

Limited Hazardous Building Materials Inspection

May 16 & May 17, 2017
Science Area Renovation Project
Shepaug Valley School
159 South Street
Washington, Connecticut

Regional School District No. 12
Washington Depot, Connecticut

June 23, 2017



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



FUSS & O'NEILL
EnviroScience, LLC

June 23, 2017

Mr. Don O'Leary
Director of Building and Grounds
Regional School District No. 12
11A School Street
Washington Depot, CT 06794

**Re: Limited Hazardous Building Materials Inspection
Science Area Renovation Project
Regional School District No. 12 – Shepaug Valley School
159 South Street, Washington, CT
Fuss & O'Neill EnviroScience Project No. 20070660.A8E**

Dear Mr. O'Leary:

Enclosed is the report for the limited hazardous building materials inspection conducted in response to proposed renovations for the Science Area at the Shepaug Valley School located at 159 South Street in Washington, Connecticut (the "Site"). The work was conducted for Regional School District No. 12 (the "Client").

The services were performed on May 16 and May 17, 2017 by a Fuss & O'Neill EnviroScience, LLC licensed inspector and included a limited asbestos-containing material (ACM) inspection, lead-based paint (LBP) determination, visual assessment of presumed polychlorinated biphenyl (PCB)-containing window/door caulking and glazing compounds, and an inventory of PCB-containing ballasts and mercury-containing equipment. The information summarized in this report is for the above-mentioned materials only. The work was performed in accordance with our written proposal dated March 20, 2017.

If you should have any questions regarding the contents of this report, please do not hesitate to contact me at (860) 533-5143, extension 5333. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Jared D. Smith, CSP
Project Manager

JDS/kr
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1 Introduction

On May 16 and May 17, 2017, a Fuss & O'Neill EnviroScience, LLC (EnviroScience) representative Mr. James Blum performed a limited hazardous building materials inspection for proposed renovations of the Science Area at the Shepaug Valley School located at 159 South Street in Washington, Connecticut (the "Site"). The work was conducted for Regional School District No. 12 (the "Client") in accordance with our written scope of services dated March 20, 2017 and is subject to the limitations included in *Appendix A*.

The limited inspection included the following:

- Asbestos-containing material (ACM) inspection;
- Lead-based paint (LBP) determination;
- Visual assessment of presumed polychlorinated biphenyls (PCBs)- containing window/door caulking and glazing compounds; and
- PCB-containing light ballasts and mercury-containing equipment visual inventory.

This limited hazardous building materials inspection was performed in response to proposed renovation activities of the Science Area and included locations provided to EnviroScience by the Client where proposed renovations are to occur.

This inspection was limited to non-invasive and discrete sampling techniques. Specific areas that were not inspected or had limited inspection (as noted) include the following:

- Beneath, behind and under window and door frames;
- Within, under and behind mechanical equipment;
- Spaces above fixed ceilings, solid walls and between and beneath floors;
 - Limited inspections were performed within representative wall cavities to identify the potential presence of vermiculite loose fill insulation.
- Spaces behind the façade;
 - Limited inspections were performed at representative locations on the exterior of the building to identify the potential presence of asphaltic coatings/barrier systems.
- Foundation walls;
- Vapor/moisture barrier under floors or on concrete foundations;
- Behind mirrors;
- Concealed pipe chases; and
- Sub-grade utility piping or other subgrade features.

As part of the data analysis, EnviroScience reviewed the Site's existing Asbestos Management Plan (AMP) to identify previously identified ACM and non-ACM materials. Supplemental samples of previously identified materials were collected at the discretion of the Asbestos Inspector.

We have excluded collection and analysis of building materials for PCBs. Sampling for PCBs is presently not mandated by the 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 this possible contaminant prior to renovation or demolition. Materials as recommended by the Connecticut Division of Construction Services (DCS) for school projects (i.e. door and window caulking and glazing compounds) were visually identified during this limited inspection.

2 Asbestos Inspection

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

On May 16 and May 17, 2017, Mr. James Blum of EnviroScience conducted the limited inspection. Mr. James Blum is a State of Connecticut Department of Public Health (CTDPH)-licensed Asbestos Inspector. Refer to *Appendix B* for the Asbestos Inspector license and accreditation.

2.1 Methodology

The limited inspection was conducted by visually inspecting for suspect ACM and touching each of the suspect materials that may be impacted by the renovation per the Client's direction. The suspect materials were categorized into three EPA NESHAP groups: friable and non-friable Category I and Category II type ACM.

- A Friable Material is defined as material that contains greater than 1 percent ($> 1\%$) asbestos that when dry **can** be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category I Non-Friable Material 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.
- A Category II Non-Friable Material 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 (S), and Miscellaneous ACM (M). TSI includes those materials used to prevent heat loss/gain or water condensation on mechanical systems. Examples of TSI are pipe insulation, boiler insulation, duct insulation, and mudded pipe fitting insulations. Surfacing ACM includes those ACM that are applied by spray, trowel, or otherwise applied to an existing surface. Surfacing ACM is commonly used for fireproofing, decorative, and acoustical applications. Miscellaneous materials include those ACM not listed as thermal or surfacing, such as linoleum, vinyl asbestos flooring, ceiling tiles, caulking, glues, construction adhesives, etc.

The EPA recommends collecting suspect ACM samples in a manner sufficient to determine asbestos content and to segregate each suspect type of homogenous (similar in color, texture, and date of application) materials. 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 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 type of material and quantity present. This regulation includes the following protocol:

1. Surfacing Materials (S) (i.e., plasters, spray-applied fireproofings, etc.) must be collected in a randomly distributed manner representing each homogenous area based on the overall quantity represented by the sampling as follows:
 - a. Three (3) samples collected from each homogenous area that is less than or equal to 1,000 square feet.
 - b. Five (5) 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. Seven (7) samples collected from each homogenous area that is greater than 5,000 square feet.
2. Thermal System Insulation (TSI) (i.e., pipe insulations, tank insulations, etc.) must be collected in a randomly distributed manner representing each homogenous area. Three (3) samples must be collected from each material. Also, a minimum of one (1) sample of any patching materials applied to TSI presuming the patched area is less than 6 linear or square feet should be collected.
3. Miscellaneous materials (M) (i.e., floor tile, gaskets, construction mastics, etc.) should have a minimum of two (2) samples collected for each type of homogenous material. Sample collection was conducted in a manner sufficient to determine asbestos content of the homogenous material as determined by the inspector.

The inspector collected samples of those suspect ACM anticipated to be disturbed by proposed renovation activities, and prepared proper chain-of-custody forms for transmission of the samples to EMSL Analytical Inc. (EMSL) for analysis. EMSL is a Connecticut-licensed and American Industrial Hygiene Association (AIHA)-accredited asbestos laboratory. The sample locations, material type, sample identification, and asbestos content are identified by bulk sample analysis in **Table 1** attached hereto. Suspect ACM not listed in Table 1 that may be identified at a later date at the Site, should be assumed to be ACM until sample collection and analysis indicate otherwise. 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).

If samples of suspect materials could not be collected or were inaccessible but observed elsewhere, these materials were assumed to contain asbestos and the inspector approximated quantities. The exterior and roof were included in the scope of work for this inspection. Silktown Roofing Inc. assisted EnviroScience in obtaining and repairing roof sample locations. Limited intrusive or destructive investigative techniques were performed at the Site to access and observe concealed areas that may have had suspect ACMs that were hidden or obstructed from normal view. Limitations are discussed in Section 1 of this report.

2.2 Building and Mechanical System Description

The portion of the building included in this limited inspection is one story and is constructed of primarily concrete block with a brick veneer and a metal ceiling structure. Interior finishes include a mix of painted concrete block walls, gypsum wallboard walls and ceilings, acoustical ceiling tile as well as painted concrete, vinyl tile and carpeted floor surfaces.

The building was reportedly constructed in 1972 and contains approximately 174,400 square feet (SF) of total floor area. The building utilizes oil-fired hot water radiant heat and rooftop heating, ventilating and air conditioning (HVAC) units.

2.3 Results

Utilizing the EPA protocol and criteria, the following materials were determined to be **ACM**:

- Black Floor Tile Mastic;
- Cream with Brown Streaks 12" x 12" Floor Tile;
- Black Laboratory Countertops;
- Cementitious Fume Hood Paneling;
- Brown Exterior Window Caulking/Glazing Compound;
- Gray Cementitious Soffit Panel;
- Gray Cementitious Window Panel;
- Black Damp Proofing on Terracotta Block; and
- Gray Penetration Roof Flashing.

The following material was determined to contain asbestos less than one percent (<1%):

- Yellow Countertop Adhesive

Refer to **Table 1** for a complete list of ACM and non-ACM identified as part of this inspection. Refer to **Table 2** attached hereto for the ACM inventory. Refer to *Appendix C* for the asbestos laboratory reports and chain-of-custody forms, *Appendix D* for site photographs, and *Appendix E* for the Site diagram.

2.4 Discussion

The EPA, the Occupational Safety and Health Administration (OSHA), and the CTDPH define a material that contains greater than one percent (> 1%) asbestos, utilizing PLM/DS, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos.

Suspect ACM not identified during this inspection should be presumed to contain asbestos until sample collection and laboratory analysis indicate otherwise.

Additionally, the EPA has suggested that materials that are non-friable organically bound (NOB) materials (e.g., asphaltic-based materials, adhesives, etc.) are recommended for further confirmatory analysis utilizing Transmission Electron Microscopy (TEM). Seventeen of the collected samples were recommended to be analyzed by TEM. The results of TEM analysis are denoted in **Table 1**.

2.5 Conclusions and Recommendations

Based on visual observations, sample collection, and laboratory analysis, ACM and material containing asbestos (<1%) are present at the Site.

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

Due to the inability to effectively separate some types of multi-layered ACM (e.g., floor tile/mastic, gypsum board/joint compound, mastic/plywood, etc.) from non-ACM, these materials are considered asbestos-contaminated and must be managed as ACM for the purposes of removal and disposal.

EnviroScience recommends that a comprehensive scope of work and technical specification be developed as part of renovation plans for the Site. We have provided a cost to develop the specifications for inclusion in the overall renovation plans. We have also developed an opinion of cost for the complete removal of all identified asbestos under separate cover. Note the total cost is inclusive of removing all asbestos, and a more limited scope can be tailored to any specific renovation work as necessary.

Suspect materials encountered during renovation that are not identified in this report as being non-ACM should be presumed to be ACM until sample collection and laboratory analysis indicate otherwise. Prior to renovation that may disturb hidden/inaccessible areas, we recommend conducting a supplemental asbestos inspection of these areas and spaces.

Materials are present at the Site in the form of yellow countertop adhesive where the concentration of asbestos is less <1%. While the EPA and the CTDPH identify materials containing < 1% as a non-asbestos containing material, OSHA worker protection regulations apply to materials containing any amount of asbestos.

EnviroScience recommends that if any ACM and materials containing asbestos <1% are to remain in the building following renovation activities, the ACM should be managed in-place under the existing AHERA AMP for the facility.

This report is not intended to be utilized as a bidding document or as a project specification document. The report is designed to aid the Client in locating identified ACM and material containing asbestos <1%.

3 Lead-Based Paint Determination

On May 17, 2017, Mr. James Blum of EnviroScience performed a lead-based paint (LBP) determination associated with coated building components at the Site that may be disturbed during renovation activities. An X-ray fluorescence (XRF) analyzer was used to perform the LBP determination. The determination was conducted in accordance with generally-accepted industry standards for non-residential (i.e., not child-occupied) buildings.

3.1 Methodology

A Radiation Monitoring Device Model LPA-1, serial number 3241R, was utilized for the LBP determination. The instrument was checked for proper calibration prior to use as detailed by the manufacturer and the Performance Characteristic Sheet (PCS) developed for the instruments.

For the purpose of this LBP determination, representative building components were tested as part of this feasibility study. Individual repainting efforts are not discoverable in such a limited program. LBP issues involving properties that are not residential are regulated to a limited degree for worker protection relating to paint-disturbing work activities and waste disposal.

Worker protection is regulated by OSHA regulations, as well as CTDPH regulations. These regulations involve air monitoring of workers to determine exposure levels when disturbing lead-containing paint. An LBP determination cannot determine a safe level of lead, but is intended to provide guidance for implementing industry standards for lead in paint at identified locations. Contractors may then better determine exposure of workers to airborne lead by understanding the different concentrations of LBP activities that disturb paint on representative surfaces.

The EPA Resource Conservation and Recovery Act (RCRA), as well the State of Connecticut Department of Energy and Environmental Protection (CTDEEP), regulate disposal of lead-containing waste. Lead-containing materials that will be impacted during renovation or demolition activities, and result in waste for disposal must either be analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) analysis if lead is determined to be present in non-residential buildings, or be presumed as a hazardous waste. A TCLP sample is a representative sample of the intended waste stream. The results are compared to a threshold value of 5.0 milligrams per liter (mg/L); a result exceeding this value is considered hazardous lead waste. If the result is below the established level, the material is not considered hazardous and may be disposed as general construction debris.

A level of LBP exceeding 1.0 milligrams of lead per square centimeter (mg/cm²) is considered toxic or dangerous for compliance with residential standards. For purpose of this LBP determination the level of 1.0 mg/cm² has been utilized as a threshold for areas where possible worker exposures may occur.

3.2 XRF Determination Results

The LBP determination indicated consistent painting trends associated with representative building components that may be impacted by renovation work. Red metal ceiling joists were determined to contain levels of lead (greater than 1.0 mg/cm²).

Refer to *Appendix F* for the XRF lead determination field data sheet.

3.3 Discussion

OSHA published a Lead in Construction Standard (OSHA Lead Standard) Title 29 CFR, Part 1926.62 in May 1993. The OSHA Lead Standard has no set limit for the content of lead in paint below which the standards do not apply. The OSHA Lead Standards are task-based, and derived from airborne exposure and blood lead levels.

The results of this LBP determination are intended to provide guidance to contractors for occupational lead exposure controls. Building components coated with lead levels above industry standards may cause exposures to lead above OSHA standards during proposed demolition and renovation activities. The results of this determination are also intended to provide insight into waste disposal requirements, in accordance with EPA RCRA regulations. Due to the limited amount of lead-coated components identified at the facility and the fact that the identified components are metal, a TCLP sample to characterize the expected waste that may result from possible selective renovation work was not collected as part of this limited inspection.

3.4 Conclusion and Recommendations

Based on our LBP determination results, LBP is present on coated building components located on and in the building.

Contractors must be made aware that OSHA has not established a level of lead in a material below which Title 29 CFR, Part 1926.62 does not apply. Contractors shall comply with exposure assessment criteria, interim worker protection, and other requirements of the regulation as necessary to protect workers during any renovation work that will impact lead paint.

If disturbed by renovation or demolition activities, LBP-coated building components should be segregated from the general waste stream for sample collection and analysis by TCLP to determine proper off-site waste disposal. If disturbed and managed off-site, non-porous LBP-coated building materials (i.e., metals) may be segregated and recycled as scrap metal if not impacted by other hazardous materials. Metal LBP-coated building components cannot be subject to grinding, sawing, drilling, sanding, or torch cutting.

Note that future work involving surface preparation of identified painted surface(s) must be performed in accordance with OSHA worker protection requirements.

The building is considered a “child-occupied facility” (i.e. children under six years of age) and therefore, is not subject to lead safe renovation requirements.

The building is presently characterized as school property, which is not subject to the State of Connecticut residential dwelling regulations. The property may be renovated using procedures required in accordance with OSHA regulation Title 29 CFR, Part 1926.62.

4 Presumed PCBs-Containing Source Building Materials Inspection

4.1 Background

Sampling 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 amongst 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 these possible contaminants prior to renovation or demolition. Suspect PCB-containing materials as recommended by the DCS (caulking and glazing compounds) as recommended by the EPA have not been tested at this time. These materials have been presumed to be PCB-containing at regulated concentrations. We recommend testing as part of this work upon confirmation that these materials will be impacted by renovation work. This information will serve as useful due to significant impact and potential requirements for planning which may be required by the EPA if PCBs are identified at a project site.

The EPA requirements apply and require removal of PCBs once identified, regardless of project intent as an unauthorized use of PCBs. Therefore, if buildings are to remain for re-use and PCBs are identified, the EPA still requires PCB material removal once it is determined that PCBs are present. In addition to identification of source materials containing PCBs, 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. soil), must also be performed or remediated. **Due to the limited aspect of the proposed renovations, we do not recommend analysis of caulking and glazing compounds for PCBs as part of this work. Rather, we recommend assuming the caulking and glazing compounds contain PCBs at EPA regulated concentrations.**

EPA requirements apply only if PCBs are present in concentrations above a specified level. Presently, PCB-containing 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 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 Observations

On May 16 and May 17, 2017, Mr. James Blum performed a visual inspection of suspect PCB-containing building materials. The visual inspection involved identifying suspect PCB-containing materials recommended by the DCS for school projects (i.e. door and window caulking and glazing compounds) as materials which may contain PCBs. The following suspect PCB-containing compounds were observed at the Site:

- Black Interior Window Glazing Compound;
- Gray Exterior Door Caulking Compound;
- Gray Exterior Window Caulking Compound; and
- Brown Exterior Window Caulking/Glazing Compound.

Refer to **Table 3** for a summary of the above-mentioned materials.

4.3 Conclusions and Recommendations

Suspect PCB-containing caulking and glazing compounds associated with window/door systems were observed at the Site. These materials have been presumed to contain PCBs at regulated concentrations.

5 PCB-Containing Fluorescent Light Ballasts and Mercury-Containing Equipment

5.1 PCB-Containing Fluorescent Ballasts

Fluorescent light ballasts manufactured prior to 1979 may contain capacitors that contain PCBs. Light ballasts installed as late as 1985 may also 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 EPA RCRA and the Superfund law as a hazardous waste. Therefore, EPA Superfund liability exists for landfilling both PCB and DEHP-containing light ballasts. These listed materials are considered hazardous waste under EPA RCRA, and require special handling and disposal considerations.

On May 17, 2017, EnviroScience representative, Mr. James Blum performed a visual inspection of representative fluorescent light fixtures to identify possible PCB-containing light ballasts. The inspection involved visually inspecting labels on representative light ballasts to identify dates of manufacture and labels indicating "No PCBs". Ballasts manufactured after 1991 were not listed as PCB or DEHP-containing ballasts, and were not quantified for disposal.

The light ballasts without a label indicating "No PCBs" are presumed to be PCB-containing waste and must be segregated for proper removal, packaging, transport, and disposal as PCB-containing waste.

Those light ballasts labeled as “No PCBs” indicating manufacture dates prior to 1991 are presumed to contain DEHP. DEHP-containing light ballasts must be segregated for proper removal, packaging, transport, and disposal as non-PCB hazardous waste. Note that disposal requirements for DEHP-containing ballasts are slightly varied, and disposal costs are slightly less than PCB-containing light ballasts. Refer to **Table 4** for the PCB/DEHP-Containing Light Ballasts Inventory.


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 mercury associated with the control. Mercury-containing equipment is regulated for proper disposal by the EPA RCRA hazardous waste regulations. According to the EPA, mercury lamps are characterized as a Universal Waste. Therefore, fluorescent lamps must be either recycled, or disposed as hazardous waste.


On May 17, 2017, EnviroScience representative Mr. James Blum performed an inventory of mercury lamps, thermostats, and mercury switches. These fixtures were inventoried in-place. Refer to **Table 5** for the Mercury-Containing Equipment Inventory.

Report prepared by Environmental Technician II, James Blum.

Reviewed by:



Jared D. Smith, CSP
Project Manager



Kathleen C. Pane
Senior Project Manager

Tables

Table 1
Summary of Suspect Asbestos-Containing Materials

Sample No.	Material Type	NESHAP Category	Sample Location	Asbestos Content	PLM/TEM
EnviroScience August 2005 Sampling					
0819JH-12	Green Carpet Glue		Hallways	ND	PLM
0819JH-13	Yellow Carpet Glue		Hallways	ND	PLM
0819JH-27	Black 4" Cove Base		Throughout	ND	PLM
0819JH-28	Brown Cove Base Glue		Throughout	ND	PLM
0819JH-33	Interior Window Sills		Throughout	ND	PLM
0819JH-34	Interior Window Sills Grout		Throughout	ND	PLM
EnviroScience November 2005 Sampling					
1109PS-01	12" x 12" Yellow Floor Tile (now referred to as Cream)	Cat 2 NF	H.S Corridor by Café	10% Chrysotile	PLM
1109PS-02	Associated Black Mastic	Cat 2 NF	H.S Corridor by Café	2% Chrysotile	PLM
1109PS-03	12" x 12" Yellow Floor Tile (now referred to as Cream)	Cat 2 NF	Middle School Corridor	10% Chrysotile	PLM
1109PS-04	Associated Black Mastic	Cat 2 NF	Middle School Corridor	5% Chrysotile	PLM
EnviroScience May 2017 Inspection - 20070660.A7E					
0516JB-10A	Gray Gypsum Board		E9 – Auto Shop	ND	PLM
0516JB-10B	Gray Gypsum Board		E7/E8 Office	ND	PLM
0516JB-11A	White Joint Compound		E9 – Auto Shop	ND	PLM
0516JB-11B	White Joint Compound		E7/E8 Office	ND	PLM
0516JB-12	Gypsum Board & Joint Compound Composite		E9 – Auto Shop	ND	PLM
0516JB-14A	Black Floor Tile Mastic	Cat 2 NF	E7/E8 Office	6% Chrysotile	PLM
0516JB-14B	Black Floor Tile Mastic		A64 – Lab C	Pos Stop	PLM
0516JB-15A	Cream with Brown Streaks 12"x12" Floor Tile		E7/E8 Office	Not Analyzed	PLM
0516JB-15B	Cream with Brown Streaks 12"x12" Floor Tile		A58 – Lab D	Not Analyzed	PLM
0516JB-18A	Black Laboratory Countertop	Cat 2 NF	A64 – Lab C	18% Chrysotile	PLM
0516JB-18B	Black Laboratory Countertop		A58 – Lab D	Pos Stop	PLM
0516JB-28A	Black Damp Proofing on Terracotta Block	Cat 2 NF	Exterior – outside E9	5% Chrysotile	PLM
0516JB-28B	Black Damp Proofing on Terracotta Block		Exterior – outside E9	Pos Stop	PLM
0516JB-29A	Tan Terracotta Block		Exterior – outside E9	Not Analyzed	PLM
0516JB-29B	Tan Terracotta Block		Exterior – outside E9	Not Analyzed	PLM
0516JB-34A	Gray Cementitious Soffit Panel	Cat 2 NF	Exterior - E7	18% Chrysotile	PLM
0516JB-34B	Gray Cementitious Soffit Panel		Exterior - E9	Pos Stop	PLM
0516JB-35A	Gray Cementitious Window Panel	Cat 2 NF	Exterior - E7	15% Chrysotile	PLM
0516JB-35B	Gray Cementitious Window Panel		Exterior - E9	Pos Stop	PLM

Sample No.	Material Type	NESHAP Category	Sample Location	Asbestos Content	PLM/TEM
EnviroScience May 2017 Inspection - 20070660.A8E					
0516JB-44A	Gray Pipe Fitting Insulation		A60 – Science Room	ND	PLM
0516JB-44B	Gray Pipe Fitting Insulation		A60 – Science Room	ND	PLM
0516JB-44C	Gray Pipe Fitting Insulation		A57 – Lab E	ND	PLM
0516JB-45A	Tan/Silver Paper Wrap on Fiberglass Pipe Insulation		A60 – Science Room	ND	PLM
0516JB-45B	Tan/Silver Paper Wrap on Fiberglass Pipe Insulation		A60 – Science Room	ND	PLM
0516JB-46A	Silver/Tan Paper Backing on Fiberglass Duct Insulation		A60 – Science Room	ND	PLM
0516JB-46B	Silver/Tan Paper Backing on Fiberglass Duct Insulation		A60 – Science Room	ND	PLM
0516JB-47A	White/Gray 2' x 2' Drop Ceiling Tile – Type 1		A60 – Science Room	ND	PLM
0516JB-47B	White/Gray 2' x 2' Drop Ceiling Tile – Type 1		A52 – Lab A	ND	PLM
0516JB-48A	White with Silver Backing 2' x 2' Drop Ceiling Tile – Type 2		A52 – Lab A	ND	PLM
0516JB-48B	White with Silver Backing 2' x 2' Drop Ceiling Tile – Type 2		A52 – Lab A	ND	PLM
0516JB-49A	Red Concrete Floor Leveler		A57 – Lab E	ND	PLM
0516JB-49B	Red Concrete Floor Leveler		A57 – Lab E	ND	PLM
0516JB-50A	Yellow Floor Tile Adhesive		Hall by A56 & A51	ND/ND	PLM/TEM
0516JB-50B	Yellow Floor Tile Adhesive		Hall by A56 & A51	ND	PLM
0516JB-51A	Gray with Brown Streaks 12" x 12" Floor Tile		Hall by A56 & A51	ND/ND	PLM/TEM
0516JB-51B	Gray with Brown Streaks 12" x 12" Floor Tile		Hall by A56 & A51	ND	PLM
0516JB-52A	Yellow Countertop Adhesive		A52 – Lab A	ND/0.47% Chrysotile	PLM/TEM
0516JB-52B	Yellow Countertop Adhesive		A52 – Lab A	ND	PLM
0516JB-53A	Black Interior Window Glazing Compound		A52 – Lab A	ND/ND	PLM/TEM
0516JB-53B	Black Interior Window Glazing Compound		A52 – Lab A	ND	PLM
0516JB-54A	Gray Exterior Door Caulking Compound		Exterior – outside A57	ND/ND	PLM/TEM
0516JB-54B	Gray Exterior Door Caulking Compound		Exterior – outside A63	ND	PLM
0516JB-55A	Gray Exterior Window Caulking Compound		Exterior – outside A57	ND/ND	PLM/TEM
0516JB-55B	Gray Exterior Window Caulking Compound		Exterior – outside A63	ND	PLM

Sample No.	Material Type	NESHAP Category	Sample Location	Asbestos Content	PLM/TEM
0516JB-56A	Brown Exterior Window Caulking/Glazing Compound	Cat 2 NF	Exterior – outside A63	8% Chrysotile	PLM
0516JB-56B	Brown Exterior Window Caulking/Glazing Compound		Exterior – outside A57	NA/Pos Stop	PLM
0516JB-57A	Tan Masonry Block		Exterior – outside A57	ND	PLM
0516JB-57B	Tan Masonry Block		Exterior – outside A57	ND	PLM
0516JB-58A	Tan Masonry Block Mortar		Exterior – outside A57	ND	PLM
0516JB-58B	Tan Masonry Block Mortar		Exterior – outside A57	ND	PLM
0516JB-59A	Black Base Sheet		South Roof – Sloped Roof	ND/ND	PLM/TEM
0516JB-59B	Black Base Sheet		South Roof – Sloped Roof	ND	PLM
0516JB-60A	Black Bottom Layer Asphalt Shingle		South Roof – Sloped Roof	ND/ND	PLM/TEM
0516JB-60B	Black Bottom Layer Asphalt Shingle		South Roof – Sloped Roof	ND	PLM
0516JB-61A	Black Top Layer Asphalt Shingle		South Roof – Sloped Roof	ND/<0.45% Chrysotile	PLM/TEM
0516JB-61B	Black Top Layer Asphalt Shingle		South Roof – Sloped Roof	ND	PLM
0516JB-62A	Black Base Tar/Paper		South Roof	ND/<0.14% Chrysotile	PLM/TEM
0516JB-62B	Black Base Tar/Paper		South Roof	ND	PLM
0516JB-63A	Black Paper Backing on Foam Insulation Block		South Roof	ND/ND	PLM/TEM
0516JB-63B	Black Paper Backing on Foam Insulation Block		South Roof	ND	PLM
0516JB-64A	Brown Cellulose Layer		South Roof	ND	PLM
0516JB-64B	Brown Cellulose Layer		South Roof	ND	PLM
0516JB-65A	Black/Brown Granulated Cap Layer		South Roof	ND/ND	PLM/TEM
0516JB-65B	Black/Brown Granulated Cap Layer		South Roof	ND	PLM
0516JB-66A	Brown Perlite Mineral Wool		South Roof – HVAC	ND	PLM
0516JB-66B	Brown Perlite Mineral Wool		South Roof - HVAC	ND	PLM
0516JB-67A	Gray Penetration Flashing	Cat 1 NF	South Roof	ND/4.3% Chrysotile	PLM/TEM
0516JB-67B	Gray Penetration Flashing		South Roof	ND	PLM
0516JB-68A	Gray Seam Caulking Compound		South Roof – Metal Perimeter Cap	ND/ND	PLM/TEM
0516JB-68B	Gray Seam Caulking Compound		South Roof – Metal Perimeter Cap	ND	PLM
Confirmatory TEM NOB Sampling					
0607JB-01	Brown Cove Base Adhesive		Room A52 - Lab A	ND	TEM
0607JB-02	Black 4" Cove Base		Room A52 - Lab A	ND	TEM

Sample No.	Material Type	NESHAP Category	Sample Location	Asbestos Content	PLM/TEM
0607JB-03	Yellow Carpet Adhesive		Room D28	ND	TEM

Cat 1 NF=Category I Non-Friable Material

Cat 2 NF=Category II Non-Friable Material

NA/Pos Stop=Not Analyzed/Positive Stop

ND=None Detected

Table 2
Summary of Asbestos-Containing Materials Inventory

Material Type	Location	Asbestos Content	Estimated Total Quantity	Comments
Brown Exterior Window Caulking/Glazing Compound	Exterior	8% Chrysotile	130 LF	
Black Floor Tile Mastic	Vivarium, Labs A, B, and E, Science Room (A60)	2% - 10% Chrysotile	5,800 SF	Material sampled August 2005, November 2005, and May 2017; Associated materials (Floor Tiles, Glues, etc.) to be removed as contaminated by ACM
Black Laboratory Countertops and Associated Yellow Counter Adhesive	Vivarium, Labs A, B, and E, Science Room (A60)	Countertops - 18% - 20% Chrysotile; Adhesive - 0.47% Chrysotile	1,500 SF	Material sampled August 2005 & May 2017 AGSTEM Inspection
Cementitious Fume Hood Paneling	Vivarium, Lab A	40% Chrysotile	60 SF	Material sampled August 2005 Inspection
Gray Cementitious Soffit Panel	Exterior	18% Chrysotile	650 SF	Material sampled 2017 AGSTEM Inspection
Gray Cementitious Window Panel	Exterior	15% Chrysotile	80 SF	Material sampled 2017 AGSTEM Inspection
Black Damp Proofing on Terracotta Block	Exterior - Behind Masonry Block	5% Chrysotile	500 SF	Associated materials (Terracotta Block, Masonry Block, etc.) to be removed as contaminated by ACM
Laboratory Test Tube Racks	Laboratory A, B, E, and vivarium	Assumed	4 EA	
Gray Penetration Flashing	South Roof	4.3% Chrysotile	30 SF	

LF = Linear Feet

SF = Square Feet

EA = Each

Table 3
Summary of Presumed PCB-Containing Building Materials

Material Location	Material Color & Type	Estimated Total Quantity	Substrate
Science Area	Black Interior Window Glazing Compound	30 LF	Metal/Glass
Exterior -Throughout	Gray Exterior Door Caulking Compound	40 LF	Metal/Masonry Block
	Gray Exterior Window Caulking Compound	60 LF	Metal/Masonry Block
	Brown Exterior Window Caulking/Glazing Compound	120 LF	Metal/Glass

Table 4
PCB/DEHP-Containing Light Ballasts Inventory

Type	Estimated Quantity
DEHP	150

Table 5
Mercury-Containing Equipment Inventory

Type	Estimated Quantity
4' Light Tube	300

Appendix A

Limitations

APPENDIX A

Science Area Renovation Project Shepaug Valley School - 159 South Street Washington, Connecticut

1. This limited inspection report for the Science Area Renovation Project at Shepaug Valley High School located at 159 South Street, Washington, CT (the "Site") has been prepared for the exclusive use of the Regional School District No. 12 (the "Client") and is subject to, and is issued in connection with the terms and conditions of the original Agreement 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 EnviroScience, LLC (EnviroScience) 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 limited inspection are approximate.
2. EnviroScience 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.
3. EnviroScience has obtained and relied upon laboratory analytical results in conducting the limited inspection. This information was used to form conclusions regarding the types and quantities of asbestos that must be managed prior to renovation activities that may disturb these materials at the Site. EnviroScience has not performed an independent review of the reliability of this laboratory data.
4. Unless otherwise noted, only suspect hazardous materials associated within or located on the building (aboveground) were included in this limited inspection. Suspect hazardous materials may exist below the ground surface and other areas of the building that were not included in the scope of work of this limited inspection. EnviroScience cannot guarantee all asbestos or suspect hazardous materials were identified within the areas included in the scope of work. With the exception of limited investigations as noted in this report, only visible and accessible areas were included in the scope of work for this limited inspection.
5. The findings, observations and conclusions presented in this report are limited by the scope of services outlined in our original Agreement (March 20, 2017), which reflects schedule and budgetary constraints imposed by Client. Furthermore, the assessment has been conducted in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made.
6. The conclusions presented in this report are based solely upon information gathered by EnviroScience to date. Should further environmental or other relevant information be discovered at a later date, the Client should immediately bring the information to the EnviroScience's attention. Based upon an evaluation and assessment of relevant information, EnviroScience may modify the letter report and its conclusions.

Appendix B

EnviroScience Inspector Licenses and Accreditations

1000459 01 A1 0.396 **AUTO T1 0 1564 06040-599246 -C01-P00461-1



JAMES B BLUM
FUSS & O'NEILL ENVIROSCIENCE LLC
146 HARTFORD RD
MANCHESTER CT 06040-5992

Dear JAMES B BLUM,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

RAUL PINO, MD, MPH, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

EMPLOYER'S COPY		
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH		
NAME JAMES B BLUM		
VALIDATION NO. 03-549011	CERTIFICATE NO. 000841	CURRENT THROUGH 11/30/17
PROFESSION ASBESTOS CONSULTANT-INSPECTOR		
 SIGNATURE	 COMMISSIONER	

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH	
PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT	
THE INDIVIDUAL NAMED BELOW IS CERTIFIED BY THIS DEPARTMENT AS A ASBESTOS CONSULTANT-INSPECTOR	
JAMES B BLUM	CERTIFICATE NO. 000841
	CURRENT THROUGH 11/30/17
	VALIDATION NO. 03-549011
 SIGNATURE	 COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD		
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH		
NAME JAMES B BLUM		
VALIDATION NO. 03-549011	CERTIFICATE NO. 000841	CURRENT THROUGH 11/30/17
PROFESSION ASBESTOS CONSULTANT-INSPECTOR		
 SIGNATURE	 COMMISSIONER	

Certificate of Training

This program was presented at
Fuss & O'Neill Enviro Science in.
Manchester, CT with the prior
approval of the CTDPH.

Awarded to

JAMES BLUM

For successful completion of a 4 Hour, 1/2 Day

**Asbestos Building Inspector
Annual Refresher Training**

August 30, 2016

This training was approved and given in accordance with the

Regulations for Connecticut State Agencies

RCSA 20 - 440 - 1-9 and RCSA 20 - 441 and meets the
requirements of the EPA Revised MAP under TSCA Title II of 4/4/94.

Presented by

Mystic Air Quality Consultants, Inc.

1204 North Road, Groton, CT 06340 (800) 247-7746

Certificate Number: ABIRF25267

Exam Grade: 100

Expiration Date: 08/30/2017

Exam Date: 08/30/2016

Christopher J. Eident

Christopher J. Eident, CIH, CSP, RS

Richard Haffey

George Williamson, Training Director

Richard Haffey, Training Director

1000460 01 AT 0.396 **AUTO T1 0 1564 06040-599246 -C01 P00462 I



JAMES B BLUM
FUSS & O'NEILL ENVIROSCIENCE LLC
146 HARTFORD RD
MANCHESTER CT 06040-5992



Dear JAMES B BLUM,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplcdph@ct.gov
www.ct.gov/dph/license

Sincerely,

RAUL PINO, MD, MPH, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

EMPLOYER'S COPY		
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH		
NAME JAMES B BLUM		
VALIDATION NO. 03-549012	CERTIFICATE NO. 002256	CURRENT THROUGH 11/30/17
PROFESSION LEAD INSPECTOR RISK ASSESSOR		
 SIGNATURE	 COMMISSIONER	

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
LEAD INSPECTOR RISK ASSESSOR

JAMES B BLUM

CERTIFICATE NO.
002256

CURRENT THROUGH
11/30/17

VALIDATION NO.
03-549012

SIGNATURE
COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD		
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH		
NAME JAMES B BLUM		
VALIDATION NO. 03-549012	CERTIFICATE NO. 002256	CURRENT THROUGH 11/30/17
PROFESSION LEAD INSPECTOR RISK ASSESSOR		
 SIGNATURE	 COMMISSIONER	

CERT#: L-600-877

**CHEMSCOPE TRAINING DIVISION
LEAD INSPECTOR/RISK ASSESSOR REFRESHER
8 HOUR TRAINING CERTIFICATE**

James Blum

146 Hartford Road, Manchester CT

Has attended an 8 hour course on the subject discipline on
2/8/2017 & 2/13/2017 and has passed a written examination.

The above individual has successfully completed the above training course approved in accordance with the Department of Public Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes.

Course topics include all required topics of State of Connecticut DPH and EPA.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (U.S.C. 1001 and 15 U.S.C. 2615), I certify that this training complies with all applicable requirements of Title IV of TSCA, 40 CFR part 745 and any other applicable Federal, State or local requirements.

**Examination Score: 96%
Exam Date: 2/13/2017
Expiration Date: 2/13/2018**


Ronald D. Arena
Training Manager

Chem Scope, Inc.
15 Moulthrop Street
North Haven CT 06473
Phone: 203.865.5605
www.chem-scope.com

Appendix C

Asbestos Laboratory Reports and Chain-of-Custody Forms



FUSS & O'NEILL
EnviroScience, LLC

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54
www.fando.com

146 Hartford Road, Manchester, CT 06040

Phone (860) 646-2469

621700757

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

Project Name: RSD 12 – SVS AGSTEM Renovation Project No. 20070660.A7E Date: May 18, 2017

Site Address: 159 South Street, Washington CT Location: Shepaug Valley School Project Manager: Jared Smith

Sample ID	Sample Location	Type of Material
0516JB-01A	E7 – Wood Shop	Gray Pipe Fitting Insulation
0516JB-01B	E7 – Wood Shop	Gray Pipe Fitting Insulation
0516JB-01C	Custodial Closet by E6	Gray Pipe Fitting Insulation
0516JB-02A	E7 – Wood Shop	Tan Cloth Wrap on Fiberglass Pipe Insulation
0516JB-02B	E7 – Wood Shop	Tan Cloth Wrap on Fiberglass Pipe Insulation
0516JB-03A	E8B – Principal Technology	White/Silver Paper Wrap on Fiberglass Pipe Insulation
0516JB-03B	E7 – Wood Shop	White/Silver Paper Wrap on Fiberglass Pipe Insulation
0516JB-04A	E9 – Auto Shop	Tan/Silver Paper Wrap on Fiberglass Pipe Insulation
0516JB-04B	E9 – Auto Shop	Tan/Silver Paper Wrap on Fiberglass Pipe Insulation
0516JB-05A	E8A – Principal Technology – Large Air Handler	Black Mineral Wool Lining
0516JB-05B	E8A – Principal Technology – Large Air Handler	Black Mineral Wool Lining
0516JB-06A	E8A – Principal Technology	White/Gray 2'x4' Drop Ceiling Tile
0516JB-06B	E8A – Principal Technology	White/Gray 2'x4' Drop Ceiling Tile
0516JB-07A	E7/E8 Office	White/Gray 2'x2' Drop Ceiling Tile – Type 1
0516JB-07B	E7/E8 Office	White/Gray 2'x2' Drop Ceiling Tile – Type 1
0516JB-08A	A59 – Storage Room	White w/ Silver Backing 2'x2' Drop Ceiling Tile – Type 2
0516JB-08B	A59 – Storage Room	White w/ Silver Backing 2'x2' Drop Ceiling Tile – Type 2
0516JB-09A	A64 – Lab C	White/Gray 2'x2' Drop Ceiling Tile – Type 3
0516JB-09B	A59 – Storage Room	White/Gray 2'x2' Drop Ceiling Tile – Type 3
0516JB-10A	E9 – Auto Shop	Gray Gypsum Board
0516JB-10B	E7/E8 Office	Gray Gypsum Board
0516JB-11A	E9 – Auto Shop	White Joint Compound
0516JB-11B	E7/E8 Office	White Joint Compound
0516JB-12	E9 – Auto Shop	Gypsum Board & Joint Compound Composite
<i>If Sample Set 0516JB-13A/B are Positive, Do Not Analyze Sample Sets 14 A /B thru 17 A/B</i>		
0516JB-13A	A58 – Lab D	Red Concrete Floor Leveler



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EnviroScience, LLC

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54
www.fando.com

146 Hartford Road, Manchester, CT 06040

Phone (860) 646-2469

621700757

Sample ID	Sample Location	Type of Material
0516JB-13B	A64 – Lab C	Red Concrete Floor Leveler
<i>If Sample Set 0516JB-14A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Sets 15 A /B thru 17 A/B</i>		
0516JB-14A	E7/E8 Office	Black Floor Tile Mastic
0516JB-14B	A64 – Lab C	Black Floor Tile Mastic
0516JB-15A	E7/E8 Office	Cream w/ Brown Streaks 12"x12" Floor Tile
0516JB-15B	A58 – Lab D	Cream w/ Brown Streaks 12"x12" Floor Tile
0516JB-16A	Hall o/s E7 – Underneath Self –Stick Carpeting	Gray w/ Gray Streaks 12"x12" Floor Tile
0516JB-16B	Hall o/s E9 – Underneath Self –Stick Carpeting	Gray w/ Gray Streaks 12"x12" Floor Tile
0516JB-17A	A64 – Lab C	Pink w/White Streaks 12"x12" Floor Tile
0516JB-17B	A64 – Lab C	Pink w/White Streaks 12"x12" Floor Tile
0516JB-18A	A64 – Lab C	Black Laboratory Countertop
0516JB-18B	A58 – Lab D	Black Laboratory Countertop
0516JB-19A	Boys' Bathroom by E6	Gray/White Concrete Ceiling
0516JB-19B	Girls' Bathroom by E6	Gray/White Concrete Ceiling
0516JB-20A	E9 – Auto Shop	Gray CMU Block
0516JB-20B	E8B – Principal Technology	Gray CMU Block
0516JB-21A	E9 – Auto Shop	Gray CMU Mortar
0516JB-21B	E8B – Principal Technology	Gray CMU Mortar
0516JB-22A	A58 – Lab D	Black Interior Window Glazing Compound
0516JB-22B	A64 – Lab C	Black Interior Window Glazing Compound
0516JB-23A	Custodial Closet by E6	Gray Ceramic Tile Thin-set
0516JB-23B	Custodial Closet by E6	Gray Ceramic Tile Thin-set
0516JB-24A	Custodial Closet by E6	Gray Ceramic Tile Grout
0516JB-24B	Boys' Bathroom by E6	Gray Ceramic Tile Grout
0516JB-25A	Custodial Closet by E6	Blue Ceramic Tile
0516JB-25B	Boys' Bathroom by E6	Blue Ceramic Tile
0516JB-26A	Exterior – o/s E9	Tan Masonry Block
0516JB-26B	Vestibule by E9 & Pool	Tan Masonry Block
0516JB-27A	Exterior – o/s E9	Tan Masonry Block Mortar
0516JB-27B	Vestibule by E9 & Pool	Tan Masonry Block Mortar



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EnviroScience, LLC

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54
www.fando.com

146 Hartford Road, Manchester, CT 06040

Phone (860) 646-2469

Sample ID	Sample Location	Type of Material
<i>If Sample Set 0516JB-28 A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Set 29 A & B</i>		
0516JB-28A	Exterior – o/s E9	Black Damp Proofing on Terracotta Block
0516JB-28B	Exterior – o/s E9	Black Damp Proofing on Terracotta Block
0516JB-29A	Exterior – o/s E9	Tan Terracotta Block
0516JB-29B	Exterior – o/s E9	Tan Terracotta Block
0516JB-30A	Exterior - Vestibule by E9 & Pool	Gray Exterior Door Caulking Compound
0516JB-30B	Exterior - E7	Gray Exterior Door Caulking Compound
0516JB-31A	Exterior - Vestibule by E9 & Pool	Brown Exterior Door Caulking Compound
0516JB-31B	Exterior - Vestibule by E9 & Pool	Brown Exterior Door Caulking Compound
0516JB-32A	Exterior - E7	Gray Exterior Window Caulking Compound
0516JB-32B	Exterior – E8B	Gray Exterior Window Caulking Compound
0516JB-33A	Exterior - E7	Brown Exterior Window Caulking/Glazing Compound
0516JB-33B	Exterior – E8B	Brown Exterior Window Caulking/Glazing Compound
0516JB-34A	Exterior - E7	Gray Cementitious Soffit Panel
0516JB-34B	Exterior - E9	Gray Cementitious Soffit Panel
0516JB-35A	Exterior - E7	Gray Cementitious Window Panel
0516JB-35B	Exterior - E9	Gray Cementitious Window Panel
<i>If Sample Set 0516JB-36A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Sets 37 A /B thru 38 A/B</i>		
0516JB-36A	North Roof – Sloped Roof	Black Base Sheet
0516JB-36B	North Roof – Sloped Roof	Black Base Sheet
0516JB-37A	North Roof – Sloped Roof	Black Bottom Layer Asphalt Shingle
0516JB-37B	North Roof – Sloped Roof	Black Bottom Layer Asphalt Shingle
0516JB-38A	North Roof – Sloped Roof	Black Top Layer Asphalt Shingle
0516JB-38B	North Roof – Sloped Roof	Black Top Layer Asphalt Shingle
<i>If Sample Set 0516JB-39A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Sets 40 A /B thru 42 A/B</i>		
0516JB-39A	North Roof	Black Base Tar/Paper
0516JB-39B	North Roof	Black Base Tar/Paper
0516JB-40A	North Roof	Black Paper Backing on Foam Insulation Block
0516JB-40B	North Roof	Black Paper Backing on Foam Insulation Block
0516JB-41A	North Roof	Brown Cellulose Layer

621700757

**FUSS & O'NEILL**
EnviroScience, LLCFuss & O'Neill EnviroScience EMSL Customer No. ENVI54
www.fando.com

146 Hartford Road, Manchester, CT 06040

Phone (860) 646-2469

Sample ID	Sample Location	Type of Material
0516JB-41B	North Roof	Brown Cellulose Layer
0516JB-42A	North Roof	Black/Brown Granulated Cap Layer
0516JB-42B	North Roof	Black/Brown Granulated Cap Layer
0516JB-43A	North Roof – Intake/Exhaust Fans	Black Tar on Base
0516JB-43B	North Roof – Intake/Exhaust Fans	Black Tar on Base

Analysis Method: ☒ PLM ☒ TEM ☐ Other _____ Turnaround Time: 1 Week

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call EnviroScience if analyses will not be completed for requested t/a/t at (860) 646-2469.

FAX Results to: 888-838-1160

Email Results to: JSmith@fando.com**Do Not Mail Hard Copy Report**Total # of Samples: 86

Special Instructions: Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. Do Not Point Count. If NOB group sample results are 0% - < 1% by PLM, analyze only "A" group sample above by TEM NOB, per group, unless you are told otherwise.

Samples collected by: James Blum SBM Date: May 16, 2017 & May 17, 2017 Time: AfternoonSamples Sent by: James Blum SBM Date: May 18, 2017 Time: _____Samples Received by: [Signature] Date: 5.19.2017 Time: 10:00Shipped To: ☒ EMSL State: ME ☐ Other _____Method of Shipment: ☒ FedEx ☐ Lab Drop Off ☐ Other _____



EMSL Analytical, Inc.

161 John Roberts Road South Portland, ME 04106
Phone/Fax: (207) 517-6921 / (207) 517-6922
<http://www.EMSL.com> / portlandlab@emsl.com

EMSL Order ID: 621700757
Customer ID: ENVI54
Customer PO: 20070660.A7E
Project ID:

Attn: Jared Smith
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
Fax: (888) 838-1160
Collected: 5/18/2017
Received: 5/19/2017
Analyzed: 6/02/2017

Proj: 20070660.A7E / RSD 12 - SVS AGSTEM RENOVATION / 159 SOUTH STREET, WASHINGTON, CT / SHEPAUG VALLEY SCHOOL

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-01A **Lab Sample ID:** 621700757-0001

Sample Description: E7 - WOOD SHOP/GRAY PIPE FITTING INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	50%	50%	None Detected	

Client Sample ID: 0516JB-01B **Lab Sample ID:** 621700757-0002

Sample Description: E7 - WOOD SHOP/GRAY PIPE FITTING INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	50%	50%	None Detected	

Client Sample ID: 0516JB-01C **Lab Sample ID:** 621700757-0003

Sample Description: CUSTODIAL CLOSET BY E6/GRAY PIPE FITTING INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	50%	50%	None Detected	

Client Sample ID: 0516JB-02A **Lab Sample ID:** 621700757-0004

Sample Description: E7 - WOOD SHOP/TAN CLOTH ON FIBERGLASS INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Tan	95%	5%	None Detected	

Client Sample ID: 0516JB-02B **Lab Sample ID:** 621700757-0005

Sample Description: E7 - WOOD SHOP/TAN CLOTH ON FIBERGLASS INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan	90%	10%	None Detected	

Client Sample ID: 0516JB-03A **Lab Sample ID:** 621700757-0006

Sample Description: E8B - PRINCIPAL TECHNOLOGY/WHITE / SILVER PAPER WRAP ON FIBERGLASS PIPE INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	White/Silver	85%	15%	None Detected	

Client Sample ID: 0516JB-03B **Lab Sample ID:** 621700757-0007

Sample Description: E7 - WOOD SHOP/WHITE / SILVER PAPER WRAP ON FIBERGLASS PIPE INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	White	90%	10%	None Detected	



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Client Sample ID: 0516JB-04A **Lab Sample ID:** 621700757-0008
Sample Description: E9 AUTO SHOP/TAN / SILVER PAPER WRAP IN FIBERGLASS PIPE INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Tan/Silver	95%	5%	None Detected	

Client Sample ID: 0516JB-04B **Lab Sample ID:** 621700757-0009
Sample Description: E9 AUTO SHOP/TAN / SILVER PAPER WRAP IN FIBERGLASS PIPE INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan/Silver	100%	0%	None Detected	

Client Sample ID: 0516JB-05A **Lab Sample ID:** 621700757-0010
Sample Description: E8A - PRINCIPAL TECHNOLOGY - LARGE AIR HANDLER/BLACK MINERAL WOOL LINING

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	90%	10%	None Detected	

Client Sample ID: 0516JB-05B **Lab Sample ID:** 621700757-0011
Sample Description: E8A - PRINCIPAL TECHNOLOGY - LARGE AIR HANDLER/BLACK MINERAL WOOL LINING

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	90%	10%	None Detected	

Client Sample ID: 0516JB-06A **Lab Sample ID:** 621700757-0012
Sample Description: E8A - PRINCIPAL TECHNOLOGY/WHITE / GRAY 2'X4' DROP CEILING TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray/White	95%	5%	None Detected	

Client Sample ID: 0516JB-06B **Lab Sample ID:** 621700757-0013
Sample Description: E8A - PRINCIPAL TECHNOLOGY/WHITE / GRAY 2'X4' DROP CEILING TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	95%	5%	None Detected	

Client Sample ID: 0516JB-07A **Lab Sample ID:** 621700757-0014
Sample Description: E7 / E8 OFFICE/WHITE / GRAY 2'X2' DROP CEILING TILE - TYPE 1

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray/White	85%	15%	None Detected	

Client Sample ID: 0516JB-07B **Lab Sample ID:** 621700757-0015
Sample Description: E7 / E8 OFFICE/WHITE / GRAY 2'X2' DROP CEILING TILE - TYPE 1

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	90%	10%	None Detected	



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Client Sample ID: 0516JB-08A **Lab Sample ID:** 621700757-0016

Sample Description: A59 - STORAGE ROOM/WHITE W/ SILVER BACKING 2'X2' DROP CEILING TILE - TYPE 2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	White/Silver	85%	15%	None Detected	

Client Sample ID: 0516JB-08B **Lab Sample ID:** 621700757-0017

Sample Description: A59 - STORAGE ROOM/WHITE W/ SILVER BACKING 2'X2' DROP CEILING TILE - TYPE 2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	White	90%	10%	None Detected	

Client Sample ID: 0516JB-09A **Lab Sample ID:** 621700757-0018

Sample Description: A64 - LAB C/WHITE / GRAY 2'X2' DROP CEILING TILE - TYPE 3

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray/White	90%	10%	None Detected	

Client Sample ID: 0516JB-09B **Lab Sample ID:** 621700757-0019

Sample Description: A59 - STORAGE ROOM/WHITE / GRAY 2'X2' DROP CEILING TILE - TYPE 3

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	90%	10%	None Detected	

Client Sample ID: 0516JB-10A **Lab Sample ID:** 621700757-0020

Sample Description: E9 - AUTO SHOP/GRAY GYPSUM BOARD

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	10%	90%	None Detected	

Client Sample ID: 0516JB-10B **Lab Sample ID:** 621700757-0021

Sample Description: E7 / E8 OFFICE/GRAY GYPSUM BOARD

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	8%	92%	None Detected	

Client Sample ID: 0516JB-11A **Lab Sample ID:** 621700757-0022

Sample Description: E9 - AUTO SHOP/WHITE JOINT COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	White	0%	100%	None Detected	

Client Sample ID: 0516JB-11B **Lab Sample ID:** 621700757-0023

Sample Description: E7 / E8 OFFICE/WHITE JOINT COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	White	0%	100%	None Detected	



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Client Sample ID: 0516JB-12 **Lab Sample ID:** 621700757-0024
Sample Description: E9 - AUTO SHOP/GYPSUM BOARD & JOINT COMPOUND COMPOSITE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray/White	8%	92%	None Detected	

Client Sample ID: 0516JB-13A **Lab Sample ID:** 621700757-0025
Sample Description: A58 - LAB D/RED CONCRETE FLOOR LEVELER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Red	0%	100%	None Detected	

Client Sample ID: 0516JB-13B **Lab Sample ID:** 621700757-0026
Sample Description: A64-LAB C/RED CONCRETE FLOOR LEVELER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Red	0%	100%	None Detected	

Client Sample ID: 0516JB-14A **Lab Sample ID:** 621700757-0027
Sample Description: E7 / E8 OFFICE/BLACK FLOOR TILE MASTIC

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	0%	94%	6% Chrysotile	

Client Sample ID: 0516JB-14B **Lab Sample ID:** 621700757-0028
Sample Description: A64-LAB C/BLACK FLOOR TILE MASTIC

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Positive Stop (Not Analyzed)

Client Sample ID: 0516JB-15A **Lab Sample ID:** 621700757-0029
Sample Description: E7 / E8 OFFICE/CREAM W/ BROWN STREAKS 12"X12" FLOOR TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Not Analyzed

Client Sample ID: 0516JB-15B **Lab Sample ID:** 621700757-0030
Sample Description: A58 - LAB D/CREAM W/ BROWN STREAKS 12"X12" FLOOR TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Not Analyzed

Client Sample ID: 0516JB-16A **Lab Sample ID:** 621700757-0031
Sample Description: HALL O/S E7 - UNDERNEATH SELF - STICK CARPETING/GRAY W/ GRAY STREAKS 12"X12" FLOOR TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Not Analyzed



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Client Sample ID: 0516JB-16B		Lab Sample ID: 621700757-0032				
Sample Description: HALL O/S E9 - UNDERNEATH SELF - STICK CARPETING/GRAY W/ GRAY STREAKS 12"X12" FLOOR TILE						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Not Analyzed	
Client Sample ID: 0516JB-17A		Lab Sample ID: 621700757-0033				
Sample Description: A64-LAB C/PINK W/ WHITE STREAKS 12"X12" FLOOR TILE						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Not Analyzed	
Client Sample ID: 0516JB-17B		Lab Sample ID: 621700757-0034				
Sample Description: A64-LAB C/PINK W/ WHITE STREAKS 12"X12" FLOOR TILE						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Not Analyzed	
Client Sample ID: 0516JB-18A		Lab Sample ID: 621700757-0035				
Sample Description: A64-LAB C/BLACK LABORATORY COUNTERTOP						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	0%	82%	18% Chrysotile	
Client Sample ID: 0516JB-18B		Lab Sample ID: 621700757-0036				
Sample Description: A58 - LAB D/BLACK LABORATORY COUNTERTOP						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Positive Stop (Not Analyzed)	
Client Sample ID: 0516JB-19A		Lab Sample ID: 621700757-0037				
Sample Description: BOYS BATHROOM BY E6/GRAY / WHITE CONCRETE CEILING						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray/White	0%	100%	None Detected	
Client Sample ID: 0516JB-19B		Lab Sample ID: 621700757-0038				
Sample Description: GIRLS BATHROOM BY E6/GRAY / WHITE CONCRETE CEILING						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray/White	0%	100%	None Detected	
Client Sample ID: 0516JB-20A		Lab Sample ID: 621700757-0039				
Sample Description: E9 - AUTO SHOP/GRAY CMY BLOCK						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-20B

Lab Sample ID: 621700757-0040

Sample Description: E8B - PRINCIPAL TECHNOLOGY/GRAY CMY BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-21A

Lab Sample ID: 621700757-0041

Sample Description: E9 - AUTO SHOP/GRAY CMU MORTAR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-21B

Lab Sample ID: 621700757-0042

Sample Description: E8B - PRINCIPAL TECHNOLOGY/GRAY CMU MORTAR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-22A

Lab Sample ID: 621700757-0043

Sample Description: A58 - LAB D/BLACK INTERIOR WINDOW GLAZING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	6/02/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-22B

Lab Sample ID: 621700757-0044

Sample Description: A64-LAB C/BLACK INTERIOR WINDOW GLAZING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	0%	100%	None Detected	

Client Sample ID: 0516JB-23A

Lab Sample ID: 621700757-0045

Sample Description: CUSTODIAL CLOSET BY E6/GRAY CERAMIC TILE THIN-SET

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-23B

Lab Sample ID: 621700757-0046

Sample Description: CUSTODIAL CLOSET BY E6/GRAY CERAMIC TILE THIN-SET

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-24A

Lab Sample ID: 621700757-0047

Sample Description: CUSTODIAL CLOSET BY E6/GRAY CERAMIC TILE GROUT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	100%	None Detected	



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Client Sample ID: 0516JB-24B **Lab Sample ID:** 621700757-0048
Sample Description: BOYS BATHROOM BY E6/GRAY CERAMIC TILE GROUT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-25A **Lab Sample ID:** 621700757-0049
Sample Description: CUSTODIAL CLOSET BY E6/BLUE CERAMIC TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Blue	0%	100%	None Detected	

Client Sample ID: 0516JB-25B **Lab Sample ID:** 621700757-0050
Sample Description: BOYS BATHROOM BY E6/BLUE CERAMIC TILE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Blue	0%	100%	None Detected	

Client Sample ID: 0516JB-26A **Lab Sample ID:** 621700757-0051
Sample Description: EXTERIOR O/S E9/TAN MASONRY BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-26B **Lab Sample ID:** 621700757-0052
Sample Description: VESTIBULE BY E9 & POOL/TAN MASONRY BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-27A **Lab Sample ID:** 621700757-0053
Sample Description: EXTERIOR O/S E9/TAN MASONRY BLOCK MORTAR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-27B **Lab Sample ID:** 621700757-0054
Sample Description: VESTIBULE BY E9 & POOL/TAN MASONRY BLOCK MORTAR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-28A **Lab Sample ID:** 621700757-0055
Sample Description: EXTERIOR O/S E9/BLACK DAMP PROOFING ON TERRACOTTA BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	0%	95%	5% Chrysotile	



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Client Sample ID: 0516JB-28B

Lab Sample ID: 621700757-0056

Sample Description: EXTERIOR O/S E9/BLACK DAMP PROOFING ON TERRACOTTA BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Positive Stop (Not Analyzed)

Client Sample ID: 0516JB-29A

Lab Sample ID: 621700757-0057

Sample Description: EXTERIOR O/S E9/TAN TERRACOTTA BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Not Analyzed

Client Sample ID: 0516JB-29B

Lab Sample ID: 621700757-0058

Sample Description: EXTERIOR O/S E9/TAN TERRACOTTA BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017					Not Analyzed

Client Sample ID: 0516JB-30A

Lab Sample ID: 621700757-0059

Sample Description: EXTERIOR - VESTIBULE BY E9 & POOL/GRAY EXTERIOR DOOR CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	6/02/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 0516JB-30B

Lab Sample ID: 621700757-0060

Sample Description: EXTERIOR - E7/GRAY EXTERIOR DOOR CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-31A

Lab Sample ID: 621700757-0061

Sample Description: EXTERIOR - VESTIBULE BY E9 & POOL/BROWN EXTERIOR DOOR CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	6/02/2017	Brown	0.0%	100%	None Detected	

Client Sample ID: 0516JB-31B

Lab Sample ID: 621700757-0062

Sample Description: EXTERIOR - VESTIBULE BY E9 & POOL/BROWN EXTERIOR DOOR CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Brown	0%	100%	None Detected	

Client Sample ID: 0516JB-32A

Lab Sample ID: 621700757-0063

Sample Description: EXTERIOR - E7/GRAY EXTERIOR WINDOW CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	6/02/2017	Gray	0.0%	100%	None Detected	



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Client Sample ID: 0516JB-32B

Lab Sample ID: 621700757-0064

Sample Description: EXTERIOR - E8B/GRAY EXTERIOR WINDOW CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-33A

Lab Sample ID: 621700757-0065

Sample Description: EXTERIOR - E7/BROWN EXTERIOR WINDOW CAULKING / GLAZING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Brown	0%	95%	5% Chrysotile	

Client Sample ID: 0516JB-33B

Lab Sample ID: 621700757-0066

Sample Description: EXTERIOR - E8B/BROWN EXTERIOR WINDOW CAULKING / GLAZING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 0516JB-34A

Lab Sample ID: 621700757-0067

Sample Description: EXTERIOR - E7/GRAY CEMENTITIOUS SOFFIT PANEL

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	82%	18% Chrysotile	

Client Sample ID: 0516JB-34B

Lab Sample ID: 621700757-0068

Sample Description: EXTERIOR - E9/GRAY CEMENTITIOUS SOFFIT PANEL

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 0516JB-35A

Lab Sample ID: 621700757-0069

Sample Description: EXTERIOR - E7/GRAY CEMENTITIOUS WINDOW PANEL

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Gray	0%	85%	15% Chrysotile	

Client Sample ID: 0516JB-35B

Lab Sample ID: 621700757-0070

Sample Description: EXTERIOR - E9/GRAY CEMENTITIOUS WINDOW PANEL

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 0516JB-36A

Lab Sample ID: 621700757-0071

Sample Description: NORTH ROOF - SLOPED ROOF/BLACK BASE SHEET

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	85%	15%	None Detected	
TEM Grav. Reduction	6/02/2017	Black	0.0%	100%	None Detected	



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EMSL Order ID: 621700757
Customer ID: ENV154
Customer PO: 20070660.A7E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-36B

Lab Sample ID: 621700757-0072

Sample Description: NORTH ROOF - SLOPED ROOF/BLACK BASE SHEET

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	80%	20%	None Detected	

Client Sample ID: 0516JB-37A

Lab Sample ID: 621700757-0073

Sample Description: NORTH ROOF - SLOPED ROOF/BLACK BOTTOM LAYER ASPHALT SHINGLE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	25%	75%	None Detected	
TEM Grav. Reduction	6/02/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-37B

Lab Sample ID: 621700757-0074

Sample Description: NORTH ROOF - SLOPED ROOF/BLACK BOTTOM LAYER ASPHALT SHINGLE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	20%	80%	None Detected	

Client Sample ID: 0516JB-38A

Lab Sample ID: 621700757-0075

Sample Description: NORTH ROOF - SLOPED ROOF/BLACK TOP LAYER ASPHALT SHINGLE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	20%	80%	None Detected	
TEM Grav. Reduction	6/02/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-38B

Lab Sample ID: 621700757-0076

Sample Description: NORTH ROOF - SLOPED ROOF/BLACK TOP LAYER ASPHALT SHINGLE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	20%	80%	None Detected	

Client Sample ID: 0516JB-39A

Lab Sample ID: 621700757-0077

Sample Description: NORTH ROOF/BLACK BASE TAR / PAPER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	75%	25%	None Detected	
TEM Grav. Reduction	6/02/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-39B

Lab Sample ID: 621700757-0078

Sample Description: NORTH ROOF/BLACK BASE TAR / PAPER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	65%	35%	None Detected	

Client Sample ID: 0516JB-40A

Lab Sample ID: 621700757-0079

Sample Description: NORTH ROOF/BLACK PAPER BACKING ON FOAM INSULATION BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/24/2017	Black/Yellow	25%	75%	None Detected	



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EMSL Order ID: 621700757
Customer ID: ENVI54
Customer PO: 20070660.A7E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-40B

Lab Sample ID: 621700757-0080

Sample Description: NORTH ROOF/BLACK PAPER BACKING ON FOAM INSULATION BLOCK

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	40%	60%	None Detected	

Client Sample ID: 0516JB-41A

Lab Sample ID: 621700757-0081

Sample Description: NORTH ROOF/BROWN CELLULOSE LAYER

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/24/2017	Brown	98%	2%	None Detected	

Client Sample ID: 0516JB-41B

Lab Sample ID: 621700757-0082

Sample Description: NORTH ROOF/BROWN CELLULOSE LAYER

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Brown	98%	2%	None Detected	

Client Sample ID: 0516JB-42A

Lab Sample ID: 621700757-0083

Sample Description: NORTH ROOF/BLACK / BROWN GRANULATED CAP LAYER

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/24/2017	Brown/Black	10%	90%	None Detected	
TEM Grav. Reduction	6/02/2017	Brown/Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-42B

Lab Sample ID: 621700757-0084

Sample Description: NORTH ROOF/BLACK / BROWN GRANULATED CAP LAYER

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	10%	90%	None Detected	

Client Sample ID: 0516JB-43A

Lab Sample ID: 621700757-0085

Sample Description: NORTH ROOF - INTAKE / EXHAUST FAN/BLACK TAR ON BASE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/24/2017	Black	20%	80%	None Detected	
TEM Grav. Reduction	6/02/2017	Black	0.0%	96.5%	3.5% Chrysotile	

Client Sample ID: 0516JB-43B

Lab Sample ID: 621700757-0086

Sample Description: NORTH ROOF - INTAKE / EXHAUST FAN/BLACK TAR ON BASE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	15%	85%	None Detected	



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EMSL Order ID: 621700757
Customer ID: ENVI54
Customer PO: 20070660.A7E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Analyst(s):

Christina Walker PLM (40)
Stephen Severn PLM (32)
Zackary Carbee TEM Grav. Reduction (10)

Reviewed and approved by:

Christina Walker, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. This test report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. EMSL bears no responsibility for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples. PLM alone is not consistently reliable in detecting asbestos in floor coverings and similar NOBs

Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from: 05/26/2017 13:46:33

621700756


FUSS & O'NEILL
EnviroScience, LLC

 Fuss & O'Neill EnviroScience EMSL Customer No. ENV154
 www.fando.com

146 Hartford Road, Manchester, CT 06040

Phone (860) 646-2469

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

 Project Name: RSD 12 – SVS Science Area Renovation Project No. 20070660.A8E Date: May 18, 2017

 Site Address: 159 South Street, Washington CT Location: Shepaug Valley School Project Manager: Jared Smith

Sample ID	Sample Location	Type of Material
0516JB-44A	A60 – Science Room	Gray Pipe Fitting Insulation
0516JB-44B	A60 – Science Room	Gray Pipe Fitting Insulation
0516JB-44C	A57 – Lab E	Gray Pipe Fitting Insulation
0516JB-45A	A60 – Science Room	Tan/Silver Paper Wrap on Fiberglass Pipe Insulation
0516JB-45B	A60 – Science Room	Tan/Silver Paper Wrap on Fiberglass Pipe Insulation
0516JB-46A	A60 – Science Room	Silver/Tan Paper Backing on Fiberglass Duct Insulation
0516JB-46B	A60 – Science Room	Silver/Tan Paper Backing on Fiberglass Duct Insulation
0516JB-47A	A60 – Science Room	White/Gray 2'x2' Drop Ceiling Tile – Type 1
0516JB-47B	A52 – Lab A	White/Gray 2'x2' Drop Ceiling Tile – Type 1
0516JB-48A	A52 – Lab A	White w/ Silver Backing 2'x2' Drop Ceiling Tile – Type 2
0516JB-48B	A52 – Lab A	White w/ Silver Backing 2'x2' Drop Ceiling Tile – Type 2
0516JB-49A	A57 – Lab E	Red Concrete Floor Leveler
0516JB-49B	A57 – Lab E	Red Concrete Floor Leveler
<i>If Sample Set 0516JB-50A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Set 51 A&B</i>		
0516JB-50A	Hall by A56 & A51	Yellow Floor Tile Adhesive
0516JB-50B	Hall by A56 & A51	Yellow Floor Tile Adhesive
0516JB-51A	Hall by A56 & A51	Gray w/ Brown Streaks 12"x12" Floor Tile
0516JB-51B	Hall by A56 & A51	Gray w/ Brown Streaks 12"x12" Floor Tile
0516JB-52A	A52 – Lab A	Yellow Countertop Adhesive
0516JB-52B	A52 – Lab A	Yellow Countertop Adhesive
0516JB-53A	A52 – Lab A	Black Interior Window Glazing Compound
0516JB-53B	A52 – Lab A	Black Interior Window Glazing Compound
0516JB-54A	Exterior – o/s A57	Gray Exterior Door Caulking Compound
0516JB-54B	Exterior – o/s A63	Gray Exterior Door Caulking Compound
0516JB-55A	Exterior – o/s A57	Gray Exterior Window Caulking Compound
0516JB-55B	Exterior – o/s A63	Gray Exterior Window Caulking Compound

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 MAY 19 2017

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EnviroScience, LLC

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Phone (860) 646-2469

Sample ID	Sample Location	Type of Material
0516JB-56A	Exterior - o/s A63	Brown Exterior Window Caulking/Glazing Compound
0516JB-56B	Exterior - o/s A57	Brown Exterior Window Caulking/Glazing Compound
0516JB-57A	Exterior - o/s A57	Tan Masonry Block
0516JB-57B	Exterior - o/s A57	Tan Masonry Block
0516JB-58A	Exterior - o/s A57	Tan Masonry Block Mortar
0516JB-58B	Exterior - o/s A57	Tan Masonry Block Mortar
<i>If Sample Set 0516JB-59A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Sets 60 A/B thru 61 A/B</i>		
0516JB-59A	South Roof - Sloped Roof	Black Base Sheet
0516JB-59B	South Roof - Sloped Roof	Black Base Sheet
0516JB-60A	South Roof - Sloped Roof	Black Bottom Layer Asphalt Shingle
0516JB-60B	South Roof - Sloped Roof	Black Bottom Layer Asphalt Shingle
0516JB-61A	South Roof - Sloped Roof	Black Top Layer Asphalt Shingle
0516JB-61B	South Roof - Sloped Roof	Black Top Layer Asphalt Shingle
<i>If Sample Set 0516JB-62A/B are Positive (PLM and/or TEM), Do Not Analyze Sample Sets 63 A/B thru 66 A/B</i>		
0516JB-62A	South Roof	Black Base Tar/Paper
0516JB-62B	South Roof	Black Base Tar/Paper
0516JB-63A	South Roof	Black Paper Backing on Foam Insulation Block
0516JB-63B	South Roof	Black Paper Backing on Foam Insulation Block
0516JB-64A	South Roof	Brown Cellulose Layer
0516JB-64B	South Roof	Brown Cellulose Layer
0516JB-65A	South Roof	Black/Brown Granulated Cap Layer
0516JB-65B	South Roof	Black/Brown Granulated Cap Layer
0516JB-66A	South Roof - HVAC	Brown Perlite Mineral Wool
0516JB-66B	South Roof - HVAC	Brown Perlite Mineral Wool
0516JB-67A	South Roof	Gray Penetration Flashing
0516JB-67B	South Roof	Gray Penetration Flashing
0516JB-68A	South Roof - Metal Perimeter Cap	Gray Seam Caulking Compound
0516JB-68B	South Roof - Metal Perimeter Cap	Gray Seam Caulking Compound

Analysis Method: ☒ PLM ☒ TEM ☐ Other _____

Turnaround Time: 1 Week

 Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call
 EnviroScience if analyses will not be completed for requested t/a/t at (860) 646-2469.

F:\P2007\0660\A8F\Lab Data\AsbestosBulk CoC-20170518.docx

OrderID: 621700756

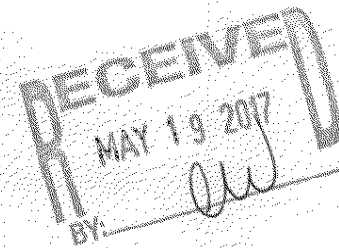
621700756

Page 3 of 3

**FUSS & O'NEILL**
EnviroScience, LLCFuss & O'Neill EnviroScience EMSL Customer No. ENVI54
www.fando.com

146 Hartford Road, Manchester, CT 06040

Phone (860) 646-2469

FAX Results to: 888-838-1160 Email Results to: JSmith@fando.com **Do Not Mail Hard Copy Report**
Total # of Samples: 49**Special Instructions:** Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. Do Not Point Count. If NOB group sample results are 0% - < 1% by PLM, analyze only "A" group sample above by TEM NOB, per group, unless you are told otherwise.Samples collected by: James Blum *SPB* Date: May 16, 2017 & May 17, 2017 Time: AfternoonSamples Sent by: James Blum *SPB* Date: May 18, 2017 Time: _____Samples Received by: *[Signature]* Date: 5-19-17 Time: 10:00Shipped To: ☒ EMSL State: ME ☐ Other _____Method of Shipment: ☒ FedEx ☐ Lab Drop Off ☐ Other _____



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EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Attn: Jared Smith
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
Fax: (888) 838-1160
Collected: 5/18/2017
Received: 5/19/2017
Analyzed: 6/06/2017

Proj: 20070660.A8E / RSD 12 - SVS SCIENCE AREA RENOVATION / 159 SOUTH STREET, WASHINGTON, CT / SHEPAUG VALLEY SCHOOL

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-44A

Lab Sample ID: 621700756-0001

Sample Description: A60-SCIENCE ROOM/GRAY PIPE FITTING INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Gray	95%	5%	None Detected	

Client Sample ID: 0516JB-44B

Lab Sample ID: 621700756-0002

Sample Description: A60-SCIENCE ROOM/GRAY PIPE FITTING INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Gray	95%	5%	None Detected	

Client Sample ID: 0516JB-44C

Lab Sample ID: 621700756-0003

Sample Description: A57-LAB E/GRAY PIPE FITTING INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	95%	5%	None Detected	

Client Sample ID: 0516JB-45A

Lab Sample ID: 621700756-0004

Sample Description: A60-SCIENCE ROOM/TAN / SILVER PAPER WRAP ON FIBERGLASS PIPE INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Tan/Silver	0%	100%	None Detected	

Client Sample ID: 0516JB-45B

Lab Sample ID: 621700756-0005

Sample Description: A60-SCIENCE ROOM/TAN / SILVER PAPER WRAP ON FIBERGLASS PIPE INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan/Silver	0%	100%	None Detected	

Client Sample ID: 0516JB-46A

Lab Sample ID: 621700756-0006

Sample Description: A60-SCIENCE ROOM/SILVER / TAN PAPER BACKING ON FIBERGLASS DUCT INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Tan/Silver	0%	100%	None Detected	

Client Sample ID: 0516JB-46B

Lab Sample ID: 621700756-0007

Sample Description: A60-SCIENCE ROOM/SILVER / TAN PAPER BACKING ON FIBERGLASS DUCT INSULATION

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan/Silver	0%	100%	None Detected	



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EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-47A

Lab Sample ID: 621700756-0008

Sample Description: A60-SCIENCE ROOM/WHITE/GRAY 2'X2' DROP CEILING TILE TYPE 1

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Gray	90%	10%	None Detected	

Client Sample ID: 0516JB-47B

Lab Sample ID: 621700756-0009

Sample Description: A52-LAB A/WHITE/GRAY 2'X2' DROP CEILING TILE TYPE 1

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	90%	10%	None Detected	

Client Sample ID: 0516JB-48A

Lab Sample ID: 621700756-0010

Sample Description: A52-LAB A/WHITE W/ SILVER BACKING 2'X2' DROP CEILING TILE - TYPE 2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	White	90%	10%	None Detected	

Client Sample ID: 0516JB-48B

Lab Sample ID: 621700756-0011

Sample Description: A52-LAB A/WHITE W/ SILVER BACKING 2'X2' DROP CEILING TILE - TYPE 2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	White	90%	10%	None Detected	

Client Sample ID: 0516JB-49A

Lab Sample ID: 621700756-0012

Sample Description: A57-LAB E/RED CONCRETE FLOOR LEVELER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Red	0%	100%	None Detected	

Client Sample ID: 0516JB-49B

Lab Sample ID: 621700756-0013

Sample Description: A57-LAB E/RED CONCRETE FLOOR LEVELER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Red	0%	100%	None Detected	

Client Sample ID: 0516JB-50A

Lab Sample ID: 621700756-0014

Sample Description: HALL BY A56 & A51/YELLOW FLOOR TILE ADHESIVE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/22/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 0516JB-50B

Lab Sample ID: 621700756-0015

Sample Description: HALL BY A56 & A51/YELLOW FLOOR TILE ADHESIVE

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Yellow	0%	100%	None Detected	



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EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-51A **Lab Sample ID:** 621700756-0016

Sample Description: HALL BY A56 & A51/GRAY W/ BROWN STREAKS 12"X12" FLOOR TILE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/22/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 0516JB-51B **Lab Sample ID:** 621700756-0017

Sample Description: HALL BY A56 & A51/GRAY W/ BROWN STREAKS 12"X12" FLOOR TILE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-52A **Lab Sample ID:** 621700756-0018

Sample Description: A52-LAB A/YELLOW COUNTERTOP ADHESIVE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/22/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Yellow	0.0%	99.5%	0.47% Chrysotile	

Client Sample ID: 0516JB-52B **Lab Sample ID:** 621700756-0019

Sample Description: A52-LAB A/YELLOW COUNTERTOP ADHESIVE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 0516JB-53A **Lab Sample ID:** 621700756-0020

Sample Description: A52-LAB A/BLACK INTERIOR WINDOW GLAZING COMPOUND

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/22/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-53B **Lab Sample ID:** 621700756-0021

Sample Description: A52-LAB A/BLACK INTERIOR WINDOW GLAZING COMPOUND

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	0%	100%	None Detected	

Client Sample ID: 0516JB-54A **Lab Sample ID:** 621700756-0022

Sample Description: EXTERIOR O/S A57/GRAY EXTERIOR DOOR CAULKING COMPOUND

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/23/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 0516JB-54B **Lab Sample ID:** 621700756-0023

Sample Description: EXTERIOR O/S A63/GRAY EXTERIOR DOOR CAULKING COMPOUND

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	



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EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-55A **Lab Sample ID:** 621700756-0024

Sample Description: EXTERIOR O/S A57/GRAY EXTERIOR WINDOW CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 0516JB-55B **Lab Sample ID:** 621700756-0025

Sample Description: EXTERIOR O/S A63/GRAY EXTERIOR WINDOW CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 0516JB-56A **Lab Sample ID:** 621700756-0026

Sample Description: EXTERIOR O/S A63/BROWN EXTERIOR WINDOW CAULKING / GLAZING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Brown	0%	92%	8% Chrysotile	

Client Sample ID: 0516JB-56B **Lab Sample ID:** 621700756-0027

Sample Description: EXTERIOR O/S A57/BROWN EXTERIOR WINDOW CAULKING / GLAZING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 0516JB-57A **Lab Sample ID:** 621700756-0028

Sample Description: EXTERIOR O/S A57/TAN MASONRY BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-57B **Lab Sample ID:** 621700756-0029

Sample Description: EXTERIOR O/S A57/TAN MASONRY BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-58A **Lab Sample ID:** 621700756-0030

Sample Description: EXTERIOR O/S A57/TAN MASONRY BLOCK MORTAR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Tan	0%	100%	None Detected	

Client Sample ID: 0516JB-58B **Lab Sample ID:** 621700756-0031

Sample Description: EXTERIOR O/S A57/TAN MASONRY BLOCK MORTAR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Tan	0%	100%	None Detected	



EMSL Analytical, Inc.

161 John Roberts Road South Portland, ME 04106
Phone/Fax: (207) 517-6921 / (207) 517-6922
<http://www.EMSL.com> / portlandlab@emsl.com

EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-59A **Lab Sample ID:** 621700756-0032

Sample Description: SOUTH ROOF - SLOPED ROOF/BLACK BASE SHEET

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/23/2017	Black	50%	50%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-59B **Lab Sample ID:** 621700756-0033

Sample Description: SOUTH ROOF - SLOPED ROOF/BLACK BASE SHEET

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	20%	80%	None Detected	

Client Sample ID: 0516JB-60A **Lab Sample ID:** 621700756-0034

Sample Description: SOUTH ROOF - SLOPED ROOF/BLACK BOTTOM LAYER ASPHALTIC SHINGLE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/23/2017	Black	15%	85%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-60B **Lab Sample ID:** 621700756-0035

Sample Description: SOUTH ROOF - SLOPED ROOF/BLACK BOTTOM LAYER ASPHALTIC SHINGLE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	10%	90%	None Detected	

Client Sample ID: 0516JB-61A **Lab Sample ID:** 621700756-0036

Sample Description: SOUTH ROOF - SLOPED ROOF/BLACK TOP LAYER ASPHALT SHINGLE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/23/2017	Black	15%	85%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	<0.45% Chrysotile	

Client Sample ID: 0516JB-61B **Lab Sample ID:** 621700756-0037

Sample Description: SOUTH ROOF - SLOPED ROOF/BLACK TOP LAYER ASPHALT SHINGLE

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	15%	85%	None Detected	

Client Sample ID: 0516JB-62A **Lab Sample ID:** 621700756-0038

Sample Description: SOUTH ROOF/BLACK BASE TAR / PAPER

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/23/2017	Black	30%	70%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	<0.14% Chrysotile	

Client Sample ID: 0516JB-62B **Lab Sample ID:** 621700756-0039

Sample Description: SOUTH ROOF/BLACK BASE TAR / PAPER

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	25%	75%	None Detected	



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EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-63A **Lab Sample ID:** 621700756-0040

Sample Description: SOUTH ROOF/BLACK PAPER BACKING ON FOAM INSULATION BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Black	90%	10%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-63B **Lab Sample ID:** 621700756-0041

Sample Description: SOUTH ROOF/BLACK PAPER BACKING ON FOAM INSULATION BLOCK

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	80%	20%	None Detected	

Client Sample ID: 0516JB-64A **Lab Sample ID:** 621700756-0042

Sample Description: SOUTH ROOF/BROWN CELLULOSE LAYER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Brown	90%	10%	None Detected	

Client Sample ID: 0516JB-64B **Lab Sample ID:** 621700756-0043

Sample Description: SOUTH ROOF/BROWN CELLULOSE LAYER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Brown	80%	20%	None Detected	

Client Sample ID: 0516JB-65A **Lab Sample ID:** 621700756-0044

Sample Description: SOUTH ROOF/BLACK / BROWN GRANULATED CAP LAYER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Black	35%	65%	None Detected	
TEM Grav. Reduction	6/06/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 0516JB-65B **Lab Sample ID:** 621700756-0045

Sample Description: SOUTH ROOF/BLACK / BROWN GRANULATED CAP LAYER

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Black	28%	72%	None Detected	

Client Sample ID: 0516JB-66A **Lab Sample ID:** 621700756-0046

Sample Description: SOUTH ROOF - HVAC/BROWN PERLITE MINERAL WOOL

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Brown	85%	15%	None Detected	

Client Sample ID: 0516JB-66B **Lab Sample ID:** 621700756-0047

Sample Description: SOUTH ROOF - HVAC/BROWN PERLITE MINERAL WOOL

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Brown	95%	5%	None Detected	



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EMSL Order ID: 621700756
Customer ID: ENVI54
Customer PO: 20070660.A8E
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 0516JB-67A **Lab Sample ID:** 621700756-0048

Sample Description: SOUTH ROOF/GRAY PENETRATION FLASHING

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Gray	25%	75%	None Detected	
TEM Grav. Reduction	6/06/2017	Gray	0.0%	95.7%	4.3% Chrysotile	

Client Sample ID: 0516JB-67B **Lab Sample ID:** 621700756-0049

Sample Description: SOUTH ROOF/GRAY PENETRATION FLASHING

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray/Black	12%	88%	None Detected	

Client Sample ID: 0516JB-68A **Lab Sample ID:** 621700756-0050

Sample Description: SOUTH ROOF - METAL PERIMETER/GRAY SEAM CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/23/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	6/06/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 0516JB-68B **Lab Sample ID:** 621700756-0051

Sample Description: SOUTH ROOF - METAL PERIMETER/GRAY SEAM CAULKING COMPOUND

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/26/2017	Gray	0%	100%	None Detected	

Analyst(s):

Stephen Severn PLM (25)
Zackary Carbee PLM (25)
TEM Grav. Reduction (14)

Reviewed and approved by:

Christina Walker, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. This test report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. EMSL bears no responsibility for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples. PLM alone is not consistently reliable in detecting asbestos in floor coverings and similar NOBs

Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from: 05/26/2017 15:43:15

**FUSS & O'NEILL**
EnviroScience, LLC

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

146 Hartford Road, Manchester, CT 06040

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CINNAMINSON, N.J.

www.fando.com

Phone (860) 646-2469

2017 JUN -8 A 10:39
ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

Sheet 1 of 1

Project Name: RSD 12 - SVS Science Area Renovation Project No. 20070660.A8E Date: May 18, 2017Site Address: 159 South Street, Washington CT Location: Shepaug Valley School Project Manager: Jared Smith

Sample ID	Sample Location	Type of Material
0607JB-01	Room A52 - Lab A	Brown Cove Base Adhesive
0607JB-02	Room A52 - Lab A	Black 4" Cove Base
0607JB-03	Room D28	Yellow Carpet Adhesive

Analysis Method: ☐ PLM ☒ TEM ☐ Other _____Turnaround Time: 48 HoursBased on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: June 10, 2017 Please call EnviroScience if analyses will not be completed for requested t/a/t at (860) 646-2469.

FAX Results to: 888-838-1160

Email Results to: JSmith@fando.com**Do Not Mail Hard Copy Report**Total # of Samples: 3Special Instructions: TEM NOB Analysis Only. Do not layer samples unless indicated.Samples collected by: James Blum JB Date: May 17, 2017 Time: AfternoonSamples Sent by: James Blum JB Date: June 7, 2017 Time: 1300Samples Received by: JB FX Date: 6-8-17 Time: 9:20amShipped To: ☒ EMSL State: NJ ☐ Other _____Method of Shipment: ☒ FedEx ☐ Lab Drop Off ☐ Other _____

(3)



EMSL Analytical, Inc.

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EMSL Order: 041716267
Customer ID: ENVI54
Customer PO: 20070660 A8E
Project ID:

Attention: Jared Smith
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
Fax: (888) 838-1160
Received Date: 06/08/2017 9:20 AM
Analysis Date: 06/09/2017
Collected Date: 05/18/2017

Project: RSD 12-SVS Science Area Renovation / 20070660 A8E / 159 South St, Washington, CT / Sepaug Valley School

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
0607JB-01 041716267-0001	Room A52-Lab A - Brown Cove Base Adhesive	Brown Non-Fibrous Homogeneous	100	None	No Asbestos Detected
0607JB-02 041716267-0002	Room A52-Lab A - Black 4" Cove Base	Black Non-Fibrous Homogeneous	100	None	No Asbestos Detected
0607JB-03 041716267-0003	Room D28 - Yellow Carpet Adhesive	Yellow Non-Fibrous Homogeneous	100	None	No Asbestos Detected

Analyst(s)

Ted Young (3)

Benjamin Ellis, 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. Cinnaminson, NJ NYS ELAP 10872, PA ID# 68-00367

Initial report from: 06/09/2017 11:17:52

Appendix D

Site Photographs



ACM Mastic & Floor Tile



ACM Laboratory Countertops



ACM Cementitious Soffit Paneling



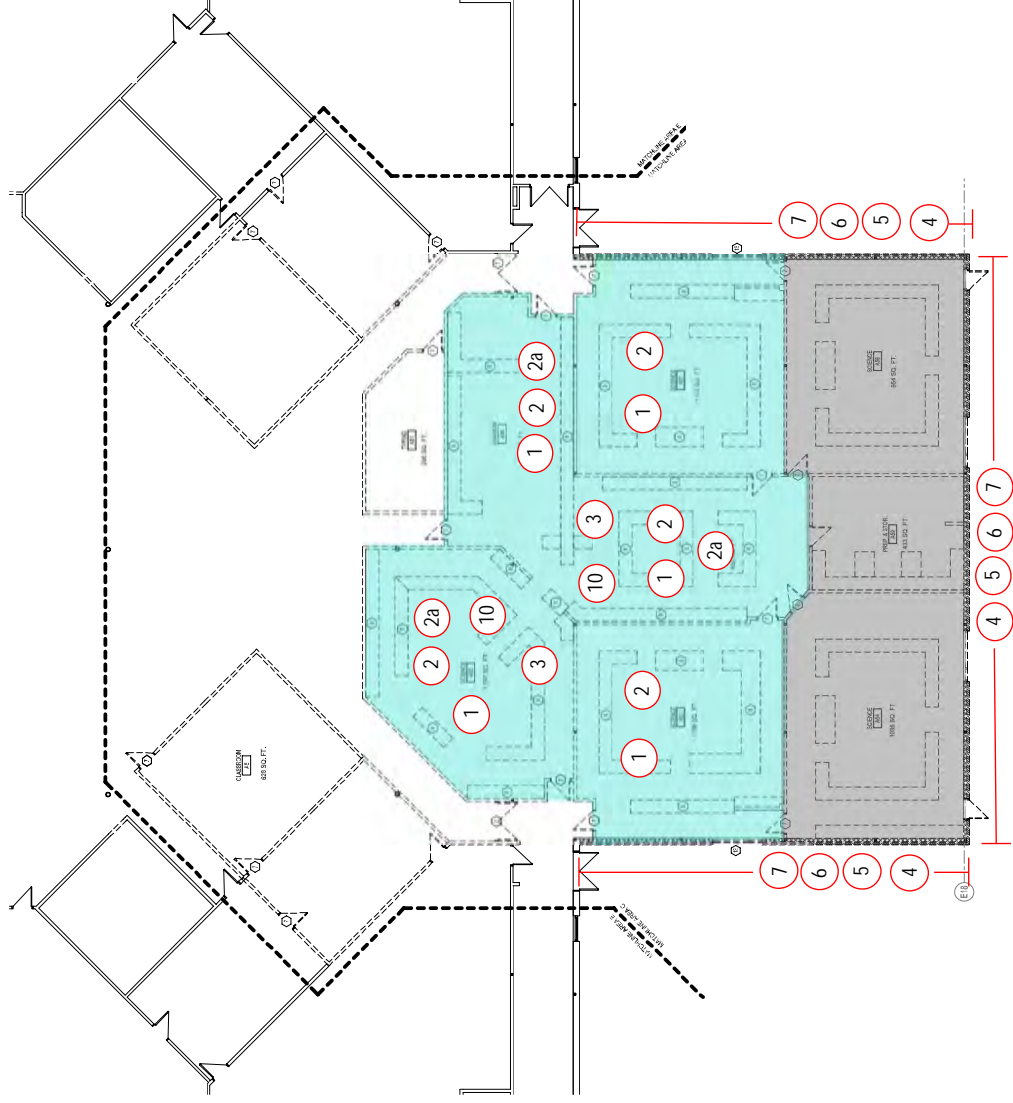
ACM Damp Proofing Behind Masonry Façade and on Terracotta Block

Appendix E

Site Diagrams

Asbestos-Containing Materials

1. Black Floor Tile Mastic and Associated Flooring Materials
2. Black Laboratory Counter Top
- 2a. Yellow Counter Top Adhesive (<1% ACM)
3. Cementitious Fume Hood Paneling
4. Black Damp Proofing on Terracotta Block
5. Brown Exterior Window Caulking/ Glazing Compound
6. Gray Cementitious Soffit Panel
7. Gray Cementitious Window Panel
8. Black Tar on Air Handlers Base
9. Gray Penetration Flashing
10. Test Tube Rack



1 MAIN LEVEL DEMOLITION PLAN - AREA C
1/8" = 1'-0"

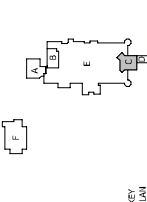


PROGRESS PRINT
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AND GENERAL NOTES SEE SHEET 1001



KEY PLAN
SCALE: 1/8" = 1'-0"



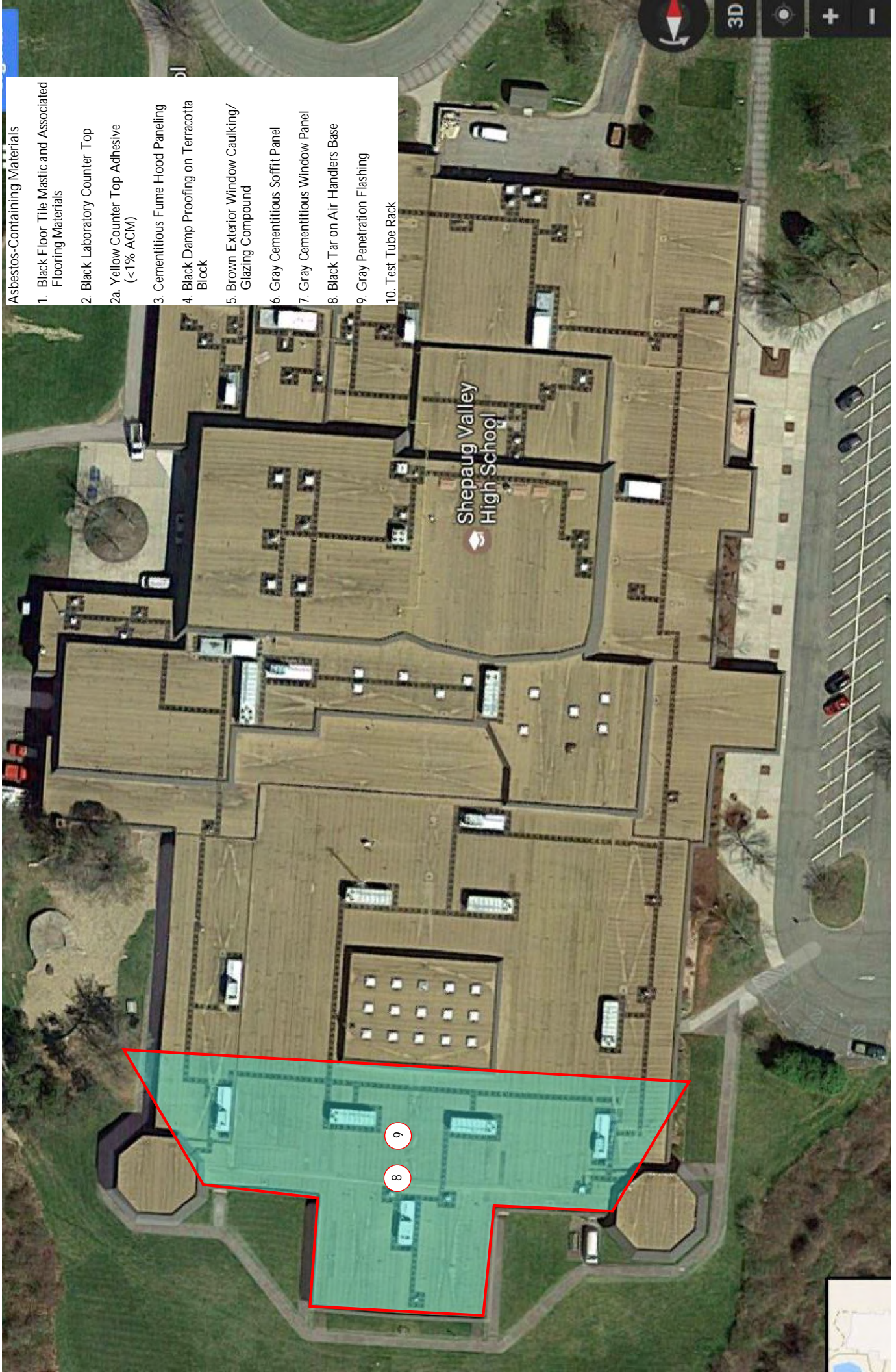
NEW
AGRISCIENCE
STEM ACADEMY
ADDITIONS & ASSOCIATED
RENOVATIONS
SHEPAUG HIGHER SCHOOL
150 SOUTH STREET
WASHINGTON, CT 06794
SCIENCE SPN: 212-0025 A/E/C
VO-AG SPN: 212-0028 I/P/N
PROJECT NO.: 1001.001
DRAWN BY: NCB

MAIN LEVEL
DEMOLITION PLAN
AREA C -
ADDITION / RENO
D1.02

Asbestos-Containing Materials

1. Black Floor Tile Mastic and Associated Flooring Materials
2. Black Laboratory Counter Top
- 2a. Yellow Counter Top Adhesive (<1% ACM)
3. Cementitious Fume Hood Paneling
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1. Black Floor Tile Mastic and Associated Flooring Materials
2. Black Laboratory Counter Top
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6. Gray Cementitious Soffit Panel
7. Gray Cementitious Window Panel
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9. Gray Penetration Flashing
10. Test Tube Rack



Appendix F

XRF Lead Determination Field Data Sheet



XRF LEAD DETERMINATION FIELD DATA SHEET

Inspector Name: James Blum Inspector License #: 002256

Date: May 17, 2017 XRF Model: LPA-1 Serial: 3241R

Project Name: RSD 12 - Shepaug Valley School - Science Area Project Number: 20070660.A8E

Address: 159 South Street, Washington CT Project PM: Jared Smith

XRF Calibration Check-RMD (0.7 to 1.3 mg/cm² inclusive)

	Hour	First Reading	Second Reading	Third Reading	Average
First Check	1300	0.9	0.8	0.9	0.83
Second Check	1700	1.0	1.0	0.9	0.97
Third Check	1830	1.1	1.0	1.2	1.1
Fourth Check					

Side	Surface/Component	Substrate/Color	XRF Reading	Positive (✓)	Comments/Notes
B	Wall	con / Pink-Red	0.3		A56
	Door casing	m / Pink-Red	0.0		1
	1 Jamb	L 1	0.1		1
	Ceiling Joist	m / Red	2.2		A57
D	Wall	con / Pink-Red	0.2		A52
	Hood Cabinet	w / Red	0.4		1
	Wall	con / Pink-Red	0.3		145 E
	Support Column	S / white	0.2		D28
A	Wall	con / white	0.3		H2110/5 D28
C	1	S / Blue	0.6		B20
	Door casing	m / Blue	0.3		1
	Jamb	1 1	0.2		1

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A: Not Accessible; N/C: Not Coated; COV: Covered; VR - Vinyl Replacement