# Appendix

LIMITED HAZARDOUS BUILDING MATERIALS INSPECTION REPORT

SECTION 3.1.8

# Limited Hazardous Building Materials Inspection Report

Leicester Middle School 70 Winslow Avenue Leicester, Massachusetts

# **Finegold Alexander Architects**

Leicester, Massachusetts

April 2019





April 10, 2019

Ms. Regan Shields Ives, AIA, NCARB, LEED AP Principal Finegold Alexander Architects 77 North Washington Street Boston, MA 02114

RE: Limited Hazardous Building Materials Inspection Leicester Middle School 70 Winslow Avenue, Leicester, MA Fuss & O'Neill Project No. 20181089.A10

Dear Ms. Shields Ives:

Enclosed is the limited hazardous building materials inspection summary report for the inspection conducted at Leicester Middle School located at 70 Winslow Avenue in Leicester, Massachusetts.

On April 1, 2019, Fuss & O'Neill, Inc. (Fuss & O'Neill) state-certified Asbestos Inspectors performed a limited asbestos inspection, presumed polychlorinated biphenyl (PCB)-containing source building materials inventory, and a fluorescent light ballast and mercury-containing equipment inventory as part of a feasibility study.

The information summarized in this report is solely for the abovementioned materials only. The work was performed in accordance with our written scope of services dated December 5, 2018.

If you should have any questions regarding the contents of the enclosed report, please do not hesitate to contact me at 617-282-4675, extension 4703. Thank you for this opportunity to have served your environmental needs.

108 Myrtle Street Suite 502 Quincy, MA 02171 t 617.282.4675 800.286.2469 f 617.481.5885

Sincerely,

Dustin A. Diedricksen Associate/Environmental Department Manager

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California Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont DD/rm

Enclosure

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APPENDIX C	ASBESTOS LABORATORY ANALYTICAL REPORTS & CHAIN-OF-
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# 1 Introduction

On April 1, 2019, Fuss & O'Neill, Inc. (Fuss & O'Neill) representatives, Ms. Heidi Keller and Mr. Lou Dias, performed a limited hazardous building materials inspection as part of a Module 3 (Feasibility Study) of the Massachusetts School Building Authority (MSBA) program for the Leicester Middle School at 70 Winslow Avenue in Leicester, Massachusetts (the "Site").

An Asbestos Hazardous Emergency Reponses Act (AHERA) Management Plan was previously conducted at the Site and applicable information has been utilized during this inspection.

# 1.1 Scope of Work

The work was performed for Finegold Alexander Architects (the "Client") in accordance with our written scope of services dated December 5, 2018. This report is subject to the limitations presented in Appendix A. The scope of work included the following:

- Limited Asbestos-Containing Materials (ACM) Inspection;
- Lead-Based Paint (LBP) Screening;
- Polychlorinated Biphenyl (PCB)-Source Building Materials Inventory (visual only); and
- Fluorescent Light Ballast and Mercury-Containing Equipment Inventory.

Intrusive or destructive investigative techniques were not performed at the Site to access and to observe concealed or inaccessible areas that may contain suspect ACM (per Client's request). Hard enclosures or obstructed areas observed at the Site include, but are not limited to, the following:

- Roofing Systems/Layers;
- Voids behind Exterior Facade;
- Vapor/Moisture Barrier under Floors or on Concrete Foundations;
- Wall Cavities;
- Pipe Chases;
- Spaces above Fixed Ceilings or Fiberglass Ceiling Tiles;
- Underneath Layered/Raised/Rubber Gymnasium Flooring;
- Beneath Window/Door Frames;
- Behind mirrors, blackboards, bulletin boards, and corkboards;
- Areas behind and within Mechanical Equipment; and
- Ceramic Floor & Wall Tile Systems.

Fuss & O'Neill did not conduct subsurface investigations to identify concealed suspect materials throughout the subject property.



We excluded collection and analysis of suspect materials for polychlorinated biphenyls (PCBs) during this inspection. Sampling for PCBs is presently not mandated by the United States Environmental Protection Agency (EPA); however, significant liability risk for disposing of PCB-containing wastes exists. Recent knowledge of PCBs within these matrices has become more prevalent, especially with remediation contractors, waste haulers, and disposal facilities. Many property owners have become subject to large changes in schedule, scope, and costs as a result of failure to identify PCBs prior to renovation or demolition activities. For the purpose of this inspection, potential PCB-containing source building materials (as recommended by the EPA) have been presumed to contain regulated concentrations of PCBs.

# 1.2 Building Description

Leicester Middle School is a single-story structure that was reportedly constructed in the 1950s with an addition made in the 1970s; it contains approximately 76,500 square feet of interior space. The most recent renovation date is unknown. The building finishes includes plaster, concrete masonry unit (CMU) walls, gypsum wallboard, a rubber roofing system, and a poured concrete slab.

# 2 Limited Asbestos Inspection

A property owner or operator must ensure that a thorough asbestos inspection is performed prior to possible disturbance of suspect ACM during renovation or demolition activities. This is a requirement of the United States Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation located at Title 40 CFR, Part 61, Subpart M.

On April 1, 2019, Ms. Heidi Keller and Mr. Lou Dias of Fuss & O'Neill conducted the limited inspection of visible and accessible areas. Ms. Keller and Mr. Dias are both Commonwealth of Massachusetts Department of Labor Standards (MADLS)-certified Asbestos Inspectors. Refer to Appendix B for copies of each Asbestos Inspector's state certification and EPA accreditation.

# 2.1 Methodology

The inspection was conducted by visually inspecting for suspect ACM and touching each of the suspect ACM, if accessible. The suspect ACM were grouped into three EPA NESHAP categories: Friable; Category I Non-Friable, and Category II Non-Friable.

- Friable is defined as material that contains greater than one percent (> 1%) asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I Non-Friable refers to material that contains > 1% asbestos (i.e., packings, gaskets, resilient floor coverings, and asphalt roofing products) that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Category II Non-Friable refers to any non-friable material excluding Category I materials that contain > 1% asbestos that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.



The suspect ACM were also categorized into their applications including: Thermal System Insulation (TSI), Surfacing ACM, and Miscellaneous ACM. TSI includes those materials used to prevent heat loss/gain or water condensation on mechanical systems. Examples of TSI include, but are not limited to, pipe insulation, boiler insulation, duct insulation, mudded pipe fitting insulation, etc. Surfacing ACM includes those ACM that are sprayed-on, troweled-on, or otherwise applied to an existing surface. Surfacing ACM is commonly used for fireproofing, decorative, and acoustical applications. Miscellaneous ACM include those not listed as TSI or Surfacing ACM, such as sheet flooring, floor tiles, ceiling tiles, caulking, mastics, construction adhesives, etc.

The EPA recommends collecting suspect ACM samples in a manner sufficient to determine asbestos content, and separating suspect ACM into homogenous material types (similar in color, texture, and date of application). The EPA NESHAP regulation does not specifically identify a minimum number of samples to be collected for each homogeneous material, but the NESHAP regulation does recommend the use of sampling protocols included in EPA Title 40 CFR, Part 763, Subpart E: Asbestos Hazard Emergency Response Act (AHERA).

The EPA AHERA regulation requires a specific number of samples be collected based on the material type and quantity present. This regulation includes the following protocol:

- 1. Surfacing Materials (e.g., plaster, spray-applied fireproofing, etc.) shall be collected in a randomlydistributed manner representing each homogenous area based on the overall quantity as follows:
  - a. At least three (3) bulk samples collected from each homogenous area that is less than or equal to 1,000 square feet.
  - b. At least five (5) bulk samples collected from each homogenous area that is greater than 1,000 square feet but less than or equal to 5,000 square feet.
  - c. At least seven (7) bulk samples collected from each homogenous area that is greater than 5,000 square feet.
- 2. Thermal System Insulation (e.g., pipe insulation, tank insulation, etc.) shall be collected in a randomlydistributed manner representing each homogenous area. At least three (3) bulk samples shall be collected of each homogenous material type. Also, at least one (1) bulk sample of any patching material applied to TSI, presuming the patched area is less than six linear or square feet, shall be collected.
- 3. Miscellaneous Materials (e.g., floor tile, mastic, cement board, caulking, glazing, etc.) should have at least two (2) bulk samples collected of each homogenous material type. Sample collection shall be conducted in a manner sufficient to determine the asbestos content of the homogenous material type as determined by the inspector.

Suspect ACM samples were collected, and proper chain-of-custody forms were prepared for transmission of collected samples to EMSL Analytical, Inc. (EMSL), for analysis. EMSL is a Commonwealth of Massachusetts-licensed and American Industrial Hygiene Association (AIHA)-accredited Asbestos Analytical Laboratory. Initial asbestos sample analysis was conducted using the EPA Interim Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116) via Polarized Light Microscopy with Dispersion Staining (PLM/DS).

The EPA recommends that non-friable, organically-bound (NOB) materials (e.g., asphaltic-based materials, adhesives, caulking, etc.) undergo further confirmatory analysis utilizing Transmission Electron Microscopy (TEM). Eight of the collected NOB samples were analyzed by TEM.



If samples of suspect ACM could not be collected, these materials were assumed to contain asbestos and quantities were approximated.

# 2.2 Results

The EPA, the Occupational Safety and Health Administration (OSHA), and the MADLS define a material that contains > 1% asbestos (by PLM/DS analysis) as an ACM. The Massachusetts Department of Environmental Protection (MassDEP) further defines ACM as materials containing greater than or equal to ( $\geq$ ) 1% asbestos. MassDEP also defines an asbestos-containing waste material (ACWM) as:

- ACM removed during renovation or demolition activities;
- Materials contaminated by an ACM during renovation or demolition activities; or
- ACM on and/or in facility components that are inoperable or have been taken out of service.

The MassDEP further defines waste material containing any amount of asbestos as an ACWM, which must be managed and disposed of as such. Materials that are identified as "none detected" are specified as not containing asbestos.

Utilizing the EPA, OSHA, MADLS, and MassDEP protocols and criteria, the following materials were determined to be ACM:

- Various Floor Tiles;
- Floor Tile Mastic;
- Sink Undercoating;
- Window Glazing Compound;
- Pipe & Fitting Insulation;
- Weatherproofing;
- Exterior Metal-to-Tile Caulking;
- Joint Compound;
- Ceramic Floor & Wall Tile Components (assumed);
- Interior Boiler Components & Boiler Pad (assumed);
- Exterior Dampproofing (assumed);
- Materials Associated with Gymnasium Floor (assumed);
- Sub-Slab Dampproofing (assumed); and
- Roofing Materials (assumed).

Refer to Table 1, attached hereto, for the complete list of ACM and non-ACM identified by sample identification, material type, sample location, and asbestos content as part of this inspection. Refer to Table 2, attached hereto, for the identified ACM inventory.

Refer to Appendix C for the asbestos laboratory analytical reports and chain-of-custody form.

## 2.3 Conclusions and Recommendations

Based on visual observations, sample collection, and laboratory analysis, ACM were identified at the Site.



Prior to disturbance, ACM that would likely be impacted by proposed renovation or demolition activities must first be abated by a MADLS-licensed Asbestos Contractor. This is a requirement of MADLS, MassDEP, and EPA NESHAP regulations governing asbestos abatement.

Due to the inability to effectively separate some types of multi-layered ACM from non-ACM, these materials are considered asbestos-contaminated and must be managed as ACWM for removal and disposal purposes.

At the Client's request, concealed or inaccessible areas were not inspected as part of this inspection. Prior to renovation or demolition activities that may disturb concealed or inaccessible areas, we recommend conducting a supplemental asbestos inspection of these areas. These areas include, but are not limited to, the following:

- Roofing Systems/Layers;
- Voids behind Exterior Facade;
- Vapor/Moisture Barrier under Floors or on Concrete Foundations;
- Wall Cavities;
- Pipe Chases;
- Spaces above Fixed Ceilings or Fiberglass Ceiling Tiles;
- Underneath Layered/Raised/Rubber Gymnasium Flooring;
- Beneath Window/Door Frames;
- Behind mirrors, blackboards, bulletin boards, and corkboards;
- Areas behind and within Mechanical Equipment; and
- Ceramic Floor & Wall Tile Systems.

If suspect materials are encountered during renovation or demolition activities that are not identified in this report as being non-ACM, they shall be assumed to be ACM until laboratory analysis indicates otherwise.

If ACM are to remain at the Site following renovation/demolition activities, Fuss & O'Neill recommends the development of a written Operations and Maintenance Program (to manage ACM in place) in accordance with OSHA regulations.

<u>This report is not intended to be utilized as a bidding or a project specification document</u>. This report is designed to aid the building owner, architect, construction manager, general contractor(s), and asbestos abatement contractor(s) in locating ACM and ACWM.

# 3 Lead-Based Paint Screening

For the purpose of this inspection, all coated building components are assumed to be coated with LBP.

# 4 Presumed Polychlorinated Biphenyls (PCBs) Source Building Materials

# 4.1 Background

On April 1, 2019, Ms. Keller of Fuss & O'Neill completed a presumed PCB-containing source building materials inventory.



Sample collection and analysis of building materials for PCBs is presently not mandated by the EPA. However, significant liability risk exists for improperly disposing of PCB-containing waste materials. Recent knowledge and awareness of PCBs within matrices such as caulking, glazing compounds, paints, adhesives and ceiling tiles has become more prevalent, especially among remediation contractors, waste haulers, and disposal facilities. The EPA recommends sample collection and analysis of caulking and glazing compounds installed between 1950 and 1980 to determine PCB concentration.

The EPA requirements apply and require removal of PCBs once identified, regardless of project intent as an unauthorized use of PCBs. Once it is determined that PCBs are present and a building is to remain for re-use, the EPA still requires PCB-containing material removal. If PCBs are present at certain concentrations, additional sampling and analysis of adjacent surfaces in contact with PCB sources, or which may have been contaminated from a source of PCBs (e.g., masonry, soil), must also be performed or remediated.

EPA requirements apply only if PCBs are present in concentrations above a specified level. Presently, PCBcontaining materials at concentrations equal to or greater than ( $\geq$ ) 50 part per million (ppm), or equivalent units of milligrams per kilogram (mg/kg), are regulated. Note materials containing  $\geq$  1, ppm but less than (<) 50 ppm may also be regulated unless proven to be an "Excluded PCB Product". The definition of an Excluded PCB Product includes those products, or source of the products, containing < 50 ppm concentration PCBs that were legally manufactured, processed, distributed in commerce, or used before October 1, 1984.

## 4.2 Results

Utilizing the EPA guidelines, a presumed PCB-containing source building materials inventory by material type, location, and quantity is included in Table 3 attached hereto. Window systems appeared to have been installed more recent than building construction; however, documentation of window installation was not obtained and all window caulking is presumed to be a PCB-containing source building material.

## 4.3 Conclusions and Recommendations

Identified materials should be presumed to contain regulated concentrations ( $\geq$  50 ppm) of PCBs until sample analysis indicates otherwise. These materials should be removed and disposed of at an EPA-approved facility as regulated PCB Bulk Product Waste.



# 5 Fluorescent Light Ballasts and Mercury-Containing Equipment

# 5.1 Fluorescent Light Ballasts

Fluorescent light ballasts manufactured prior to 1979 may contain capacitors that contain PCBs. Light ballasts installed as late as 1985 may contain PCB capacitors. Fluorescent light ballasts that are not labeled as "No PCBs" must be assumed to contain PCBs unless proven otherwise by quantitative analysis. Capacitors in fluorescent light ballasts labeled as non-PCB-containing may contain diethylhexyl phthalate (DEHP). DEHP was the primary substitute to replace PCBs for small capacitors in fluorescent light ballasts in use until 1991. DEHP is a toxic substance, a suspected carcinogen, and is listed under RCRA and the Superfund Law as a hazardous waste. Therefore, Superfund liability exists for landfilling both PCB- and DEHP-containing light ballasts. These listed materials are considered hazardous waste under RCRA and require special handling and disposal considerations.

# 5.2 Mercury-Containing Equipment

Fluorescent lamps/tubes are presumed to contain mercury vapor, which is a hazardous substance to both human health and the environment. Thermostatic controls and electrical switch gear may contain a vial or bulb of liquid mercury associated with the control. Mercury-containing equipment is regulated for proper disposal by EPA RCRA regulations.

## 5.3 Results

On April 1, 2019, Ms. Keller of Fuss & O'Neill performed a visual inspection of representative fluorescent light fixtures in-place to identify possible PCB-containing ballasts in the building. The inspection involved visually inspecting labels on representative light ballasts to identify manufacture dates and labels indicating "No PCBs". Ballasts manufactured after 1991 were not listed as PCB- or DEHP-containing ballasts and were not quantified for disposal. An in-place inventory of the fluorescent lamps/tubes and other mercury-containing equipment was completed concurrently.

During this inspection, PCB-containing ballasts were identified at several locations within the school. Therefore, all ballasts in the building are presumed to contain PCBs.

# 5.4 Conclusions and Recommendations

PCB-containing fluorescent light ballasts were identified in the building during this inspection.

Fluorescent light ballasts marked as "No PCBs" with date labels indicating manufacture prior to 1991 are presumed to contain DEHP. DEHP-containing ballasts must be segregated for proper packaging, transporting, and disposal as non-PCB hazardous waste. Note that disposal requirements for DEHP-containing ballasts are slightly varied, and disposal costs are slightly less, when compared to PCB-containing light ballasts.



According to the EPA, mercury-containing equipment is characterized as a hazardous waste and mercury lamps/tubes are characterized as a Universal Waste. The mercury-containing equipment and fluorescent lamps/tubes identified in the proposed renovation areas must be recycled, reclaimed, or disposed of as hazardous waste or Universal Waste prior to disturbance.

<u>This report is not intended to be utilized as a bidding or a project specification document</u>. This report is designed to aid the building owner, architect, construction manager, general contractor(s), and abatement contractor(s) in locating hazardous building materials.

Report prepared by Environmental Analyst, Heidi Keller.

Reviewed by:

Robert Mallett Environmental Analyst

Dustin A. Diedricksen Associate/Environmental Department Manager



# Tables



 Table 1

 Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

#### Leicester Middle School Leicester, Massachusetts

Finegold Alexander Architects April 2019 Fuss & O'Neill Reference No. 20181089.A10

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
01A-HK-190401	White Thin Coat	Non-ACM	Room 24	ND	
01B-HK-190401	White Thin Coat	Non-ACM	Gym Storage Room	ND	
01C-HK-190401	White Thin Coat	Non-ACM	Boiler Room	ND	
01D-HK-190401	White Thin Coat	Non-ACM	Boiler Room with Storage	ND	
01E-HK-190401	White Thin Coat	Non-ACM	Cafeteria	ND	
01F-HK-190401	White Thin Coat	Non-ACM	It Room	ND	
01G-HK-190401	White Thin Coat	Non-ACM	Auditorium	ND	
02A-HK-190401	Gray Rough Coat	Non-ACM	Room 24	ND	
02B-HK-190401	Gray Rough Coat	Non-ACM	Gym Storage Room	ND	
02C-HK-190401	Gray Rough Coat	Non-ACM	Boiler Room	ND	
02D-HK-190401	Gray Rough Coat	Non-ACM	Boiler Room with Storage	ND	
02E-HK-190401	Gray Rough Coat	Non-ACM	Cafeteria	ND	
02F-HK-190401	Gray Rough Coat	Non-ACM	It Room	ND	
02G-HK-190401	Gray Rough Coat	Non-ACM	Auditorium	ND	
03A-HK-190401	Blue 12" x 12" with Black Streaks	Non-ACM	Room 36 Hallway	ND	
03B-HK-190401	Blue 12" x 12" with Black Streaks	Non-ACM	Room 12 Hallway	ND	
04A-HK-190401	Yellow Mastic	Non-ACM	Room 36 Hallway	ND	
04B-HK-190401	Yellow Mastic	Non-ACM	Room 12 Hallway	ND	
05A-HK-190401	Orange 12" x 12" with White Streaks	Non-ACM	Room 19 Hallway	ND	TEM
05B-HK-190401	Orange 12" x 12" with White Streaks	Non-ACM	Room 30 Hallway	ND	
06A-HK-190401	Cream Mastic	Non-ACM	Room 19 Hallway	ND	TEM
06B-HK-190401	Cream Mastic	Non-ACM	Room 30 Hallway	ND	
07A-HK-190401	Black 12" x 12" with White Streaks	Non-ACM	Gym Hallway	ND	
07B-HK-190401	Black 12" x 12" with White Streaks	Non-ACM	Room 19 Hallway	ND	
08A-HK-190401	Black Mastic	Non-ACM	Gym Hallway	ND	
08B-HK-190401	Black Mastic	Non-ACM	Room 19 Hallway	ND	
09A-HK-190401	White 12'' x 12'' with Gray Streaks	Cat 1 NF	Room 36	2% Chrysotile	
09B-HK-190401	White 12'' x 12'' with Gray Streaks	Cat 1 NF	Room 33	Pos Stop	
10A-HK-190401	Black Mastic	Not Analyzed	Room 36	Not Analyzed	



<u>Table 1</u>
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
10B-HK-190401	Black Mastic	Cat 1 NF	Room 33	10% Chrysotile	
11A-HK-190401	Brown 9'' x 9'' with White Specks	Cat 1 NF	Auditorium Office	5% Chrysotile	
11B-HK-190401	Brown 9'' x 9'' with White Specks	Cat 1 NF	Room 30	Pos Stop	
12A-HK-190401	Black Mastic	Cat 1 NF	Auditorium Office	10% Chrysotile	
12B-HK-190401	Black Mastic	Cat 1 NF	Room 3	Pos Stop	
13A-HK-190401	Light Blue 12" x 12" with Bark Blue Streaks	Non-ACM	Cafeteria	ND	
13B-HK-190401	Light Blue 12" x 12" with Bark Blue Streaks	Non-ACM	Cafeteria Hallway	ND	
14A-HK-190401	Yellow Mastic	Non-ACM	Cafeteria	ND	
14B-HK-190401	Yellow Mastic	Non-ACM	Cafeteria Hallway	ND	
15A-HK-190401	Light Green 12" x 12" with White Streaks	Cat 1 NF	Gym	5% Chrysotile	
15B-HK-190401	Light Green 12" x 12" with White Streaks	Cat 1 NF	Room 25	Pos Stop	
16A-HK-190401	Black Mastic	Cat 1 NF	Gym	10% Chrysotile	
16B-HK-190401	Black Mastic	Cat 1 NF	Room 25	Pos Stop	
17A-HK-190401	White 12" x 12" with Cream Streaks	Non-ACM	Room 36	ND	
17B-HK-190401	White 12" x 12" with Cream Streaks	Non-ACM	Room 32	ND	
18A-HK-190401	Yellow Mastic	Non-ACM	Room 36	ND	
18B-HK-190401	Yellow Mastic	Non-ACM	Room 32	ND	
19A-HK-190401	Light Brown 9" x 9" with White Streaks	Cat 1 NF	Room 24	5% Chrysotile	
19B-HK-190401	Light Brown 9" x 9" with White Streaks	Cat 1 NF	Auditorium Office	Pos Stop	
20A-HK-190401	Black Mastic	Non-ACM	Room 24	ND	
20B-HK-190401	Black Mastic	Non-ACM	Auditorium Office	ND	
21A-HK-190401	Dark Brown 12" x 12" with Black Streaks	Cat 1 NF	Boiler Room Hallway	2% Chrysotile	
21B-HK-190401	Dark Brown 12" x 12" with Black Streaks	Cat 1 NF	Gym Hallway	Pos Stop	
22A-HK-190401	Black Mastic	Non-ACM	Boiler Room Hallway	ND	
22B-HK-190401	Black Mastic	Non-ACM	Gym Hallway	ND	
23A-HK-190401	Black Sink Undercoating	Cat 1 NF	Room 24	2% Chrysotile	
23B-HK-190401	Black Sink Undercoating	Cat 1 NF	Room 24	Pos Stop	
24A-HK-190401	Yellow Carpet Mastic	Non-ACM	Auditorium	ND	
24B-HK-190401	Yellow Carpet Mastic	Non-ACM	Auditorium	ND	
25A-HK-190401	White Sand Proofing Wall Tiles	Non-ACM	Auditorium	ND	
25B-HK-190401	White Sand Proofing Wall Tiles	Non-ACM	Auditorium	ND	
26A-HK-190401	Brown 9" x 9" with Orange & White Streaks	Cat 1 NF	School Store	2% Chrysotile	
26B-HK-190401	Brown 9'' x 9'' with Orange & White Streaks	Cat 1 NF	School Store	Pos Stop	



<u>Table 1</u>
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
27A-HK-190401	Black Mastic	Cat 1 NF	School Store	10% Chrysotile	
27B-HK-190401	Black Mastic	Cat 1 NF	School Store	Pos Stop	
28A-HK-190401	Yellow Carpet Square Adhesive	Non-ACM	Room 32	ND	
28B-HK-190401	Yellow Carpet Square Adhesive	Non-ACM	Room 32	ND	
29A-HK-190401	White Vinyl Baseboard	Non-ACM	Room 36	ND	
29B-HK-190401	White Vinyl Baseboard	Non-ACM	Room 33	ND	
30A-HK-190401	Cream Mastic	Non-ACM	Room 36	ND	
30B-HK-190401	Cream Mastic	Non-ACM	Room 33	ND	
31A-HK-190401	Gray Vinyl Baseboard	Non-ACM	Room 13	ND	
31B-HK-190401	Gray Vinyl Baseboard	Non-ACM	Room 13	ND	
32A-HK-190401	Greenish Gray Vinyl Baseboard	Non-ACM	Room 24	ND	
32B-HK-190401	Greenish Gray Vinyl Baseboard	Non-ACM	Room 24	ND	
33A-HK-190401	Brown Mastic	Non-ACM	Room 24	ND	
33B-HK-190401	Brown Mastic	Non-ACM	Room 24	ND	
34A-HK-190401	Black Vinyl Baseboard	Non-ACM	Boiler Room Hallway	ND	
34B-HK-190401	Black Vinyl Baseboard	Non-ACM	Gym Hallway	ND	
35A-HK-190401	Cream Mastic	Non-ACM	Boiler Room Hallway	ND	
35B-HK-190401	Cream Mastic	Non-ACM	Gym Hallway	ND	
36A-HK-190401	Black Vinyl Baseboard	Non-ACM	Room 32	ND	
36B-HK-190401	Black Vinyl Baseboard	Non-ACM	Room 32	ND	
37A-HK-190401	Cream Mastic	Non-ACM	Room 32	ND	
37B-HK-190401	Cream Mastic	Non-ACM	Room 32	ND	
38A-HK-190401	Dot & Fissure Ceiling Tile	Non-ACM	Gym Hallway	ND	
38B-HK-190401	Dot & Fissure Ceiling Tile	Non-ACM	Room 24	ND	
39A-HK-190401	Dot & Fissure Ceiling Tile	Non-ACM	Room 34	ND	
39B-HK-190401	Dot & Fissure Ceiling Tile	Non-ACM	Room 36	ND	
40A-HK-190401	White Mudded Pipe Insulation	Friable	Kitchen (above Suspended Ceiling)	60% Chrysotile	
40B-HK-190401	White Mudded Pipe Insulation	Friable	Kitchen (above Suspended Ceiling)	Pos Stop	
40C-HK-190401	White Mudded Pipe Insulation	Friable	Kitchen Storage	Pos Stop	
41A-HK-190401	Gray Glazing Compound	Cat 2 NF	Interior Hallway	2% Chrysotile	
41B-HK-190401	Gray Glazing Compound	Cat 2 NF	Windows	Pos Stop	
42A-HK-190401	Black Caulking	Non-ACM	Room 26 Hallway Door Window	ND	TEM
42B-HK-190401	Black Caulking	Non-ACM	Room 19 Hallway Door Window	ND	



Table 1
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
43A-HK-190401	Black Caulking	Non-ACM	Room 26 Hallway Side Window	ND	TEM
43B-HK-190401	Black Caulking	Non-ACM	Room 19 Hallway Side Window	ND	
44A-HK-190401	Gray Caulking	Non-ACM	Room 12 Hallway Control Joint	ND	
44B-HK-190401	Gray Caulking	Non-ACM	Cafeteria Control Joint	ND	
45A-HK-190401	Gray AirCell Pipe Insulation	Friable	Kitchen	70% Chrysotile	
45B-HK-190401	Gray AirCell Pipe Insulation	Friable	Kitchen	Pos Stop	
46A-HK-190401	Brown Caulking	Non-ACM	Interior of Gym Door to The Exterior	ND	
46B-HK-190401	Brown Caulking	Non-ACM	Interior of Gym Door to The Exterior	ND	
47A-HK-190401	Gray Caulking	Non-ACM	Interior Door between Kitchen & Maintenance	ND	
47B-HK-190401	Gray Caulking	Non-ACM	Interior Door between Kitchen & Maintenance	ND	
48A-HK-190401	Black Caulking	Non-ACM	Exterior Windows	ND	
48B-HK-190401	Black Caulking	Non-ACM	Exterior Windows	ND	
49A-HK-190401	Gray Caulking	Non-ACM	Exterior Baseboard Heat Vents	ND	
49B-HK-190401	Gray Caulking	Non-ACM	Exterior Baseboard Heat Vents	ND	
50A-HK-190401	Black Weatherproofing	Cat 2 NF	Awning (Around Bolts)	20% Chrysotile	
50B-HK-190401	Black Weatherproofing	Cat 2 NF	Awning (Around Bolts)	Pos Stop	
51A-HK-190401	Black Caulking	Non-ACM	Exterior Window Frame	ND	
51B-HK-190401	Black Caulking	Non-ACM	Exterior Window Frame	ND	
52A-HK-190401	Cream Thin-Set Mortar	Non-ACM	Exterior Wall Tiles	ND	
52B-HK-190401	Cream Thin-Set Mortar	Non-ACM	Exterior Wall Tiles	ND	
53A-HK-190401	Gray Grout	Non-ACM	Exterior Wall Tile Grout	ND	
53B-HK-190401	Gray Grout	Non-ACM	Exterior Wall Tile Grout	ND	
54A-HK-190401	Gray Caulking	Cat 2 NF	Exterior Caulking (Metal to Tile)	5% Chrysotile	
54B-HK-190401	Gray Caulking	Cat 2 NF	Exterior Caulking (Metal to Tile)	Pos Stop	
55A-HK-190401	Gray Caulking	Non-ACM	Exterior Kitchen Vent	ND	
55B-HK-190401	Gray Caulking	Non-ACM	Exterior Kitchen Vent	ND	
56A-HK-190401	White Joint Compound	Non-ACM	Cafeteria	ND	
56B-HK-190401	White Joint Compound	Cat 2 NF	Room 7 (Partition)	2% Chrysotile	
57A-HK-190401	White Gypsum Wallboard	Non-ACM	Maintenance Garage	ND	
57B-HK-190401	White Gypsum Wallboard	Non-ACM	Cafeteria	ND	
57C-HK-190401	White Gypsum Wallboard	Non-ACM	Room 7	ND	
58A-HK-190401	White Grout	Non-ACM	Auditorium Wall Tile	ND	
58B-HK-190401	White Grout	Non-ACM	Auditorium Wall Tile	ND	



<u>Table 1</u>
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
59A-HK-190401	Cream Adhesive	Non-ACM	Auditorium Wall Tile	ND	
59B-HK-190401	Cream Adhesive	Non-ACM	Auditorium Wall Tile	ND	
60A-HK-190401	Cream Adhesive	Non-ACM	Living Bathroom	ND	
60B-HK-190401	Cream Adhesive	Non-ACM	White Wall Tiles	ND	
61A-HK-190401	Cream Adhesive	Non-ACM	Girl's Bathroom By Gym Gray Wall Tile	ND	
61B-HK-190401	Cream Adhesive	Non-ACM	Girl's Bathroom By Gym Gray Wall Tile	ND	
62A-HK-190401	Cream Adhesive	Non-ACM	Kitchen Light Blue Wall Tile	ND	
62B-HK-190401	Cream Adhesive	Non-ACM	Kitchen Light Blue Wall Tile	ND	
63A-HK-190401	Cream Adhesive	Non-ACM	Cafeteria Wall Tile	ND	
63B-HK-190401	Cream Adhesive	Non-ACM	Cafeteria Wall Tile	ND	
64A-HK-190401	White Grout	Non-ACM	Kitchen Wall Tile	ND	
64B-HK-190401	White Grout	Non-ACM	Kitchen Wall Tile	ND	
65A-HK-190401	Cream Adhesive	Non-ACM	Maintenance Dept. Bathroom	ND	
65B-HK-190401	Cream Adhesive	Non-ACM	Maintenance Dept. Bathroom	ND	

Cat 1 NF = Category I Non-Friable Material

Cat 2 NF = Category II Non-Friable Material

Pos Stop = Positive Stop ND = None Detected

IND = None Detected

ACM = Asbestos-Containing Material

ACWM = Asbestos-Containing Waste Material

TEM = Transmission Electron Microscopy



#### Table 2 Asbestos-Containing Materials Summary

#### Leicester Middle School Leicester, Massachusetts

Finegold Alexander Architects April 2019 Fuss & O'Neill Reference No. 20181089.A10

Asbestos-Containing Material Type	Locations(s)	Asbestos Content	Estimated Total Quantity	Comments
White 12" x 12" with Gray Streaks	Rooms 33 & 36	2% Chrysotile	1,800 SF	
Brown 9" x 9" with White Specks	Auditorium Office, Library Offices, Maintenance Office, Rooms 2, 7-11, 20,	5% Chrysotile	10.800 SF	
Light Brown 9" x 9" with White Streaks	24, 26, 28, & 30	5% Chrysotile	10,000 31	
Light Green 12" x 12" with White Streaks	Gymnasium & Room 25	5% Chrysotile	2,650 SF	
Dark Brown 12" x 12" with Black Streaks	Boiler Room Hallway	2% Chrysotile	1,600 SF	
Brown 9" x 9" with Orange & White Streaks	School Store	2% Chrysotile	1,050 SF	
Black Mastic	Gymnasium, Library Offices, Maintenance Office, School Store, Rooms 2, 7-11, 20, 25, 26, 28, 30, 33, & 36	10% Chrysotile	12,550 SF	
Black Sink Undercoating	Room 24	2% Chrysotile	1 EA	
Gray Glazing Compound	Hallway-to-Classroom Partition Walls (Top-of-Wall)	2% Chrysotile	3,500 LF	
Gray AirCell Pipe Insulation	Kitchen & Concealed Locations	70% Chrysotile	750 LF	
White Mudded Pipe Insulation	throughout Building	60% Chrysotile	75 EA	
Black Weatherproofing	Awning (Around Bolts)	20% Chrysotile	50 SF	
Gray Caulking	Exterior Caulking (Metal to Tile)	5% Chrysotile	1,500 LF	
White Joint Compound	Classroom-to-Classroom Partition Walls	2% Chrysotile	5,600 SF	50% of Classroom-to- Classroom Partition Walls
Ceramic Floor Tile Components	Boy's & Girl's Locker Rooms, Boy's & Girl's Bathrooms	Assumed	7,500 SF	
Interior Boiler Components & Boiler Pad	Boiler Room	Assumed	2 EA	
Exterior Dampproofing	Exterior Walls	Assumed	18,500 SF	
Materials Associated with Gymnasium Floor	Gymnasium	Assumed	6,750 SF	Include Possible Mercury Remediation
Sub-Slab Dampproofing	Beneath Slab	Assumed	1,400 CY	Assumes 6" slab
Roofing Materials	Roof	Assumed	75,600 SF	

CY - Cubic Yards; EA = Each, LF = Linear Feet, SF = Square Feet

ACM = Asbestos-Containing Material



Table 3
Presumed PCB-Containing Source Building Materials Summary

Material Type	Location	Estimated Quantity
Gray Glazing Compound*	Hallway-to-Classroom Partition Walls	3,500 LF
Gray Caulking*	Exterior, Metal Colum-to-Tile Joint	1,500 LF
Black Caulking	Hallway Fire Door Systems	1,500 LF
Gray Control-Joint Caulking	Interior Control Joints	250 LF
Brown Door Caulking	Gym-to-to Exterior Door	150 LF
Gray Door Caulking	Kitchen-to-Maintenance Door	25 LF
Black Interior/Exterior Window Caulking	Exterior Windows	1,500 LF
Gray Vent Caulking	Exterior Vents	500 LF

LF = Linear Feet

\* Denotes material type also contains, or is presumed to contain, asbestos



# Appendix A

Limitations



#### APPENDIX A

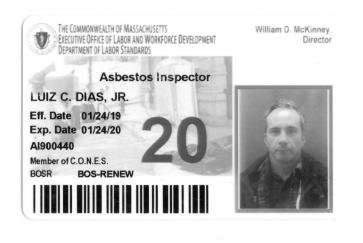
Leicester Middle School Leicester, Massachusetts

- This environmental report has been prepared for the exclusive use of the Client, and is subject to, and is issued in connection with, the general terms and conditions of the original Agreement (December 5, 2019) and all of its provisions. Any use or reliance upon information provided in this report, without the specific written authorization of the Client and Fuss & O'Neill, shall be at the User's individual risk. This report should not be used as an abatement specification. All quantities of materials identified during this inspection are approximate.
- 2. Fuss & O'Neill has obtained and relied upon laboratory analytical results in conducting the inspection. This information was used to form conclusions regarding the types and quantities of ACM source materials that must be managed prior to renovation or demolition activities that may disturb these materials at the subject property. Fuss & O'Neill has not performed an independent review of the reliability of this laboratory data.
- 3. Unless otherwise noted, only suspect hazardous materials associated within or located on the building (aboveground) were included in this inspection. Suspect hazardous materials may exist below the ground surfaces or inaccessible areas of the building that were not included in the scope of work of this inspection. EnviroScience cannot guarantee all asbestos or suspect hazardous materials were identified within the areas included in the scope of work. Only visible and accessible areas were included in the scope of work for this inspection.
- 4. The findings, observations, and conclusions presented in this report are limited by the scope of services outlined in our original Agreement, which reflects schedule and budgetary constraints imposed by the Client. Furthermore, the assessment has been conducted in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made.
- 5. The conclusions presented in this report are based solely upon information gathered by Fuss & O'Neill to date. Should further environmental or other relevant information be discovered at a later date, the Client should immediately bring the information to Fuss & O'Neill's attention. Based upon an evaluation and assessment of relevant information, Fuss & O'Neill may modify the report and its conclusions.
- 6. Fuss & O'Neill has obtained and relied upon information from multiple sources to form certain conclusions regarding likely environmental issues at and in the vicinity of the subject property in conducting this inspection. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information or verify compliance by any party with federal, state or local laws or regulations.



# Appendix B

Fuss & O'Neill Asbestos Inspector State Certifications & EPA Accreditations



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This is to certify that

# Lou C. Dias Jr.



pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646 has completed the requisite training, and has passed an examination for Asbestos Inspector Refresher reaccreditation as:

Course Location

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

November 19, 2018 Examination Date

November 19, 2019 Expiration Date

18-1208-106-207949

Course Dates

Certificate Number

November 19, 2018

**Fraining Director** Wenting ?

16 Upton Drive, Wilmington, MA 01887 (01 Valephare) 978.658.5272

INSTITUTE FOR ENVIRONMENTAL EDUCATION

www.ieetrains.com



-



This is to certify that





has completed the requisite training, and has passed an examination for reaccreditation as:

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

**INSTITUTE FOR ENVIRONMENTAL EDUCATION** 

www.ieetrains.com

Telephone 978.658.5272

16 Upton Drive, Wilmington, MA 01887

Training Director

Wenterft

November 02, 2019

Expiration Date

**Examination Date** 

November 02, 2018

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

**Course Location** 

18-1207-106-267547 **Course Dates** 

**Certificate Number** 

November 2, 2018



# Appendix C

# Asbestos Laboratory Analytical Reports & Chain-of-Custody Form

MSI Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 131902222 Customer ID: ENVI54 Customer PO: 20181089.A10 Project ID:

Attention: H Keller

Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040

Phone: (860) 646-2469 Fax: (888) 838-1160 Received Date: 04/03/2019 9:30 AM Analysis Date: 04/04/2019 - 04/05/2019 Collected Date: 04/01/2019

Project: Leicester Middle School / 20181089.A10 / 70 Winslow Avenue

				bestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
01A-HK-190401	Room 24 - White Thin Coat	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0001		Homogeneous			
01B-HK-190401	Gym Storage Room - White Thin Coat	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0002		Homogeneous			
01C-HK-190401	Boiler Room - White Thin Coat	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0003		Homogeneous			
01D-HK-190401	Boiler Room w/ Storage - White Thin	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0004	Coat	Homogeneous			
01E-HK-190401	Cafeteria - White Thin Coat	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0005		Homogeneous			
01F-HK-190401	IT Room - White Thin Coat	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0006		Homogeneous			
01G-HK-190401	Auditorium - White Thin Coat	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0007		Homogeneous			
02A-HK-190401	Room 24 - Gray Rough Coat	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0008		Homogeneous			
02B-HK-190401	Gym Storage Room - Gray Rough Coat	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0009		Homogeneous			
02C-HK-190401	Boiler Room - Gray Rough Coat	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0010	Dellas De servid	Homogeneous			News Detected
02D-HK-190401 131902222-0011	Boiler Room w/ Storage - Gray Rough Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02E-HK-190401	Cafeteria - Gray	Gray		100% Non-fibrous (Other)	None Detected
404000000 0040	Rough Coat	Non-Fibrous			
131902222-0012		Homogeneous			
02F-HK-190401	IT Room - Gray Rough Coat	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0013	Acceltacia	Homogeneous			New Dirich 1
02G-HK-190401	Auditorium - Gray Rough Coat	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0014		Homogeneous			
03A-HK-190401	Room 36 Hallway - Blue 12x12 w/ Black	Blue Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0015	Streaks	Homogeneous			
03B-HK-190401	Room 12 Hallway - Blue 12x12 w/ Black	Blue Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0016	Streaks	Homogeneous			



				Non-Asbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
04A-HK-190401 31902222-0017	Room 36 Hallway - Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04B-HK-190401	Room 12 Hallway - Yellow Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0018		Homogeneous			
05A-HK-190401	Room 19 Hallway - Orange 12x12 w/	Orange Non-Fibrous		100% Non-fibrous (Other)	None Detected
31902222-0019	White Streaks	Homogeneous			
05B-HK-190401 131902222-0020	Room 30 Hallway - Orange 12x12 w/ White Streaks	Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06A-HK-190401	Room 19 Hallway - Cream Mastic	Beige Non-Fibrous		100% Non-fibrous (Other)	None Detected
31902222-0021		Homogeneous			
06B-HK-190401	Room 30 Hallway - Cream Mastic	Beige Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0022		Homogeneous			
07A-HK-190401 131902222-0023	Gym Hallway - Black 12x12 w/ White Streaks	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B-HK-190401	Room 19 Hallway -	Black		100% Non-fibrous (Other)	None Detected
131902222-0024	Black 12x12 w/ White Streaks	Non-Fibrous Homogeneous			
)8A-HK-190401	Gym Hallway - Black Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
31902222-0025		Homogeneous			
Sample appears to be yel					
08B-HK-190401	Room 19 Hallway - Black Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09A-HK-190401	Room 36 - White	White		98% Non-fibrous (Other)	2% Chrysotile
31902222-0027	12x12 w/ Gray Streaks	Non-Fibrous Homogeneous			
)9B-HK-190401	Room 33 - White 12x12 w/ Gray				Positive Stop (Not Analyzed)
131902222-0028	Streaks				
10A-HK-190401 131902222-0029	Room 36 - Black Mastic				Insufficient Material
10B-HK-190401	Room 33 - Black	Black		90% Non-fibrous (Other)	10% Chrysotile
	Mastic	Non-Fibrous			,
31902222-0030		Homogeneous			
11A-HK-190401 31902222-0031	Auditorium Office - Brown 9x9 w/ White Specks	Brown Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
I1B-HK-190401	Room 30 - Brown 9x9 w/ White Specks	Themogeneous			Positive Stop (Not Analyzed)
31902222-0032	- <b>F</b>				
2A-HK-190401	Auditorium Office - Black Mastic	Black Non-Fibrous		90% Non-fibrous (Other)	10% Chrysotile
31902222-0033		Homogeneous			
12B-HK-190401 131902222-0034	Room 3 - Black Mastic				Positive Stop (Not Analyzed)
13A-HK-190401	Cafeteria - Light Blue	Gray		100% Non-fibrous (Other)	None Detected
10/7-1111-130401	12x12 w/ Bark Blue	Non-Fibrous			



				New Ashertes		Ashastas
Sample	Description	Appearance	% Fibrous	<u>Non-Asbestos</u>	% Non-Fibrous	<u>Asbestos</u> % Type
3B-HK-190401	Cafeteria Hallway - Light Blue 12x12 w/ Bark Blue Streaks	Gray Non-Fibrous Homogeneous			100% Non-fibrous (Other)	None Detected
4A-HK-190401	Cafeteria - Yellow Mastic	Yellow Non-Fibrous			100% Non-fibrous (Other)	None Detected
131902222-0037	maono	Homogeneous				
14B-HK-190401	Cafeteria Hallway - Yellow Mastic	Yellow Non-Fibrous			100% Non-fibrous (Other)	None Detected
131902222-0038		Homogeneous				
15A-HK-190401	Gym - Light Green 12x12 w/ White Streaks	Green Non-Fibrous			95% Non-fibrous (Other)	5% Chrysotile
31902222-0039		Homogeneous				Desitive Step (Net Applyzed)
15B-HK-190401 31902222-0040	Room 25 - Light Green 12x12 w/ White Streaks					Positive Stop (Not Analyzed)
16A-HK-190401	Gym - Black Mastic	Black			90% Non-fibrous (Other)	10% Chrysotile
131902222-0041		Non-Fibrous Homogeneous				
16B-HK-190401	Room 25 - Black Mastic					Positive Stop (Not Analyzed)
31902222-0042						
I7A-HK-190401	Room 36 - White 12x12 w/ Cream	White Non-Fibrous			100% Non-fibrous (Other)	None Detected
31902222-0043	Streaks	Homogeneous				
7B-HK-190401 31902222-0044	Room 32 - White 12x12 w/ Cream Streaks	White Non-Fibrous			100% Non-fibrous (Other)	None Detected
		Homogeneous			100% New Sterror (Other)	News Detected
8A-HK-190401 31902222-0045	Room 36 - Yellow Mastic	Yellow Non-Fibrous Homogeneous			100% Non-fibrous (Other)	None Detected
8B-HK-190401	Room 32 - Yellow	Yellow			100% Non-fibrous (Other)	None Detected
31902222-0046	Mastic	Non-Fibrous Homogeneous				
9A-HK-190401	Room 24 - Light Brown 9x9 w/ White	Brown Non-Fibrous			95% Non-fibrous (Other)	5% Chrysotile
131902222-0047	Streaks	Homogeneous				
19B-HK-190401	Auditorium Office - Light Brown 9x9 w/					Positive Stop (Not Analyzed)
31902222-0048	White Streaks	Dissis			4000/ No. Sharar (Ollar)	News Detected
20A-HK-190401 31902222-0049	Room 24 - Black Mastic	Black Non-Fibrous Homogeneous			100% Non-fibrous (Other)	None Detected
20B-HK-190401	Auditorium Office -	Black			100% Non-fibrous (Other)	None Detected
21002222 0050	Black Mastic	Non-Fibrous				
31902222-0050	Poilor Doom Hollwey	Homogeneous			00% Non fibrous (Otho-)	20/ Chrysotile
21A-HK-190401 31902222-0051	Boiler Room Hallway - Dark Brown 12x12 w/ Black Streaks	Brown Non-Fibrous Homogeneous			98% Non-fibrous (Other)	2% Chrysotile
21B-HK-190401	Gym Hallway - Dark					Positive Stop (Not Analyzed)
31902222-0052	Brown 12x12 w/ Black Streaks					
22A-HK-190401	Boiler Room Hallway - Black Mastic	Black Non-Fibrous			100% Non-fibrous (Other)	None Detected
131902222-0053		Homogeneous				
22B-HK-190401	Gym Hallway - Black Mastic	Black Non-Fibrous			100% Non-fibrous (Other)	None Detected
131902222-0054		Homogeneous				

Initial report from: 04/05/2019 17:15:15



			Non-Asbes		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
23A-HK-190401	Room 24 - Black Sink Undercoating	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
23B-HK-190401	Room 24 - Black Sink Undercoating	Homogeneous			Positive Stop (Not Analyzed)
131902222-0056	ondercoating				
24A-HK-190401	Auditorium - Yellow Carpet Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0057		Homogeneous			
24B-HK-190401	Auditorium - Yellow Carpet Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0058		Homogeneous			
25A-HK-190401	Auditorium - White Sand Proofing Wall	Gray Fibrous	80% Min. Wool	20% Non-fibrous (Other)	None Detected
131902222-0059	Tiles	Homogeneous			
25B-HK-190401 131902222-0060	Auditorium - White Sand Proofing Wall Tiles	Gray Fibrous Homogeneous	80% Min. Wool	20% Non-fibrous (Other)	None Detected
26A-HK-190401	School Store - Brown 9x9 w/ Orange +	Brown Non-Fibrous		98% Non-fibrous (Other)	2% Chrysotile
131902222-0061	White Streaks	Homogeneous			
26B-HK-190401	School Store - Brown 9x9 w/ Orange +				Positive Stop (Not Analyzed)
131902222-0062	White Streaks				
27A-HK-190401	School Store - Black Mastic	Black Non-Fibrous		90% Non-fibrous (Other)	10% Chrysotile
131902222-0063	Oshaal Otana Dhash	Homogeneous			
27B-HK-190401 131902222-0064	School Store - Black Mastic				Positive Stop (Not Analyzed)
28A-HK-190401	Room 32 - Yellow	Yellow		100% Non-fibrous (Other)	None Detected
131902222-0065	Carpet Square Adhesive	Non-Fibrous Homogeneous			
28B-HK-190401	Room 32 - Yellow Carpet Square	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0066	Adhesive	Homogeneous			
29A-HK-190401	Room 36 - White Vinyl Baseboard	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0067		Homogeneous			
29B-HK-190401	Room 33 - White Vinyl Baseboard	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0068	Deem 20. 00000	Homogeneous			Name Distants d
30A-HK-190401 131902222-0069	Room 36 - Cream Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B-HK-190401	Room 33 - Cream	Beige		100% Non-fibrous (Other)	None Detected
131902222-0070	Mastic	Non-Fibrous Homogeneous			NONE DELECIEU
31A-HK-190401	Room 13 - Gray Vinyl	Gray		100% Non-fibrous (Other)	None Detected
31902222-0071	Baseboard	Non-Fibrous Homogeneous			
31B-HK-190401	Room 13 - Gray Vinyl Baseboard	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0072		Homogeneous			
32A-HK-190401	Room 24 - Greenish Gray Vinyl Baseboard	Green Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0073		Homogeneous			



			Non-Asbes	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
32B-HK-190401	Room 24 - Greenish Gray Vinyl Baseboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33A-HK-190401	Room 24 - Brown Mastic	Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0075		Homogeneous			
33B-HK-190401	Room 24 - Brown Mastic	Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0076		Homogeneous			
34A-HK-190401 131902222-0077	Boiler Room Hallway - Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34B-HK-190401	Gym Hallway - Black	Black		100% Non-fibrous (Other)	None Detected
131902222-0078	Vinyl Baseboard	Non-Fibrous Homogeneous		100% Non-horous (Other)	None Delected
	Boiler Room Hallway -	Yellow		100% Non-fibrous (Other)	None Detected
131902222-0079	Cream Mastic	Non-Fibrous Homogeneous			
35B-HK-190401	Gym Hallway - Cream	Yellow		100% Non-fibrous (Other)	None Detected
131902222-0080	Mastic	Non-Fibrous Homogeneous		ζ, ,	
36A-HK-190401	Room 32 - Black Vinyl Baseboard	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0081		Homogeneous			
36B-HK-190401	Room 32 - Black Vinyl Baseboard	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0082		Homogeneous			
37A-HK-190401	Room 32 - Cream Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0083		Homogeneous			
37B-HK-190401 131902222-0084	Room 32 - Cream Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Cum Hollway Dat 8	Homogeneous	40% Callulana	20% Non fibraux (Other)	Nene Detected
38A-HK-190401 131902222-0085	Gym Hallway - Dot & Fissure Ceiling Tile	Gray/White Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
38B-HK-190401	Room 24 - Dot & Fissure Ceiling Tile	Gray/White Fibrous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
131902222-0086	· · · · · · · · · · · · · · · · · · ·	Homogeneous			
39A-HK-190401	Room 34 - Dot & Fissure Ceiling Tile	Gray/White Fibrous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
131902222-0087		Homogeneous			
39B-HK-190401	Room 36 - Dot & Fissure Ceiling Tile	Gray/White Fibrous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
131902222-0088		Homogeneous			
40A-HK-190401	Kitchen (Above Suspended Ceiling) - White Mudded Bine	Gray Fibrous		40% Non-fibrous (Other)	60% Chrysotile
131902222-0089	White Mudded Pipe Insulation	Homogeneous			
40B-HK-190401	Kitchen (Above				Positive Stop (Not Analyzed)
131902222-0090	Suspended Ceiling) - White Mudded Pipe Insulation				
40C-HK-190401	Kitchen Storage - White Mudded Pipe				Positive Stop (Not Analyzed)
131902222-0091	Insulation				



			<u>N</u>	Ion-Asbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
41A-HK-190401 131902222-0092	Interior Hallway - Gray Glazing	Gray Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
41B-HK-190401	Windows - Gray Glazing	Themegoneous			Positive Stop (Not Analyzed)
131902222-0093					
42A-HK-190401	Room 26 Hallway Door Window - Black	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0094	Caulking	Homogeneous			
42B-HK-190401	Room 19 Hallway Door Window - Black	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0095	Caulking	Homogeneous			
43A-HK-190401	Room 26 Hallway Side Window - Black	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0096		Homogeneous			
43B-HK-190401 131902222-0097	Room 19 Hallway Side Window - Black Caulking	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
44A-HK-190401	Room 12 Hallway	Gray		100% Non-fibrous (Other)	None Detected
131902222-0098	Control Joint - Gray Caulking	Non-Fibrous Homogeneous			None Detected
44B-HK-190401	Cafeteria Control Joint - Gray Caulking	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0099		Homogeneous			
45A-HK-190401	Kitchen - Gray Air Cell Pipe Insulation	Gray Fibrous		30% Non-fibrous (Other)	70% Chrysotile
131902222-0100		Homogeneous			
45B-HK-190401	Kitchen - Gray Air Cell Pipe Insulation				Positive Stop (Not Analyzed)
131902222-0101					
16A-HK-190401 131902222-0102	Interior of Gym Door to the Exterior - Brown Coulking	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Brown Caulking	Homogeneous		1000/ Non Sharve (Other)	Nana Datastad
16B-HK-190401 131902222-0103	Interior of Gym Door to the Exterior - Brown Caulking	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
47A-HK-190401	Interior Door B/W Kitchen +	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0104	Maintenance - Gray Caulking	Homogeneous			
47B-HK-190401	Interior Door B/W Kitchen +	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0105	Maintenance - Gray Caulking	Homogeneous			
I8A-HK-190401	Exterior Windows - Black Caulking	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0106		Homogeneous			
8B-HK-190401	Exterior Windows - Black Caulking	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0107		Homogeneous			
49A-HK-190401	Exterior Baseboard Heat Vents - Gray	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0108	Caulking	Homogeneous			News Data day
49B-HK-190401 131902222-0109	Exterior Baseboard Heat Vents - Gray Caulking	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
131302222-0109	Caulkilly	nomoyeneous			



			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
0A-HK-190401 31902222-0110	Awning (Around Bolts) - Black Weatherproofing	Black Non-Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
50B-HK-190401 31902222-0111	Awning (Around Bolts) - Black Weatherproofing				Positive Stop (Not Analyzed)
51A-HK-190401	Exterior Window Frame - Black	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0112 51B-HK-190401	Caulking Exterior Window Frame - Black	Homogeneous Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0113	Caulking	Homogeneous			
52A-HK-190401	Exterior Wall Tiles - Cream Thin Set	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0114		Homogeneous			
52B-HK-190401	Exterior Wall Tiles - Cream Thin Set	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
53A-HK-190401	Exterior Wall Tile Grout - Gray Grout	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0116		Homogeneous			
53B-HK-190401	Exterior Wall Tile Grout - Gray Grout	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
54A-HK-190401	Exterior Caulking (Metal to Tile) - Gray	Homogeneous Gray Non-Fibrous		95% Non-fibrous (Other)	5% Chrysotile
131902222-0118	Caulking	Homogeneous			
54B-HK-190401	Exterior Caulking (Metal to Tile) - Gray				Positive Stop (Not Analyzed)
131902222-0119	Caulking				
55A-HK-190401 31902222-0120	Exterior Kitchen Vent - Gray Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
55B-HK-190401	Exterior Kitchen Vent - Gray Caulking	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0121		Homogeneous			
56A-HK-190401	Cafeteria - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
56B-HK-190401	Room 7 (Partition) - White Joint	Tan Non-Fibrous		98% Non-fibrous (Other)	2% Chrysotile
131902222-0123	Compound	Homogeneous			
57A-HK-190401	Maintenance Garage - White Gypsum	Tan/White Fibrous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
31902222-0124	Wallboard	Homogeneous	400/ 0 " '	000/ New Class (0/1 - )	New Diff is
57B-HK-190401 31902222-0125	Cafeteria - White Gypsum Wallboard	Gray/Tan Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
57C-HK-190401	Room 7 - White	Gray/Tan	15% Cellulose	85% Non-fibrous (Other)	None Detected
31902222-0126	Gypsum Wallboard	Fibrous Homogeneous			
58A-HK-190401	Auditorium Wall Tile - White Grout	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0127		Homogeneous			
58B-HK-190401	Auditorium Wall Tile - White Grout	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
131902222-0128		Homogeneous			

#### Initial report from: 04/05/2019 17:15:15



 EMSL Order:
 131902222

 Customer ID:
 ENVI54

 Customer PO:
 20181089.A10

Project ID:

#### 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	% Туре	
59A-HK-190401	Auditorium Wall Tile - Cream Adhesive	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0129		Homogeneous				
59B-HK-190401	Auditorium Wall Tile - Cream Adhesive	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0130		Homogeneous				
60A-HK-190401	Living Bathroom - Cream Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
60B-HK-190401	White Wall Tiles - Cream Adhesive	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0132		Homogeneous				
61A-HK-190401	Girl's Bathroom by Gym Gray Wall Tile - Cream Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
61B-HK-190401	Girl's Bathroom by Gym Gray Wall Tile -	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0134	Cream Adhesive	Homogeneous				
62A-HK-190401	Kitchen Light Blue Wall Tile - Cream	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0135	Adhesive	Homogeneous				
62B-HK-190401	Kitchen Light Blue Wall Tile - Cream Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
63A-HK-190401	Cafeteria Wall Tile - Cream Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
63B-HK-190401	Cafeteria Wall Tile -	Tan		100% Non-fibrous (Other)	None Detected	
131902222-0138	Cream Adhesive	Non-Fibrous Homogeneous			None Delected	
64A-HK-190401	Kitchen Wall Tile - White Grout	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0139		Homogeneous				
64B-HK-190401	Kitchen Wall Tile - White Grout	White Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0140		Homogeneous				
65A-HK-190401	Maintenance Dept. Bathroom - Cream	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131902222-0141	Adhesive	Homogeneous				
65B-HK-190401	Maintenance Dept. Bathroom - Cream Adhesive	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected	
131302222-0142	Autresive	Homogeneous				

Analyst(s)

Elizabeth Stutts (24) John McCarthy (41) Kevin Pine (60)

P.Z.

Steve Grise, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. 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 relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. 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. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

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

Initial report from: 04/05/2019 17:15:15



Attention: H Keller

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

Fuss & O'Neill EnviroScience, LLC

146 Hartford Road

Manchester, CT 06040

 EMSL Order:
 131902222

 Customer ID:
 ENVI54

 Customer PO:
 20181089.A10

 Project ID:
 Environmentation

 Phone:
 (860) 646-2469

 Fax:
 (888) 838-1160

 Received Date:
 04/03/2019 9:30 AM

 Analysis Date:
 04/10/2019

 Collected Date:
 04/01/2019

Project: Leicester Middle School / 20181089.A10 / 70 Winslow Avenue

#### Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
05A-HK-190401 131902222-0019	Room 19 Hallway - Orange 12x12 w/ White Streaks	Orange Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
06A-HK-190401 131902222-0021	Room 19 Hallway - Cream Mastic	Beige Non-Fibrous Homogeneous	99.09 Other	None	0.91% Chrysotile
42A-HK-190401 131902222-0094	Room 26 Hallway Door Window - Black Caulking	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
43A-HK-190401 131902222-0096	Room 26 Hallway Side Window - Black Caulking	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
44A-HK-190401 131902222-0098	Room 12 Hallway Control Joint - Gray Caulking	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
48A-HK-190401 131902222-0106	Exterior Windows - Black Caulking	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
51A-HK-190401 131902222-0112	Exterior Window Frame - Black Caulking	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
63A-HK-190401 131902222-0137	Cafeteria Wall Tile - Cream Adhesive	Tan Fibrous Heterogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Matthew Conley (8)

- P.A

Steve Grise, Laboratory Manager or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA

Initial report from: 04/10/2019 09:48:58

ASB\_PLMEPANOB\_0012\_0002 Printed 4/10/2019 9:49:15AM

#### OrderID: 131902222 131902222 FUSS&O'NEILL

EMSL Customer No. ENVI54

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108 Myrtle Street, Suite 502, Quincy, MA 02171

\*

	Leicester Middle School		
	er:		
Site Address:	70 Winslow Avenue	Total # of Samples:	142
Sample ID (#-Initials-Date)	Material Type (Size, Color, Description, Material)	Sample Location	Commen Quantit
01A - 14 K-190401	white thin coat	Ram 24	plaster
JIB	· · · · · /	Byn strage ram	
SIC		BBILET room	
aic		Boiler norm w/ strage	
310		Cafetena	
SIF		IT Room	
316		Auditorium	
32A	gray rugh coct	Room 24	plaster
213	0 0 0	Gym storick room	
2C		Botter north	
20		Boiler norm w/ storage	
28	•	Culetona	
02F		IT ROOM	
26		Aditaria	
33A	blue 12×12 w/ black Stred	Room 36 Hallway	
13B	1	Room 12 Hallway	
CHA	yellew mastic	Room 36 HallwEr	blue 12:
YHB .	0	Room B Hallway	
J5A	oranye BX12 W	Room 19 Hallward	
i5B	White Streaks	Room 30 Hallwall	
3GA	Cran mastic	Room 19 Hallway	orange 1
XB		Room 30 Hallway	0
O7A	blach 12x12 w/	Bym Hallway	
073 1	white Streaks	Room 19 Hallway 10 NSL FX 7952 9402 56	



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108 Myrtle Street, Suite 502, Quincy, MA 02171

08A-4K-19	0401 black mastic	Gym Hallway	blach DX12
08B ]		Roan 19 HulkSay	)
COTA	white 12x12 w	Room 360 ()	
0913	gray Streaks	Rozm 33	
IOA	black mastric	Room 36	white BXD
10B		Room 33	w/ gray Stree
INA ·	brun 9x9 w/	Auditorium Office	0 0
IB	White Speaks	Room 30	
> 12A	black mastic	Aditorium office	brun 9x9
123		Roum 3 W	w spaces.
i3A	light blue 12×12	Cifetena	,
1333	is dance blue stread	3 Cufetona Hallway	
14A	yellow mustic	Cifetena V	light blue
I4B	0	Caletona Hallway	92×13
15A	light green 12×12	Gym	
15B	W/ white Streams	Ram 25	
IGA	black Mastic	Gym.	lig green
163		Room 25	12×12
I7A	while 12x12 w/	Room 36	
173	Cram Streaks	Room 32	
18A	yellow mastre	Rorm 36	White 12×12
183		Room 30	w/ cream
19A	light brun 9x9	Room 24	
193	Wuhit Streaks	Auditarim Office	
20A	blach mastic	Room 24	It. brun
2013	)	Auditorium Office	9×9
21A	dan brun 12x12	Boiler room hallway	
213	w/ black Streaks	Cym hallway	
	blach mastic	Baller non hallway	dark brun





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108 Myrtle Street, Suite 502, Quincy, MA 02171

22B-H6-1	9040/0/ach mustic	Bym hallway	dark brugs b
23A	blach Sinh	Room 24 ()	
23B	Undercoating		
24A	yerlow carpet mastric	Auditorium	
24B	0		
25A	white Sand przeginy		
25B	White Sand przefiny wall stileoz		
2CA	brun 9×9 W ()	School Store	
26B	oringe & white Strain		
QTA	black mastic		brun 9×9
27B			wornge
28A	yellow reapet Square	Room 30	0
28B	adhesive		
29A	white ving)	Room 36	
29B	baseboard	Room 33	
30A	arcam mastic	Ram 36	white
30B		Room 33	beschael
31A	gray viny)	Room 13	
3IB	bizboard		
32A	greenish graig	Room 24	
323	Viny baseboard		
33A	brung mastic		greenish gru
33B			paseboard 4
34A	blace vings	Boiler nom hellway	
34B	baseboard	Gym Hallway U	
35A	Cream mustic	Borler nem Phillway	blach
35B		Bym Hallway	baseboord
36A	black viny)	Rom 32 U	never
363	baseboard		bldg.

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### 131902222

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Phone (617) 282-4675 Fax (617) 282-8253

EMSL-BOSTON

37A -HK-190401 Gram mastic loom 32 bluch 37B bischoon Gym 38A Rosur certine Hallwar dot z 38B Room 24 tile 39A 34 Roan new 392 bide Room 36 white mudded pipe labore HOA hitchen HOB insulation Suspended Certina HOC hitchen Storige Intener Hallway 4)A MAZINO HIP Windows Door ¥42A Roam 26 Hrillwas Intener blach Callina Winder )00 dar 423 Room 19 Halling inda System ¥H3A Rm 202 Halleri 43B Km Hillica FX 44A Centrol Caulling HA Room ani 41R Celetina Control 45A hitcher air (el) 45R pipe insulation HCA Intener of Gym door brun caulhing 46B to the extend Interior Door B/W 47A Caulhona Witchen + Mainknunce 47B #48A blach Extense Windows Front of authina 48B Schoo 49A Extence buschmarch Caullona Mi 49B heat vents Awany Carend 50A blach weatherprofino 50B Dolt 0:30 MM REC'D AF APR 0 3 2019

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# 131902222

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Phone (617) 282-4675 Fax (617) 282-8253

51A-HK-190	101 black caulting	Extence window frame	Side
518			windus
52A	Cream thin Set	Extenor wall tiles	
52B		)	
53A	gray gravt	Extence wall tik grut	
53B	0001	1 0	
5HA	gray caviling	Extence ceulling	
5HB	0010	(meta) to tile?	
55A	gray cauthing	Extence hitchen vent	
55B	0010		
56A	white joint compand	Cifetiner	
56B	01	Roem 7 (partien)	
57A	white gypsum	Maintenance Garage	
57B	00 wallboard	Cefetona	
57C		Ram 7	
58A	white great	Auditorium wall tile	
58B	10		
59A	Cream adhesive		
59B			
COA	Cream adhesive	Living Bathroom	
COB		While Wall Tiles	
GIA	Cram adhesive	GINS Bathroom by	
GIB		Gym Gray Wall File.	
GZA	Cram adhesive	Kitchen Light Blue	
a2B		Wall Tile.	
3A	Cream adhesive	Culeton Wall Tike	
63B			
COHA	white gravi	Kitchen Wall Tile	
CHB 1	0)		

Page 5 Of 10

OrderID: 131902222

FUSS&O'NEILL 131902222

EMSL Customer No. ENVI54

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108 Myrtle Street, Suite 502, Quincy, MA 02171

(5A-HK-19040	Cram adhesive	Muntenance Dept.	
65B		Bathroom	
÷			
	, ,		
Analysis Method: 🛛 PI	LM 🗆 TEM 🗆 Other	Turnaround Tir	ne: 1-Week
Please call Fuss & O'Neill	at (617) 282-4675 if analyses will not be comp	pleted for requested turnaround time listed above.	
Email Results to:	aller @fando.cor	n Do Not Mail Hard Copy Report FAX Re	sults to: 888-838-1160.
Special Instructions: Sto	p analysis on first positive sample in each hor	nogeneous set of samples unless otherwise noted. D	o not layer samples
1		negative by PLM, analyze the sample denoted with a	
<b>TEM NOB</b> on a $d - 1$	turnaround time. Analyze a MAXIM	UM of samples by TEM in noted order.	
Samples Collected by: _	1915	Date: 4.1	.19
Samples Sent by:	1912 I	Date: <u>4.2.19</u> Time:	
Shipped To: 🛛 EMSI	L Other		
Method of Shipment:	Fed Ex 🗌 Lab Drop Off	Other	9:30 km
	Page 6 Of	10 Other REC'D AF EMSL-BUSTUM	APR 0 3 2019

OrderID: 131902222

### 131902222

#### Funk, Austin

From:	Heidi Keller <hkeller@fando.com></hkeller@fando.com>
Sent:	Thursday, April 4, 2019 8:47 AM
То:	EMSL Lab - Boston
Subject:	RE: Change in TAT - Leicester Middle School
Attachments:	image003.png; image001.jpg

Please remove 03A and 09A from the TEM list.

Thanks!

Heidi Keller

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From: Funk, Austin [afunk@EMSL.com] on behalf of EMSL Lab - Boston [bostonlab@EMSL.com] Sent: Wednesday, April 3, 2019 4:58 PM To: Heidi Keller Subject: RE: Change in TAT - Leicester Middle School

Here you go, let us know which you would like taken out

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v5A\_CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP\_iQBi6Udc8Md5rzg6xm03hedI a9k0ahw674&s=D6H2cHfkhXnrAxZdVLWpDGVWIgw68EGx5T41\_6x3Sxg&e=> Austin Funk | Administrative Assistant EMSL Analytical, Inc. | 5 Constitution Way, Unit A | Woburn, MA 01801 Phone: 781-933-8411 | Fax: | Toll Free: 800-220-3675 Lab Hours: Monday - Friday 8:30AM - 6:30PM, Saturday-Sunday On-Call Some of the resources EMSL Analytical, Inc. offers to our clients: LABConnect <https://urldefense.proofpoint.com/v2/url?u=https-3A\_\_linkprotect.cudasvc.com\_url-3Fa-3Dhttps-253a-252f-252fextranet.emsl.com-252f-26c-3DE-2C1-2CyHMcnuSqRAcG3uBwiGsCU6lHjv33LglbBeJTgw23SStiVxf-5FeNqzszyhfSPU0b7NDAh4nKMgjBtLjg8Gp9AXAvccDTRcLt8-2DnhdG-2D5FN7caTnL8vNb8p5vDWOA-2C-2C-26typo-3D1&d=DwIF-g&c=euGZstcaTDIlvimEN8b7jXrwqOfv5A\_CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP\_iQBi6Udc8Md5rzg6xm03hedI a9k0ahw674&s=IQA-aTN9x4HWI2xTTtezXdVAcZHJ-bX2b3Vz8ODu9II&e=> | Order Products <https://urldefense.proofpoint.com/v2/url?u=https-3A linkprotect.cudasvc.com\_url-3Fa-3Dhttp-253a-252f-</p> 252fwww.emsl.com-252fProductCatalogHome.aspx-26c-3DE-2C1-2CD9RmYYjONdLR1wuPgZDji-2DeZuHvCKQWqB8pKtzrj7k8ybBC8GSEX7o-5FabUqDgSaM6z-5F6oBsTe2A1WH6b-2DiuwlCuVmnjZhWge7ZQ1Mrk5yA-2C-2C-26typo-3D1&d=DwIF-g&c=euGZstcaTDllvimEN8b7jXrwqOfv5A CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP iQBi6Udc8Md5rzg6xm03hedl a9k0ahw674&s=dWNueyZESFPvi7nqtzClieiv\_MiD2TGaWRm9ktyh8wE&e=> | Client Corner<https://urldefense.proofpoint.com/v2/url?u=https-3A\_linkprotect.cudasvc.com\_url-3Fa-3Dhttp-253a-252f-252femsl.com-252fPage.aspx-253fID-253d420-26c-3DE-2C1-2CiMBhfQn25qNzpc6AeZllzxweT9ixazh01clTHCUtgeqBOw41JFj-5FyG2kyum4eYviODnjqvGI68BbRbM6k922w99DY9V1bPS4ra6d5vM3drxl2w-2C-2C-26typo-3D1&d=DwIFg&c=euGZstcaTDIlvimEN8b7jXrwqOfv5A\_CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP\_iQBi6Udc8Md5rzg6xm03hedI a9k0ahw674&s=Tdw1FqP-3Fln\_VOVMM-1cYps-blBROfDnox-\_j\_lwJs&e=> | Training<https://urldefense.proofpoint.com/v2/url?u=https-3A linkprotect.cudasvc.com url-3Fa-3Dhttp-253a-252f-252femsl.com-252fTraining.aspx-26c-3DE-2C1-2Cyy-5Fxb1Bhn-2DlxF7ozdDuFleiVKGF7onwymQBGUTikQ-2Dwmf80hn12My0hoeU9h4PG4T7Ye26rrC5xyvg3gt-5FEams5b-5FnWv1GwJl6ZU6-2Dvs6VOeDazRg06CkL2lvQ-2C-2C-26typo-3D1&d=DwIF-g&c=euGZstcaTDIlvimEN8b7jXrwqOfv5A\_CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP\_iQBi6Udc8Md5rzg6xm03hedI a9k0ahw674&s=-Vs7owzpnxTGhS7oNP0valcla7ldYN5xxjuiKf68p-M&e=> | Additional Resources<https://urldefense.proofpoint.com/v2/url?u=https-3A\_linkprotect.cudasvc.com\_url-3Fa-3Dhttp-253a-252f-252femsl.com-252fLinks.aspx-26c-3DE-2C1-2C8LUyempWVdnkV2ROMVmUY3ndQ0yuG0UzR8b-2DTuE7hayAiuCd3-5FUtEoHLN3JIRBLFWkt98aErAiFCePT8GXs9Lfj01i6B5Qo9a9g3adVefU9Ed9tbDdr8-26typo-3D1&d=DwIFg&c=euGZstcaTDllvimEN8b7jXrwqOfv5A\_CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP\_iQBi6Udc8Md5rzg6xm03hedI a9k0ahw674&s=DQbWj3Foze74oDUpL9qFA818r4ECcD9vJMaCfoPwa90&e=> | Sampling Videos<https://urldefense.proofpoint.com/v2/url?u=https-3A linkprotect.cudasvc.com\_url-3Fa-3Dhttp-253a-252f-252fwww.emsl.tv-252f-26c-3DE-2C1-2CDa6i4bbS4fRyu-2D-5FUXcfK7lJ9vq6LbIRlm1Y-5F-2Dj-2D2-2DSNrc1nUW2d-5FjqJFJWyEl8CbC04wf7L6EIjtQ21o9D0tb8sNTdXs-2Du6XktDdGX5ZRpG0GA-2C-2C-26typo-3D1&d=DwIFg&c=euGZstcaTDllvimEN8b7jXrwqOfv5A CdpgnVfiiMM&r=M6BHBardEis5fzEyTTzKQQ5QBNCmHuvSI73xLyoydAo&m=sTrxiKKP iQBi6Udc8Md5rzg6xm03hedI a9k0ahw674&s=v39tMjGc7LBrtm5rQnJD1alns5dxvobhVOFppmEQxxs&e=>

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Sent: Wednesday, April 3, 2019 1:52 PM

### 131902222

To: EMSL Lab - Boston <bostonlab@EMSL.com> Subject: Change in TAT - Leicester Middle School

Good afternoon-

I collected samples at the Leicester Middle School on April 1, 2019 and they should have arrived today. Please change the turnaround time to 48-hours for both the PLM and TEM samples. I will be removing two of the TEM samples, however, I do not have a copy of the chain to review. Could you please send over a copy when it is processed?

Thanks,

[FO]

Heidi Keller

Hydrogeologist

Fuss & O'Neill, Inc. | 108 Myrtle Street, Suite 502 | Quincy, MA 02171

617.282.4675 x4709 | hkeller@fando.com<mailto:hkeller@fando.com> | cell: 419.553.7275

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