

June 3, 2024

Rick Underwood  
Director of Operations & Maintenance  
Lowell Public Schools  
155 Merrimack Street, 4<sup>th</sup> Floor  
Lowell, Massachusetts 01852

via email: [runderwood@lowell.k12.ma.us](mailto:runderwood@lowell.k12.ma.us)

**RE: AHERA 3-Year Reinspection  
Edith Nourse Rogers School (former) – STEM Academy  
43 Highland Street  
Lowell, Massachusetts  
EFI Project No. 014.07795**

Dear Mr. Underwood:

EFI Global Inc. (EFI) is pleased to present this AHERA 3-Year Reinspection Report prepared for the Edith Nourse Rogers School (former) – Stem Academy, located at 43 Highland Street in Lowell, Massachusetts (Site). The reinspection site visit was conducted on April 16, 2024, and the corresponding report was completed in accordance with the United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR 763) and Massachusetts Department of Labor Standards "Requirements for Schools Subject to AHERA" regulations (454 CMR 28.13).

EFI relied upon previous 3-Year Inspection and Management Plan Update report from 2014 prepared by Cardo ATC, and 2017 and 2020 reinspection's prepared by EFI Global Inc. The original AHERA Management Plan and other subsequent records were not made available at the school or at the administrative office for review. EFI relied upon the 2020 table of identified ACM for this reinspection. The school's Management Plan and records should be located and kept on file at the school and the administrative offices.

EFI is pleased to provide environmental consulting services to Lowell Public Schools. This report should be kept on file with the school's AHERA records. If you have any questions regarding the contents of this report, or are in need of additional information, please contact either of the undersigned at (800) 659-1202. Thank you for the opportunity to serve your environmental needs.

Sincerely,  
**EFI Global, Inc.**



Derrick Calvario  
Project Manager  
MA Asbestos Inspector # AI 900703



Michael McCarter  
Senior Project Manager  
MA Asbestos Management Planner #AP 035661

## **AHERA 3-YEAR REINSPECTION**

**FOR:**

**EDITH NOURSE ROGERS SCHOOL (former) – STEM ACADEMY  
43 HIGHLAND STREET  
LOWELL, MASSACHUSETTS**

**PREPARED BY:**



**155 WEST STREET, SUITE 6  
WILMINGTON, MASSACHUSETTS 01887**

**EFI PROJECT NUMBER 014.07795**

**June 3, 2024**

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### Attachments:

Attachment A – AHERA Summary Table of ACMs and Recommended Response Actions

Attachment B – Site Plans and 2024 Reinspection Bulk Sample Locations

Attachment C –2024 Reinspection Asbestos Bulk Sample Laboratory Report

Attachment D – Licenses and Training Certificates of Asbestos Inspector and Management Planner

## **INTRODUCTION**

EFI Global, Inc. (EFI) was retained by Lowell Public Schools to perform a 3-Year AHERA Reinspection in accordance with United States Environmental Protection (USEPA) Asbestos Hazard Emergency Response Act (AHERA) asbestos regulations (40 CFR 763) and Massachusetts Department of Labor Standards “Requirements for Schools Subject to AHERA” regulations (454 CMR 28.13). These regulations, commonly known as the “Asbestos in Schools Rule,” require under 40 CFR 763.80 and 454 CMR 28.13(2)(b)(1) that local education agencies (LEAs) must conduct a reinspection at least once every three years of all friable and nonfriable known or assumed asbestos-containing materials (ACMs). The reinspection includes all previously known and assumed ACMs, as well as any additional suspect ACM not previously included, as required by 40 CFR 763.80 and 454 CMR 28.13 in each school building leased, owned, or otherwise used as a school building. A school building is defined in 454 CMR 28.02 as including each of the following:

- Any structure suitable for use as a classroom, including a school facility such as a library, school eating facility, or facility used in the preparation of food
- Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education
- Any other facility used for the instruction or housing of students or for the administration of educational or research programs
- Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described as a school building above
- Any portico or covered exterior hallway or walkway
- Any exterior portion of a mechanical system used to condition interior space.

EFI conducted a 3-year AHERA re-inspection at the Edith Nourse Rogers School (former) – STEM Academy, which involved determining the condition and hazard potential of previously known and assumed ACMs, and additional confirmed and assumed ACMs observed during the 2024 reinspection. The 3-year reinspection was conducted on April 16, 2024, by Derrick Calvario and Emma Cypherd, both EPA accredited, and Massachusetts Department of Labor Standards (MADLS) licensed Asbestos Inspectors, (license number AI-900703) and (license number AI-901189) respectively. EFI relied upon the 2020 3-year reinspection table of identified and assumed ACMs for this reinspection. The original AHERA Management Plan and subsequent records were not made available at the school or at the administrative office for review. The recommended response actions were prepared by MADLS-licensed Asbestos Management Planner Michael McCarter (AP-033118).

A summary of known and assumed ACM within the Edith Nourse Rogers School (former) - STEM Academy is presented in the AHERA Summary Table in **Attachment A**. Site Plans showing buildings and locations referenced in this report are presented in **Attachment B**.

The Designated Person for the Lowell Public Schools is Rick Underwood. Rick’s contact information is:

Rick Underwood  
Director of Operations & Maintenance  
Lowell Public Schools  
155 Merrimack Street, 4<sup>th</sup> Floor  
Lowell, Massachusetts 01852  
978-674-4328  
[runderwood@lowell.k12.ma.us](mailto:runderwood@lowell.k12.ma.us)

**AHERA 3-YEAR REINSPECTION****A. AHERA Records Review**

As part of this 3-year reinspection, EFI reviewed available AHERA records for the school, in accordance with the AHERA regulation and 454 CMR 28.13(5)(f). A summary of records reviewed is provided in the table below.

<b>Review of AHERA Documentation</b> <b>Edith Nourse Rogers School</b> <b>43 Highland Street, Lowell, Massachusetts</b>		
<b>Document/Record</b>	<b>Present?</b>	<b>Comment</b>
Asbestos Management Plan (on hand at school and available for review)	No	No records available at the school or administrative office for review. The Cardo ATC 2014 3-Year Reinspection and Updated Management Plan is posted on the school's web site. EFI also relied upon in-house records from the 2017 and 2020 reinspection's.
Designated Person Training Records (for Rick Underwood)	No	No records available at the school or administrative office for review. Designated Person should receive formal designated person training or review the Designated Person Self Study Guide (available at <a href="https://www.epa.gov/sites/default/files/2015-01/documents/dp_study_guide_0.pdf">https://www.epa.gov/sites/default/files/2015-01/documents/dp_study_guide_0.pdf</a> ).
Custodial Personnel 2-hour Awareness Training Records	No	No records available at the school or administrative office for review.
Annual Parental Notification Records	No	No records available at the school or administrative office for review. Annual notification letters should be sent or posted on the school's web site and copies kept on file with the AHERA records.
Abatement/Response Action Records (includes abatement, special cleaning activities & small scale short duration (SSSD) activities and associated monitoring reports and work plans)	No	No records available at the school or administrative office for review.
Designated Person True and Correct Statement	No	No records available at the school or administrative office for review.
6-month Surveillance Inspection Records	No	No records available at the school or administrative office for review.
Previous 3-Year Reinspection Records	No	No records available at the school or administrative office for review.
Asbestos Labels present (required in routine maintenance areas)	No	No labeling observed. Labels should be placed immediately adjacent to ACM present in routine maintenance areas (i.e., boiler rooms, utility closets, etc.)

## **B. ACM Application Types**

ACMs are divided into the following application types:

Thermal system insulation (TSI): Insulation applied to mechanical, heating, and cooling systems such as pipes, boilers, flue breechings, ducts, tanks and fittings.

Surfacing Materials: Material that is spray-applied or trowel-applied to walls, ceilings or structural components (i.e. plasters, acoustical finishes and fireproofing).

Miscellaneous Materials: All other asbestos materials, including but not limited to floor tiles and mastic, ceiling tiles, vinyl cove base and mastic, gypsum board and joint compound, and asbestos-cement board, etc.

## **C. ACM Assessment Criteria**

The assessment is divided into two categories - the physical assessment and the hazard potential assessment.

### Physical Assessment

The physical assessment is divided into the following seven categories and describes the material condition at the time of the inspection:

Physical Condition #1 - Damaged or significantly damaged thermal system ACM.

Physical Condition #2 - Damaged friable surfacing ACM.

Physical Condition #3 - Significantly damaged friable surfacing ACM.

Physical Condition #4 - Damaged or significantly damaged miscellaneous ACM.

Physical Condition #5 - ACM with potential for damage.

Physical Condition #6 - ACM with potential for significant damage.

Physical Condition #7 - Any remaining friable ACM or friable suspected ACM.

### Hazard Assessment

The hazard assessment is a combination of the physical assessment combined with the potential for disturbance (i.e., physical contact, vibration air movement) as follows:

Hazard Rank #1 – Good condition/Low potential for disturbance

Hazard Rank #2 – Good condition/ Moderate potential for disturbance

Hazard Rank #3 – Good condition/ High potential for disturbance

Hazard Rank #4 – Damaged condition/Low potential for disturbance

Hazard Rank #5 – Damaged condition/Moderate potential for disturbance

Hazard Rank #6 – Damaged condition/High potential for disturbance

Hazard Rank #7 – Significantly damaged condition

The following is the Assessment Criteria used during the inspection:

1. Homogeneous Areas (An area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in size, color and texture and was applied at approximately the same time) were quantified by location and assessed by condition. Materials are listed as friable or non-friable. Note: friable materials are materials that can be crushed and pulverized to dust by hand pressure. A general condition description for suspect materials used in this inspection is as follows:
  - a. Damaged Surfacing ACM: That material which has deterioration, delamination, water damage, lacks cohesion, is blistered, crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over more than 1% but less than 10 % of the total surface area if the damage is evenly distributed or less than 25%, if the damage is localized in one area of the homogeneous area.
  - b. Significantly Damaged ACM: That material which has deterioration, delamination, water damage, lacks cohesion, is blistered, crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over at least 10% of the surface area if the damage is evenly distributed or at least 25% if the damaged is localized.
  - c. Good Condition ACM: ACM with no visible damage or deterioration in less than one percent of the material and/or coverings.
  - d. ACM with potential for damage: Pertains to circumstances in which:
    - i. Friable ACM is in an area regularly used by building occupants, including maintenance workers, currently in intact (good) condition.
    - ii. 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 O&M practices, changes in occupancy or recurrent damage.

Note: All ACM in good condition is still considered to have a potential for damage, and in certain instances, has the potential for significant damage.

- e. ACM with potential for significant damage: Pertains to circumstances in which:
  - i. Friable ACM is in an area regularly used by building occupants, including maintenance personnel.
  - ii. Indications show 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 O&M practices, changes in occupancy or re-occurring damage.
  - iii. 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.

#### D. Response Actions – General Recommendations

Specific response actions for each known and assumed ACM located at the Edith Nourse Rogers School (former) – STEM Academy are located in **Attachment A**. The following are general recommendations for response actions associated with managing ACMs at the school.

1. Damaged materials in the school should be repaired, if feasible, or removed in order to maintain compliance with the AHERA regulations. Damaged ACMs of any quantity listed in the report should be repaired or removed by a Massachusetts licensed asbestos abatement contractor following all applicable regulations, in accordance with a work plan design, and final clearance air testing performed in accordance with the AHERA regulations. It is the policy of the Lowell Public Schools to use licensed asbestos contractors for all response action work.
2. The AHERA regulation states that the response actions chosen for other than small scale/short duration repairs (less than 3 square or linear feet), must be designed and conducted by persons accredited to design and conduct response actions. MADLS Regulation 454 CMR 28.00 requires the services of licensed Project Designers who meet the requirements set forth in 454 CMR 28.00, as well as Massachusetts licensed Asbestos Contractors.
3. Damaged ACMs that involve small scale/short duration repairs can only be conducted by 16-hour asbestos-trained personnel or by a licensed Asbestos Contractor. EFI understands that small scale/ short duration projects will not be performed by in house personnel, and that all work will be conducted by an outside licensed Asbestos Contractor.
4. Each known and assumed ACM should be monitored for any changes in condition during the six-month periodic surveillance, or more frequently.
5. If known or suspect ACMs are to be impacted by planned renovation or demolition activities, the ACM must be removed by a Massachusetts licensed Asbestos Contractor. Note that AHERA inspections do not meet the EPA NESHAP and Commonwealth of Massachusetts Department of Environmental Protection (MADEP) requirements for a comprehensive pre-renovation or demolition survey. Prior to any planned renovation or demolition project, all renovation/demolition areas must be thoroughly surveyed to meet the requirements of EPA NESHAP and MADEP 310 CMR 7.15(4) Survey Requirements. LEA Designated Persons should make sure that pre-renovation/demolition surveys are performed in each instance that ACM may be disturbed.

#### E. AHERA Licensing & Training Documentation

The AHERA 3-year Reinspection report for the Edith Nourse Rogers School (former) – STEM Academy was performed by the following individuals who have received appropriate training and who are MADLS licensed personnel:



Derrick Calvario  
Project Manager  
MA Asbestos Inspector # AI 900703



Michael McCarter  
Senior Project Manager  
MA Asbestos Management Planner #AP 035661



## F. Asbestos Bulk Sampling

Asbestos bulk sampling of suspect ACM was performed for various suspect ACMs not previously identified as ACM in portions of the building included in the AHERA program. The bulk sampling was performed by USEPA-accredited, and MADLS licensed Asbestos Inspector Derrick Calvario and Emma Cypherd. A total of 99 bulk samples of suspect ACMs were collected and transported under chain of custody protocol to EMSL Analytical, Inc., of Woburn, Massachusetts, a Massachusetts-licensed laboratory. EMSL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis, which is administered by the National Institute of Standards and Testing (NIST).

Samples were analyzed with a standard 3-day turnaround time using polarized light microscopy (PLM) in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116. The PLM/DS analytical method is modeled after 40 CFR Part 763, Subpart F, Attachment A: "Interim Method for the Determination of Asbestos in Bulk Insulation Samples." MADEP asbestos regulations define an ACM as any material containing greater than or equal to one percent asbestos. The findings of this report are based upon observations of accessible materials and the analysis of representative bulk samples collected. **Attachment B** contains site plans indicating locations of samples collected and analyzed as part of this reinspection. A copy of the asbestos laboratory reports is presented in **Attachment C**.

Bulk samples representing individual homogenous areas of suspect ACM, (materials that are determined to be uniform in color and texture and installed in the same construction period) were collected in a randomly distributed manner, in accordance with the EPA sampling protocol outlined in 40 CFR 763.

The following suspect ACMs sampled by EFI during the 2024 reinspection were reported by EMSL as containing no detectable concentration of asbestos:

### **Summary of Non-ACMs per 2024 3-Year Reinspection**

Material Description	Location(s) Sampled
12x12 Green with Green Speckled Floor Tile	Room 62, Room 118
Black Mastic Associated with 12x12 Green Speckled Floor Tile	Room 62, Room 118
12x12 Blue with Blue Speckled Floor Tile	Room 62
12x12 White with Speckled Floor Tile	Room 123
Yellow Mastic Associated with 12x12 White Speckled Floor Tile	Room 123
12x12 White Floor Tile with Streak	Room 103
Yellow Mastic Associated with 12x12 White Streak Floor Tile	Room 103
Blue/Green Floor Tile Under Carpet	Room 132, Room 131, 1 <sup>st</sup> Floor Nurse
Black Mastic Associated with Blue/Green Floor Tile	Room 132, Room 131, 1 <sup>st</sup> Floor Nurse
Yellow Mastic Associated with Blue/Green Floor Tile	Room 132, Room 131, 1 <sup>st</sup> Floor Nurse
12x12 Grey with Grey Speckled Floor Tile	Room 117, 1 <sup>st</sup> Floor Nurse

Material Description	Location(s) Sampled
Yellow Mastic Associated with 12x12 Grey Speckled Floor Tile	Room 117, 1 <sup>st</sup> Floor Nurse
Yellow Carpet Mastic	Room 131, Room 132
Crow's Feet Ceiling Tile	Room 62, Room 136
Crow's Feet Ceiling Tile with Center Line	1 <sup>st</sup> Floor Main Offices, Room 236
Pinhole Ceiling Tile	Room 115, Room 118
Rough Textured Ceiling Tiles	Lower-Level Hallway Side D, 2 <sup>nd</sup> Floor Hallway Near Stairwell 1
Smooth Pinhole Ceiling Tile	Lower-Level Kitchen
Ceramic Tile Grout	Lower-Level Hallway Side D, Lower-Level Kitchen Storage
Ceramic Tile Tan Adhesive	Lower-Level Hallway Side D
Ceramic Tile Thinset	Lower-Level Kitchen Storage
Green Window Caulking	Room 60, Room 115
Black Window Caulking	Lower-Level Hallway Near Elevator, Room 234
White Caulking	Hallway Near Room 143 and 144, Room 115, 1 <sup>st</sup> Floor Old Boys Locker Room, Room 233, Room 226
Tan Caulking	Room 123, Room 124
Green Exterior Caulking	Windows, Door 2
Grey/White Exterior Caulking	Door 1
Cove Base	Lower-Level Hallway Near Custodian Office, 1 <sup>st</sup> Floor Main Office Hallway
Tan Mastic Associated with Cove Base	Lower-Level Hallway Near Custodian Office, 1 <sup>st</sup> Floor Main Office Hallway
Epoxy Flooring	Lower-Level Kitchen
Black Sink Undercoat	Room 53, Room 142
Grey Duct Seam Sealant	Room 115
Red Fire Stopper	Room 207
Gypsum Board	Room 136, 1 <sup>st</sup> Floor Assistant Principals Office
Joint Compound	Room 136, Room 135, Room 60, Room 122, Room 123, Room 236, Room 237
Plaster Skim Coat	Room 101, Room 230, Girls Bathroom Near Room 207, Hallway Near Room 61, Hallway Near Door 23
Plaster Base Coat	Room 101, Room 230, Girls Bathroom Near Room 207, Hallway Near Room 61, Hallway Near Door 23

#### G. ACM Hazard Assessment & Recommended Response Actions

Accessible locations were inspected and assessed to determine the presence and condition of ACM. A Summary Table of known and assumed ACMs present at the school, the physical and hazard assessments and the recommended response action for each ACM, is presented in **Attachment A**. It should be noted that EFI did not conduct destructive evaluations of the school building to identify suspect ACM. Per USEPA NESHAP and MADEP asbestos regulations, a thorough "path of construction" survey should be conducted prior to any renovation or repair activities that may impact suspect ACM, regardless of the date of installation.

## H. Cost Estimate and Schedule for Recommended Response Actions

The confirmed and assumed ACMs outlined in the summary table in **Attachment A** that were in good condition at the time of the reinspection must be maintained in place in accordance with the Operations and Maintenance Plan. Estimated costs associated with managing known and assumed ACMs at the school are summarized below.

<b>Cost Estimate of AHERA Considerations</b> <b>Edith Nourse Rogers School (former) - STEM Academy</b> <b>43 Highland Street, Lowell, Massachusetts</b>	
<b>Training Costs</b>	
<b>Item</b>	<b>Approximate Cost</b>
2-hour asbestos awareness training (New Hires, within 60 days of hire)	\$500/person
Designated Person Training	\$250
<b>Maintenance Costs</b>	
<b>Item</b>	<b>Approximate Cost</b>
Asbestos labeling (Place/maintain labels adjacent to ACM in routine maintenance areas)	\$500
6-month surveillance inspections (Per schedule below)	\$500/event
3-year re-inspection (Per schedule below)	\$2,000
<b>Response Action Costs</b>	
<b>Item</b>	<b>Approximate Cost</b>
Immediately and annually notify occupants regarding ACM materials noted in the Summary Table if Identified and Assumed ACMs.	\$500

A proposed schedule of events between this 3-Year reinspection and the 2027 3-Year reinspection is provided for your use:

<b>Schedule of AHERA-Related Actions</b> <b>Edith Nourse Rogers School (former) - STEM Academy</b> <b>43 Highland Street, Lowell, Massachusetts</b>	
<b>Event</b>	<b>Completion Date</b>
Immediately and annually notify occupants regarding ACM gypsum board/joint compound and bumpy plaster as recommended in the Summary Table of Identified and Assumed ACMs.	By June 28, 2024 and annually thereafter.
Annual Parental Notification Letter	September 1, 2024
6 Month Surveillance Inspection	October 16, 2024
6 Month Surveillance Inspection	April 16, 2025
Annual Parental Notification Letter	September 1, 2025
6 Month Surveillance Inspection	October 16, 2025
6 Month Surveillance Inspection	April 16, 2026

Annual Parental Notification Letter	September 1, 2026
6 Month Surveillance Inspection	October 16, 2026
3 Year Reinspection	April 16, 2027

**ATTACHMENT A**

**AHERA SUMMARY TABLE**

AHERA 3 Year Re-Inspection Summary Table  
 Edith Nourse Rogers School (former) – STEM Academy  
 Summary Table of Identified and Assumed Asbestos-Containing Building Materials  
 43 Highland Street, Lowell, MA  
 Dates of Inspection: 4/16/2024

Item	Material Description	Location	Approximate Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
1	Gypsum Board Ceilings (Material added per 2020 reinspection)	Stage	1,080 SF	NF	Positive per Management Plan records	5	Good	Immediately and annually thereafter notify occupants that the joint compound and gypsum board are ACM and shouldn't be disturb the by hanging items or storing materials against the ACM. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
2	Joint Compound Ceilings (Material added per 2020 reinspection)	Stage	1,080 SF	NF	Positive per Management Plan records	5	Good	Immediately and annually thereafter notify occupants that the joint compound and gypsum board are ACM and shouldn't be disturb the by hanging items or storing materials against the ACM. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
3	Gypsum Board Ceilings (Material added per 2020 reinspection)	Stage Storage	120 SF	NF	Positive per Management Plan records	5	Good	Immediately and annually thereafter notify occupants that the joint compound and gypsum board are ACM and shouldn't be disturb the by hanging items or storing materials against the ACM. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
4	Joint Compound Ceilings (Material added per 2020 reinspection)	Stage Storage	120 SF	NF	Positive per Management Plan records	5	Good	Immediately and annually thereafter notify occupants that the joint compound and gypsum board are ACM and shouldn't be disturb the by hanging items or storing materials against the ACM. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
5	Bumpy Plaster Ceiling	Cafetorium	3,420 SF	NF	Positive per Management Plan records	5	Good	Immediately and annually thereafter notify occupants that the plaster is ACM and should not be disturbed by hanging items or storing materials against plaster. Manage in place in accordance with the Asbestos O& Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.

AHERA 3 Year Re-Inspection Summary Table  
Edith Nourse Rogers School (former) – STEM Academy  
Summary Table of Identified and Assumed Asbestos-Containing Building Materials  
43 Highland Street, Lowell, MA  
Dates of Inspection: 4/16/2024

Item	Material Description	Location	Approximate Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
6	Pipe Fitting Insulation	Closet 115 (Interior Closet with Air Handler Unit)	4 Elbows	NF	Positive per Management Plan records	6	Good	Manage in place in accordance with the Asbestos O&M Program. Do not store ladders, supplies or other equipment near the pipe fitting insulation.	
7	Pipe Fitting Insulation	Room 108 (Former Gym Shower)	4 Elbows	NF	Positive per Management Plan records	6	Good	Manage in place in accordance with the Asbestos O&M Program. Do not store ladders, supplies or other equipment near the pipe fitting insulation.	
8	Pipe Fitting Insulation	Outside Room 108	2 Elbows	NF	Assumed ACM	6	Good	Manage in place in accordance with the Asbestos O&M Program. Do not store ladders, supplies or other equipment near the pipe fitting insulation. Collect bulk samples to determine asbestos content prior to any disturbance.	
9	Pipe Insulation	Generator Room	20 LF	NF	Positive per Management Plan records	6	Good	Manage in place in accordance with the Asbestos O&M Program. Do not store ladders, supplies or other equipment near the pipe fitting insulation.	
10	Old White/Grey Caulking (Material added per 2024 reinspection)	Exterior Doors and Entrances	17 Doors	NF	3% Chrysotile Asbestos	5	Good	Manage in place in accordance with the Asbestos O&M Program.	

SF = Square Feet

Assumed ACM = This material was identified as an assumed ACM in the Management Plan records and was not sampled during the 2024 Re-inspection. Prior to any planned disturbance by maintenance, renovation, or demolition activities, EFI recommends bulk sampling and analysis to determine asbestos content.

For all recommended response actions other than administrative actions, the work should be conducted by a Massachusetts licensed Asbestos Contractor and a work plan for the specific repair or removal activity should be prepared by a Massachusetts licensed Asbestos Designer.

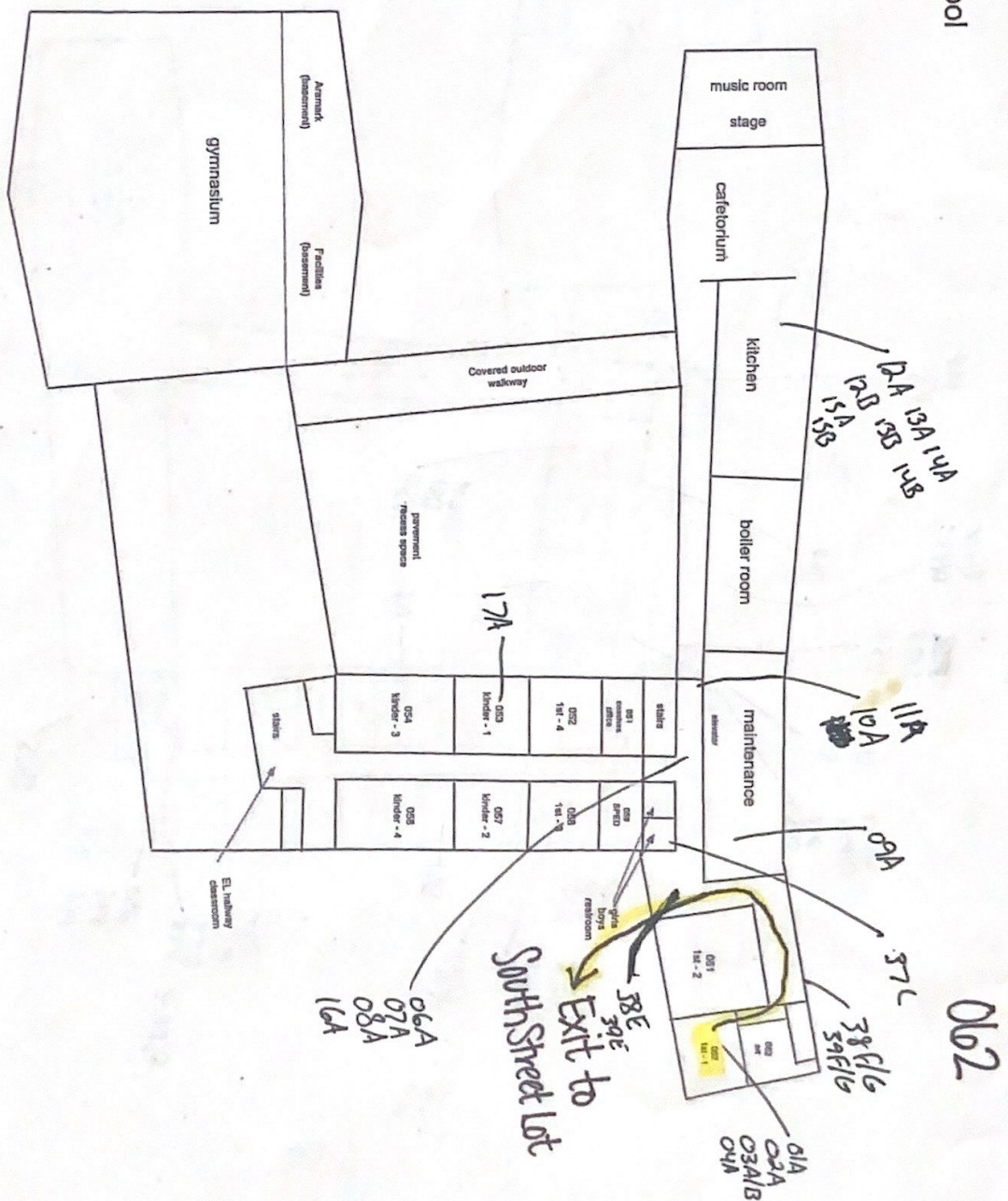
Physical Assessment Category
1 – Damaged or Significantly Damaged Thermal System ACM
2 – Damaged Friable Surfacing ACM
3 – Significantly Damaged Surfacing ACM
4 – Damaged or Significantly Damaged Friable Miscellaneous ACM
5 – ACM with Potential for Damage
6 – ACM with Potential for Significant Damage
7 – Any Remaining friable ACM or friable suspect ACM

**ATTACHMENT B**

**SITE PLANS AND 2024 REINSPECTION ASBESTOS BULK SAMPLE LOCATIONS**

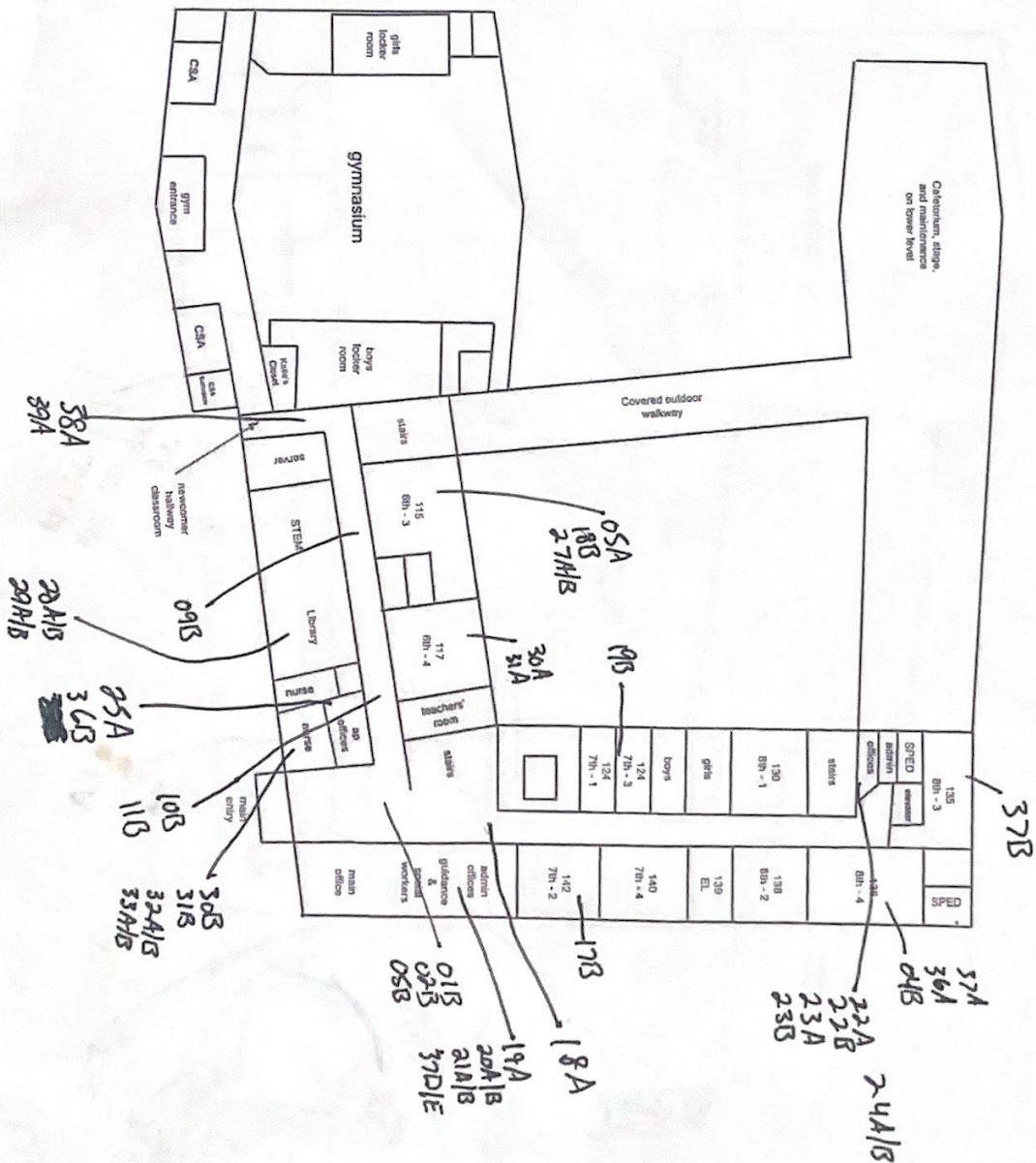


## Lower Level





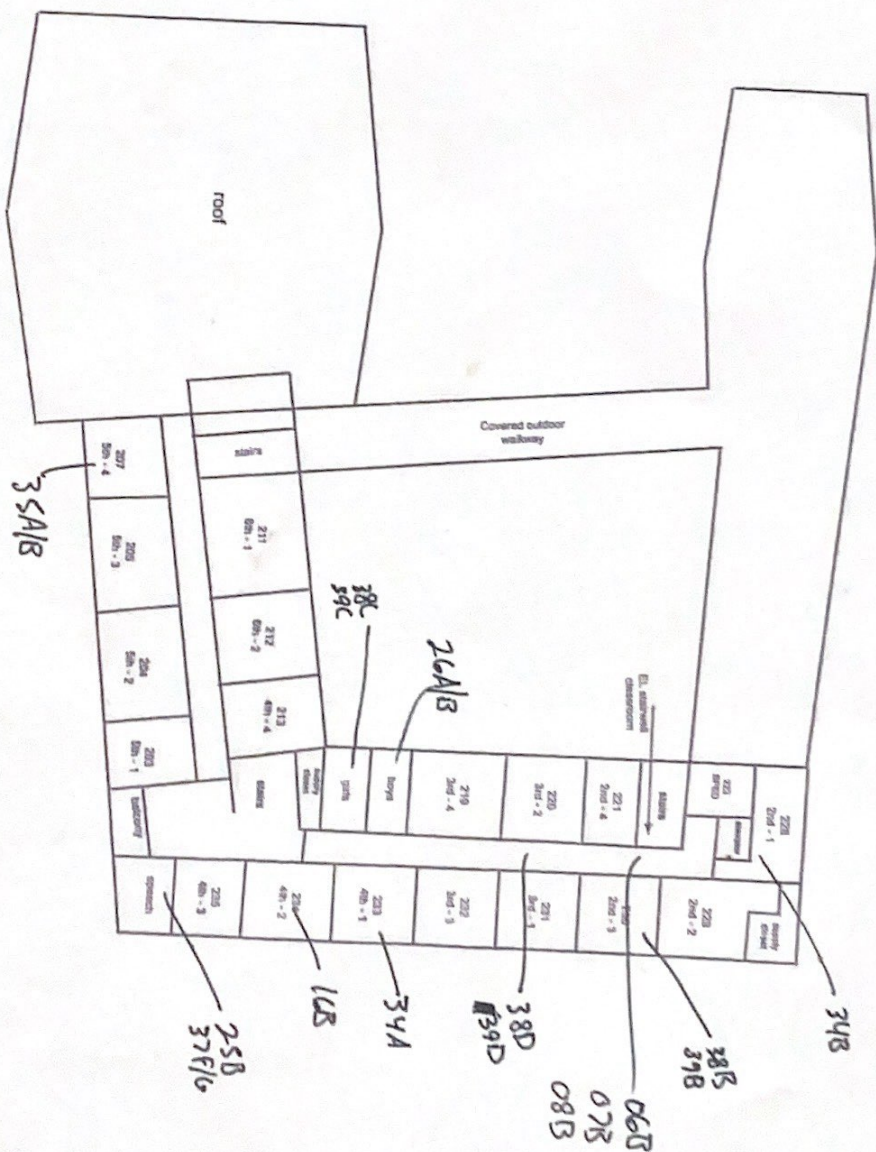
## 1st Floor





STEM Academy at Rogers School  
 43 Highland Street  
 Lowell, MA 01852

2nd Floor



**ATTACHMENT C**

**2024 REINSPECTION ASBESTOS BULK SAMPLE LABORATORY REPORT**



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com/bostonlab@emsl.com>

EMSL Order: 132402127

Customer ID: EAF166

Customer PO:

Project ID:

Attention: Derrick Calvario

EFI Global, Inc.

155 West Street

Suite 6

Wilmington, MA 01887

Project: 014.07795 - 43 Highland Street; Lowell, MA

Phone: (978) 688-3736

Fax: (978) 688-5494

Received Date: 04/16/2024 2:00 PM

Analysis Date: 04/18/2024 - 04/19/2024

Collected Date: 04/16/2024

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01A 132402127-0001	Room #62 - Lower Level - 12x12 Green w. Green Spec Floor Tile	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01B 132402127-0002	Room #118 - 1st Floor - 12x12 Green w. Green Spec Floor Tile	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02A 132402127-0003	Room #62 - Lower Level - Assoc. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02B 132402127-0004	Room #118 - 1st Floor - Assoc. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A 132402127-0005	Room #62 - Lower Level - 12x12 Blue w. Blue Spec Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B 132402127-0006	Room #62 - Lower Level - 12x12 Blue w. Blue Spec Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A 132402127-0007	Room #62 - Lower Level - Crows Feet Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
04B 132402127-0008	1st Floor - Room #136 - Crows Feet Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
05A 132402127-0009	1st Floor - Janitor Closet Room #115 - Pin Hole Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
05B 132402127-0010	1st Floor - Room 118 - Pin Hole Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
06A 132402127-0011	Lower Level - Hallway Side D - Ceramic Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06B 132402127-0012	2nd Floor - Hallway Side D - Ceramic Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07A 132402127-0013	Lower Level - Hallway Side D - Ceramic Tile Adhesive (Tan)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B 132402127-0014	2nd Floor - Hallway Side D - Ceramic Tile Adhesive (Tan)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08A 132402127-0015	Lower Level - Hallway Side D - Rough Textured Ceiling Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected

Initial report from: 04/19/2024 12:39:43



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com / bostonlab@emsl.com>

EMSL Order: 132402127

Customer ID: EAF166

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
08B 132402127-0016	2nd Floor - Hallway near Stair #1 - Rough Textured Ceiling Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
09A 132402127-0017	Lower Level - Room #60 - Green Window Caulk	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B 132402127-0018	1st Floor - Hallway near 115 - Green Window Caulk	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A 132402127-0019	Lower Level - Hallway near Custodian Office - Cove Base	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10B 132402127-0020	1st Floor - Main Office Hallway - Cove Base	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11A 132402127-0021	Lower Level - Hallway near Custodian Office - Tan Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B 132402127-0022	1st Floor - Main Office Hallway - Tan Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A 132402127-0023	Lower Level - Kitchen Storage - Thinset assoc. w. Gray Ceramic Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B 132402127-0024	Lower Level - Kitchen Storage - Thinset assoc. w. Gray Ceramic Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A 132402127-0025	Lower Level - Kitchen Storage - Grout assoc. w. Gray Ceramic Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B 132402127-0026	Lower Level - Kitchen Storage - Grout assoc. w. Gray Ceramic Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A 132402127-0027	Lower Level - Kitchen - Epoxy Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14B 132402127-0028	Lower Level - Kitchen - Epoxy Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A 132402127-0029	Lower Level - Kitchen - Smooth Pinhole CT	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
15B 132402127-0030	Lower Level - Kitchen - Smooth Pinhole CT	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
16A 132402127-0031	Lower Level - Hallway near Elevator - Black Window Caulk (Interior Brown Windows)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B 132402127-0032	2nd Floor - Room #234 - Black Window Caulk (Interior Brown Windows)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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EMSL Order: 132402127

Customer ID: EAFI66

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos % Type
			% Fibrous	% Non-Fibrous	
17A 132402127-0033	Lower Level - Room #53 - Black Sink Undercoat	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17B 132402127-0034	1st Floor - Room #142 - Black Sink Undercoat	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18A 132402127-0035	1st Floor - Hallway near Room 143/144 - White Caulk on Ceramic Tile Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18B 132402127-0036	1st Floor - Janitors Closet #115 - White Caulk on Doorway	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19A 132402127-0037	1st Floor - Room #123 - Tan Caulk on Exposed Brick Wall	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B 132402127-0038	1st Floor - Room #124 - Tan Caulk on Exposed Brick Wall	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A 132402127-0039	1st Floor - Room #123 - 12x12 White w. Spec Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20B 132402127-0040	1st Floor - Room #123 - 12x12 White w. Spec Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21A 132402127-0041	1st Floor - Room #123 - 12x12 White w. Spec Floor Tile assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21B 132402127-0042	1st Floor - Room #123 - 12x12 White w. Spec Floor Tile assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22A 132402127-0043	1st Floor - Room #131 - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B 132402127-0044	1st Floor - Room #132 - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A 132402127-0045	1st Floor - Room #131 - Blue/Green Floor Tile under Carpet	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23B 132402127-0046	1st Floor - Room #132 - Blue/Green Floor Tile under Carpet	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24A 132402127-0047	1st Floor - Room #131 - Assoc. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24B 132402127-0048	1st Floor - Room #132 - Assoc. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25A 132402127-0049	1st Floor - Main Office - Crows Feet Ceiling Tile w. Center Line	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected

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EMSL Order: 132402127

Customer ID: EAFI66

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
25B 132402127-0050	2nd Floor - Room #236 - Crows Feet Ceiling Tile w. Center Line	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
26A 132402127-0051	1st Floor - Old Boys Locker Room - White Caulk (Black Paper)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26B 132402127-0052	1st Floor - Old Boys Locker Room - White Caulk (Black Paper)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27A 132402127-0053	1st Floor - Room #115 - Gray Duct Seam Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27B 132402127-0054	1st Floor - Room #115 - Gray Duct Seam Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A 132402127-0055	1st Floor - Room #103/Library - 12x12 White Floor Tile w. Streak	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B 132402127-0056	1st Floor - Room #103/Library - 12x12 White Floor Tile w. Streak	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A 132402127-0057	1st Floor - Room #103/Library - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29B 132402127-0058	1st Floor - Room #103/Library - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30A 132402127-0059	1st Floor - Room #117 Left Rear Right Office - 12x12 Gray Floor Tile w. Gray Spec	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B 132402127-0060	1st Floor - Nurse - 12x12 Gray Floor Tile w. Gray Spec	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31A 132402127-0061	1st Floor - Room #117 Left Rear Right Office - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31B 132402127-0062	1st Floor - Nurse - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32A 132402127-0063	1st Floor - Nurse - Blue/Green Tile under 12x12 Gray w. Spec Tile	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32B 132402127-0064	1st Floor - Nurse - Blue/Green Tile under 12x12 Gray w. Spec Tile	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33A 132402127-0065	1st Floor - Nurse - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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EMSL Order: 132402127

Customer ID: EAFI66

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
33B 132402127-0066	1st Floor - Nurse - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34A 132402127-0067	2nd Floor - Room #233 - White Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34B 132402127-0068	2nd Floor - Room #226 - White Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35A 132402127-0069	2nd Floor - Utility near Room 207 - Red Caulk/Fire Stop	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35B 132402127-0070	2nd Floor - Utility near Room 207 - Red Caulk/Fire Stop	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
36A 132402127-0071	1st Floor - Room 136 - Gypsum Board	White Non-Fibrous Homogeneous	2% Cellulose 2% Glass	96% Non-fibrous (Other)	None Detected
36B 132402127-0072	1st Floor - Assistant Principals Office - Gypsum Board	Brown/Gray Fibrous Homogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
37A 132402127-0073	1st Floor - Room 136 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37B 132402127-0074	1st Floor - Room 135 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37C 132402127-0075	Ground Floor - Room 060 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37D 132402127-0076	Ground Floor - Room 122 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37E 132402127-0077	1st Floor - Room 123 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37F 132402127-0078	2nd Floor - Room 236 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37G 132402127-0079	2nd Floor - Room 237 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38A 132402127-0080	1st Floor - Room 101 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38B 132402127-0081	2nd Floor - Room 230 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38C 132402127-0082	2nd Floor - Girls BR near 207 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38D 132402127-0083	2nd Floor - Hallway near 231 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38E 132402127-0084	Lower Level - Hallway near Room 61 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/19/2024 12:39:43



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EMSL Order: 132402127

Customer ID: EAFI66

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## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
38F 132402127-0085	Lower Level - Hallway near Door #23 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38G 132402127-0086	Lower Level - Hallway near Door #23 - Plaster Skim Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39A 132402127-0087	1st Floor - Room 101 - Plaster Base Coat - Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39B 132402127-0088	2nd Floor - Room 203 - Plaster Base Coat - Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39C 132402127-0089	2nd Floor - Girls BR near 207 - Plaster Base Coat - Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39D 132402127-0090	2nd Floor - Hallway near 231 - Plaster Base Coat - Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39E 132402127-0091	Lower Level - Hallway near Room 61 - Plaster Base Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39F 132402127-0092	Lower Level - Hallway near Door #23 - Plaster Base Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39G 132402127-0093	Lower Level - Hallway near Door #23 - Plaster Base Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40A 132402127-0094	Exterior - Door #2 - Green Exterior Caulk	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40B 132402127-0095	Exterior - Windows - Green Exterior Caulk	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41A 132402127-0096	Exterior - Door #1 - Gray/White Exterior Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41B 132402127-0097	Exterior - Door #1 - Gray/White Exterior Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
42A 132402127-0098	Exterior - Door #17 - Old White/Gray Exterior Caulk	Gray/Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
42B 132402127-0099	Exterior - Door - Old White/Gray Exterior Caulk				Positive Stop (Not Analyzed)



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EMSL Order: 132402127

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Analyst(s)

John McCarthy (98)

Steve Grise, Laboratory Manager  
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, ME LB-0039

Initial report from: 04/19/2024 12:39:43



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132402127

BOSTON NORTH

155 West Street | Suite 6 | Wilmington, MA 01887 | PHONE 978.688.3736 | FAX 978.688.5494 | FREE 800.659.1202

## BULK SAMPLE CHAIN OF CUSTODY FORM

Report to (Inspector Name):	Derrick Calvario	Bill To:	Accounts Payable
Company:	EFI Global, Inc.	Address:	Same
Address:	155 West Street Suite 6	City, State, Zip:	Same
City, State, Zip:	Wilmington, MA 01887	Telephone:	800-659-1202
Inspector Cell:	81-825-5012	Email:	US-EFIGlobal-BostonEnviroPC@efiglobal.com
Project Information			
Project No./ Description:	014.07795 - 43 Highland St Lowell, MA		
Email Report to:	Derrick.Calvario@efiglobal.com		
Alternate:			
Requested Turnaround Time:			
<input type="checkbox"/> RUSH (6hr)	<input type="checkbox"/> 1 day (24hr)	<input type="checkbox"/> 2 day (48hr)	<input checked="" type="checkbox"/> 3 day (72hr)
<input type="checkbox"/> 5 day			
Media and Methodology			
Type of Analysis:	PLM		Check for Positive Stop: <input checked="" type="checkbox"/>
Notes:	Analyze all plaster and joint compound samples		Date Collected: 4/16/24

Sample ID	Type of Material	Location
01A	12x12 green w/ green spec floor tile	Rm #62 - lower level
01B	" "	Rm # 118 - <del>1st floor</del> 1st floor
02A	assorted black mastic	Rm #62 - lower level
02B	" "	Rm # 118 - <del>1st floor</del> 1st floor
03A	12x12 blue w/ blue spec floor tile	Rm #62 - lower level
03B	" "	" "
04A	Crows feet Ceiling tile	Rm #62 - lower level
04B	" "	1st floor Rm # 136
05A	Pin hole Ceiling tile	1st floor - Janitor Closet Rm #115
05B	" "	1st floor - Rm 118

Total Number of Samples Submitted: 99

Samplers Name: Derrick Calvario

Samplers Signature

Relinquished By (Client):

Date:

4/16/24

Time: -

Received By (Lab):

Date:

Time:

REC'D

EMSL-BOSTON

APR 16 2024





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132402127

Sample ID	Type of Material	Location
06A	<del>tile</del> Ceramic tile grout	10th floor - Hallway side D
06B	" "	2nd floor - Hallway side D
07A	<del>tile</del> Ceramic tile adhesive (tan)	lower level - hallway side D
07B	" "	2nd floor - Hallway side D
08A	Rough texture Ceiling tile	lower level - hallway side D
08B	" "	2nd fl - hallway near stair #1
09A	Green window Caulk	lower level - Rm #60
09B	" "	<del>2nd fl - Rm #233</del> 1st floor - hallway near 115
10A	<del>gray</del> Car base	lower level - Hallway near Custodian office
10B	" "	1st floor - Main office hallway
11A	Tan Mastik	lower level - Hallway near Custodian office
11B	" "	1st floor - Main office hallway
12A	Thinset assoc w/ Gray Ceramic Tile	Lower level - Kitchen Storage
12B	" "	" "
13A	Grout assoc w/ Gray Ceramic Tile	" "
13B	" "	" "
14A	Epoxy Flooring	Lower level - Kitchen
14B	" "	" "
15A	Smooth Pinhole CT	Lower level - Kitchen
15B	" "	" "
16A	Black window Caulk (Interior brown windows)	Lower level - hallway near elevator
16B	" "	2nd floor - Rm #234
17A	Black Sipe under coat	lower level - Rm #53
17B	" "	<del>1st floor - hallway near Rm #142</del> 1st floor Rm #142
18A	White Caulk on ceramic tile wall	1st floor - hallway near Rm #143/144
18B	" " on door wall	1st floor - Janitor's closet #115
19A	Tan Caulk on exterior brick wall	1st floor - Rm #123
19B	" "	1st floor - Rm #124
20A	12x12 white w/spec floor tile	1st floor - Rm #123
20B	" "	" "

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APR 16 2024



Sample ID	Type of Material	Location
21A	12x12 white w/spec tile associated yellow mastic	1st floor - Rm # 123
21B	" "	" "
22A	yellow Carpet mastic	1st floor - Rm # <del>123</del> 131
22B	" "	- Rm # 132
23A	Blue/green floor tile under Carpet	- Rm # 131
23B	" "	- Rm # 132
24A	associated black mastic	- Rm # 131
24B	" "	↓ - Rm # 132
25A	Crows feet Ceiling tile w/center line	1st floor - Main office
25B	" "	2nd floor - Rm # 236
26A	white Caulk (black floor)	1st floor - boys locker room
26B	" "	" "
27A	grey/duct foam Sealant	1st floor - Rm # 115
27B	" "	null "
28A	12x12 white floor tile w/ stain	1st floor - Rm # 103/library
28B	" "	↓ - Rm #
29A	associated yellow mastic	- Rm #
29B	" "	↓ - Rm # ↓
30A	12x12 grey floor tile w/ grey spec	1st floor - Rm # 117B left rear right office
30B	" "	↓ - <del>Rm #</del> Nurse
31A	associated yellow mastic	- Rm # 117B left rear right office
31B	" "	↓ - <del>Rm #</del> Nurse
32A	blue/green tile under 12x12 grey w/spec tile	1st floor - Nurse
32B	" "	↓ - ↓
33A	associated yellow mastic	↓ - ↓
33B	" "	↓ - ↓
34A	white window Caulk	2nd floor - Rm # 233
34B	" "	2nd floor - Rm # 226
35A	Red Caulk Fire stop	2nd floor - utility near 207
35B	" "	" "





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132402127

Sample ID	Type of Material	Location
36A	Gypsum Board -	2nd Floor - Room 136
36B	" " -	1st floor - assistant Principals office
37A	Joint Compound -	2nd Floor - Room 136
37B	" " -	" " - Room 135
37C	" " -	Ground Floor - Room 060
37D	" " -	" " - Room 122
37E	" " -	1st floor - Room 123
37F	" " -	2nd Floor - Room 236
37G	" " -	" " - Room 237
38A	Plaster Skin Coat - wall	1st Floor - Room 101
38B	" " -	2nd floor - Room 230
38C	" " -	↓ - girls BR near 207
38D	" " -	↓ - Hallway near 231
38E	" " - wall	lower level - Hallway near Room 61
38F	" " -	↓ - Hallway near door #23
38G	" " -	↓ - " "
39A	Plaster Base Coat - wall	2nd Floor - Room 101
39B	" " -	2nd floor - Room 230
39C	" " -	↓ - girls BR near 207
39D	" " -	↓ - Hallway near 231
39E	" " - wall	Lower level - Hallway near Room 61
39F	" " -	↓ - Hallway near door #23
39G	" " -	↓ - " "
40A	Green exterior Caulk	Exterior - door #2
40B	" " -	Exterior - windows
41A	<sup>gray</sup> white exterior Caulk	Exterior - door #1
41B	" " -	↓ - door #1
42A	<sup>off</sup> white/gray exterior Caulk	↓ - door #17
42B	" " -	↓ - door

REC'D

EMSL-BOSTON

APR 16 2024

**ATTACHMENT D**

**LICENSES AND TRAINING CERTIFICATES OF ASBESTOS INSPECTOR & MANAGEMENT PLANNER**





THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT  
DEPARTMENT OF LABOR STANDARDS

Michael Flanagan  
Director

**ASBESTOS INSPECTOR**

**DERRICK W. CALVARIO**

**Eff.Date: 11/03/2023**

**Exp.Date: 11/02/2024**

**AI900703**

**Member C.O.N.E.S.**

**WB - NEW**

24





*This is to certify that*

**Derrick W. Calvario**

39 Valleywood Road, Hopkinton, MA 01748

MA DLS Asbestos Inspector License# AI900703



*has completed requisite training by Video Conference, and has passed an examination for  
reaccreditation as:*

**Asbestos Inspector Refresher**

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

Course Location

Zoom Video Conference

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

August 3, 2023

Course Dates

23-4811-106-265405

Certificate Number

August 03, 2023

Examination Date

August 03, 2024

Expiration Date

Training Director

16 Upton Drive, Wilmington, MA 01887

Telephone 978.658.5272

www.ieetrains.com

**INSTITUTE FOR ENVIRONMENTAL EDUCATION**



THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT  
DEPARTMENT OF LABOR STANDARDS

Michael Flanagan  
Director

**ASBESTOS MANAGEMENT PLANNER**

**MICHAEL MCCARTER**

**Eff.Date: 09/08/2023**

**Exp.Date: 09/07/2024**

**AP035661**

**Member C.O.N.E.S.**



24



*This is to certify that*

**Michael L. McCarter**

7 Millstone Road, Windham, NH 03087

MA DLS Asbestos Management Planner License# AP035661

*has completed the requisite training by Video Conference, and has passed an examination for  
reaccreditation*

**Asbestos Management Planner Refresher**

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

Course Location

Zoom Video Conference

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

March 21, 2024

Course Dates

24-5264-136-219102

Certificate Number

March 21, 2024

Examination Date

March 21, 2025

Expiration Date



Training Director

16 Upton Drive, Wilmington, MA 01887

Telephone 978.658.5272

www.ieetrains.com

**INSTITUTE FOR ENVIRONMENTAL EDUCATION**