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

for

Oak Ridge School

For Compliance with

Commonwealth of Massachusetts Department of Labor Standards (MADLS)
Asbestos Containing Materials in Schools Regulation (453 CMR 6.00)

and

EPA Asbestos Hazard Emergency Response Act (Title 40 CFR Part 763, Subpart E)

### Sandwich Public School District

Sandwich, Massachusetts

February 2017



Fuss & O'Neill EnviroScience, LLC 50 Redfield Street, Suite 100 Boston, MA 02122



February 28, 2017

Mr. Jonathan Nelson Facilities and Grounds Sandwich Public School District 33 Water Street Sandwich, MA 02563

RE: Three-Year AHERA Re-Inspection and Management Plan Update
Oak Ridge School
260 Quaker Meeting House Road, East Sandwich, MA
Fuss & O'Neill EnviroScience, LLC No. 20160762.A1E

Dear Mr. Nelson:

Enclosed is the Three-Year AHERA Re-Inspection and Management Plan Update report prepared by Fuss & O'Neill EnviroScience, LLC for the Oak Ridge School located at 260 Quaker Meeting House Road in East Sandwich, Massachusetts. AHERA services were performed for Sandwich Public School District (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 Asbestos Management Plans 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,

50 Redfield Street Suite 100 Boston, MA 02122 t 617.282.4675

> 800.286.2469 f 617.282.8253

Dustin A. Diedricksen Senior Project Manager

DD/so

Enclosure

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Connecticut
Massachusetts
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South Carolina



### **Table of Contents**

### Three-Year Asbestos Hazard Emergency Response Act Re-Inspection and Management Plan Update Oak Ridge School

1	Introd	duction	1
	1.1	Background	1
	1.2	Local Education Agency (LEA) Responsibilities	1
	1.3	Key Personnel	
		•	
2	Buildi	ng and Mechanical System Description	3
3	Three	Year Re-Inspection	3
	3.1	Re-Inspection Procedures	
4	Re-In:	spection Report	4
	4.1	Existing Records Review	
	4.2	Re-Inspection Summary	
	4.3	Newly-Identified or Re-Sampled ACBM	
	4.4	ACBM Physical Assessment	
5	Mana	agement Plan Update	7
	5.1	Recommended Response Actions	7
	5.2	Periodic Surveillance	8
	5.3	Preventive Measures	8
6	EPA A	Accreditation Requirements	8
Appe	ndices	End of Re	eport
APPEN	NDIX A	EXISTING RECORDS CHECKLIST	
APPEN	NDIX B	ASBESTOS LABORATORY ANALYTICAL RESULTS AND CHAIN-OF CUSTODY FORM	₹_
APPEN	NDIX C		
	NDIX D		
	NDIX E		
		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 require that local education agencies (LEA) 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, which 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 a private or public school system, a church-affiliated school of any denomination, a school dedicated to the education of children with special needs, or a charter school. In the Commonwealth of Massachusetts, the Department of Labor Standards (MADLS) is responsible for AHERA regulation enforcement.

### 1.2 Local Education Agency (LEA) Responsibilities

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 AHERA requirements are properly implemented. The LEA's Designated Person must receive adequate training to perform their duties.
- 2. The LEA must ensure that the Asbestos Management Plans (AMP) are maintained in a central location as well as at each facility; these AMP and pertinent documentation shall be available for inspection or review at all times.
- 3. The LEA must inform all workers, building occupants, and legal representatives (as appropriate) in writing at least once per school year about asbestos-related activities and the availability of the AMP for each school building.



- 4. The LEA must ensure proper accreditation for all persons who perform asbestos inspections, asbestos re-inspections, AMP development/updates, Asbestos Work Plan (AWP) development, and response actions that may disturb asbestos; this includes operations and maintenance (O&M) activities.
- 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, and refresher training must be completed annually.
- 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 reinspection 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 Key Personnel

A. Local Education Agency (LEA)

LEA: Sandwich Public School District

Address: 33 Water Street

Sandwich, Massachusetts 02563

Phone: (508) 888-1054

B. Designated Mr. Jonathan Nelson

Person: Head of Facilities and Grounds

Address: 33 Water Street

Sandwich, Massachusetts 02563

Phone: (508) 888-3312



### C. Asbestos Consultant Data

Firm: Fuss & O'Neill EnviroScience, LLC

Address: 50 Redfield Street, Suite 100

Boston, MA 02122

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

### D. Asbestos Inspector

Inspector: Robert Mallett MADLS Certification Number: AI900557 Expiration Date: 06/01/2017

E. Asbestos Management Planner:

Planner: Dustin Diedricksen

MADLS Certification Number: AP900425 Expiration Date: 04/05/2017

### 2 Building and Mechanical System Description

The Site building is a two-story building reportedly constructed in 1989; portable classrooms were added in 1999.

Two Weil-McLain gas-fired, hot-water boilers provide heat to the building. Hot water is transferred via a closed-loop system through the ceiling plenum to unit ventilators throughout the building.

### 3 Three Year Re-Inspection

### 3.1 Re-Inspection Procedures

This Three-Year AHERA Re-Inspection was conducted in accordance with EPA requirements of the AHERA regulation, Title 40 CFR, Part 763, Section 763.85 (b).

On December 28, 2016, Mr. Robert Mallett of Fuss & O'Neill EnviroScience, LLC (EnviroScience) performed the re-inspection.

- A. During the re-inspection, EnviroScience 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 Existing Records Review

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 AMP 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 MADLS.

Sixteen bulk samples were collected during this re-inspection. The results can be found in Table 1. Refer to *Appendix B* for a copy of the asbestos laboratory analytical results and chain-of-custody form.

Bulk samples were last collected during the 2012 re-inspection. The results can be found in Table 1. Refer to *Appendix C* for a copy of the 2012 re-inspection asbestos laboratory results.

Using EPA protocol and criteria, none of the materials existing in the building at the time of this three-year re-inspection have been determined and/or assumed to be **ACBM**.

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 1
Non-Asbestos-Containing Building Materials

Homogeneous Material	Location(s)	Reference & Sample Number
Joint Compound	Original Building, 1 <sup>st</sup> & 2 <sup>nd</sup> Floor Classrooms, Hallways, Offices, & Storage Rooms	AMP July 2012 Prepared by Cardno ATC (Sample IDs 01A-01G)
Yellow Mastic Associated with Black Cove Base	Original Building, 1 <sup>st</sup> & 2 <sup>nd</sup> Floor Classrooms, Hallways, Offices, & Storage Rooms	AMP July 2012 Prepared by Cardno ATC (Sample IDs 02A & 02B)



Homogeneous Material	Location(s)	Reference & Sample Number				
Wateriai		AMP				
Yellow Mastic Associated with	Original Building & 1st & 2nd	July 2012				
Gray Carpet	Floor Classrooms	Prepared by Cardno ATC				
Gray Carpet	1 Ioor Classicoms	(Sample IDs 03A & 03B)				
		AMP				
	Original Building & 1st & 2nd	July 2012				
White Sink Coat	Floor Classrooms	Prepared by Cardno ATC				
	1 Ioor Classicoms	(Sample IDs 04A & 04B)				
		AMP				
	Original Building & 1st & 2nd	July 2012				
Black Sink Coat	Floor Classrooms	Prepared by Cardno ATC				
	1 1001 Classicollis	(Sample IDs 05A & 05B)				
		AMP				
	Original Building, 1st & 2nd	July 2012				
1' x 1' Ceiling Tile	Floor Hallways, & Room 112	Prepared by Cardno ATC				
	1 1001 Hanways, & Room 112	(Sample IDs 06A & 06B)				
		AMP				
Brown Glue Daub Associated with	Original Building, 1st & 2nd	July 2012				
1' x 1' Ceiling Tile	Floor Hallways, & Room 112	Prepared by Cardno ATC				
I A I Gennig The	1 looi Hanways, & Room 112	(Sample IDs 07A & 07B)				
		AMP				
	Original Building, 1st & 2nd	July 2012				
12" x 12" White Mottled Floor Tile	Floor Hallways, & Classrooms	Prepared by Cardno ATC				
		(Sample IDs 08A & 08B)				
		AMP				
Black Mastic Associated with 12" x	Original Building, 1st & 2nd	July 2012				
12" Floor Tile	Floor Hallways, & Classrooms	Prepared by Cardno ATC				
		(Sample IDs 09A & 09B)				
		AMP				
22 22 C 11 7511	Original Building & 1st & 2nd	July 2012				
2' x 2' Ceiling Tile	Floor Classrooms	Prepared by Cardno ATC				
		(Sample IDs 10A & 10B)				
	Original Parilding Act 9 2nd	AMP				
Crrn W/-111 1	Original Building, 1st & 2nd	July 2012				
Gypsum Wallboard	Floor Classrooms, Hallways,	Prepared by Cardno ATC				
	Offices, & Storage Rooms	(Sample IDs 11A & 11B)				
		AMP				
2' x 4' White Fissure & Dot	Portable Classrooms:	January 2017				
	Classrooms, Bathrooms, &	Prepared by EnviroScience				
Suspended Ceiling Tile	Hallway	(Sample IDs 01A & 01B-				
		RCM-1228)				



Homogeneous Material	Location(s)	Reference & Sample Number
6" Gray Vinyl Baseboard	Portable Classrooms: Classrooms, Bathrooms, & Hallway	AMP January 2017 Prepared by EnviroScience (Sample IDs 02A & 02B- RCM-1228)
Yellow Adhesive Associated with 6" Vinyl Baseboard	Portable Classrooms: Classrooms, Bathrooms, & Hallway	AMP January 2017 Prepared by EnviroScience (Sample IDs 03A & 03B- RCM-1228)
Gray Gypsum Wallboard	Portable Classrooms: Classrooms, Bathrooms, & Hallway	AMP January 2017 Prepared by EnviroScience (Sample IDs 04A & 04B- RCM-1228)
12" x 12" White with Blue Splotch Floor Tile	Portable Classrooms: Bathrooms & Hallway	AMP January 2017 Prepared by EnviroScience (Sample IDs 05A & 05B- RCM-1228)
Black Mastic Associated with 12" x 12" Floor Tile	Portable Classrooms: Bathrooms & Hallway	AMP January 2017 Prepared by EnviroScience (Sample IDs 06A & 06B- RCM-1228)
Yellow Carpet Glue	Portable Classrooms: Classrooms	AMP January 2017 Prepared by EnviroScience (Sample IDs 07A & 07B- RCM-1228)
Black Partition Wall Window Glazing Compound	Original Building at 2 <sup>nd</sup> Floor Lobby	AMP January 2017 Prepared by EnviroScience (Sample IDs 08A & 08B- RCM-1228)

 $\mathrm{AMP} = \mathrm{AHERA} \; \mathrm{Management} \; \mathrm{Plan}$ 

Mr. Dustin Diedricksen reviewed the information obtained during this re-inspection. Mr. Diedricksen is an EPA-accredited and MADLS-Certified Asbestos Management Planner.



### 4.3 Newly-Identified or Re-Sampled ACBM

Eight new suspect ACBMs were identified during this re-inspection.

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. In accordance with EPA National Emission Standards for Hazardous Air Pollutants (NESHAP), samples of these and other exterior suspect ACM must be collected and analyzed for asbestos content prior to disturbance.

Safety Data Sheets (SDS) must be obtained and kept with the AHERA documentation for any newly-installed materials in order to meet AHERA requirements. These SDS must demonstrate that asbestos-containing materials were not installed in the building. We recommend that SDS for newly-installed materials be inserted into *Appendix D*.

### 4.4 ACBM Physical Assessment

During 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 ACBM include all ACBM not listed in TSI or surfacing, such as linoleum, vinyl asbestos flooring, ceiling tiles, and construction mastics/adhesives.

Based on bulk sample results and building construction date, the Oak Ridge School has been determined not to contain ACBM at the time of this three-year re-inspection. Therefore, physical assessments were not required.

### 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. O & M - Not Applicable

### 5.2 Periodic Surveillance

At least once every six months after a management plan 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, and any changes in the ACBM condition and submit the record to the LEA Designated Person for inclusion in the AMP.

Based on bulk sample results and building construction date, the Oak Ridge School has been determined not to contain ACBM at the time of this three-year re-inspection. Therefore, physical assessments were not required.

SDS must be obtained and kept with the AHERA documentation for any newly-installed materials in order to meet AHERA requirements. These SDS must demonstrate that asbestos-containing materials were not installed in the building.

### 5.3 Preventive Measures

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

Based on bulk sample results and building construction date, the Oak Ridge School has been determined not to contain ACBM at the time of this three-year re-inspection Therefore, preventative measures in regards to ACBM are not required.

SDS must be obtained and kept with the AHERA documentation for any newly-installed materials in order to meet AHERA requirements. These SDS must demonstrate that asbestos-containing materials were not installed in the building.

### 6 EPA Accreditation Requirements

The MADLS certifications and EPA accreditations for the individuals (Mr. Dustin Diedricksen and Mr. Robert Mallett) involved in performing the re-inspection, and updating the AMP, are provided in *Appendix E*.

Report prepared by Environmental Technician, Robert Mallett.

Reviewed by:

Dustin A. Diedricksen Senior Project Manager



### Appendix A

**Existing Records Checklist** 



### **Existing Records Checklist**

Local Education Agency (LEA): Sandwich Public School District

33 Water Street

Sandwich, MA 02563

School Building: Oak Ridge 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.

	Dagumantation	Loca	ation
	Documentation	LEA Office	School
1.	Original AHERA Inspection/Management Plan	No	No
2.	Three year Re-inspections	2012, 2015	2012, 2015
3.	Notifications to Parents/Guardians and Teachers (yearly since last re-inspection)	No	No
4.	Designated Person Identified and Proper Training (person must be named and have appropriate training)	Yes	Yes
5.	Designated Person Periodic Surveillance (every six months since last re-inspection)	N/A	N/A
6.	Record of Awareness Training for Maintenance Staff	Yes	Yes
7.	Outside Vendor Awareness Notification	No	No
8.	Warning Signs and Labels (required posting in Boiler room and mechanical spaces only)	N/A	N/A
9.	Record of Response Actions (includes any abatement done since last re-inspection)	N/A	N/A

Comments: <u>Items marked "No" indicate not present/available at the time of this inspection.</u>

Inspector (LEA Office): Robert Mallett Date: December 28, 2016

Inspector (School): Robert Mallett Date: December 28, 2016



### Appendix B

Asbestos Laboratory Analytical Results and Chain-of-Custody Form



146 Hartford Road

Manchester, CT 06040

Attention: Dustin Diedricksen

EMSL Order: 131700083 Customer ID: ENVI54

Customer PO: 20160762.A1E-15

Project ID:

**Phone:** (617) 778-3750

**Fax:** (888) 838-1160

Received Date: 12/30/2016 9:17 AM

**Analysis Date**: 01/09/2017 **Collected Date**: 12/28/2016

Project: 20160762.A1E Task 15 / Sandwich Public Schools, 3-Yr AHERA Re-Inspections / Oakridge School - 260

Quaker Meeting House Road, Sandwich, MA

Fuss & O'Neill EnviroScience, LLC

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

			Non-Asbe	stos	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
01A-RCM-1228 131700083-0001	Portable Classrooms, Room 501 - 2'x4' White Fissure & Dot Suspended Ceiling Tile	Gray/White Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
01B-RCM-1228 131700083-0002	Portable Classrooms, Hallway - 2'x4' White Fissure & Dot Suspended Ceiling Tile	Gray/White Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
02A-RCM-1228 131700083-0003	Portable Classrooms, Room 501 - 6" Gray Vinyl Baseboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02B-RCM-1228	Portable Classrooms, Library - 6" Gray Vinyl Baseboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A-RCM-1228 131700083-0005	Portable Classrooms, Room 501 - Yellow Adhesive Associated with 6" Vinyl Baseboard	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B-RCM-1228 131700083-0006	Portable Classrooms, Library - Yellow Adhesive Associated with 6" Vinyl Baseboard	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A-RCM-1228 131700083-0007	Portable Classrooms, Library - Gray Gypsum Wallboard	Brown/White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
04B-RCM-1228	Portable Classrooms, Room 4 - Gray Gypsum Wallboard	White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
05A-RCM-1228 131700083-0009	Portable Classrooms, Bathroom - 12"x12" White with Blue Splotch Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05B-RCM-1228 131700083-0010	Portable Classrooms, Hallway - 12"x12" White with Blue Splotch Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06A-RCM-1228 131700083-0011	Portable Classrooms, Bathroom - Black Mastic Associated with 12"x12" Floor Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06B-RCM-1228 131700083-0012	Portable Classrooms, Hallway - Black Mastic Associated with 12"x12" Floor Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/09/2017 08:41:03



**EMSL Order:** 131700083 **Customer ID:** ENVI54

Customer PO: 20160762.A1E-15

Project ID:

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

			Non-Asbestos							
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type					
07A-RCM-1228	Portable Classrooms, Room 501 - Yellow Carpet Glue	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected					
	· · · · · · · · · · · · · · · · · · ·			4000/ New Shares (Others)	Name Detected					
07B-RCM-1228 131700083-0014	Portable Classrooms, Room 4 - Yellow Carpet Glue	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected					
08A-RCM-1228	2nd Floor Lobby - Black Partition Wall	Black Non-Fibrous	2% Cellulose	98% Non-fibrous (Other)	None Detected					
131700083-0015	Window Glazing Compound	Homogeneous								
08B-RCM-1228	2nd Floor Lobby - Black Partition Wall	Black Non-Fibrous	2% Cellulose	98% Non-fibrous (Other)	None Detected					
131700083-0016	Window Glazing Compound	Homogeneous								

Analyst(s)

Michael Mink (16)

Steve Grise, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3, VT AL998919, Maine Bulk Asbestos BA039

Initial report from: 01/09/2017 08:41:03

EMSL Customer No. ENVI54

www.fando.com

50 Redfield Street, Suite 100, Boston, MA 02122

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

EMSL FX

	Asbestos Bulk S	Sample Chain-of-Custody	Sheet of
Project Name:	Sandwich Public Schools, 3-Yr AHERA R	Re-Inspections Project No.: 20160762	.A1E_Task: _15_
Building Name/Numb	oer: Oakridge School	Project Manager:	D Diedricksen
Site Address:	260 Quaker Meeting House Road, Sandwi	ch, MA Total # of Samples:	16
Sample ID (#-Initials-Date)	Material Type (Size, Color, Description, Material)	Sample Location	Comments/ Quantities
01A-RCM-1228	2' x 4' White Fissure & Dot Suspended Ceiling Tile	Portable Classrooms, Room 501	
01B-RCM-1228	2' x 4' White Fissure & Dot Suspended Ceiling Tile	Portable Classrooms, Hallway	
02A-RCM-1228	6" Gray Vinyl Baseboard	Portable Classrooms, Room 501	
02B-RCM-1228	6" Gray Vinyl Baseboard	Portable Classrooms, Library	
03A-RCM-1228	Yellow Adhesive Associated with 6" Vinyl Baseboard	Portable Classrooms, Room 501	
03B-RCM-1228	Yellow Adhesive Associated with 6" Vinyl Baseboard	Portable Classrooms, Library	
04A-RCM-1228	Gray Gypsum Wallboard	Portable Classrooms, Library	
04B-RCM-1228	Gray Gypsum Wallboard	Portable Classrooms, Room 4	
05A-RCM-1228	12" x 12" White with Blue Splotch Floor Tile	Portable Classrooms, Bathroom	
05B-RCM-1228	12" x 12" White with Blue Splotch Floor Tile	Portable Classrooms, Hallway	
06A-RCM-1228	Black Mastic Associated with 12" x 12" Floor Tile	Portable Classrooms, Bathroom	
06B-RCM-1228	Black Mastic Associated with 12" x 12" Floor Tile	Portable Classrooms, Hallway	7
07A-RCM-1228	Yellow Carpet Glue	Portable Classrooms, Room 501	
07B-RCM-1228	Yellow Carpet Glue	Portable Classrooms, Room 4	
08A-RCM-1228	Black Partition Wall Window Glazing Compound	2 <sup>nd</sup> Floor Lobby	
08B-RCM-1228	Black Partition Wall Window Glazing Compound	2 <sup>nd</sup> Floor Lobby	
Analysis Method: 🛛 PI	M TEM Other	Turnaround Time	:1-week
Please call EnviroScience a	at (617) 282-4675 if analyses will not be completed	eted for requested turnaround time listed above.	
Email Results to:d	diedricksen & Rmallett @fando.com	Do Not Mail Hard Copy Report FAX Resu	alts to: 888-838-1160.
Special Instructions: Stop	p analysis on first positive sample in each hom	ogeneous set of samples unless otherwise noted. Do	not layer samples
unless indicated. Do not p	oint count.		*
Samples Collected by: _	Je Maplet	Date:	25/16 10 10 10 10 10 10 10 10 10 10 10 10 10 1
Samples Sent by:		Pate: 12/29/16 Time:	A CIUCI
Shipped To: 🛛 EMSI	Other		EC 3 V 2016
Method of Shipment:	Fed Ex ☐ Lab Drop Off [	Other 1926 UU	9:17

1



### **Appendix C**

2012 Re-Inspection Asbestos Laboratory Results

Client Name:

ATC Associates, Inc., Woburn

PO#:

N/A

Client Project #: N/A

Method:

Client Reference: Oakridge School

EPA/600/R-93/116

Batch:

B82057

Date Sampled:

N/A 7/5/2012

Date Received: Date Analyzed:

7/6/2012

Date of Report:

7/10/2012

		Asbestos %							Non-Asbestos %						
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON	
01A	White	0	0	0	0	0	0	0	0	0	0	0	0	100	

Description: Location:

Joint compound

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		1302		Asbes	tos %			Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON	
01B	White	0	0	0	0	0	0	0	0	0	0	0	0	100	

Description: Location:

Joint compound Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		Asbestos %					Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
01C	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Joint compound

Location:

Throughout Comments:

Is asbestos present? No.

Analyzed: Yes

		Asbestos %						Non-Asbestos %						
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
01D	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Joint compound

Location:

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

	/ 12-20-21-21-21			Asbes	stos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
01E	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Joint compound

Location:

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		julius.	nin-Aling	Asbes	stos %	THE				Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
01F	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description:

Joint compound

Location:

Throughout

Comments:

Is asbestos present? No.

Client Name:

ATC Associates, Inc., Woburn

PO#:

Client Project #: N/A

Method:

Client Reference: Oakridge School EPA/600/R-93/116 Batch:

B82057

Date Sampled:

N/A

Date Received:

7/5/2012 7/6/2012

Date Analyzed: Date of Report:

7/10/2012

				Asbes	stos %	area and	TA BA			Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
01G	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Joint compound

Location:

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		and it		Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02A	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow mastic assoc. w/black cove base

Location:

Throughout

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		20.00	VII.74	Asbes	stos %		TA PERSON			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	отн	NON
02B	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow mastic assoc. w/black cove base

Location:

Comments:

Is asbestos present? No.

Analyzed: Yes

		1000	Market 1	Asbes	tos %	H.W.				Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
03A	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow mastic assoc. w/gray carpet

Location:

Classrooms

Comments:

Is asbestos present? No.

Analyzed: Yes

			186° BIS	Asbes	tos %	\$1-5/WT				Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
03B	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow mastic assoc. w/gray carpet

Location:

Classrooms

Comments:

Is asbestos present? No.

Analyzed: Yes

		100		Asbes	stos %		TUESTR.			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
04A	White	0	0	0	0	0	0	0	0	25	0	0	0	75

Description: White sink coat

Location:

Room 112

Comments:

Is asbestos present? No.

Client Name:

ATC Associates, Inc., Woburn

PO #:

Client Project #: N/A

Method:

Client Reference: Oakridge School

EPA/600/R-93/116

Batch:

B82057

Date Sampled:

N/A

Date Received:

7/5/2012 7/6/2012

Date Analyzed: Date of Report:

7/10/2012

		A FIFTIG		Asbes	stos %	ning i ji	# pelvill			Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
04B	White	0	0	0	0	0	0	0	0	25	0	0	0	75

Location:

Description: White sink coat Room 112

Comments:

Analyzed: Yes Is asbestos present? No.

		1 Marie		Asbes	stos %		Z/ANAY			Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
05A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Location:

Description: Black sink coat Room 228A

Comments:

Is asbestos present? No.

Analyzed: Yes

		THE W	PUMB	Asbes	stos %	PALITA S				Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	ИОИ
05B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black sink coat

Location: Comments: Room 107

Is asbestos present? No.

Analyzed: Yes

		A traple		Asbes	stos %	FEE MAY	a. Latin			Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
06A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: 1x1 Ceiling tile

Location:

Room 112

Comments:

Is asbestos present? No.

Analyzed: Yes

		The last	<b>网络贝克斯</b>	Asbes	stos %	of the same	M. Holling			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
06B	Multi	0	0	: 0	0	0	0	0	40	40	0	0	0	20

Description: 1x1 Ceiling tile

Location:

Hallway Comments:

Is asbestos present? No.

Analyzed: Yes

		100		Asbes	stos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
07A	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Brown daub assoc. w/1x1 ceiling tile

Location: Comments: Room 112

Is asbestos present? No.

Client Name:

ATC Associates, Inc., Woburn

N/A

Batch:

B82057

PO #:

Date Sampled:

N/A

Client Project #: N/A

Date Received:

7/5/2012 7/6/2012

Method:

Client Reference: Oakridge School EPA/600/R-93/116 Date Analyzed: Date of Report:

7/10/2012

		V. Own	525	Asbes	itos %	Section 1				Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
07B	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Brown daub assoc. w/1x1 ceiling tile

Location:

Hallway

Comments:

Is asbestos present? No.

Analyzed: Yes

		1300		Asbes	stos %	12 A . W				Non-	-Asbeste	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
08A	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: 12"x12" White floor tile

Location:

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		HIN WY	TO IT WE	Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
08B	White	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: 12"x12" White floor tile

Location: Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

			12.	Asbes	stos %	NEW				Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
09A	Black	0	0	0	0	0	0	0	0	10	0	0	0	90

Description: Black mastic assoc. w/white floor tile

Location:

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	stos %	450	THE P			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
09B	Black	0	0	0	0	0	0	0	0	15	0	0	0	85

Description: Black mastic assoc. w/white floor tile

Location:

Throughout

Comments:

Is asbestos present? No.

Analyzed: Yes

		110		Asbes	stos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
10A	Multi	0	0	0	0	0	0	0	20	60	0	0	0	20

Description: 2'x2' Ceiling tile

Location:

Room 228A

Comments:

Is asbestos present? No.

Client Name:

ATC Associates, Inc., Woburn

PO #:

N/A

Client Project #: N/A

Client Reference: Oakridge School Method:

EPA/600/R-93/116

Batch:

B82057

Date Sampled:

N/A

Date Received:

7/5/2012

Date Analyzed:

7/6/2012

Date of Report:

7/10/2012

		TA N	1 Y 4	Asbes	stos %	32-18 VI				Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
10B	Multi	0	0	0	0	0	0	0	20	60	0	0	0	20

Description: 2'x2' Ceiling tile

Location:

Conf. room

Comments:

Is asbestos present? No.

Analyzed: Yes

		SITE		Asbes	tos %	01,140,7	机油用			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
11A	Multi	0	0	0	0	0	0	TR	0	10	0	0	0	90

Description: Gypsum board Room 153 Location:

Comments:

Is asbestos present? No.

Analyzed: Yes

		E1 . SEE		Asbes	tos %		S115,68, 89			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
11B	Multi	0	0	0	0	0	0	TR	0	10	0	0	0	90

Description: Gypsum board

Location: Room 210

Comments:

Is asbestos present? No.

Analyzed: Yes

		42 78 1		Asbes	stos %	in the				Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
12A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black window caulk

Location:

Interior windows

Comments:

Is asbestos present? No.

Analyzed: Yes

		Asbestos %							Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON		
12B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100		

Description: Black window caulk

Location:

Interior windows

Comments:

Is asbestos present? No.

Analyzed: Yes

		Asbestos %						Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON	
13A	White	10	0	0	0	0	0	0	0	0	0	0	0	90	

Description: White caulk

Location:

Exterior window

Comments:

Is asbestos present? Yes.

Client Name:

ATC Associates, Inc., Woburn

PO#:

N/A

Client Project #: N/A

Method:

Client Reference: Oakridge School EPA/600/R-93/116 Batch:

B82057

Date Sampled:

N/A 7/5/2012

Date Received:

7/6/2012

Date Analyzed: Date of Report:

7/10/2012

No

		Asbestos %						Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON	
13B		0	0	0	0	0	0	0	0	0	0	0	0	0	

Description: White caulk

Location:

Exterior window

Comments:

Asbestos Codes:

Non-Asbestos Codes:

CHR = Chrysotile FBG = Fiberglass

AMO = Amosite MNW = Mineral Wool

Note: To create a unique lab sample ID, use the Batch # and the Sample ID (example: [Batch #] - [Sample: ID]

CRO = Crocidolite CEL = Cellulose

ACT = Actinolite HAR = Hair

TRE = Tremolite SYN = Synthetic

ANT = Anthophyllite

NON = Non-Fibrous Minerals OTH = Other

\* All results are in percentage.

Analyzed:

Analyst: Dan Pine

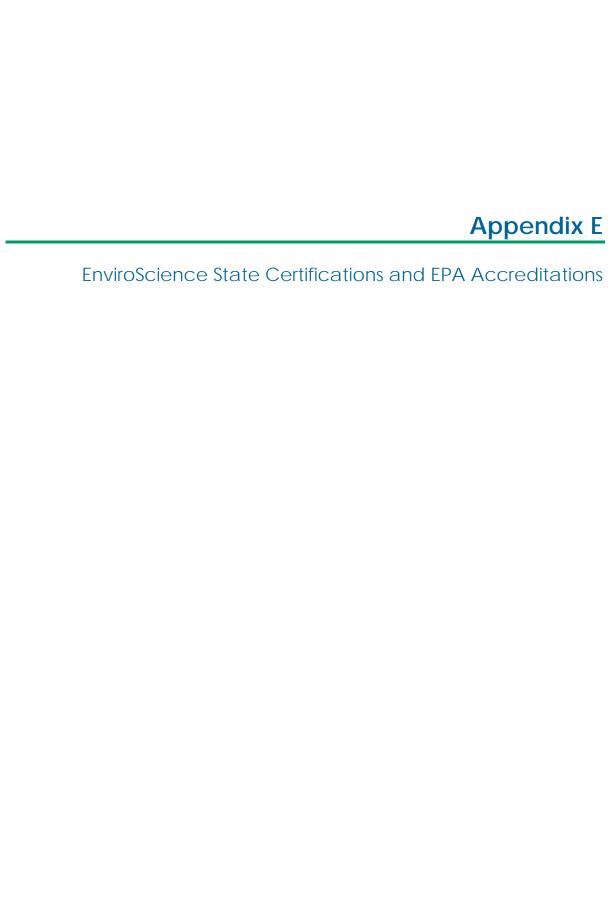
Page 6 of 6



### Appendix D

Newly-Installed Materials Safety Data Sheets

To be Provided by LEA



### Commonwealth of Massachusetts

Department of Labor Standards

William D. McKinney, Director

**Asbestos Inspector** 

### **ROBERT C. MALLETT**

Eff. Date 05/10/16 Exp. Date 06/01/17

Al900557

Member of C.O.N.E.S.

BOSR









### Robert C Mallett



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

# Asbestos Inspector Refresher

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

Institute for Environmental Education, Inc. 16 Upton Drive Wilmington, MA 01887 Course Location

January 7, 2016

Course Dates

16-0243-106-400644

Certificate Number

January 07, 2016

**Examination Date** 

January 07, 2017

**Expiration Date** 

**Training Director** 

16 Upton Drive, Wilmington, MA 01887 Telephone 978,658,5272

www.leetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION

### Commonwealth of Massachusetts

Department of Labor Standards

William D. McKinney, Director

### **Asbestos Management Planner**

### **DUSTIN A. DIEDRICKSEN**

Eff. Date 04/05/16 Exp. Date 04/05/17

AP900425

Member of C.O.N.E.S.

**BOS-RENEW** 









## **Dustin A. Diedricksen**



has completed the requisite training, and has passed an examination for

## reaccreditation

Asbestos Management Planner Refresher

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

Institute for Environmental Education, Inc. 16 Upton Drive Wilmington, MA 01887 Course Location

January 21, 2016

Course Dates

16-0267-136-208040

Certificate Number

January 21, 2016 **Examination Date** 

January 21, 2017

**Expiration Date** 

Training Director

Telephone 978,658,5272 16 Upton Drive, Wilmington, MA 01887

www.leetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION