.001 |
| 07092105SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier in East Stairwell | 6:38 AM | 2:02 PM | 2.0 | 2.0 | 2.0 | 444 | 888.0 | 0.0 | 100 | 0.000 |
| 07092106SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07092107SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 7/9/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/9/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor, Multipurpose Room Work Area/ Removal of Floor Tiles and Associated Black Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor, Multipurpose Room Work |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:** Bucket of water was provided by the contractor.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/9/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/9/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Removal of Black Floor Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Removal of |
| **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:** Lauren E. Kesslak **Date:** 7/9/2021

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

# LETTER OF TRANSMITTAL

July 12, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/10/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental Project Manager

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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 No. | **47:11652-D1** |
| Report No. | **14** |
| Day & Date | **Saturday 7/10/2021** |
| Weather | **84 °/ Sunny** |
| On-Site Time | **7.50** |
| Lab Time | **0.00** |
| Travel Time* | **0.50** |
| Total | **8.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| | | | | | | |
|---|---|---|---|---|---|---|
| Trip Charges* | Tolls/Parking* | Mileage* | **8** | Time of | Arrival | Departure |
| Chargeable Items | | | | | **7:30A** | **3:00P** |

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

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

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing black floor mastic from the 1st floor multipurpose room work area, black mastic from the 1st floor work area, and floor tile and mastic from the second floor elevator lobby. A sketch and photographs for today's regulated work area is attached to this report.

ECS observed the abatement contractor workers were removing black floor mastic using grinder with an attached HEPA vacuum on the 1st floor work area and multipurpose room.

1ST FLOOR MULTIPURPOSE ROOM WORK AREA MONITORING

Between 7:32 am and 8:32 am,2 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier near lobby area. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

At 9:00 am, the undersigned stopped all the work area inside the work area, and requested abatement contractor supervisor Miguel Sandoval of WACO to correct the negative pressure required -0.020 column inches of water. At this time, the manometer reading was observed at -0.010 column inches of water.

At 12:00 pm, the abatement contractor continue abatement activities inside the work area. Manometer reading observed at -0.029 column inches of water and maintain required negative pressure.

Between 2:32 pm and 2:34  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 for analysis.

1ST FLOOR WORK AREA MONITORING

**By JP Nuique** 1825

Between 7:30 am and 9:00 am, 2 PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier in east stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

At 9:00 am, The undersigned stopped all the work area inside the work area, and requested abatement contractor supervisor Miguel Sandoval of WACO to correct the negative pressure required -0.020 column inches of water. At this time, the manometer reading was observed at -0.011 column inches of water.

Between 2:30 pm and 2:36 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 for analysis.

2ND FLOOR ELEVATOR LOBBY 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.

At 8:00 am, PCM air sample was started outside the work area. The sampling pump was calibrated using a rotameter to 2.0 liters per minute. Abatement workers removed approximately 60 square feet of 12"x 12" floor tile and black floor mastic. Airless water sprayer utilized during abatement operation.

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

At 1:45 pm, the sampling pump was checked using a rotameter. The flow rate was 2.0 liters per minute. The PCM air sample was stopped and gathered for analysis.

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

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

At 2:00 pm, the sampling pumps were calibrated using a rotameter after the air within the regulated work area was sampled using PCM cassettes for 120 minutes at 10.0 liters per minute. The air sampling pumps were stopped, and the cassettes were gathered for analysis.

The US EPA and VA re-occupancy limit is 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the PCM final clearance air samples collected from 2nd floor elevator lobby work area were reported to be less than the maximum allowable limits set by applicable regulations which meets the project requirements. The client and abatement contractor supervisor were informed of the laboratory results.

GENERAL

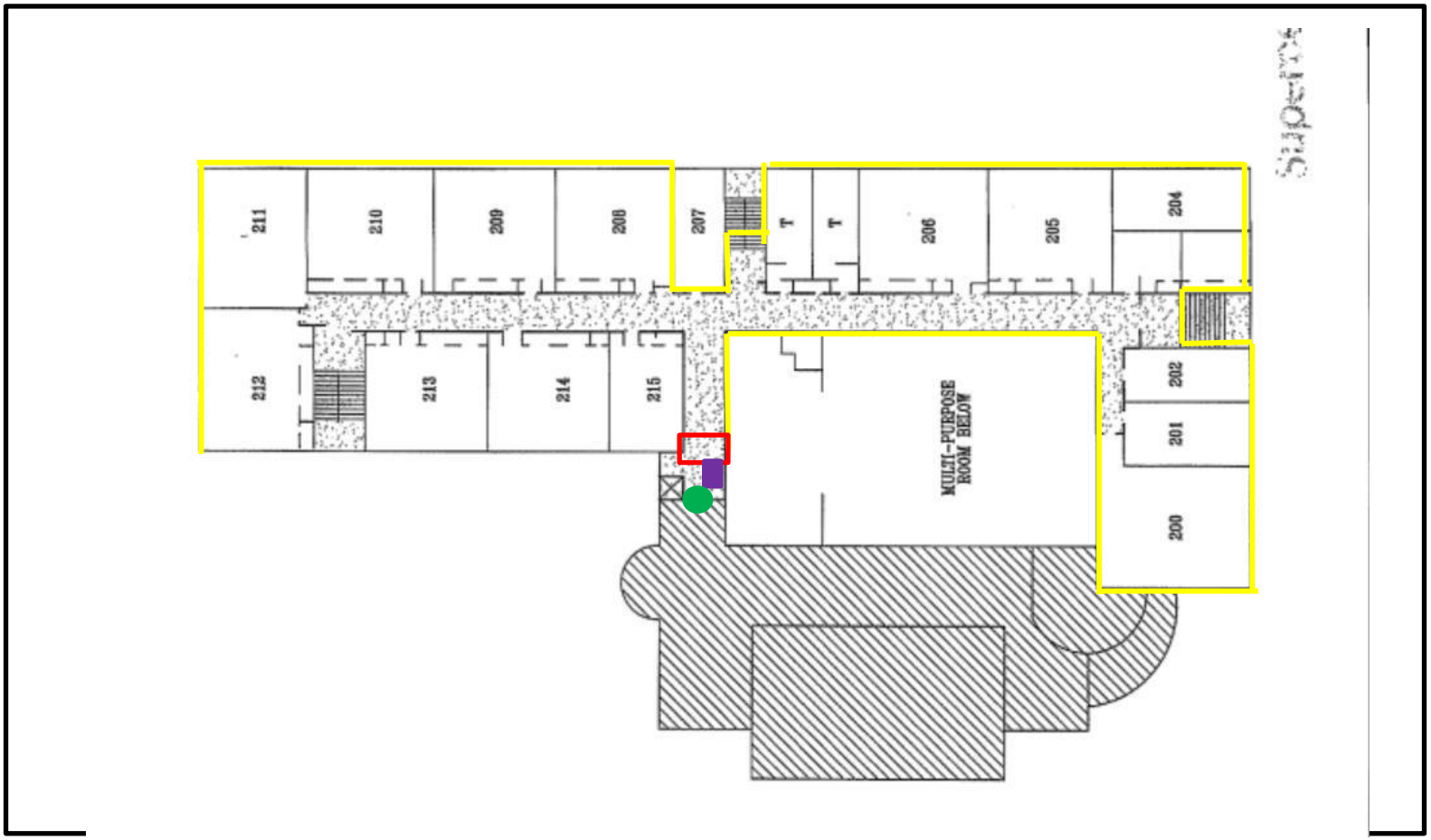
The regulated work area was surveyed to evaluate general compliance applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Cleared Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location
- Work Area

Notes:

**Transmittal Page 5/14**

**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**2nd Floor**
**Alexandria City Public Schools**

SCALE NTS

Project No. 47:11652-D1

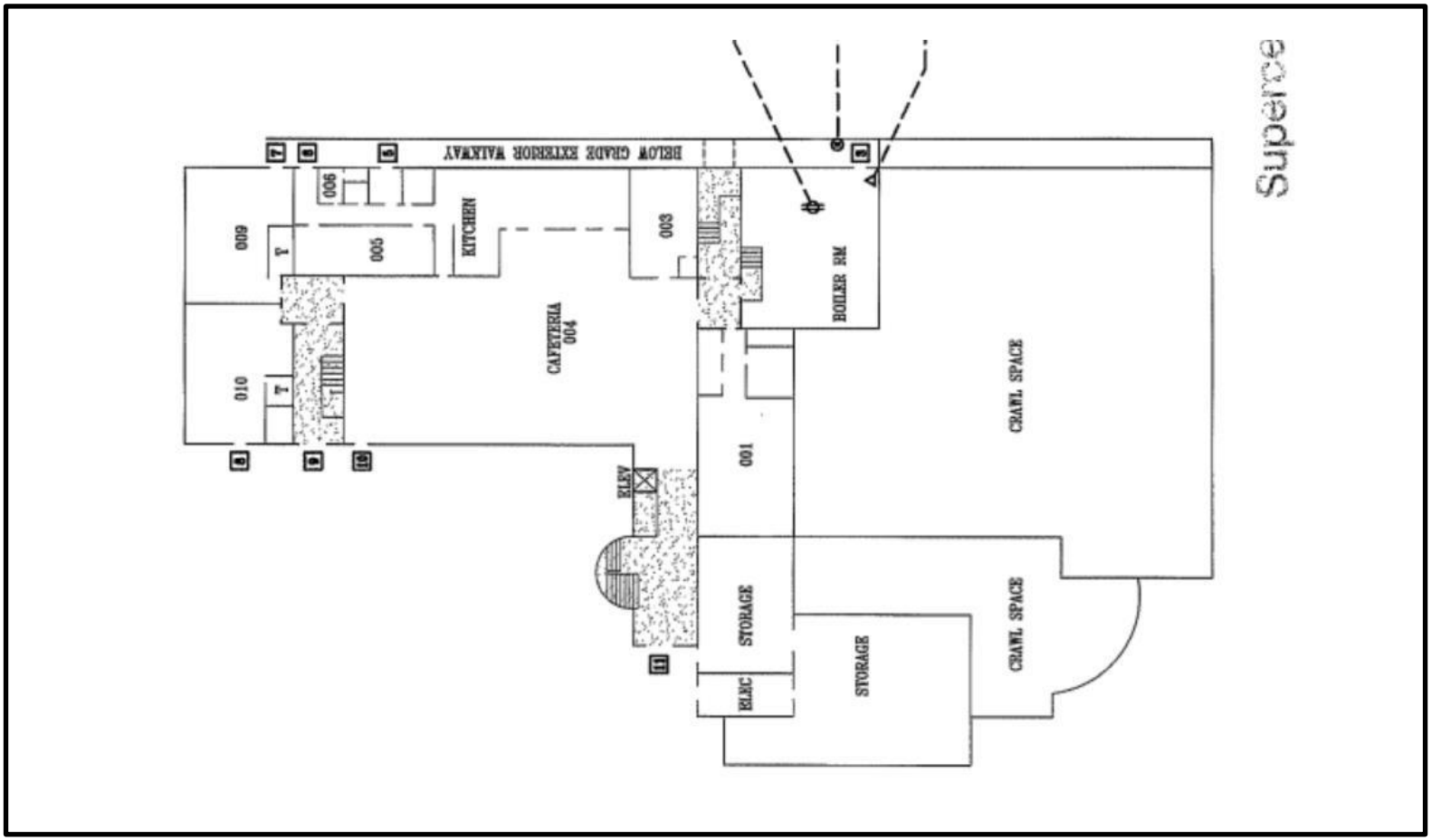
Date 07/10/21

| Lyles-Crouch Traditional Academy<br>530 S St Asaph St, Alexandria, VA<br>22314 | | Work Area Sketch<br>1st Floor<br>Alexandria City Public Schools | | SCALE NTS<br>Project No. 47:11652-D1<br>Date 07/10/21 |
|---|---|---|---|---|




Legend
- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/10/21

# Attachments



View of 2nd floor elevator lobby during pre abatement walk through

Figure 1



View of the 2nd floor elevator lobby work area following abatement

Figure 2

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/10/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07102101GN | OWA,1st Floor Work Area at Decontamination Unit Entry | 7:30 AM | 2:30 PM | 2.0 | 2.0 | 2.0 | 420 | 840.0 | 4.0 | 100 | 0.002 |
| 07102102GN | OWA,Multipurpose Room Work Area at Decontamination Unit Entry | 7:32 AM | 2:32 PM | 2.0 | 2.0 | 2.0 | 420 | 840.0 | 3.0 | 100 | 0.002 |
| 07102103GN | OWA,Multipurpose Room Work Area at Critical Barrier | 8:32 AM | 2:34 PM | 2.0 | 2.0 | 2.0 | 362 | 724.0 | 3.0 | 100 | 0.002 |
| 07102104GN | OWA,2nd Floor Elevator Lobby Work Area at Decontamination Unit Entry | 8:00 AM | 1:45 PM | 2.0 | 2.0 | 2.0 | 345 | 690.0 | 3.0 | 100 | 0.002 |
| 07102105GN | OWA,1st Floor Work Area at Critical Barrier Stairwell Landing | 9:00 AM | 2:36 PM | 2.0 | 2.0 | 2.0 | 336 | 672.0 | 0.0 | 100 | 0.000 |
| 07102106GN | Final Clearance,IWA,2nd Floor Elevator Lobby | 12:00 PM | 2:00 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 1.0 | 100 | 0.000 |
| 07102107GN | Final Clearance,IWA,2nd Floor Elevator Lobby | 12:00 PM | 2:00 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 2.0 | 100 | 0.001 |
| 07102108GN | Final Clearance,IWA,2nd Floor Elevator Lobby | 12:00 PM | 2:00 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.0 | 100 | 0.000 |
| 07102109GN | Final Clearance,IWA,2nd Floor Elevator Lobby | 12:00 PM | 2:00 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 1.0 | 100 | 0.000 |
| 07102110GN | Final Clearance,IWA,2nd Floor Elevator Lobby | 12:00 PM | 2:00 PM | 10.0 | 10.0 | 10.0 | 120 | 1200.0 | 0.0 | 100 | 0.000 |
| 071021FB01GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 071021FB02GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** JP Nuique **Date:** 7/10/2021

## ECS Mid-Atlantic, LLC

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/11/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1ST FLOOR WORK AREA

| | | |
|---|---|---|
| | Work Area Location/Description | 1ST FLOOR 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 | 2 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/11/2021

**ECS Mid-Atlantic, LLC**

# Pre-Abatement Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/11/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Elevator Lobby

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Elevator Lobby |
| **Administrative** | Training Certificates/Licenses | Satisfactory |
| | Permits | Satisfactory |
| | EPA/State/Local Notification | Satisfactory |
| **Work Area** | Public Access Restricted | Satisfactory |
| | Warning Signs/Tape Posted | Satisfactory |
| **Negative Air Filtration** | Number of Units | 1 |
| | 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 | N/A |
| | Shower Water Available | N/A |
| | Waste Water Filtration In-Use | N/A |
| | Disposable Towels | N/A |
| | Soap | N/A |
| | Equipment Room | N/A |
| **Personal Protective Equipment** | Type of Respirator | Half Face |
| | Type of Filters Used | P100 |
| | Disposable Protective Clothing | Satisfactory |
| | Work Area Acceptable | Yes |

**Notes:** The abatement contractor placed two stage decontamination unit with bucket of water.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/11/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/11/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Elevator Lobby

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Elevator Lobby |
| **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 | 1 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/11/2021

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 47:11652-D1 **Date:** 7/11/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 2nd Floor Elevator Lobby

| | | |
|---|---|---|
| | Work Area Location/Description | 2nd Floor Elevator Lobby |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | N/A |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | Floors | Satisfactory |
| | Walls | Satisfactory |
| | Ceiling | Satisfactory |
| | Windows | N/A |
| | Mechanical Equipment | N/A |
| | Ducts | N/A |
| | Pipes | N/A |
| | Lighting | N/A |
| | Other Surfaces | N/A |
| | Specified ACM Removed | Satisfactory |
| | Work Area Encapsulated | Satisfactory |
| | Negative Air Filtration Functioning | Satisfactory |
| | Waste Bags Removed | Satisfactory |
| | Final Clearance Air Sample Type | PCM |
| | Number of Samples Collected | 5 |
| | Sample Volume (liters) | 1200 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/11/2021

## ECS Mid-Atlantic, LLC

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/11/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1ST FLOOR MULTIPURPOSE ROOM

| | | |
|---|---|---|
| | Work Area Location/Description | 1ST FLOOR MULTIPURPOSE |
| **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:** Lauren E. Kesslak **Date:** 7/11/2021

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

# LETTER OF TRANSMITTAL

July 12, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/11/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental Project Manager

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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 No. | **47:11652-D1** |
| Report No. | **15** |
| Day & Date | **Sunday 7/11/2021** |
| Weather | **85 °/ Sunny** |
| On-Site Time | **2.50** |
| Lab Time | **0.00** |
| Travel Time* | **1.00** |
| Total | **3.50** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| | | | | | | |
|---|---|---|---|---|---|---|
| Trip Charges* | Tolls/Parking* | Mileage* | **16** | Times of | Arrival | Departure |
| Chargeable Items | | | | | **7:30A** | **9:30A** |
| | | | | | **12:30P** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing black floor mastic at the edges on the 1st floor work area. A sketch and photographs for today's regulated work area are attached to this report.

ECS observed the abatement contractor workers were removing black floor mastic at the edges using grinder attached with HEPA vacuum on the 1st floor work area.

1ST FLOOR MULTIPURPOSE ROOM WORK AREA MONITORING

The abatement workers did not work inside the work area for today's work shift.

1ST FLOOR WORK AREA MONITORING

Between 7:30 am and 8:00 am, 2 PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier in stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 12:45 pm and 12:49 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 for analysis.

The abatement contractor will continue abatement on the next working shift.

GENERAL

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

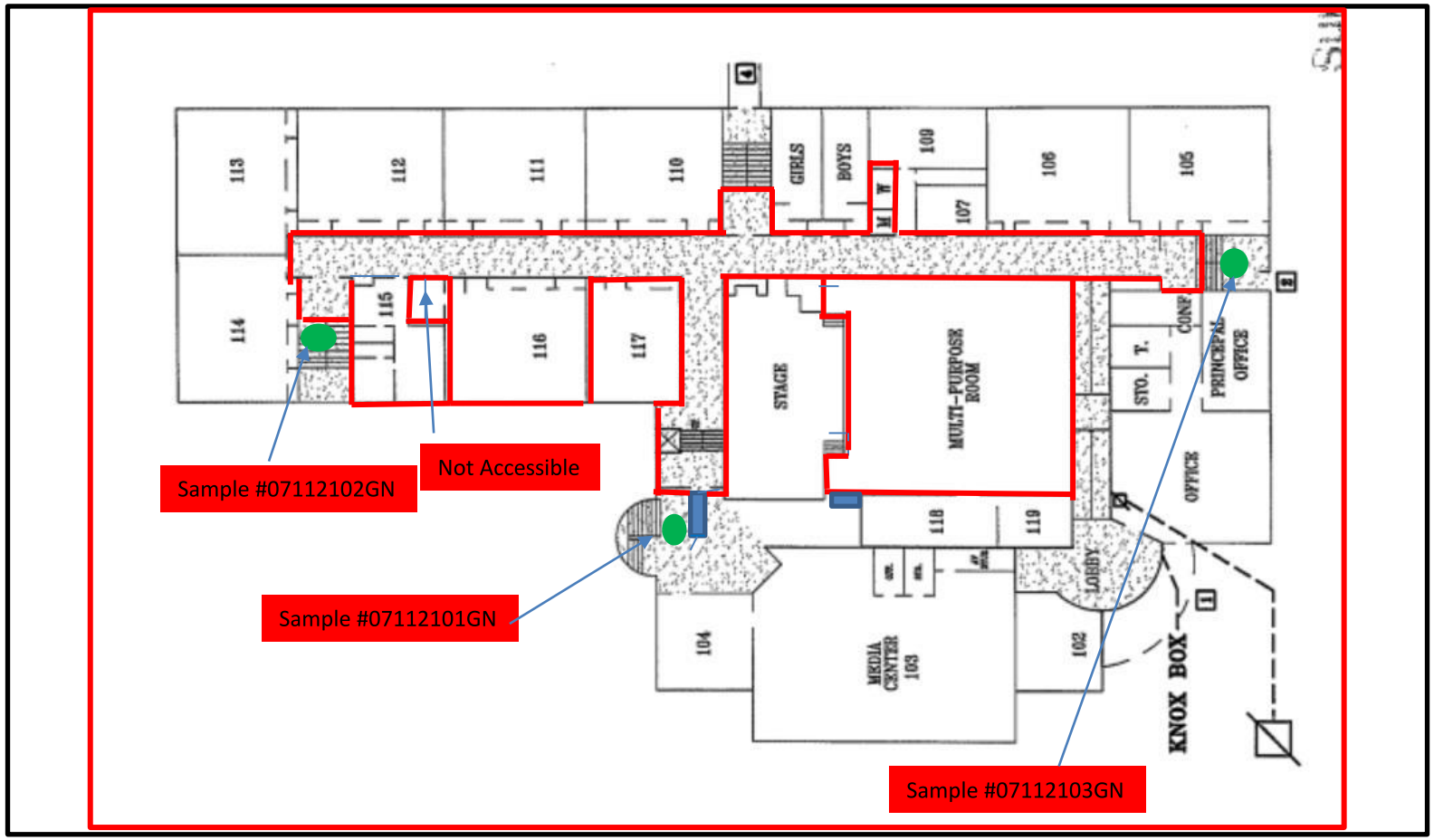
**By JP Nuique** 1825

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/11/21

# Attachments



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

Figure 1



View of abatement activities in the 1st floor work area

Figure 2

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/11/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07112101GN | OWA,1st Floor Work Area at Decontamination Unit Entry | 7:30 AM | 12:45 PM | 2.0 | 2.0 | 2.0 | 315 | 630.0 | 1.0 | 100 | 0.001 |
| 07112102GN | OWA,1st Floor Work Area at Critical Barrier Stairwell Landing | 7:40 AM | 12:47 PM | 2.0 | 2.0 | 2.0 | 307 | 614.0 | 0.0 | 100 | 0.000 |
| 07112103GN | OWA,1st Floor Work Area at Critical Barrier Stairwell Landing | 8:00 AM | 12:49 PM | 2.0 | 2.0 | 2.0 | 289 | 578.0 | 0.0 | 100 | 0.000 |
| 07112104GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 07112105GN | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** JP Nuique **Date:** 7/11/2021

## ECS Mid-Atlantic, LLC

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/11/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | Satisfactory |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | All Critical Barriers Intact | Satisfactory |
| | Wet Methods In-Use | Satisfactory |
| | Prompt Clean-Up | Satisfactory |
| | Adequate Lighting | Satisfactory |
| | Respiratory Protection | Satisfactory |
| | Disposable Clothing Worn Properly | Satisfactory |
| | No Respirators Stored in Work Area | Satisfactory |
| | Negative Air Filtration In-Use | Satisfactory |
| | Pre-Filters Clean | Satisfactory |
| | Exhaust Properly Vented | Satisfactory |
| | No Eating/Drinking/Smoking in Work Area | Satisfactory |
| **End of Shift Checklist** | Negative Air Filtration Machines Operating | Satisfactory |
| | Debris Bagged/Sealed | Satisfactory |
| | Work Area Secured from Public Access | Satisfactory |
| **Air Samples Collected** | Number of PCM Air Samples | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/11/2021

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

# LETTER OF TRANSMITTAL

July 13, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

**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 7/12/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **16** |
| Day & Date | **Monday 7/12/2021** |
| Weather | **76 °/ Sunny** |
| On-Site Time | **10.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.00** |
| Total | **10.00** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | Times of | Arrival | Departure |
|---|---|---|---|---|---|
| Chargeable Items | | | | **6:00A** | **7:30A** |
| | | | | **8:00A** | **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 onsite, as requested, to perform air monitoring and observe asbestos abatement. The materials to be removed today are asbestos-containing black mastic in the 1st floor multipurpose room work area and in the 1st floor work area. A work area sketch and photographs for today's regulated work areas are attached to this report.

ECS observed the abatement contractor workers were removing black floor mastic at the edges of the work areas using edge grinder with an attached HEPA vacuum. Construction activities were observed outside the building.

1ST FLOOR WORK AREA MONITORING

Between 6:30 am and 6:31 am, 2 PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier in southwest stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 2:15 pm and 2:16 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 for analysis.

1ST FLOOR MULTIPURPOSE ROOM WORK AREA MONITORING

Between 6:35 am and 6:38 am, 3 PCM air samples were started outside the work area at decontamination unit entry, outside the critical barrier near lobby area and the hallway. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 3:00 pm 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 for analysis.

**By Suhel Shafaat** 1825

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

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

GENERAL

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

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

ECS observed the abatement contractor placing the specified asbestos-containing materials in 6-mil polyethylene bags which were double-bagged and sealed in general accordance with the applicable regulations. Waste bags/barrels were were labeled and placed in a poly lined waste hauling container.

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.

| | | | | |
|---|---|---|---|---|
| Lyles-Crouch Traditional Academy<br>530 S St Asaph St, Alexandria, VA<br>22314 | EGS | Work Area Sketch<br>2nd Floor<br>Alexandria City Public Schools | SCALE NTS<br>Project No. 47:11652-D1<br>Date 07/12/21 | |




Legend

= Cleared Work Area

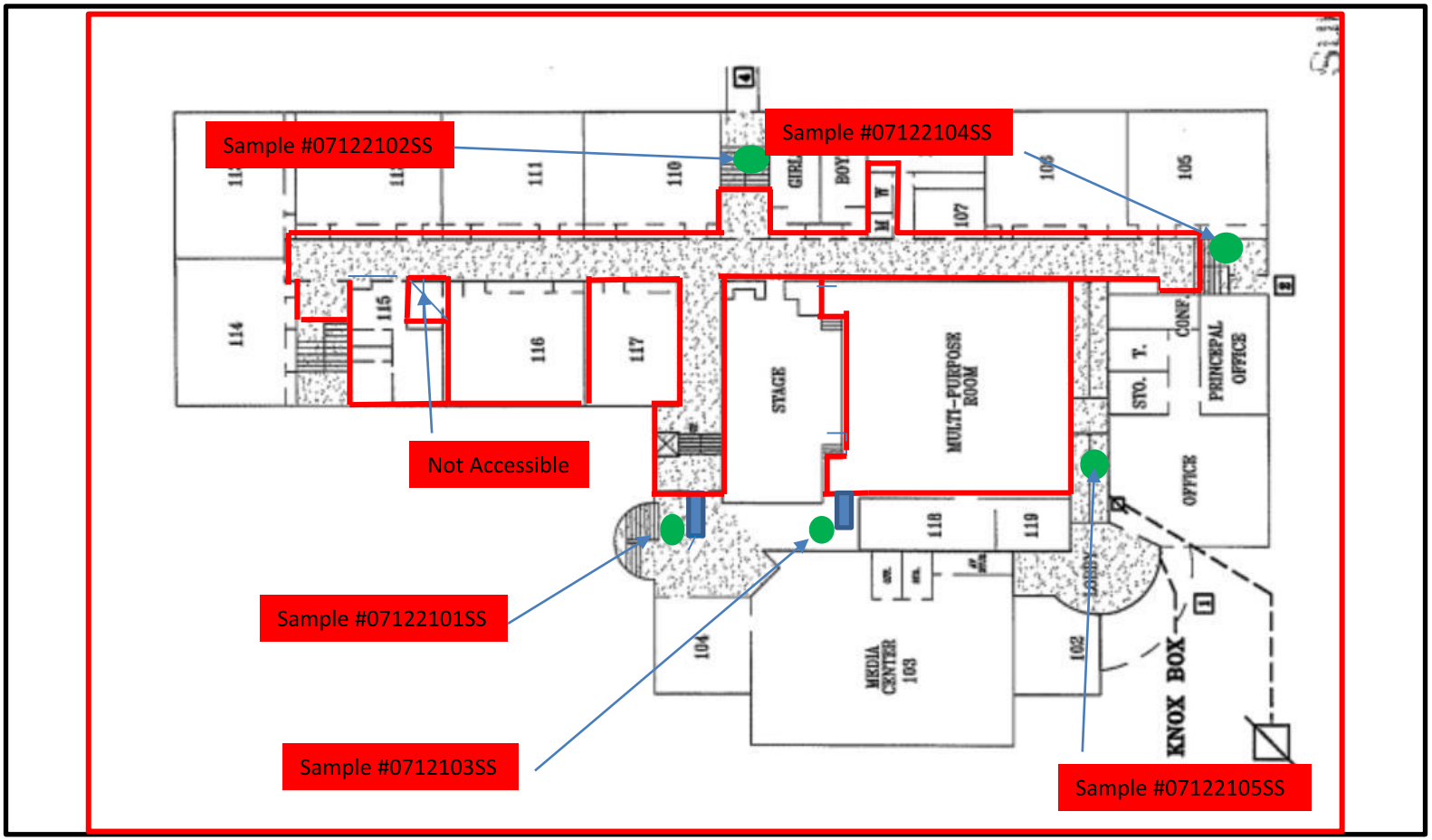
= Decontamination Unit

= OWA Sample Location

= IWA Sample Location

Notes:

Transmittal Page 4/12




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



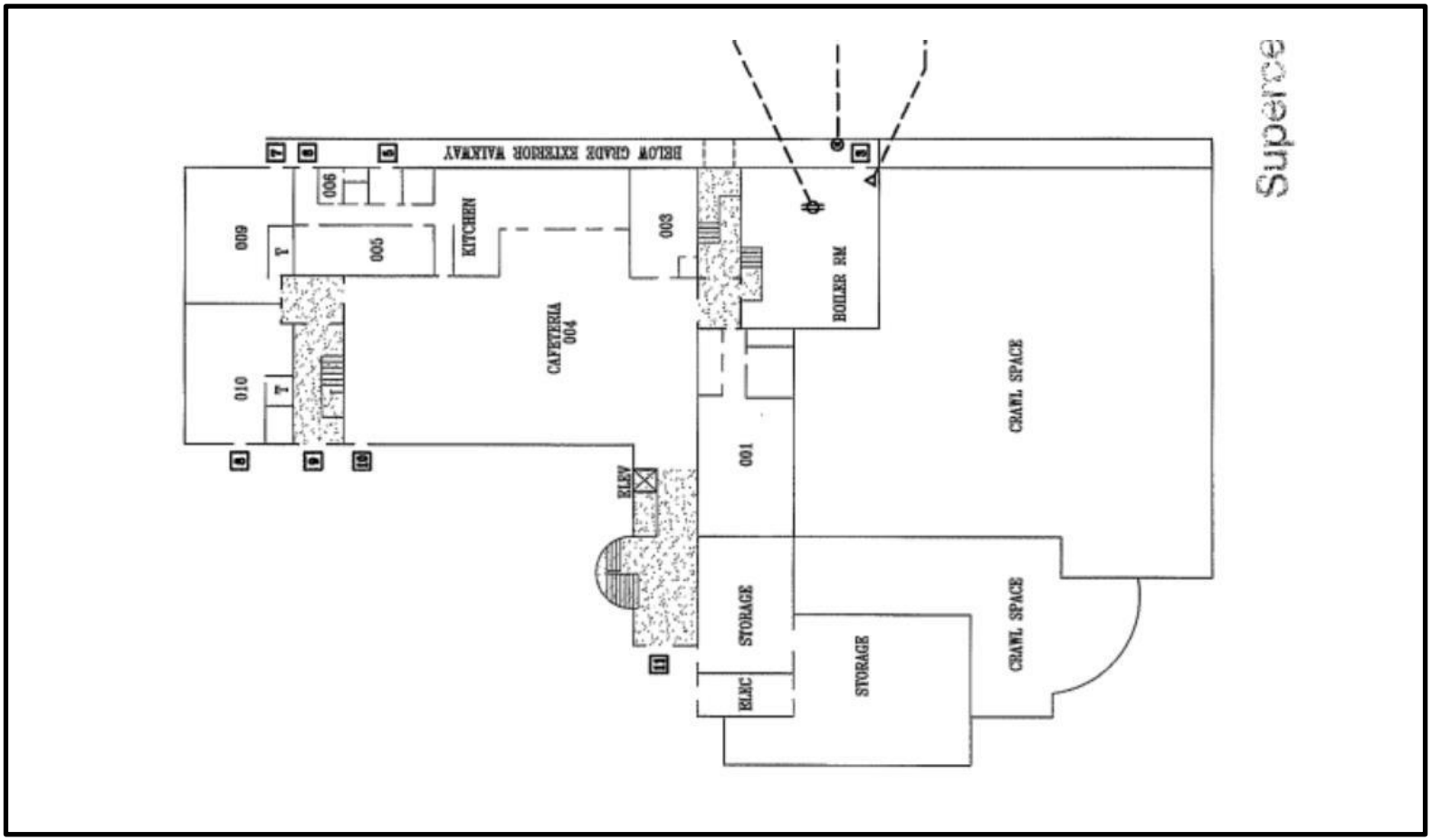
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/12/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/12/21

# Attachments



View of the 1st floor work area classroom following removal of black mastic

Figure 1



View of the 1st floor work area hallway following removal of black mastic

Figure 2

# Attachments



View of the 1st floor multipurpose room work area following fine cleaning

Figure 3



View of the 1st floor multipurpose room work area following fine cleaning

Figure 4

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/12/2021
**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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07122101SS | OWA/ 1st Floor Work Area, At Decontamination Unit Entry | 6:30 AM | 2:15 PM | 2.0 | 2.0 | 2.0 | 465 | 930.0 | 3.5 | 100 | 0.002 |
| 07122102SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier in Southwest Stairwell | 6:31 AM | 2:00 PM | 2.0 | 2.0 | 2.0 | 449 | 898.0 | 2.0 | 100 | 0.001 |
| 07122103SS | OWA/ 1st Floor, Multipurpose Room Work Area, At Decontamination Unit Entry | 6:35 AM | 3:00 PM | 2.0 | 2.0 | 2.0 | 505 | 1010.0 | 2.5 | 100 | 0.001 |
| 07122104SS | OWA/ 1st Floor, Multipurpose Room Work Area, Outside the Critical Barrier in the Hallway | 6:36 AM | 3:01 PM | 2.0 | 2.0 | 2.0 | 505 | 1010.0 | 2.0 | 100 | 0.001 |
| 07122105SS | OWA/ 1st Floor, Multipurpose Room Work Area, Outside the Critical Barrier near Lobby | 6:38 AM | 3:02 PM | 2.0 | 2.0 | 2.0 | 504 | 1008.0 | 1.0 | 100 | 0.000 |
| 071221FB01SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 071221FB02SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 7/12/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/12/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor, Multipurpose Room Work Area/ Removal of Black Floor Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor, Multipurpose Room Work |
| **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 | 3 |
| | Number of PCM Blank Samples | 2 |
| | Work Area Acceptable | Yes |

**Notes:**



**ECS Technician:** Lauren E. Kesslak **Date:** 7/12/2021

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 47:11652-D1 **Date:** 7/12/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor, Multipurpose Room Work Area/ Removal of Black Floor Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor, Multipurpose Room Work |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | N/A |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | Floors | Satisfactory |
| | Walls | Satisfactory |
| | Ceiling | N/A |
| | Windows | N/A |
| | Mechanical Equipment | N/A |
| | Ducts | N/A |
| | Pipes | N/A |
| | Lighting | N/A |
| | Other Surfaces | Satisfactory |
| | Specified ACM Removed | Satisfactory |
| | Work Area Encapsulated | Satisfactory |
| | Negative Air Filtration Functioning | Satisfactory |
| | Waste Bags Removed | Satisfactory |
| | Final Clearance Air Sample Type | |
| | Number of Samples Collected | |
| | Sample Volume (liters) | |
| | Work Area Acceptable | Yes |

**Notes:** Aggressive final clearance samples will be collected on next business day.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/12/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/12/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Removal of Black Floor Mastic

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Removal of |
| **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:** Lauren E. Kesslak **Date:** 7/12/2021

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

# LETTER OF TRANSMITTAL

July 15, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

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

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

ENCL: Field Report # 17 7/13/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
Environmental 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 No. | **47:11652-D1** |
| Report No. | **17** |
| Day & Date | **Tuesday 7/13/2021** |
| Weather | **76 °/ Sunny** |
| On-Site Time | **7.25** |
| Lab Time | **0.00** |
| Travel Time* | **1.50** |
| Total | **8.75** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| | | | | | | |
|---|---|---|---|---|---|---|
| Trip Charges* | Tolls/Parking* | Mileage* | **58** | Times of | Arrival | Departure |
| Chargeable Items | | | | | **6:00A** | **9:45A** |
| | | | | | **11:30A** | **3:00P** |

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

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

The undersigned arrived onsite, as requested, to perform air monitoring and observe asbestos abatement. The abatement workers were fine cleaning 1st floor work area. A sketch and photographs for today's regulated work area is attached to this report.

FINAL CLEARANCE SAMPLING FOR THE 1ST FLOOR MULTIPURPOSE ROOM WORK AREA

After waiting for the encapsulant to dry from previous day, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

Between 9:22 and 9:25 am, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 120 minutes at 10.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. located in Beltsville, Maryland for analysis. A copy of the chain of custody has been attached.

The US EPA and Commonwealth of Virginia maximum allowable airborne asbestos concentration from within the work area is 70 structures per millimeter squared (s/mm2). In order to be deemed acceptable, the average of the interior samples analyzed must have asbestos concentrations of 70 s/mm2 or less. EMSL Analytical, Inc. informed ECS that the analytical results of the TEM final clearance air samples collected from 1st floor multipurpose room work area found the airborne asbestos fiber concentrations to be less than the maximum allowable concentration. The client and abatement contractor supervisor, Mr. Miguel Sandoval of Waco,Inc. were informed of the results. A copy of the laboratory report is attached.

**By Suhel Shafaat** 1825

1ST FLOOR WORK AREA MONITORING

Between 6:30 am and 6:32 am, 2 PCM air samples were started outside the work area at decontamination unit entry and outside the critical barrier in southwest stairwell. The sampling pumps were calibrated using a rotameter to 2.0 liters per minute.

Between 1:40 pm and 1:42 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 for analysis.

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

Following the successful completion of the final clearance visual survey, the abatement contractor applied an encapsulant to surfaces within the regulated work area. Notes: ACM may present in the storage room (LLS materials staff only) which is not accessible.

GENERAL

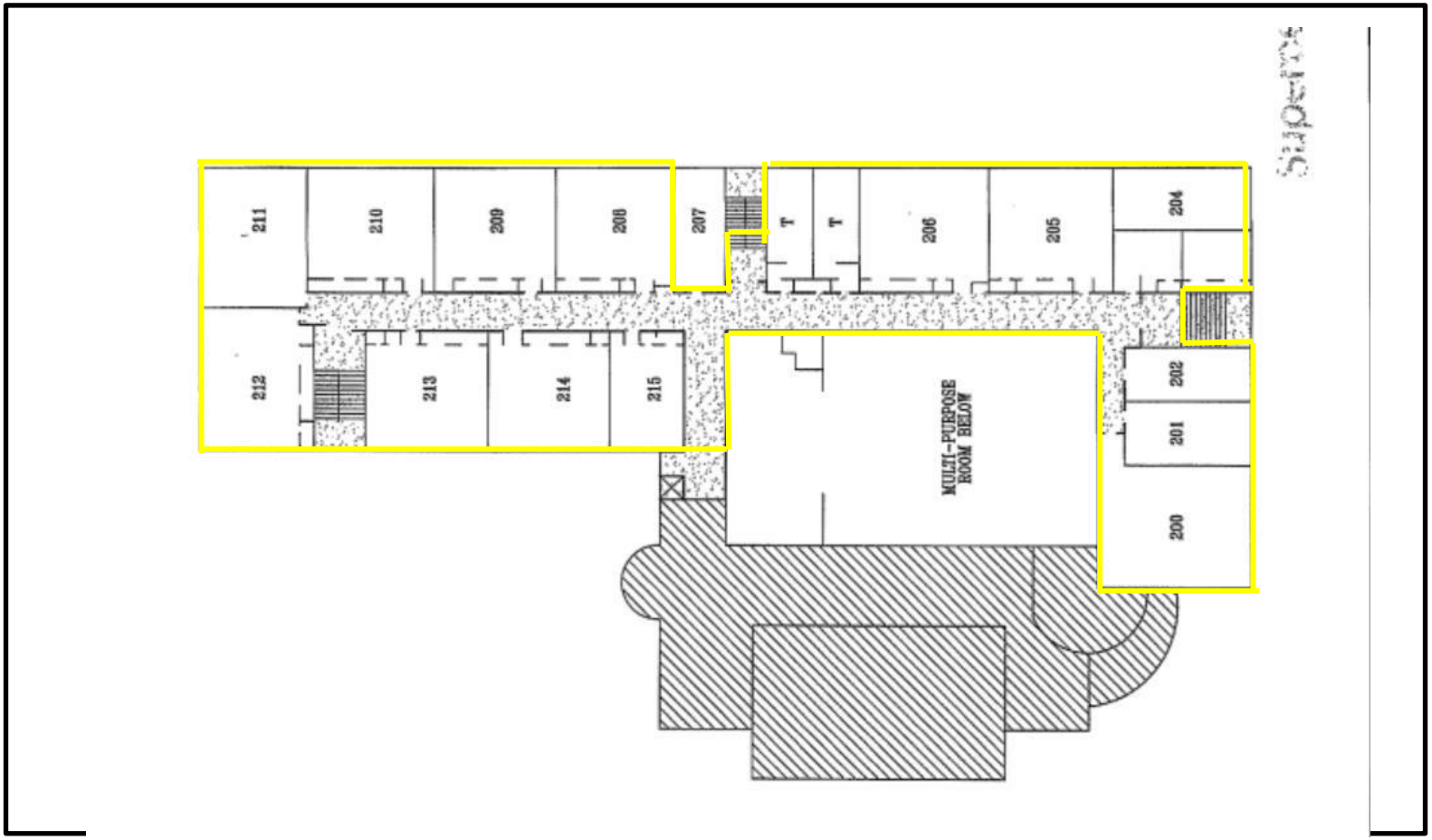
The regulated work area was surveyed to evaluate general compliance applicable regulations. The Daily Work Area Survey Checklist was completed and is attached to this report.

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

The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.

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

The sample results reflect the conditions where the air samples were collected at the time and dates of collection.




Legend

- = Cleared Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



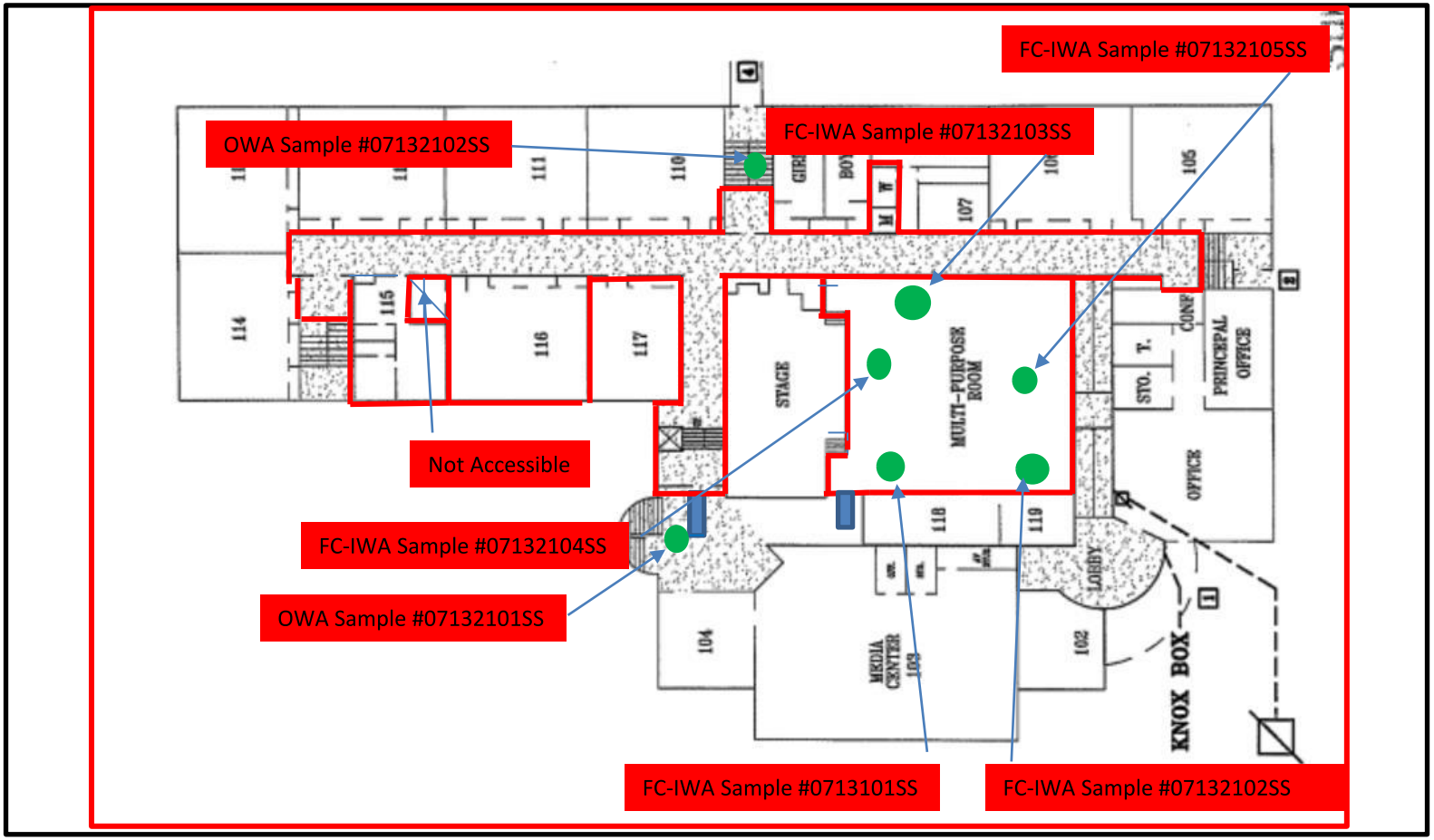
**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**2nd Floor**
**Alexandria City Public Schools**

SCALE NTS

Project No. 47:11652-D1

Date 07/13/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:



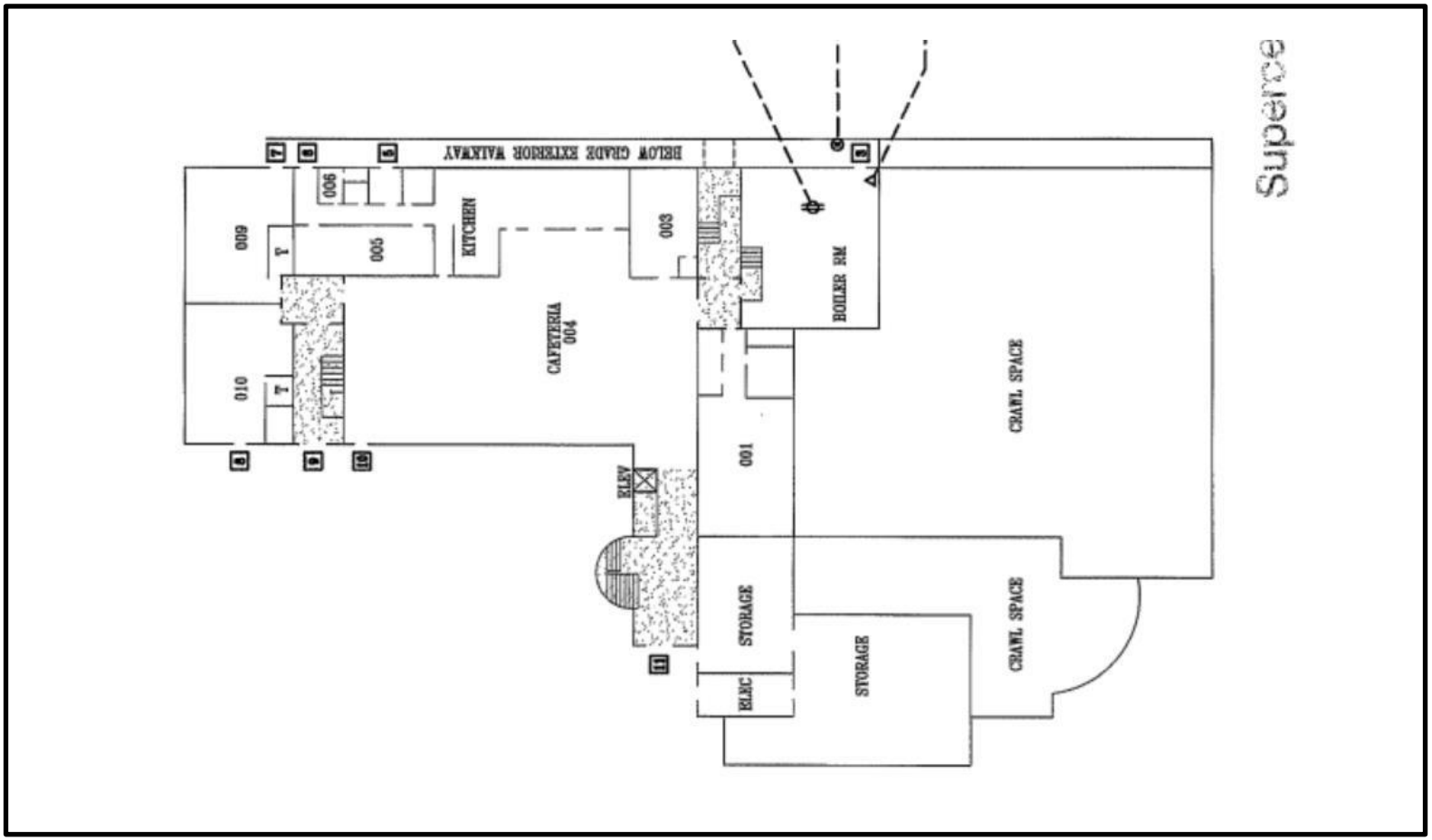
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/13/21




Legend

- = Regulated Work Area
- = Decontamination Unit
- = OWA Sample Location
- = IWA Sample Location

Notes:

**Transmittal Page 6/15**

**Lyles-Crouch Traditional Academy**
**530 S St Asaph St, Alexandria, VA 22314**

**Work Area Sketch**
**Ground Floor**
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/13/21

OrderID: 192106597

EMSL ANALYTICAL, INC
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

**EMSL Order Number** *(Lab Use Only)*: 192106597

EMSL ANALYTICAL, INC
10768 BALTIMORE AVE
BELTSVILLE, MD 20705
PHONE: (301) 937-5700
FAX: (301) 937-5701

| | |
|---|---|
| **Company:** ECS Mid-Atlantic, LLC | **EMSL-Bill to:** ☐ Same ☐ Different<br>If Bill to is Different note instructions in Comments**<br>*Third Party Billing requires written authorization from third party* |
| **Street:** 14026 Thunderbolt Place, Suite 100 | |
| **City:** Chantilly **State/Province:** VA | **Zip/Postal Code:** 20151 **Country:** USA |
| **Report To (Name):** Lauren Kesslak | **Telephone #:** (202)494-7649 |
| **Email Address:** LKesslak@ecslimited.com | **Fax #:** **Purchase Order:** |
| **Project Name/Number:** Lyles Crouch/97.16652-01 | **Please Provide Results:** ☐ Fax ☒ Email |
| **U.S. State Samples Taken:** VA | **CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt |

**Turnaround Time (TAT) Options* – Please Check**

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

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

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

**PLM - Bulk (reporting limit)**
☐ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0 25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NIOSH 9002 (<1%)

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

**TEM - Bulk**
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2 5

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

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

**Soil/Rock/Vermiculite**
☐ PLM CARB 435 - A (0.25% sensitivity)
☐ PLM CARB 435 - B (0.1% sensitivity)
☐ TEM CARB 435 - B (0 1% sensitivity)
☐ TEM CARB 435 - C (0.01% sensitivity)
☐ TEM Qual. via Filtration Technique
☐ TEM Qual. via Drop-Mount Technique

**Other:**
☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** Filter Pore Size (Air Samples): ☐ 0.8µm ☒ 0.45µm

**Samplers Name:** Suhel Shafaat **Samplers Signature:**

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 0713210155 | Final Clearance-IWA, 1st Floor Multipurpose Room Work Area | 1200 Liters | 7/13/21 |
| 0255 | | | |
| 0355 | | | |
| 0455 | | | |
| 0555 | | | |
| 0655 | Final Clearance-OWA, 1st Floor Multipurpose Room Work Area | | |
| 0755 | | | |
| 0855 | | | |

**Client Sample # (s):** 0713210155 - 0713213355 **Total # of Samples:** 13

**Relinquished (Client):** **Date:** 7/13/21 **Time:**

**Received (Lab):** **Date:** 7/13/21 **Time:** 1045

**Comments/Special Instructions:** Please only analyze IWA samples. Aggressive Sampling method.

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

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

PHONE:
FAX:

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

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 071321 0955 | Final clearance-OWA, 1st Floor Multipurpose Room Work Area | 1200 Liters | 7/13/21 |
| 1055 | | | |
| 1155 | Field Blank-opened 30secs before by entrance | N/A | |
| 1255 | Field Blank-opened 30sec before in darkroom | | |
| 1355 | Sealed Blank-Not opened | | |
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*Comments/Special Instructions:

# 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: 192106597
Customer ID: ECMA78
Customer PO:
Project ID:

**Attention:** Lauren Kesslak
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
**Project:** Lyles Crouch / 47:11652-D1

**Phone:** (703) 471-8400
**Fax:** (703) 471-8400
**Received Date:** 07/13/2021 10:45 AM
**Analysis Date:** 07/13/2021
**Collected Date:** 07/13/2021

## 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) |
|---|---|---|---|---|---|---|---|---|---|---|
| 07132101SS<br>*192106597-0001* | Final Clearance-IWA, 1st Fl. Multipurpose Room | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07132102SS<br>*192106597-0002* | Final Clearance-IWA, 1st Fl. Multipurpose Room | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07132103SS<br>*192106597-0003* | Final Clearance-IWA, 1st Fl. Multipurpose Room | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07132104SS<br>*192106597-0004* | Final Clearance-IWA, 1st Fl. Multipurpose Room | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| 07132105SS<br>*192106597-0005* | Final Clearance-IWA, 1st Fl. Multipurpose Room | 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: 07/13/2021 14:50 PM

# Attachments



View of the hallway on the 1st floor work area following fine cleaning

Figure 1



View of the 1st floor work area following fine cleaning

Figure 2

# Attachments



View of the classroom on the 1st floor work area following fine cleaning

Figure 3



View of the closet on the 1st floor work area following fine cleaning

Figure 4

# Attachments



View of the restroom on the 1st floor work area following fine cleaning

Figure 5

**ECS Mid-Atlantic, LLC**

# PCM Air Sample Field Data Sheet

## WORK AREA SAMPLES

**Project Number:** 47:11652-D1
**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Date:** 7/13/2021
**Page:** 1 of 1

| Sample # | Location/Description | Start | Stop | Start Flow (lpm) | Stop Flow (lpm) | Average Flow (lpm) | Total Time (lpm) | Volume (l) | Fibers (#) | Field (#) | Result (f/cc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07132101SS | OWA/ 1st Floor Work Area, At Decontamination Unit Entry | 6:30 AM | 1:40 PM | 2.0 | 2.0 | 2.0 | 430 | 860.0 | 2.5 | 100 | 0.001 |
| 07132102SS | OWA/ 1st Floor Work Area, Outside the Critical Barrier in Southwest Stairwell | 6:32 AM | 1:42 PM | 2.0 | 2.0 | 2.0 | 430 | 860.0 | 2.0 | 100 | 0.001 |
| 071321FB01SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |
| 071321FB02SS | Field Blank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.0 | 100 | NFD |

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

**Notes:** The US EPA and Commonwealth of Virginia PCM re-occupancy limit is less than or equal to 0.01 fibers per cubic centimeter of air (f/cc). The analytical results of the air samples from outside the work area were below this level.



**ECS Technician:** Suhel Shafaat **Date:** 7/13/2021

**ECS Mid-Atlantic, LLC**

# Daily Work Area Checklist

**Project Number:** 47:11652-D1 **Date:** 7/13/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Fine Cleaning Work Area

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Fine Cleaning |
| **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:** Lauren E. Kesslak **Date:** 7/13/2021

**ECS Mid-Atlantic, LLC**

# Final Clearance Checklist

**Project Number:** 47:11652-D1 **Date:** 7/13/2021

**Project Address:** 530 S St Asaph Street
Alexandria, VA-22314

**Work Area Location/Description:** 1st Floor Work Area/ Fine Cleaning Work Area

| | | |
|---|---|---|
| | Work Area Location/Description | 1st Floor Work Area/ Fine Cleaning |
| **Decontamination Enclosure** | Floors and Walls Clean | Satisfactory |
| | No Debris Present | Satisfactory |
| | Signage Intact | Satisfactory |
| | Shower Functioning | N/A |
| | Used Suits/Towels in Waste Bag | Satisfactory |
| **Interior of Work Area** | Floors | Satisfactory |
| | Walls | Satisfactory |
| | Ceiling | N/A |
| | Windows | N/A |
| | Mechanical Equipment | N/A |
| | Ducts | N/A |
| | Pipes | N/A |
| | Lighting | N/A |
| | Other Surfaces | Satisfactory |
| | Specified ACM Removed | Satisfactory |
| | Work Area Encapsulated | Satisfactory |
| | Negative Air Filtration Functioning | Satisfactory |
| | Waste Bags Removed | Satisfactory |
| | Final Clearance Air Sample Type | |
| | Number of Samples Collected | |
| | Sample Volume (liters) | |
| | Work Area Acceptable | Yes |

**Notes:** Aggressive final clearance samples will be collected on next business day.



**ECS Technician:** Lauren E. Kesslak **Date:** 7/13/2021

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

# LETTER OF TRANSMITTAL

July 15, 2021

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

ATTN: John Finnigan

RE: **Lyles Crouch Flooring Abatement Monitoring Summer 2021**
ECS Job # **47:11652-D1**

Permits:
Location: **530 S St Asaph Street Alexandria, VA 22314**

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

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

ENCL: Field Report # 18 7/14/2021

Michael P. Hamill, CIH
Environmental Senior Project Manager

Lauren E. Kesslak, CIH, CSP
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 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-D1** |
| Report No. | **18** |
| Day & Date | **Wednesday 7/14/2021** |
| Weather | **68 °/ Sunny** |
| On-Site Time | **4.00** |
| Lab Time | **0.00** |
| Travel Time* | **0.75** |
| Total | **4.75** |
| Re Obs Time | **0.00** |

| | |
|---|---|
| Project | **Lyles Crouch Flooring Abatement Monitoring** |
| Location | **Alexandria, VA** |
| Client | **Alexandria City Public Schools** |
| Contractor | **None Listed** |

Remarks

| Trip Charges* | Tolls/Parking* | Mileage* | **29** | Time of | Arrival | Departure |
|---|---|---|---|---|---|---|
| Chargeable Items | | | | | **6:00A** | **10:00A** |

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

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

The undersigned arrived onsite, as requested, to perform final clearance air sampling on the 1st floor work area. A Floor Plan for today's regulated work area and final clearance air sample location 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 from previous day for the encapsulant to dry, aggressive air sampling was performed. Five (5) TEM air samples were started within the regulated work area and Five (5) TEM air samples were started outside the work area. The sampling pumps were calibrated using a rotameter to 10.0 liters per minute. One field blank sample was opened within the work area for 30 seconds. One field blank sample was opened outside the work area for 30 seconds.

Between 9:07 am nd 9:10 am, the sampling pumps were checked using a rotameter after the air within and outside the regulated work area was sampled using TEM cassettes for 120 minutes at 10.0 liters per minute. The sampling cassettes, including the two field blanks and one sealed blank were labeled with unique identification and transported to EMSL Analytical, Inc. located in Beltsville, Maryland for analysis.

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

**By Suhel Shafaat** 1825

| | | | | |
|---|---|---|---|---|
| Lyles-Crouch Traditional Academy<br>530 S St Asaph St, Alexandria, VA 22314 | EGS | Work Area Sketch<br>2nd Floor<br>Alexandria City Public Schools | SCALE NTS<br>Project No. 47:11652-D1<br>Date 07/14/21 | |

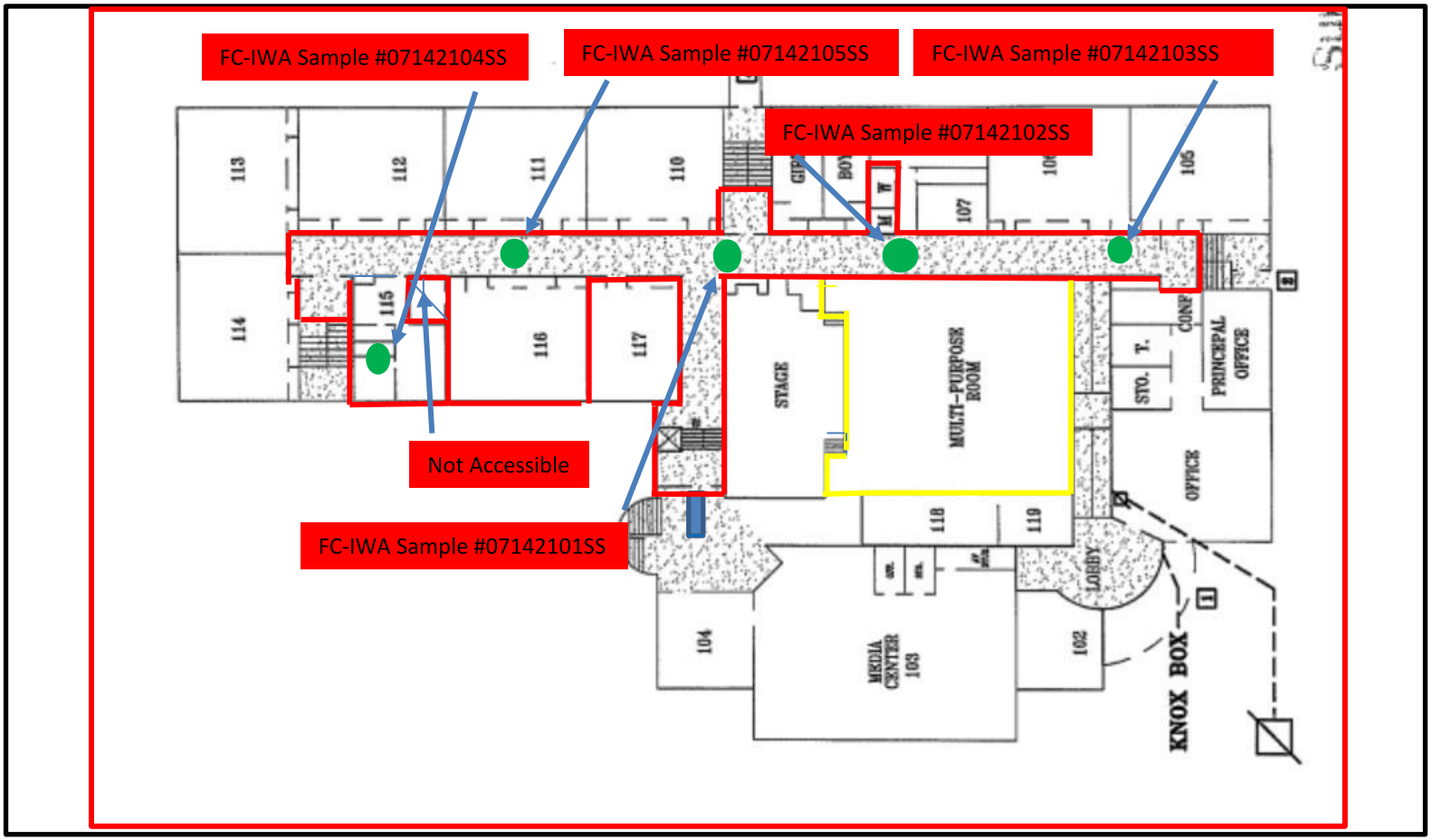



Legend

= Cleared Work Area

Notes:

Transmittal Page 3/8




Legend

- = Regulated Work Area
- = Decontamination Unit
- = FC-IWA Sample Location
- = Cleared Work Area

Notes:



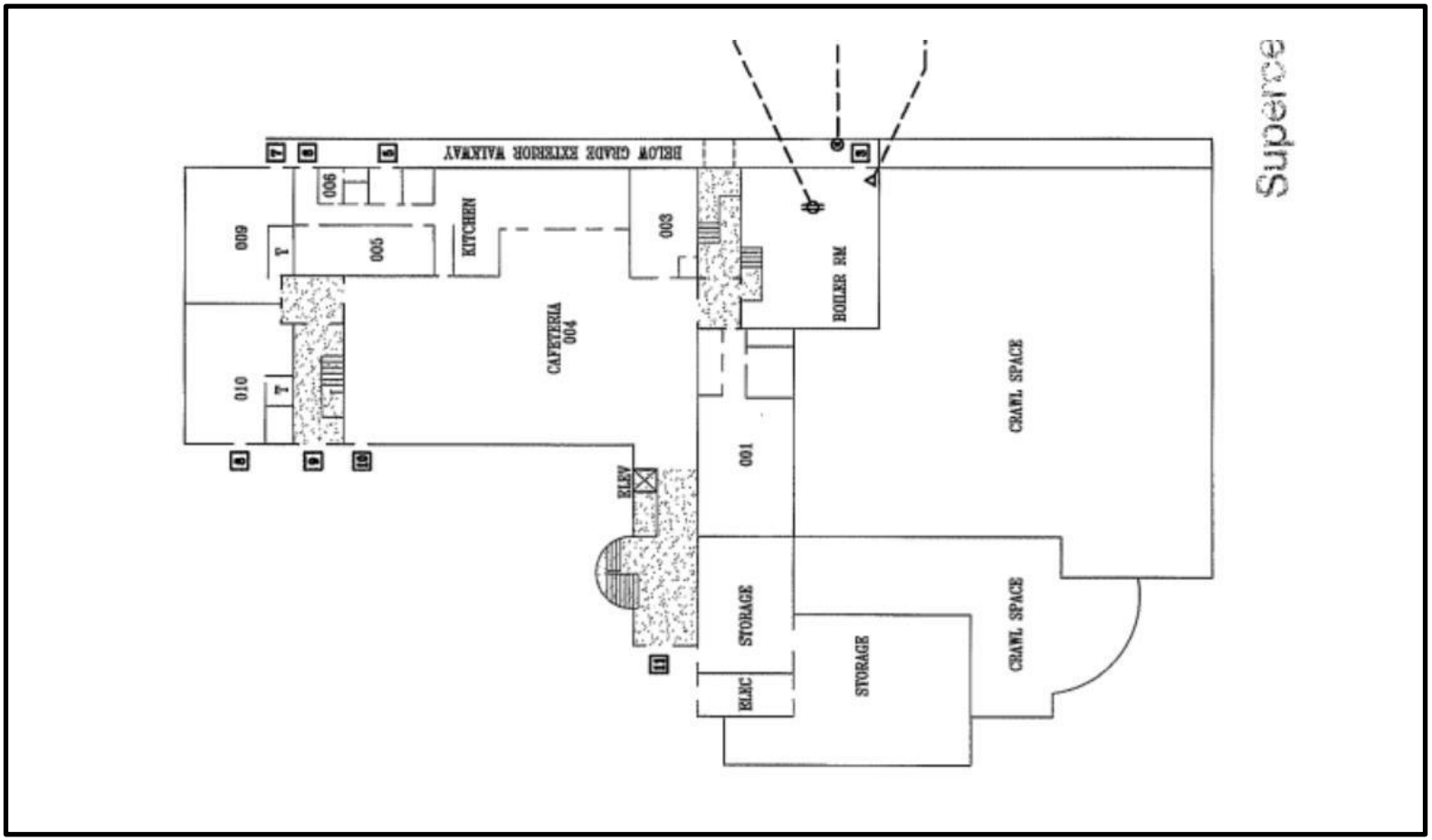
Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
1st Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/14/21




Legend

Notes:



Lyles-Crouch Traditional Academy
530 S St Asaph St, Alexandria, VA 22314

Work Area Sketch
Ground Floor
Alexandria City Public Schools

SCALE NTS

Project No. 47:11652-D1

Date 07/14/21

# EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

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

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


EMSL Order: 192106656
Customer ID: ECMA78
Customer PO:
Project ID:

**Attention:** Lauren Kesslak
ECS Mid-Atlantic, LLC
14026 Thunderbolt Place
Suite 100
Chantilly, VA 20151
**Project:** Lyles Crouch / 47:11652-D1

**Phone:** (703) 471-8400
**Fax:** (703) 471-8400
**Received Date:** 07/14/2021 10:46 AM
**Analysis Date:** 07/14/2021
**Collected Date:** 07/14/2021

## 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) |
|---|---|---|---|---|---|---|---|---|---|---|
| 07142101 | Final Clearance-IWA, 1st Fl. Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| *192106656-0001* | | | | | | | | | | |
| 07142102 | Final Clearance-IWA, 1st Fl. Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| *192106656-0002* | | | | | | | | | | |
| 07142103 | Final Clearance-IWA, 1st Fl. Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| *192106656-0003* | | | | | | | | | | |
| 07142104 | Final Clearance-IWA, 1st Fl. Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| *192106656-0004* | | | | | | | | | | |
| 07142105 | Final Clearance-IWA, 1st Fl. Work Area | 1200.00 | 0.0650 | 0 | None Detected | 0 | 0 | 0.0049 | <15.00 | <0.0049 |
| *192106656-0005* | | | | | | | | | | |

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: 07/14/2021 17:44 PM

OrderID: 192106656

# Asbestos Chain of Custody

**EMSL Order Number** (Lab Use Only): 192106656

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

| | | | |
|---|---|---|---|
| **Company Name:** ECS Mid-Atlantic, LLC | | **EMSL Customer ID:** | |
| **Street:** 14026 Thunderbolt Place, Suite 100 | **City:** Chantilly | | **State/Province:** VA |
| **Zip/Postal Code:** 20151 | **Country:** USA | **Telephone #:** (202)494-7649 | **Fax #:** |
| **Report To (Name):** Lauren Kesslak | | **Please Provide Results:** ☐ Fax ☒ Email | |
| **Email Address:** LKesslak@ecslimited.com | | **Purchase Order:** | |
| **Project Name/Number:** Lyles Crouch / 47.1162-D1 | | **EMSL Project ID** (Internal Use Only): | |
| **U.S. State Samples Taken:** VA | | **CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt | |

**EMSL-Bill to:** ☒ Same ☐ Different - If Bill to is Different note instructions in Comments**

*Third Party Billing requires written authorization from third party*

**Turnaround Time (TAT) Options* – Please Check**

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

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

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

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

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

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0 1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198 6 NOB (non-friable-NY)
- ☐ NYS 198 8 SOF-V
- ☐ NIOSH 9002 (<1%)

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

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

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

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

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

**Other:** ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

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

**Samplers Name:** Suhel Shafaat **Samplers Signature:**

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 071421055 | Final Clearance-IWA, 1st Floor Work Area | 1200 Liters | 7/14/21 |
| 0255 | | | |
| 0355 | | | |
| 0455 | | | |
| 0555 | | | |

**Client Sample # (s):** 071421055 - 071421355 **Total # of Samples:** 13

**Relinquished (Client):** **Date:** 7/14/21 **Time:**

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

**Comments/Special Instructions:** Please only analyze IWA samples, Aggressive sampling method.

'21 JUL 14 AM10:41

OrderID: 192106656

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

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

PHONE:
FAX:

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

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|---|---|---|---|
| 0714210655 | Final Clearance-OWA 1st Floor Work Area | 1200 Liters | 7/14/21 |
| 0755 | | | |
| 0855 | | | |
| 0955 | | | |
| 1055 | | | |
| 1155 | Field Blank opened 30secs before by entrance | N/A | |
| 1255 | Field Blank opened 30secs before in ambient | | |
| 1355 | Sealed Blank (Not opened) | | |

*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 Condit... custody by reference in their entirety. Submission of samples to EMSL Analytical Inc. constitutes acceptance and acknowledgment of all terms and conditions.

Page 2 of 2