

Asbestos Hazard Emergency Response Act Three-Year Asbestos Re-Inspection and Management Plan Update

for
North Stratfield Elementary School

For Compliance with
State of Connecticut Department of Public Health
Asbestos-Containing Material in Schools Regulation
(Sections 19a - 333-1 through 19a - 333-13)
and
EPA Asbestos Hazard Emergency Response Act
(Title 40 CFR, Part 763, Subpart E)

Fairfield Public Schools
Fairfield, Connecticut

July 2021



FUSS & O'NEILL

56 Quarry Road
Trumbull, CT 06611



FUSS & O'NEILL

September 22, 2021

Mr. Angelus Papageorge
Executive Director of Operations
Fairfield Public Schools
501 Kings Highway East, Suite 210
Fairfield, CT 06825

RE: Three-Year AHERA Asbestos Re-Inspection and Management Plan Update
Re-Inspection Date: June 1, 2021
North Stratfield Elementary School
190 Putting Green Road, Fairfield, CT
Fuss & O'Neill Project No. 20190061.A10

Dear Mr. Papageorge:

Enclosed is the three-year Asbestos Hazard Emergency Response Act (AHERA) Asbestos Re-Inspection and Asbestos Management Plan (AMP) Update report prepared by Fuss & O'Neill, Inc. at the North Stratfield Elementary School located at 190 Putting Green Road in Fairfield, Connecticut (the "Site"). The inspection was performed for Fairfield Public Schools (the "Client"). This report is an important document that must be kept on file at the school as well as at a central location where the AMPs are maintained.

If you should have any questions regarding this report, please do not hesitate to contact me. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Eduardo Miguel Marques
Senior Environmental Analyst

EMM/nw

Enclosure

56 Quarry Road
Trumbull, CT
06611
t 203.374.3748
800.286.2469
f 203.374.4391

www.fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Table of Contents

Asbestos Hazard Emergency Response Act Three-Year Re-Inspection and Management Plan Update North Stratfield Elementary School

1	Introduction	1
1.1	Background	1
1.2	Local Education Agency (LEA) Responsibilities	1
1.3	Accreditation	2
2	Building and Mechanical System Description	3
3	Three Year Re-Inspection.....	3
3.1	Re-Inspection Procedures	3
4	Re-Inspection Report.....	4
4.1	Review of Existing Records	4
4.2	Re-Inspection Summary.....	4
4.3	Newly Identified or Re-sampled ACBM Materials	5
4.4	Physical Assessment of ACBM	6
5	Management Plan Update	7
5.1	Recommended Response Actions.....	7
5.2	Periodic Surveillance	8
5.3	Preventive Measures.....	8
5.4	Abatement (Removal) Cost Estimates	8
6	EPA Accreditation Requirements	9

Appendices

End of Report

APPENDIX A	EXISTING RECORDS CHECKLIST
APPENDIX B	RE-INSPECTION FORM 1A
APPENDIX C	RE-INSPECTION FORM 2
APPENDIX D	SAMPLE 6-MONTH PERIODIC SURVEILLANCE FORM
APPENDIX E	PREVENTIVE MEASURES
APPENDIX F	ASBESTOS INSPECTOR AND MANAGEMENT PLANNER STATE LICENSES AND EPA ACCREDITATIONS

1 Introduction

1.1 Background

The Clean Air Act required the United States Environmental Protection Agency (EPA) to develop standards to address the potential health risks associated with adverse effects of asbestos exposure as an indoor contaminant. In October 1986, the EPA promulgated the Asbestos Hazard Emergency Response Act (AHERA) located at Title 40 CFR, Part 763, Subpart E.

The AHERA regulations required that local education agencies (LEAs) conduct inspections of each school building that they lease, own, or otherwise use as a school building to identify friable (easily crumbled or crushed to powder by hand pressure) and non-friable asbestos-containing building materials (ACBM) locations. The original inspections were required to have been completed prior to October 12, 1988.

AHERA also requires that any building leased or acquired on or after October 12, 1988 that is to be used as a school building shall be inspected for friable and non-friable ACBM prior to use as a school building. In the event of an emergency use of a building that has not been inspected for ACBM, the building shall be inspected within 30 days after commencement of such use.

The regulatory requirements remain in effect for private or public school systems, a church-affiliated school of any denomination, a school dedicated to the education of children with special needs, or a charter school. In the State of Connecticut, the Department of Public Health (CTDPH) is responsible for AHERA regulation enforcement.

1.2 Local Education Agency (LEA) Responsibilities

- A. The LEA is responsible for compliance with the AHERA regulation. The following responsibilities must be followed:
1. The LEA must designate a person to ensure that all of the AHERA requirements are properly implemented. The Designated Person must receive adequate training to perform their duties.
 2. The LEA must ensure that the asbestos management plans (AMPs) are maintained in a central location, as well as at each facility, and such plans and records are available for inspection or review at all times.
 3. The LEA must inform all workers, building occupants or their legal representative in writing at least once per school year about asbestos-related activities, and the availability of the AHERA AMPs for the school buildings.

4. The LEA must ensure proper accreditation for all persons who perform asbestos inspections, asbestos re-inspections, develop/update AMPs, develop response actions, and perform required response actions including operations and maintenance (O&M) activities that may disturb asbestos.
5. The LEA must provide training for all custodial and maintenance staff who regularly perform building maintenance where ACBM are present. The training must be provided upon initial hire, as well as annual updates.
6. The LEA must provide information (disclosure) to any workers who may perform work and may come into contact with asbestos in school buildings where ACBM or presumed ACBM are present.
7. The LEA must ensure that known ACBM or presumed ACBM are provided with warning labels in routine maintenance areas.
8. The LEA must ensure that periodic surveillance is performed at least once every six months, after AMP implementation, in all school buildings that it leases, owns, or otherwise uses that contains ACBM or presumed ACBM.
9. The LEA must ensure that once every three years, after an AMP is implemented, a Re-Inspection is performed at each school building that it leases owns or otherwise uses that contains ACBM or presumed ACBM.

Refer to above-mentioned regulation for full requirements and responsibilities.

1.3 Accreditation

A. Local Education Agency (LEA):

LEA: Fairfield Public Schools
Address: 501 Kings Highway East, Suite 210
Fairfield, CT
Phone: (203) 255-8235
Fax: (203) 255-8246

B. Designated Person:

Designated Person: Mr. Joseph Giacobbe
Address: 3400 Fairfield Avenue
Fairfield, CT
Phone: (203) 255-8448
Fax: (203) 255-8246

C. Asbestos Consultant:

Firm: Fuss & O'Neill, Inc.
Address: 56 Quarry Road
Trumbull, CT
Phone: (203) 374-3748
Fax: (203) 374-4391

D. Asbestos Inspector:

Inspector: Mr. James B. Blum
CTDPH License #: 000841
Expiration Date: November 30, 202

E. Asbestos Management Planner:

Planner: Mr. Eduardo Miguel Marques
CTDPH License #: 000201
Expiration: February 28, 2022

2 Building and Mechanical System Description

The original North Stratfield Elementary School is a one-story building constructed in 1964. A building addition was reportedly constructed in 1996. During the construction of the addition, the original building had undergone renovations, where the majority of accessible known/assumed asbestos-containing materials were abated. The building is heated with gas-fired hot water, in addition with rooftop heating, ventilation, and air conditioning (HVAC) units.

3 Three Year Re-Inspection

3.1 Re-Inspection Procedures

This three-year asbestos re-inspection was conducted in accordance with EPA requirements of the AHERA regulation, Title 40 CFR, Part 763, Section 763.85 (b).

On June 1, 2021, Fuss & O'Neill, Inc. (Fuss & O'Neill) representative Mr. James B. Blum performed the re-inspection.

A. During the re-inspection, Fuss & O'Neill conducted the following required tasks:

1. A visual re-inspection and reassessment of all known friable or assumed ACBM.
2. A visual re-inspection of ACBM that was previously considered non-friable to determine if the present condition of the material has become friable.

3. Identification and assessment of any newly-identified homogeneous area that contains friable ACBM since the last inspection or re-inspection.

4 Re-Inspection Report

4.1 Review of Existing Records

An important part of this AHERA re-inspection involved researching prior documentation that is required to be present at the school, as well as at the central recordkeeping location where AMPs are stored.

Please see *Appendix A* for the checklist for existing records.

4.2 Re-Inspection Summary

The on-site portion of the re-inspection was documented on forms modeled after examples provided by the EPA and reviewed with the CTDPH. The first form, **Re-Inspection Form 1A**, identifies previous inspection data gathered during the initial AHERA inspection and subsequent re-inspection (see *Appendix B*). This form is useful to reference response actions (if any), which have been performed since the last inspection, as well as identifies the last known conditions of ACBM in the building. It additionally provides the inspector a “quick glance” reference when performing the re-inspection.

The second EPA form, **Re-Inspection Form 1B**, is used to list all known or assumed asbestos-containing materials that were previously unidentified. It also lists the ACBM in areas newly-acquired by the school for student use either permanently or temporarily. (Not Applicable)

The third EPA form, **Re-Inspection Form 2**, was used to provide information and justification regarding re-assessment of the ACBM (see *Appendix C*). This form also provides response action recommendations, including a tentative schedule for completing response actions that recommend removal or repair.

No bulk samples were collected during this re-inspection.

Using EPA protocol and criteria, the following materials summarized in Table 1 below, existing in North Stratfield Elementary School at the time of this three-year re-inspection have been determined and/or assumed to be **ACBM**. Please refer to the above-mentioned Re-Inspection Forms for specific locations of the materials.

Table 1
Asbestos-Containing Building Materials

Material	Location	Reference	Asbestos Content
Pipe Fitting Insulation	Boiler Room, Tunnels, Yard Storage Room	AMC AHERA 2017 Re-Inspection	Unknown/ Assumed
Cementitious Board	Soffits Along Classrooms (assumed to be behind metal panels) and Behind Exterior Metal Wall Panels	AMC AHERA 2017 Re-Inspection	Unknown/ Assumed

Using the EPA protocol, samples of the following suspect materials were collected and analyzed. The analytical results indicated that these materials are **non-ACBM**:

Table 2
Non-Asbestos-Containing Building Materials (Previous Re-Inspections)

Material	Location	Reference
Fiberglass Pipe Insulation Wrap	Tunnels	AMC 2017 AHERA Re-Inspection

Mr. Eduardo Miguel Marques reviewed the information obtained during this Re-Inspection. Mr. Marques is an EPA-accredited and CTDPH-licensed Asbestos Management Planner.

4.3 Newly Identified or Re-sampled ACBM Materials

The following materials were observed during this re-inspection:

- Brown 12"x12" floor tile and associated adhesive – Corridors;
- White with multi-color specks 12"x12" floor tile and associated adhesive – Corridors, Art Room, Rooms 1 – 11, 13 – 28, 32;
- White with green 12"x12" floor tile and associated adhesive – Gym storage room, Maintenance office, work room, Rooms 1 – 4, 29, storage across from All-Purpose room, Nurse's office, Library office, Library (space by exterior door 22);
- Dark gray with black & white specks 12"x12" floor tile and associated adhesive – Art Room, Work Room; and
- 2'x2' suspended ceiling tiles.

The above listed materials may have been recently installed. If the materials have been recently installed, the Client may obtain a letter from an Architect for renovations conducted at the Site, a Safety Data Sheet (SDS) for the product or a letter from the material manufacturer stating asbestos was not used in the manufacturing of the product. Alternatively, the material may be sampled to determine potential asbestos content. If this information cannot be obtained, this material will be quantified and included in the AMP during the next triennial update.

AHERA regulations pertain to interior identified or assumed ACBM and limited exterior ACBM. AHERA regulations do include ACBM located on exterior porticos, covered walkways, and mechanical equipment used to condition interior building air.

Any suspect material encountered during renovation/demolition/maintenance activities that is not specifically identified in the AMP as a non-ACM should be assumed to contain asbestos unless sample results indicate otherwise.

Additional Information:

- Asbestos-containing floor tile and associated mastics may exist below non-moveable objects such as cabinets, platforms, sheetrock walls, lockers, etc.;
- Samples of exterior building materials not covered under AHERA, such as caulking and glazing compounds, roofing materials and materials behind exterior walls and panels should be collected and analyzed to determine asbestos content prior to performing activities that would disturb them;
- Asbestos-containing vapor barriers and waterproofing materials may exist beneath wood floors, behind walls, exterior below ground surface foundations, etc.; and
- Subsurface cementitious pipe (i.e., asbestos cement pipe).

4.4 Physical Assessment of ACBM

During the inspection, suspect ACBM were separated into three EPA categories. These categories are thermal system insulation (TSI), surfacing ACBM, and miscellaneous ACBM. TSI includes all materials used to prevent heat loss or gain or water condensation on mechanical systems. Examples of TSI are pipe and fitting insulations, boiler insulation, and duct insulation. Surfacing ACBM is commonly used for fireproofing, decorative, and acoustical applications. Miscellaneous materials include all ACBM not listed in TSI or surfacing, such as sheet flooring, vinyl asbestos flooring, ceiling tiles, and construction mastics/adhesives.

Finally, ACBM were quantified in linear and/or square feet, depending on the nature of the material.

The ACBM identified during the inspection and still remaining in the school were re-assessed using the CTDPH and AHERA guidelines for assessment of ACBM. The following assessment categories are listed:

1. Damaged or significantly damaged TSI ACBM
2. Damaged friable surfacing ACBM
3. Significantly damaged friable surfacing ACBM
4. Damaged or significantly damaged friable miscellaneous ACBM
5. ACBM with potential for damage
6. ACBM with potential for significant damage
7. Any remaining friable ACBM or friable suspected ACBM

Material locations, assessments, and recommended response actions are listed in the Re-Inspection Forms.

5 Management Plan Update

5.1 Recommended Response Actions

Based on the inspection report, physical walk-through inspection, and existing ACBM conditions, the following response actions are recommended:

1. Removal - Not Applicable
2. Repair - Not Applicable
3. Enclosure Not Applicable
4. Encapsulation - Not Applicable
5. Operations and Maintenance (O & M) - All remaining ACBM

It should be noted that only ACBM with assessments of 1 or 2 are recommended for removal or repair. The remaining ACBM should be included in the O & M Program. The condition of these ACBM will be monitored until all of the ACBM have been completely removed from the building. A successful O & M Program includes the following elements:

- A. Cleaning: All areas of the school where friable ACBM or assumed friable ACBM are present should be cleaned at least once after completion of the initial inspection. Additional cleaning may be necessary if the Asbestos Management Planner makes a written recommendation indicating the methods and frequency of such cleaning.
- B. O & M Activities: The LEA shall ensure that the procedures described below are followed to protect building occupants from O & M activities that may disturb known or assumed ACBM:
 1. Restrict entry into the area either by physically isolating or by scheduling.
 2. Post asbestos warning signs to prevent entry by unauthorized persons.
 3. Deactivate or temporarily shut off or divert the air-handling system to the area.
 4. Use proper work practices and engineering controls, such as wet methods, protective clothing, High Efficiency Particulate Air (HEPA) vacuums, mini-enclosures/glove bags, etc. to inhibit fiber migration.
 5. Place asbestos debris and other contaminated materials into a sealed, leak-tight container for disposal.
- C. Minor Fiber Release Episode: The LEA shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., disturbance of less than or equal to 3 linear/square feet of friable ACBM):
 1. Saturate the debris using wet method.
 2. Place the debris in a sealed, leak-tight container and clean the area.
 3. Repair the area of damaged ACBM with materials such as asbestos-free spackling, plaster or insulation or seal with an encapsulant.

D. Major Fiber Release Episode: The LEA shall ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., disturbance of greater than 3 linear/square feet of friable ACBM):

1. Restrict entry into the area and post asbestos warning signs.
2. Deactivate or temporarily shut off or divert the air handling system from the area to prevent fiber migration.
3. The response action for any major fiber release episode must be prepared by an EPA-accredited Asbestos Project Designers and conducted by EPA-accredited personnel.
4. The LEA shall notify the CTDPH of any major fiber release episode within twenty-four hours of its occurrence and, if necessary, provide written notification as required by applicable federal and/or state regulations.

5.2 Periodic Surveillance

At least once every six months after an AMP is implemented, the LEA will conduct periodic surveillance in the school that contains ACBM or assumed ACBM. The person conducting periodic surveillance will visually inspect all areas in the school where ACBM have been identified in the AMP, record the date of surveillance, their name, any changes in the ACBM condition and submit the record to the LEA Designated Person for inclusion in the AMP.

Please see *Appendix D* for the sample Periodic Surveillance Form that may be used for conducting periodic surveillance.

5.3 Preventive Measures

The LEA shall institute appropriate preventive measures to eliminate the reasonable likelihood that ACBM will become damaged, deteriorated, or delaminated.

Please see *Appendix E* for preventive measures designed for various types of ACBM that may exist in the school.

5.4 Abatement (Removal) Cost Estimates

At the time of the June 1, 2021 re-inspection, no materials were observed to be damaged (other than O & M Repairs); therefore, estimated abatement costs have not been provided.

6 EPA Accreditation Requirements

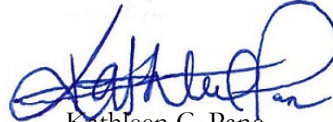
The EPA accreditations and the CTDPH Asbestos Inspector licenses for Mr. James B. Blum and Mr. Eduardo Miguel Marques are provided in *Appendix F*.

Report prepared by Senior Environmental Technician James B. Blum, CMC.

Reviewed by:



Eduardo Miguel Marques
Senior Environmental Analyst



Kathleen C. Pane
Associate

Appendix A

Existing Records Checklist

Existing Records Checklist

Local Education Agency (LEA): Fairfield Public Schools
501 Kings Highway East, Suite 210
Fairfield, CT 06825

School Building: North Stratfield Elementary School

The following documentation is required to be present in both the LEA's office, as well as in a centralized location in the school administrative office. The information included in this checklist will be verified to be present and complete as part of three-year Re-Inspection.

DOCUMENTATION		LOCATION	
		School	LEA Office
1	Original AHERA Operations and Maintenance Plan/Inspection Report	Yes	Yes
2	Three Year Re-Inspection (First and All Subsequent Inspections)	Yes	Yes
3	Parents and Teachers Notifications (Annually Since Last Re-Inspection)	Yes	Yes
4	Designated Person Identification and Proper Training (Person Must Be Named and Have Appropriate Training)	Yes	Yes
5	Designated Person Periodic Surveillance (Once Every Six Months)	Yes	Yes
6	Maintenance Staff Awareness Training Records	Yes	Yes
7	Outside Vendor Awareness Notification	Yes	Yes
8	Asbestos Warning Signs and Labels (Required Posting in Boiler Rooms and Mechanical Spaces Only)	Yes	N/A
9	Response Action Records (Includes Any Abatement Conducted Since Last 3-Year Re-Inspection)	Yes	Yes

Comments: Items marked "No" indicate not present/available at the time of this inspection. Items marked "No*" indicate records are not current, with last records dating to 2013.

Inspector (LEA Office): James B. Blum

Date: May 24, 2021

Inspector (School): James B. Blum

Date: May 27, 2021

Appendix B

Re-Inspection Form 1A

Re-Inspection Form 1(A) - List of Identified ACBM

School: North Stratfield Elementary School
Address: 190 Putting Green Road, Fairfield, CT

Date(s) of Original Inspection: 1991
Date(s) of Subsequent Re-Inspections: 1994 - 2017, 2021

Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/Other Comments
Sample Number	Asbestos Content	Material Description					
N/A	Unknown/Assumed	Pipe Fitting Insulation	TSI	F	5	Boiler Room, Tunnels, Yard Storage Room	
N/A	Unknown/Assumed	Cementitious Board	Misc.	NF	5	Soffits Along Classrooms (assumed to be behind metal panels) and Behind Exterior Metal Wall Panels	Materials not observed during this re-inspection. Materials may exist behind metal panel/coverings
N/A	N/A	Duct Breeching Insulation	TSI	F	N/A	Boiler Room	Materials not observed during this re-inspection. Materials reported to have been removed within past year. Materials will be removed from AMP.
N/A	N/A	Hot Water Tank Insulation	TSI	F	N/A	Boiler Room	

Information abstracted by: James B. Blum

Date: June 1, 2021

Material Category: TSI = Thermal System Insulation, S = Surfacing, M = Miscellaneous
LF = Linear Feet; SF = Square Feet Friability: F = Friable, NF = Non-Friable

AHERA Assessment Categories: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM

Appendix C

Re-Inspection Form 2





Re-Inspection Form 2. Re-Inspection of ACBM: Findings and Management Planner Recommendations

School: North Stratfield Elementary School

Date of Re-Inspection June 1, 2021

Homogeneous Material: Pipe Fitting Insulation

Sample ID: N/A

ACBM RE-INSPECTION FINDINGS					MANAGEMENT PLANNER RECOMMENDATIONS	
ACBM Location(s) by Assessment Category	Friability	Estimated Quantity	Assessment Category	Physical Description	Recommended Response Action(s)	Date Action Completed
Boiler Room, Tunnels, Yard Storage Room	F	10 LF (Materials in Tunnels not Quantified)	5	ACBM with potential for damage	Maintain Under O & M Plan Recommend sampling to determine asbestos content prior to disturbance	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: June 23, 2021	
Inspector's Name: <u>James B. Blum</u>					Management Planner Name: <u>Eduardo Miguel Marques</u>	
Inspector Signature: 					Management Planner Signature: 	
Accreditation #/State: <u>000841/CT</u>					Accreditation #/State: <u>000201/CT</u>	
Expiration Date: <u>11/30/2021</u>					Expiration Date: <u>2/28/2022</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____						
Date: _____						





Re-Inspection Form 2. Re-Inspection of ACBM: Findings and Management Planner Recommendations

School: North Stratfield Elementary School

Date of Re-Inspection June 1, 2021

Homogeneous Material: Cementitious Board

Sample ID: N/A

ACBM RE-INSPECTION FINDINGS					MANAGEMENT PLANNER RECOMMENDATIONS	
ACBM Location(s) by Assessment Category	Friability	Estimated Quantity	Assessment Category	Physical Description	Recommended Response Action(s)	Date Action Completed
Soffits Along Classrooms (assumed to be behind metal panels) and Behind Exterior Metal Wall Panels	NF	Unknown	5	ACBM with potential for damage	Maintain Under O & M Plan Recommend sampling to determine asbestos content prior to disturbance	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: June 23, 2021	
Inspector's Name: <u>James B. Blum</u>					Management Planner Name: <u>Eduardo Miguel Marques</u>	
Inspector Signature: 					Management Planner Signature: 	
Accreditation #/State: <u>000841/CT</u>					Accreditation #/State: <u>000201/CT</u>	
Expiration Date: <u>11/30/2021</u>					Expiration Date: <u>2/28/2022</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____						
Date: _____						

Appendix D

Sample 6-Month Periodic Surveillance Form

Sample 6-Month Periodic Surveillance Form

Local Education Agency
(LEA):

Fairfield Public Schools

Facility Address:

North Stratfield Elementary School, 190 Putting Green Road, Fairfield, CT

Date of Surveillance:

Asbestos-Containing Building Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Estimated Damaged Quantity	Comments
Pipe Fitting Insulation	Boiler Room, Tunnels, Yard Storage Room					
Cementitious Board	Soffits Along Classrooms (assumed to be behind metal panels) and Behind Exterior Metal Wall Panels					

Conditions: D = Damaged; F = Fair; G = Good; IA = Inaccessible; N/A = Not Applicable; SD = Significant Damage

SF = Square Feet

Surveillance conducted by:

(print name)

(signature)

I, the LEA's Designated Person, have read and understood the findings noted above: _____

Date: _____

Appendix E

Preventive Measures

Preventive Measures for Various Asbestos-Containing Building Materials

A. Surfacing Materials

“Surfacing Materials” means materials in a school building that are applied by spray, trowel, or otherwise applied to surfaces. These include sprayed-applied fireproofing materials on structural members, ceiling and wall plasters, or other materials applied to surfaces for acoustical, fireproofing, or other purposes.

Surfacing Materials are generally considered friable and can release asbestos fibers if damaged by impact, air erosion, vibration, and/or water intrusion. When properly implemented, the following procedures will reduce the potential for fiber release:

1. Sprayed-Applied Fireproofing
 - a) Identify the materials and post warning signs on the laid-in or glued-in ceiling tile. If the decking is not covered, place the sign on the wall.
 - b) Maintain the materials in intact state and undamaged condition. During winter, pigeons, squirrels and other rodents tend to roost in boiler/machine rooms and dislodge sprayed-applied fireproofing on the decking. Prevent such possibilities.
 - c) Prevent water leakage. If the material is significantly damaged, removal is the best option. For minor damage, enclosure is a temporary solution. Encapsulation of damaged sprayed-on fireproofing material is not recommended.
 - d) Train the custodial people who are responsible for care and maintenance of surfacing materials. Please note that the repair/removal can only be performed by a licensed abatement contractor.
2. Ceiling and Wall Plasters
 - a) Identify the materials and post asbestos warning signs.
 - b) Maintain the materials in intact state and undamaged condition. Avoid storing/stacking on/near the materials to reduce contact damage.
 - c) Prevent water leakage. If the material is significantly damaged, removal is the best option. For minor damage, repair or enclosure is a temporary solution.
 - d) Train the custodial people who are responsible for care and maintenance of surfacing materials.

B. Thermal System Insulation (TSI)

“Thermal System Insulation (TSI)” means insulating materials applied to pipes, pipe fittings, boilers, breechings, tanks, ducts, or other components to prevent process heat loss or gain, water condensation, or for other purposes (e.g., fire door insulation core).

TSI are generally considered friable ACBM. This means they can be easily damaged, increasing the potential for fiber release. When properly implemented, the following procedures will reduce the potential for fiber release:

1. Boiler and Breeching Insulation

- a) Identify the locations and label the boiler. Warning signs should be posted outside the boiler room.
- b) Reduce the likelihood of fiber release by ensuring that the insulation is not damaged. Avoid storing/stacking on/near the boiler to reduce contact damage.
- c) Maintain the insulation in intact state and undamaged condition. Repair damaged areas as soon as possible to prevent further deterioration. If repair is not feasible due to extensive damage/deterioration, remove the material.
- d) Train the custodial people who are responsible for care and maintenance of TSI. Please note that the repair/removal can only be performed by a licensed abatement contractor.

2. Pipe, Pipe Fitting, Tank, Duct & Breeching Insulations

- a) Identify the locations and label the materials. Warning signs should be posted outside of rooms that have TSI materials.
- b) Reduce the likelihood of fiber release by ensuring that the materials are not damaged. Avoid storing/stacking near the materials to reduce contact damage.
- c) Maintain all TSI materials in intact state and undamaged condition. Inspect the protective jackets for damage. Repair damaged areas as soon as possible to prevent further deterioration. If repair is not feasible due to extensive damage/deterioration, remove the material.
- d) Train the custodial people who are responsible for care and maintenance of TSI. Please note that the repair/removal can only be performed by a licensed abatement contractor.

C. **Miscellaneous Materials**

“Miscellaneous Materials” are the other ACBM in a school building that are not categorized as Surfacing Materials or TSI. These include floor tiles, floor tile and carpet mastics, gypsum wallboard and joint compound, ceiling tiles, glue daubs, asbestos cement panels, cove base and associated glue, window/door caulking and glazing compounds, etc. The following maintenance procedures are recommended for these materials:

1. Vinyl Asbestos Floor Tiles (VAT)

Vinyl Asbestos Floor Tiles (VAT) are considered non-friable, however routine maintenance procedures such as spray-buffing, burnishing, wet scrubbing, and stripping can generate asbestos fibers. Following procedures, when properly implemented, will reduce the potential of fiber release:

- a) Do not sand, grind, or abrade the tiles. Stripping of VAT should be done as infrequently as possible. When stripping becomes necessary, follow the appropriate work practices. Never perform dry stripping.
- b) During spray-buffing or burnishing the floor, operate the machine at the lowest workable speed and use the least abrasive pad. Use a wet mop for routine cleaning whenever possible.
- c) Routinely check whether chair and desk glides are in good condition and replace when necessary. Worn glides can gouge the floor and cause fiber release.
- d) Place carpets/floor mats in all entrances to reduce abrasion of floor tiles by sand and pebbles. During winter, have parking lots and walkways swept to the extent possible to avoid the tracking of salt and ice-melting compounds into the school by the students.
- e) Train the custodial people who are responsible for care and maintenance of VAT. Please note that the repair/removal can only be performed by a licensed abatement contractor.

2. Wallboard and Joint Compound Assembly

- a) Since a number of different homogeneous assemblies may exist in a building, sheetrock/joint compound must be assumed to be ACBM unless sample results prove otherwise. If any specific areas are going to be disturbed, samples of the material in that area should be collected and analyzed.
- b) Reduce the likelihood of fiber release by avoiding cutting or drilling holes through the sheetrock panels.

3. Ceiling Tile and Glue Daubs

- a) Reduce the likelihood of fiber release by limiting access to the space above the ceiling tiles. Maintain the ceiling tiles in undamaged condition. Replace any damaged or water stained tile.
- b) If the ceiling tiles are non-asbestos, collect samples and analyze the glue daubs to identify asbestos-content before disturbing the tiles.

4. Asbestos Cement Panels, Window/Door Caulking and Glazing Compounds

- a) Maintain asbestos cement panels and window/door caulking and glazing compounds in undamaged condition.

5. Carpet Glue, Blackboard/Tack Board Glue, Floor Tile Mastic, Cove Base, and Mastic

- a) Reduce the likelihood of fiber release by leaving materials in place.
- b) Maintain materials in good condition. Collect samples and analyze to identify asbestos-content before disturbing.

Appendix F

Asbestos Inspector and Management Planner State Licenses and EPA Accreditations

1005448 SP

1564

-C01 P05455-1



JAMES B BLUM
FUSS & O'NEILL 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,

DEIDRE S. GIFFORD, MD, MPH, ACTING COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

EMPLOYER'S COPY		
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH		
NAME JAMES B BLUM		
VALIDATION NO. 03-856192	CERTIFICATE NO. 000841	CURRENT THROUGH 11/30/21
PROFESSION ASBESTOS CONSULTANT-INSPECTOR		
 SIGNATURE	 ACTING 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
11/30/21

VALIDATION NO.
03-856192

SIGNATURE

ACTING 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. 03-856192	CERTIFICATE NO. 000841	CURRENT THROUGH 11/30/21
PROFESSION ASBESTOS CONSULTANT-INSPECTOR		
 SIGNATURE	 ACTING COMMISSIONER	

CERT#: A-509-V692

**CHEMSCOPE TRAINING DIVISION
ASBESTOS INSPECTOR REFRESHER
4-HOUR TRAINING CERTIFICATE**

James Blum

146 Hartford Road, Manchester CT

Has attended a 4-hour annual refresher course on the subject discipline on
9/1/2020 and has passed a written examination.

"The person receiving this certificate has completed the requisite training for asbestos accreditation as an inspector under TSCA Title II"

Course topics include a review and update on asbestos health hazards, functions of inspectors and management planners, building systems, planning, inspecting for asbestos, sampling and analysis, respiratory protection, government regulations and preparing the inspection report.

This training course has been accredited by the State of Connecticut.

Examination Score: 88%

Exam Date: 9/1/2020

Expiration Date: 9/1/2021



Daniel Sullivan
Training Manager

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



EDUARDO M. MARQUES
FUSS & ONEILL ENVIRO SCIENCE LLC
146 HARTFORD ROAD
MANCHESTER CT 06040

Dear EDUARDO M. MARQUES,

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,

DEIDRE S. GIFFORD, MD, MPH, ACTING COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

EMPLOYER'S COPY		
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH		
NAME		
EDUARDO M. MARQUES		
VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-866767	000201	02/28/22
PROFESSION		
ASBESTOS CONSULTANT-INSP/MGMT PLANNER		
SIGNATURE		ACTING 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-INSP/MGMT PLANNER

EDUARDO M. MARQUES

CERTIFICATE NO.
000201

CURRENT THROUGH
02/28/22

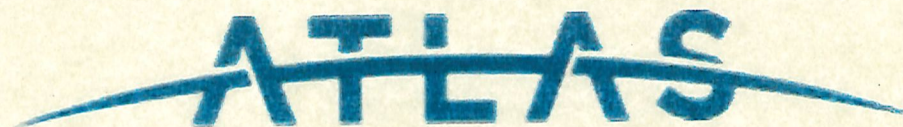
VALIDATION NO.
03-866767

SIGNATURE

ACTING 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.



CERTIFICATE OF ACHIEVEMENT

This certifies that

Eduardo Miguel Marques

has successfully completed the
8 Hour Asbestos Site Inspector/Management Planner Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763 and
CT Department of Public Health Title 20

Training held via a Live
Webinar

Score: 84%

conducted by:

ATC Group Services LLC dba ATLAS Technical
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Principal Instructor: Gregory Morsch

July 22, 2021
Date of Course

July 22, 2022
Expiration Date

Regional Training Director: Gregory Morsch

MPAR-3394
Certificate Number

July 22, 2021
Examination Date