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

for

Otis Memorial Elementary School
5500 Curtis Boulevard
Bourne, Massachusetts

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)

Bourne Public Schools

Bourne, Massachusetts

December 2017

Fuss & O'Neill EnviroScience, LLC
108 Myrtle Street, Suite 502
Quincy, MA 02171

Project Number: 20121141.C3E

FUSS & O'NEILL
EnviroScience, LLC

February 19, 2018

Mr. Jordan Geist
Interim Business Director
Bourne Public Schools
36 Sandwich Road
Bourne, MA 02532

RE: Three-Year AHERA Re-Inspection and Management Plan Update
Otis Memorial Elementary School
5500 Curtis Boulevard, Bourne, MA
Fuss & O'Neill EnviroScience Project No. 20121141.C3E

Dear Mr. Geist:

Enclosed is the Three-Year AHERA Re-Inspection and Management Plan Update report prepared by Fuss & O'Neill EnviroScience, LLC for the Otis Memorial Elementary School located at 5500 Curtis Boulevard in Bourne, Massachusetts (the "Site"). AHERA services were performed for Bourne Public Schools (the "Client").

This report is an important document that must be kept on file at the school and 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,

Dustin A. Diedricksen
Senior Project Manager

DD/so

Enclosure

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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 and 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.

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 assumed ACBM are present.

7. The LEA must ensure that known ACBM or assumed 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 assumed 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 assumed ACBM.

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

1.3 Key Personnel

A. Local Education Agency (LEA):

LEA:	Bourne Public Schools
Address:	36 Sandwich Road Bourne, MA 02532
Phone:	(508) 759-0660

B. Designated Person:

Designated Person:	Mr. Jordan Geist Interim Business Director
Address:	36 Sandwich Road Bourne, Massachusetts 02532
Phone:	(508) 759-0660

C. Asbestos Consultant:

Firm:	Fuss & O'Neill EnviroScience, LLC
Address:	108 Myrtle Street, Suite 502
	Quincy, MA 02171
Phone:	(617) 282-4675

D. Asbestos Inspector:

Inspector:	Robert Mallett
MADLS Certification Number:	AI900557
Expiration Date:	06/01/2018

E. Asbestos Management Planner:

Planner:	Dustin Diedricksen
MADLS Certification Number:	AP900425
Expiration Date:	04/05/2018

2 Building and Mechanical System Description

Otis Memorial Elementary School is a one-level, concrete and masonry structure reportedly constructed in 1962; it contains approximately 35,160 square feet of interior space. The school building includes the following functional spaces: two classroom wings; offices; gymnasium; kitchen; multi-purpose room; boiler room; and crawlspace areas.

Two hot-water boilers provide perimeter radiant heating throughout the building via fin-tube radiators.

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 8, 2017, Fuss & O'Neill EnviroScience, LLC (EnviroScience) representative, Mr. Robert Mallett, performed the re-inspection.

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 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 AMP are stored.

Refer to *Appendix A* for the existing records checklist.

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. The first form, **Re-Inspection Form 1**, identifies previous inspection data gathered during the initial AHERA inspection and subsequent re-inspection (refer to *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 2**, is used to provide information and justification regarding re-assessment of the ACBM (refer to *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.

Previous bulk sampling results can be found in Table 1 and Table 2. Refer to *Appendix D* for previously sampled materials asbestos laboratory analytical report and chain-of-custody form.

Using EPA protocol and criteria, the following materials existing in the Otis Memorial 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 ACBM.

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Table 1
Asbestos-Containing Building Materials (ACBM)
(Previous & Current Re-Inspections)

Material	Location	Reference	Asbestos Content
White Boiler Insulation	Boiler Room	Assumed ACBM	Assumed ACBM
White Boiler Breeching	Boiler Room	EnviroScience Sample Report July 2009 (Sample ID: 717DD-02A)	80% Chrysotile
White Hot Water Tank Insulation	Boiler Room	Assumed ACBM	Assumed ACBM
White Mudded Pipe-Fitting Associated with Fiberglass Pipe Insulation	Boiler Room, Pipe Tunnel, Nurse's Office beneath Sink, Kitchen Unit Ventilators, Supply Room near Custodial Office, & Supply Closet	EnviroScience Sample Report July 2009 (Sample ID: 717DD-01A)	10% Chrysotile 10% Amosite
9" x 9" Tan with Specks Floor Tile	Boiler Room Entry, Teacher's Room & Supply Room (Classroom 20)	Assumed ACBM	Assumed ACBM
9" x 9" Multi-Colored Specks Floor Tile	At Double Doors in Hallway Outside Clinic	Assumed ACBM	Assumed ACBM
9" x 9" Multi-Colored Specks & Tan with Specks Floor Tile	Classroom 1 & Classroom 9	Assumed ACBM	Assumed ACBM
9" x 9" Gray with Streaks & Blue with Streaks Floor Tile	Classroom 2 & Hallway between Classrooms 1 & 2	Assumed ACBM	Assumed ACBM
9" x 9" Beige with Specks & Gray with Specks Floor Tile	Classroom 3	Assumed ACBM	Assumed ACBM
9" x 9" Gray with Specks & Light Gray with Specks Floor Tile	Classroom 4	Assumed ACBM	Assumed ACBM
9" x 9" Green with White Streaks Floor Tile	Classroom 5 & Principal's Office	Assumed ACBM	Assumed ACBM
9" x 9" Blue with Streaks Floor Tile	Classroom 6	Assumed ACBM	Assumed ACBM

Material	Location	Reference	Asbestos Content
9" x 9" Beige with Specks Floor Tile	Classroom 7, Classroom 8, & Classroom 11	Assumed ACBM	Assumed ACBM
9" x 9" Gray with Specks Floor Tile	Classroom 10	Assumed ACBM	Assumed ACBM
9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Classroom 12 & Classroom 14 (Former Library)	Assumed ACBM	Assumed ACBM
9" x 9" Beige with Multi-Colored Specks Floor Tile	Classroom 13, Classroom 17, Classroom 18, Foyer & Hallway outside Teacher's Room, & Hallway at Gym Wing	Assumed ACBM	Assumed ACBM
9" x 9" Brown with Streaks & Green with Blue Streaks Floor Tile	Classroom 15	Assumed ACBM	Assumed ACBM
9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Classroom 16	Assumed ACBM	Assumed ACBM
9" x 9" Tan with Blue & Brown Streaks Floor Tile	Classroom 19	Assumed ACBM	Assumed ACBM
9" x 9" Multi-Colored Specks Floor Tile	Nurse's Office, Main Office Hallway from Classroom 15 to Doors outside Restrooms, & North Wing Hallway	Assumed ACBM	Assumed ACBM
9" x 9" Beige Floor Tile	Cafeteria/Gym	Assumed ACBM	Assumed ACBM
9" x 9" Tan Floor Tile	Custodian's Office	Assumed ACBM	Assumed ACBM
Fire Door Core Insulation	Boiler Room & Emergency Generator Room	Assumed ACBM	Assumed ACBM
Black Sink Undercoating	Classrooms	EnviroScience Sample Report July 2009 (Sample ID: 717DD-04A)	5% Chrysotile
Gray Fiber-Reinforced Cement Panel	Exterior Soffit	Assumed ACBM	Assumed 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 2
Non-Asbestos-Containing Building Materials
(Previous & Current Re-Inspections)

Material	Location	Reference
HVAC Cloth Duct Vibration Isolator	Generator Room	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-03A – 03B)
4" Black Vinyl Baseboard	Classrooms, Hallways, Offices, & Storage Closets	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-05A – 05C)
Black Mastic Associated with Black Cove Base	Classrooms, Hallways, Offices, & Storage Closets	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-06A – 06C)
Black Mastic Associated with 9" x 9" Floor Tile	Classrooms, Hallways, Offices, & Storage Closets	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-07A – 07E)
Wall Plaster Skim Coat	Throughout School (Classrooms, Offices, Bathrooms, & Hallways)	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-08A – 08G)
Wall Plaster Rough Coat	Throughout School (Classrooms, Offices, Bathrooms, & Hallways)	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-09A – 09G)
Ceiling Plaster Skim Coat	Bathrooms & Custodial Closets	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-10A – 10G)
Ceiling Plaster Rough Coat	Bathrooms & Custodial Closets	EnviroScience Sample Report July 2009 (Sample IDs: 717DD-11A – 11G)

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 Materials

No new materials 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.

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

Safety Data Sheets (SDS) should 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 E*.

4.4 Physical Assessment of ACBM

During inspection, suspect ACBM were separated into three EPA categories: Thermal System Insulation (TSI), Surfacing ACBM, and Miscellaneous ACBM. TSI includes all materials used to prevent heat loss/ 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 sheet flooring, vinyl asbestos flooring, ceiling tiles, and construction mastics/adhesives.

Finally, ACBM were quantified in linear 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 MADLS and AHERA guidelines for assessment of ACBM. The following assessment categories are listed:

1 Damaged or significantly damaged TSI ACM
2 Damaged friable surfacing ACM
3 Significantly damaged friable surfacing ACM
4 Damaged or significantly damaged friable miscellaneous ACM
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, the physical walk-through inspection, and the 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

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 EPA-accredited Asbestos Project Designers and conducted by EPA-accredited personnel.
4. The LEA shall notify the MADLS 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, and record the date of surveillance, their name, and any changes in the ACBM condition; this information shall then be submitted to the LEA's Designated Person for inclusion in the AMP.

Refer to *Appendix F* for the Sample 6-Month 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, and/or delaminated.

Refer to *Appendix G* for preventive measures designed for various types of ACBM that may exist in the school.

5.4 Abatement (Removal) Cost Estimates

Costs for abatement (removal) of all ACBM in the building are as follows:

Table 3
Abatement Cost Estimates

Material	Location	Estimated Quantity	Estimated Contractor Cost
White Boiler Insulation	Boiler Room	200 SF	$5,000
White Boiler Breeching	Boiler Room	365 SF	$5,500

Material	Location	Estimated Quantity	Estimated Contractor Cost
White Hot Water Tank Insulation	Boiler Room	100 SF	$2,500
White Mudded Pipe-Fitting Associated with Fiberglass Pipe Insulation	Boiler Room, Pipe Tunnel, Nurse's Office (beneath Sink), Kitchen (Unit Ventilators), Supply Room near Custodial Office, Supply Closet	350 EA	$17,500
Black Sink Undercoating	Classrooms	25 EA	$3,125
9" x 9" Floor Tile	Classrooms and Hallways	23,435 SF	$117,175
Gray Fiber-Reinforced Cement Panel (Transite)	Exterior Soffit	1,975 SF	$19,750
Fire Door Core Insulation	Boiler Room & Emergency Generator Room	2 EA	$1,200

EA=Each, SF=Square Foot

Asbestos training costs for custodial and maintenance workers (under O&M Program) are as follows:

Table 4
Asbestos Training Cost Estimates

Training Course	Estimated Cost
Two-Hour Asbestos Awareness Training (Annual)	$75/Person/Year
Asbestos Coordinator/LEA Designated Person Initial Training	$250/Person
Asbestos Coordinator/LEA Designated Person Annual Refresher Training	$200/Person/Year
Asbestos Operations & Maintenance Initial Training	$300/Person
Asbestos Operations & Maintenance Annual Refresher Training	$150/Person/Year
Three-Year Re-Inspection & AMP Update	$5,000 -$8,000

6 EPA Accreditation Requirements

EPA accreditations and MADLS Asbestos Inspector and Management Planner certifications for Mr. Mallett and Mr. Diedricksen are provided in *Appendix H*.

Report prepared by Environmental Analyst, Robert Mallett.

Reviewed by:



Dustin A. Diedricksen
Senior Project Manager

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Appendix A

Existing Records Checklist

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Existing Records Checklist

Local Education Agency (LEA): Bourne Public Schools
36 Sandwich Road
Bourne, MA 02532

School Building: Otis Memorial Elementary School

The following documentation is required to be present at both the LEA's office and at 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 the three-year re-inspection.

DOCUMENTATION		LOCATION	
		School*	LEA Office
1	Original AHERA Operations and Maintenance Plan/Inspection Report	No*	No
2	Three Year Re-Inspection (First and All Subsequent Inspections)	No*	1994, 1998, 2001, 2004, 2011, & 2014
3	Parents and Teachers Notifications (Annually Since Last Re-Inspection)	No*	Yes (In Student Handbook & Website)
4	Designated Person Identification and Proper Training	No*	Yes
5	Designated Person Periodic Surveillance (Once Every Six Months)	No*	Yes
6	Maintenance Staff Awareness Training Records	No*	No
7	Outside Vendor Awareness Notification	No*	No
8	Asbestos Warning Signs and Labels (Required Posting in Boiler Rooms and Mechanical Spaces Only)	No*	Yes
9	Response Action Records (Includes Any Abatement Conducted Since Last 3-Year Re-Inspection)	No*	Yes

* Denotes the school is no longer in use and files are no longer kept at this location.

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

Inspector (LEA Office): Robert Mallett Date: December 8, 2017

Inspector (School): Robert Mallett Date: December 8, 2017

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Appendix B

Re-Inspection Form 1

School: Otis Memorial Elementary School
Address 5500 Memorial Blvd, Bourne, MA

Date(s) of Original Inspection: 1988
Date(s) of Subsequent Re-Inspections: 1994, 1998, 2001, 2004, 2007, 2011, 2014, & 2017

Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/Other Comments
Sample Number	Asbestos Content	Material Description					
Assumed ACBM	Assumed ACBM	White Boiler Insulation	TSI	F	7	Boiler Room	School is not operational
717DD-02A	80% Chrysotile	White Boiler Breeching	TSI	F	7	Boiler Room	School is not operational
Assumed ACBM	Assumed ACBM	White Hot Water Tank Insulation	TSI	F	7	Boiler Room	School is not operational
717DD-01A	10% Chrysotile 10% Amosite	White Mudded Pipe-Fitting Associated with Fiberglass Pipe Insulation	TSI	F	7	Boiler Room, Pipe Tunnel, Nurse's Office beneath Sink, Kitchen Unit Ventilators, Supply Room near Custodial Office, & Supply Closet	School is not operational
Assumed ACBM	Assumed ACBM	9" x 9" Tan with Specks Floor Tile	Misc.	NF	5	Boiler Room Entry	
Assumed ACBM	Assumed ACBM	9" x 9" Tan with Specks Floor Tile	Misc.	NF	5	Teacher's Room	
Assumed ACBM	Assumed ACBM	9" x 9" Tan with Specks Floor Tile	Misc.	NF	5	Supply Room (Classroom 20)	
Assumed ACBM	Assumed ACBM	9" x 9" Multi-Colored Specks Floor Tile	Misc.	NF	5	At Double Doors in Hallway Outside Clinic	
Assumed ACBM	Assumed ACBM	9" x 9" Multi-Colored Specks & Tan with Specks Floor Tile	Misc.	NF	5	Classroom 1	

School: Otis Memorial Elementary School
Address 5500 Memorial Blvd, Bourne, MA

Date(s) of Original Inspection: 1988
Date(s) of Subsequent Re-Inspections: 1994, 1998, 2001, 2004, 2007, 2011, 2014, & 2017

Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/Other Comments
Sample Number	Asbestos Content	Material Description					
Assumed ACBM	Assumed ACBM	9" x 9" Multi-Colored Specks & Tan with Specks Floor Tile	Misc.	NF	5	Classroom 9	
Assumed ACBM	Assumed ACBM	9" x 9" Gray with Streaks & Blue with Streaks Floor Tile	Misc.	NF	5	Classroom 2	
Assumed ACBM	Assumed ACBM	9" x 9" Gray with Streaks & Blue with Streaks Floor Tile	Misc.	NF	5	Hallway between Classrooms 1 & 2	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Specks & Gray with Specks Floor Tile	Misc.	NF	5	Classroom 3	
Assumed ACBM	Assumed ACBM	9" x 9" Gray with Specks & Light Gray with Specks Floor Tile	Misc.	NF	5	Classroom 4	
Assumed ACBM	Assumed ACBM	9" x 9" Green with White Streaks Floor Tile	Misc.	NF	5	Classroom 5	
Assumed ACBM	Assumed ACBM	9" x 9" Green with White Streaks Floor Tile	Misc.	NF	5	Principal's Office	
Assumed ACBM	Assumed ACBM	9" x 9" Blue with Streaks Floor Tile	Misc.	NF	5	Classroom 6	

School: Otis Memorial Elementary School

Address 5500 Memorial Blvd, Bourne, MA

Date(s) of Original Inspection: 1988

Date(s) of Subsequent Re-Inspections: 1994, 1998, 2001, 2004, 2007, 2011, 2014, & 2017

Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/Other Comments
Sample Number	Asbestos Content	Material Description					
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Specks Floor Tile	Misc.	NF	5	Classroom 7	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Specks Floor Tile	Misc.	NF	5	Classroom 8	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Specks Floor Tile	Misc.	NF	5	Classroom 11	
Assumed ACBM	Assumed ACBM	9" x 9" Gray with Specks Floor Tile	Misc.	NF	5	Classroom 10	
Assumed ACBM	Assumed ACBM	9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Misc.	NF	5	Classroom 12	
Assumed ACBM	Assumed ACBM	9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Misc.	NF	5	Classroom 14 (Former Library)	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Multi-Colored Specks Floor Tile	Misc.	NF	5	Classroom 13	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Multi-Colored Specks Floor Tile	Misc.	NF	5	Classroom 17	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Multi-Colored Specks Floor Tile	Misc.	NF	5	Classroom 18	

School: Otis Memorial Elementary School

Address 5500 Memorial Blvd, Bourne, MA

Date(s) of Original Inspection: 1988

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Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/Other Comments
Sample Number	Asbestos Content	Material Description					
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Multi-Colored Specks Floor Tile	Misc.	NF	5	Foyer & Hallway Outside of Teacher's Room	
Assumed ACBM	Assumed ACBM	9" x 9" Beige with Multi-Colored Specks Floor Tile	Misc.	NF	5	Hallway at Gym Wing	
Assumed ACBM	Assumed ACBM	9" x 9" Brown with Streaks & Green with Blue Streaks Floor Tile	Misc.	NF	5	Classroom 15	
Assumed ACBM	Assumed ACBM	9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Misc.	NF	5	Classroom 16	
Assumed ACBM	Assumed ACBM	9" x 9" Tan with Blue & Brown Streaks Floor Tile	Misc.	NF	5	Classroom 19	
Assumed ACBM	Assumed ACBM	9" x 9" Multi-Colored Specks Floor Tile	Misc.	NF	5	Nurse's Office	
Assumed ACBM	Assumed ACBM	9" x 9" Multi-Colored Specks Floor Tile	Misc.	NF	5	Main Office Hallway from Classroom 15 to Doors Outside Restrooms	
Assumed ACBM	Assumed ACBM	9" x 9" Multi-Colored Specks Floor Tile	Misc.	NF	5	North Wing Hallway	

School: Otis Memorial Elementary School
Address 5500 Memorial Blvd, Bourne, MA

Date(s) of Original Inspection: 1988
Date(s) of Subsequent Re-Inspections: 1994, 1998, 2001, 2004, 2007, 2011, 2014, & 2017

Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/Other Comments
Sample Number	Asbestos Content	Material Description					
Assumed ACBM	Assumed ACBM	9" x 9" Beige Floor Tile	Misc.	NF	5	Cafeteria/Gym	
Assumed ACBM	Assumed ACBM	9" x 9" Tan Floor Tile	Misc.	NF	5	Custodian's Office	
Assumed ACBM	Assumed ACBM	Fire Door Core Insulation	Misc.	F	7	Boiler Room	School is not operational
Assumed ACBM	Assumed ACBM	Fire Door Core Insulation	Misc.	F	7	Emergency Generator Room	School is not operational
717DD-04A	5% Chrysotile	Black Sink Undercoating	Misc.	NF	5	Classrooms	
Assumed ACBM	Assumed ACBM	Gray Fiber-Reinforced Cement Panel	Misc.	NF	5	Exterior Soffit	

Information abstracted by: Robert Mallett Date: December 8, 2017

Material Category: TSI = Thermal System Insulation, Surf. = Surfacing, Misc. = Miscellaneous

Friability: F = Friable, NF = Non-Friable

AHERA Assessment Categories:

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

FUSS & O'NEILL
EnviroScience, LLC

Appendix C

Re-Inspection Form 2

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: White Boiler Insulation
Sample ID Number: Assumed ACBM

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	F	200 SF	7	Any remaining friable ACBM or friable suspected ACBM	No damaged, friable TSI or suspect debris was observed at the time of inspection in the Boiler Room. Periodic cleaning is not recommended at this time because the building is currently unoccupied and scheduled for sale/transfer. Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Homogeneous Material: White Boiler Breeching

Date of Re-Inspection: December 8, 2017
Sample ID Number: 717DD-02A

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	F	365 SF	7	Any remaining friable ACBM or friable suspected ACBM	No damaged, friable TSI or suspect debris was observed at the time of inspection in the Boiler Room. Periodic cleaning is not recommended at this time because the building is currently unoccupied and scheduled for sale/transfer. Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: White Hot Water Tank Insulation
Sample ID Number: Assumed ACBM

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	F	100 SF	7	Any remaining friable ACBM or friable suspected ACBM	No damaged, friable TSI or suspect debris was observed at the time of inspection in the Boiler Room. Periodic cleaning is not recommended at this time because the building is currently unoccupied and scheduled for sale/transfer. Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Homogeneous Material: White Mudded Pipe-Fitting Associated with Fiberglass Pipe Insulation

Date of Re-Inspection: December 8, 2017
Sample ID Number: 717DD-01A

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, Pipe Tunnel, Nurse's Office (beneath Sink), Kitchen (Unit Ventilators), Supply Room near Custodial Office, Supply Closet	F	350 EA	7	Any remaining friable ACBM or friable suspected ACBM	No damaged, friable TSI or suspect debris was observed at the time of inspection in the Boiler Room. Periodic cleaning is not recommended at this time because the building is currently unoccupied and scheduled for sale/transfer. Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	

I, the LEA's Designated Person, have read and understood the recommendations made above: _____

Date: _____

School: Otis Memorial Elementary School
Homogeneous Material: Black Sink Undercoating

Date of Re-Inspection: December 8, 2017
Sample ID Number: 717DD-04A

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**
Classrooms	NF	25 EA	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Tan with Specks Floor Tile
Sample ID Number: Assumed ACBM

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 Entry, Teachers' Room, Supply Room (Classroom 20), Classrooms 1 & 9	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Multi-Colored Specks Floor Tile
Sample ID Number: Assumed ACBM

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**
At Double Doors in Hallway Outside Clinic, Classroom 1, & 9, Nurse's Office, Main Office Hallway from Classroom 15 to Doors Outside Restrooms, & North Wing Hallway	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Gray with Streaks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 2 & Hallway between Classrooms 1 & 2,	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Blue with Streaks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classrooms 2, 6 & Hallway between Classrooms 1 & 2	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Beige with Specks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classrooms 3, 7, 8, 11, 13, 17, & 18; Foyer & Hallway Outside Teachers' Room, Hallway at Gym Wing	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Gray with Specks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classrooms 3, 4, & 10	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Light Gray with Specks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 4	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Green with White Streaks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 5 & Principal's Office	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Brown with Multi-Colored Specks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classrooms 12 &16; Classroom 14 (Former Library)	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Tan with Multi-Colored Specks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 12 & 16; Classroom 14 (former Library)	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Brown with Streaks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 15	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	

I, the LEA's Designated Person, have read and understood the recommendations made above: _____

Date: _____

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Green with Blue Streaks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 15	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Tan with Blue & Brown Streaks Floor Tile
Sample ID Number: Assumed ACBM

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**
Classroom 19	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: 9" x 9" Beige Floor Tile
Sample ID Number: Assumed ACBM

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**
Cafeteria/Gym	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School Date of Re-Inspection: December 8, 2017

Homogeneous Material: 9" x 9" Tan Floor Tile Sample ID Number: Assumed ACBM

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**
Custodian's Office	NF	Not Quantified Individually (23,435 SF total)	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: Gray Fiber-Reinforced Cement Panel (Transite)
Sample ID Number: Assumed ACBM

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**
Exterior Soffit	NF	1,975 SF	5	ACBM with potential for damage	Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

School: Otis Memorial Elementary School
Date of Re-Inspection: December 8, 2017
Homogeneous Material: Fire Door Core Insulation
Sample ID Number: Assumed ACBM

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 & Emergency Generator Room	F	2 EA	7	Any remaining friable ACBM or friable suspected ACBM	No damaged, friable TSI or suspect debris was observed at the time of inspection in the Boiler Room & Emergency Generator Room. Periodic cleaning is not recommended at this time because the building is currently unoccupied and scheduled for sale/transfer. Maintain under O&M Program	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: February 19, 2018	
Inspector's Name: Robert Mallett Inspector Signature: _____ Accreditation #/State: AI900557/MA Expiration Date: 06/01/2018					Management Planner Name: Dustin Diedricksen Management Planner Signature: _____ Accreditation #/State: AP900425/MA Expiration Date: 04/05/2018	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

Appendix D

Previously Sampled Materials Laboratory Reports

EMSL Analytical, Inc.
7 Constitution Way, Suite 107, Woburn, MA 01801
Phone: (781) 933-8411 Fax: (781) 933-8412 Email: bostonlab@emsl.com

Attn: **Bob May**
Fuss & O' Neill EnviroScience, LLC
50 Redfield Street
Boston, MA 02122

Fax: (413) 647-0018 Phone: (617) 282-4675
Project: **20070914.A4E / Bourne Public Schools; Otis Memorial Elementary School**

Customer ID: ENVI54C
Customer PO:
Received: 07/20/09 9:45 AM
EMSL Order: 130902669
EMSL Proj:
Analysis Date: 7/24/2009

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

Sample	Description	Appearance	Non-Asbestos %	Fibrous	Non-Asbestos %	Non-Fibrous	Asbestos %	Type
717DD-01A *130902669-0001*	Supplies Rm; Mudded Fittings a/w FG Pipe Insul	White Fibrous Homogeneous			80%	Non-fibrous (other)	10%	Chrysotile
							10%	Amosite
717DD-01B *130902669-0002*	Air Hand Unit @ Kit; Mud Fitting a/w FG Pipe Insul							Stop Positive (Not Analyzed)
717DD-01C *130902669-0003*	Boiler Rm; Mudded Fittings a/w FG Pipe Insul							Stop Positive (Not Analyzed)
717DD-02A *130902669-0004*	Boiler Breeching; TSI	Gray Fibrous Homogeneous			20%	Non-fibrous (other)	80%	Chrysotile
717DD-02B *130902669-0005*	Boiler Breeching; TSI							Stop Positive (Not Analyzed)
717DD-02C *130902669-0006*	Boiler Breeching; TSI							Stop Positive (Not Analyzed)
717DD-03A *130902669-0007*	Generator; Vibration Isolator Cloth	Gray Fibrous Homogeneous	95%	Cellulose	5%	Non-fibrous (other)		None Detected

Analyst(s)
Kevin Pine (44)

Renaldo Drakes
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn 7 Constitution Way, Suite 107, Woburn MA NVLAP Lab Code 101147-0, AIHA IHLAP 180179, CT PH-0315, MA AA000188, R and VT AL357102

EMSL Analytical, Inc.
7 Constitution Way, Suite 107, Woburn, MA 01801
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Attn: **Bob May**
Fuss & O' Neill EnviroScience, LLC
50 Redfield Street
Boston, MA 02122

Fax: (413) 647-0018 Phone: (617) 282-4675

Project: **20070914.A4E / Bourne Public Schools; Otis Memorial Elementary School**

Customer ID: ENVI54C
Customer PO:
Received: 07/20/09 9:45 AM
EMSL Order: 130902669

EMSL Proj:
Analysis Date: 7/24/2009

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

			Non-Asbestos				Asbestos	
Sample	Description	Appearance	%	Fibrous	%	Non-Fibrous	%	Type
717DD-03B *130902669-0008*	Generator; Vibration Isolator Cloth	Gray Fibrous Homogeneous	95%	Cellulose	5%	Non-fibrous (other)		None Detected
717DD-04A *130902669-0009*	Classrm #3; Black Sink Undercoat	Black Non-Fibrous Homogeneous			95%	Non-fibrous (other)	5%	Chrysotile
717DD-04B *130902669-0010*	Classrm #7; Black Sink Undercoat							Stop Positive (Not Analyzed)
717DD-04C *130902669-0011*	Classrm #19; Black Sink Undercoat							Stop Positive (Not Analyzed)
717DD-05A *130902669-0012*	Supplies Rm; Black Covebase	Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)		None Detected
717DD-05B *130902669-0013*	Faculty Rm; Black Covebase	Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)		None Detected
717DD-05C *130902669-0014*	Main Office Reception; Black Covebase	Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)		None Detected

Analyst(s)

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EMSL Proj:
Analysis Date: 7/24/2009

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

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
717DD-06A *130902669-0015*	Supplies Rm; Black Mastic a/w Black Covebase	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-06B *130902669-0016*	Faculty Rm; Black Mastic a/w Black Covebase	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-06C *130902669-0017*	Main Office Reception; Blk Mastic a/w Blk Covebase	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-07A *130902669-0018*	Health Office/Clinic; Black Mastic a/w 9x9 FT	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-07B *130902669-0019*	Gym; Black Mastic a/w 9x9 FT	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-07C *130902669-0020*	Gym; Black Mastic a/w 9x9 FT	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-07D *130902669-0021*	Classrm #11; Black Mastic a/w 9x9 FT	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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EMSL Proj:
Analysis Date: 7/24/2009

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
717DD-07E *130902669-0022*	Classrm #14; Black Mastic a/w 9x9 FT	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
717DD-08A *130902669-0023*	Mens Bathrm acr Supply Rm; Skim Wall Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
717DD-08B *130902669-0024*	Girls Handicap Bathrm; Skim Wall Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
717DD-08C *130902669-0025*	Classrm #8 Upr Wall abv Closet; Skim Wall Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
717DD-08D *130902669-0026*	Classrm #11 Bathrm; Skim Wall Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
717DD-08E *130902669-0027*	Classrm #12; Skim Wall Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
717DD-08F *130902669-0028*	Classrm #14 Upr Wall abv Closet; Skim Wall Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
717DD-09A *130902669-0029*	Mens Bathrm acr Supply Rm; Rough Wall Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-09B *130902669-0030*	Girls Handicap Bathrm; Rough Wall Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-09C *130902669-0031*	Classrm #8 Upr Wall abv Closet; Rough Wall Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-09D *130902669-0032*	Classrm #11 Bathrm; Rough Wall Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-09E *130902669-0033*	Classrm #12; Rough Wall Plstr	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
717DD-09F *130902669-0034*	Classrm #14 Upr Wall abv Closet; Rough Wall Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-10A *130902669-0035*	Womens Bathrm acr Supply Rm; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
717DD-10B *130902669-0036*	Girls Handicap Bathrm; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-10C *130902669-0037*	Kitchen; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-10D *130902669-0038*	Classrm #1 Closet; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-10E *130902669-0039*	Classrm #14 Closet; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-10F *130902669-0040*	Classrm #17 Closet; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-10G *130902669-0041*	Cust Closet; O/S Classrm #11; Skim Ceiling Plstr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-11A *130902669-0042*	Womens Bathrm acr Supply Rm; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Project: **20070914.A4E / Bourne Public Schools; Otis Memorial Elementary School**

Customer ID: ENVI54C
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EMSL Order: 130902669

EMSL Proj:
Analysis Date: 7/24/2009

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

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
717DD-11B *130902669-0043*	Girls Handicap Bathrm; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-11C *130902669-0044*	Kitchen; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-11D *130902669-0045*	Classrm #1 Closet; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-11E *130902669-0046*	Classrm #14 Closet; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-11F *130902669-0047*	Classrm #17 Closet; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-11G *130902669-0048*	Cust Closet; O/S Classrm #11; Rough Ceiling Plstr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
717DD-08G *130902669-0049*	Health Office/Clinic; Skim Wall Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
717DD-09G *130902669-0050*	Health Office/Clinic; Rough Wall Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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THIS IS THE LAST PAGE OF THE REPORT.

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SAMPLE LOG FOR ASBESTOS BULKS

Sheet 1 of 5

Project Name: BOURNE PUBLIC SCHOOLS Project No. 20070914.A4E

Building: OTIS MEMORIAL ELEMENTARY SCHOOL Project Manager: BOB MAY

	Sample ID	Sample Location	Material	Result (%)
1	717DD-01A	SUPPLIES ROOM	MUDDED FITTINGS A/W FIBERGLASS PIPE INSULATION	
2	-01B	AIR HANDLING UNIT @ KITCHEN	↓	
3	-01C	BOILER ROOM	↓	
4	717DD-02A	BOILER BREECHING	TSI	
5	-02B	↓	↓	
6	-02C	↓	↓	
7	717DD-03A	GENERATOR	VIBRATION ISOLATORS (CLOTH)	
8	-03B	↓	↓	
9	717DD-04A	CLASS ROOM #3	BLACK SINK UNDERCOAT	20 SINKS
10	-04B	CLASS ROOM #7	↓	
11	-04C	CLASS ROOM #19	↓	

Analysis Method: ☒ PLM ☐ Other _____ Turnaround Time 24 HOUR

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call the EnviroScience Laboratory at (860) 953-2700 if analyses will be late.

Fax Results To: EnviroScience Consultants, Inc. Laboratory at 413-647-0018

FedEx # 792097962451

RECEIVED JUL 20 2009 SA 0945

Special Instructions: STOP AT FIRST POSITIVE COUNT IN EACH HOMOGENEOUS SET.

Samples Collected By: D.D. + J.H. Date: 7/17/09 Time: A.M.

Samples [Rec'd][Sent By]: [ ][D.D.] Date: [ ][7/17] Time: [ ][P.M.]

Samples Received By: _____ Date: _____ Time: _____

Shipped To: ☒ EMSL (State) NJ ☐ Other _____

Method of Shipment: ☒ Fed Ex ☐ UPS Overnight ☐ UPS Ground ☐ Other _____

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SAMPLE LOG FOR ASBESTOS BULKS

Sheet 2 of 5

Project Name: BOURNE PUBLIC SCHOOLS Project No. 2007 0914.A4E

Building: OTIS MEMORIAL ELEMENTARY SCHOOL Project Manager: BOB MAY

	Sample ID	Sample Location	Material	Result (%)
12	717DD-05A	SUPPLIES ROOM	BLACK COVEBASE	
13	-05B	FACULTY ROOM	↓	
14	-05C	MAIN OFFICE RECEPTION	↓	
15	717DD-06A	SUPPLIES ROOM	BLACK MASTIC A/W BLACK BASECOVE	
16	-06B	FACULTY ROOM	↓	
17	-06C	MAIN OFFICE RECEPTION	↓	
18	717DD-07A	HEALTH OFFICE/ CLINIC	BLACK MASTIC A/W 9+9 FLOOR TILE	
19	-07B	GYMNASIUM	↓	
20	-07C	GYMNASIUM	↓	
21	-07D	CLASSROOM #11	↓	
22	-07E	CLASSROOM #14	↓	

Analysis Method: ☒ PLM ☐ Other _____ Turnaround Time 24 HOUR

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____. Please call the EnviroScience Laboratory at (860) 953-2700 if analyses will be late.

Fax Results To: EnviroScience Consultants, Inc. Laboratory at 413-647-0018

Special Instructions: SEE 1ST PAGE

Samples Collected By: DD. + J.H. Date: 7/17/09 Time: A.M.

Samples [Rec'd] [Sent By]: [ ] [D.D] Date: [ ] [7/17] Time: [ ] [P.M]

Samples Received By: _____ Date: _____ Time: _____

Shipped To: ☒ EMSL (State) NJ ☐ Other _____

Method of Shipment: ☒ Fed Ex ☐ UPS Overnight ☐ UPS Ground ☐ Other _____

130902669

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SAMPLE LOG FOR ASBESTOS BULKS

Sheet 3 of 5

Project Name: BOURNE PUBLIC SCHOOLS Project No. 20070914.A4E

Building: OTIS MEMORIAL ELEMENTARY SCHOOL Project Manager: BOB MAY

	Sample ID	Sample Location	Material	Result (%)
23	717DD-08A	~~BATH~~, BATHROOM MENS ACROSS FROM SUPPLIES	SKIM WALL PLASTER	
24	-08B	GIRL'S HANDICAP ROOM BATHROOM		
25	-08C	CLASSROOM #8 UPPER WALL ABOVE CLOSET		
26	-08D	CLASSROOM #11 BATHROOM		
27	-08E	CLASSROOM #12		
28	-08F	CLASSROOM #14 UPPER WALL ABOVE CLOSET		
29	717DD-09A	MENS BATHROOM ~~ACROSS~~ ACROSS FROM SUPPLIES ROOM	ROUGH WALL PLASTER	
30	-09B	GIRL'S HANDICAP BATHROOM		
31	-09C	CLASSROOM #8 UPPER WALL ABOVE CLOSET		
32	-09D	CLASSROOM #11 BATHROOM		
33	-09E	CLASSROOM #12		

★-086 ON PG. 5

Analysis Method: ☒ PLM ☐ Other _____ Turnaround Time 24 HOUR

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____. Please call the EnviroScience Laboratory at (860) 953-2700 if analyses will be late.

Fax Results To: EnviroScience Consultants, Inc. Laboratory at 413-647-0018

Special Instructions: SEE 1ST PAGE

★ - SAMPLE-086 IS ON PAGE 5

Samples Collected By: D.D + J.H. Date: 7/17/09 Time: A.M.

Samples [Rec'd] [Sent By]: [ ][D.D.] Date: [ ][7/17] Time: [ ][P.M.]

Samples Received By: _____ Date: _____ Time: _____

Shipped To: ☒ EMSL (State) NJ ☐ Other _____

Method of Shipment: ☒ Fed Ex ☐ UPS Overnight ☐ UPS Ground ☐ Other _____

130902669

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EnviroScience, LLC

130902669

www.fando.com

50 Redfield Street, Suite 100 Boston, MA 02122

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

SAMPLE LOG FOR ASBESTOS BULKS

Sheet 4 of 5

Project Name: BOURNE PUBLIC SCHOOLS Project No. 200709 14.A4E

Building: OTIS MEMORIAL ELEMENTARY SCHOOL Project Manager: BOB MAY

	Sample ID	Sample Location	Material	Result (%)
-09G on ☆ PG.5 34	-09F	CLASSROOM # 14 UPPER WALL ABOVE CLOSET	ROUGH WALL PLASTER	
35	717DD-10A	WOMEN'S BATHROOM ACROSS FROM SUPPLIES ROOM	SKIM CEILING PLASTER	
36	-10B	GIRLS HANDICAP BATHROOM	↓	
37	-10C	KITCHEN	↓	
38	-10D	CLASSROOM #1 CLOSET	↓	
39	-10E	CLASSROOM # 14 CLOSET	↓	
40	-10F	CLASSROOM #17 CLOSET	↓	
41	-10G	CUSTODIAN CLOSET @ HALL O/S CLASSROOM #14	↓	
42	717DD-11A	WOMEN'S BATHROOM ACROSS FROM SUPPLIES ROOM	ROUGH CEILING PLASTER	
43	-11B	GIRLS HANDICAP BATHROOM	↓	
44	-11C	KITCHEN	↓	

Analysis Method: ☒ PLM ☐ Other _____ Turnaround Time 24 HOUR

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____. Please call the EnviroScience Laboratory at (860) 953-2700 if analyses will be late.

Fax Results To: EnviroScience Consultants, Inc. Laboratory at 413-647-0018

Special Instructions: SEE 1ST PAGE

☆ SAMPLE -09G IS ON PAGE 5

Samples Collected By: D.D. + J.H. Date: 7/17/09 Time: A.M.

Samples [Rec'd][Sent By]: [ ][D.D.] Date: [ ][7/17/09] Time: [ ][P.M.]

Samples Received By: _____ Date: _____ Time: _____

Shipped To: ☒ EMSL (State) NJ ☐ Other _____

Method of Shipment: ☒ Fed Ex ☐ UPS Overnight ☐ UPS Ground ☐ Other _____

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SAMPLE LOG FOR ASBESTOS BULKS

Sheet 5 of 5

Project Name: BOURNE PUBLIC SCHOOLS Project No. 20070914.A4E

Building: OTIS MEMORIAL ELEMENTARY SCHOOL Project Manager: BOB MAY

	Sample ID	Sample Location	Material	Result (%)
45	-11D	CLASSROOM #1 CLOSET		
46	-11E	CLASS ROOM #14 CLOSET		
47	-11F	CLASSROOM # 17 CLOSET		
48	-11G	CUSTODIA CLOSET @ HALL O/S CLASSROOM #11		
49 ★	717DD-08G	HEALTH OFFICE/CLINIC	SKIM WALL PLASTER	
50 ★	717DD-09G	HEALTH OFFICE/CLINIC	ROUGH WALL PLASTER	

Analysis Method: ☒ PLM ☐ Other _____ Turnaround Time 24 HOUR

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____. Please call the EnviroScience Laboratory at (860) 953-2700 if analyses will be late.

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Samples Received By: _____ Date: _____ Time: _____

Shipped To: ☒ EMSL (State) NJ ☐ Other _____

Method of Shipment: ☒ Fed Ex ☐ UPS Overnight ☐ UPS Ground ☐ Other _____

Appendix E

Newly Installed Materials Safety Data Sheets

To be Provided by LEA

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Appendix F

Sample 6-Month Periodic Surveillance Form

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Sample 6- Month Periodic Surveillance Form

Local Education Agency (LEA): Bourne Public Schools

Facility Name: Otis Memorial Elementary School

Date of Surveillance: _____

ACBM Damage Report

Asbestos-Containing Building Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Estimated Damaged Quantity	Comments
White Boiler Insulation	Boiler Room	G				
White Boiler Breeching	Boiler Room	G				
White Hot Water Tank Insulation	Boiler Room	G				
White Mudded Pipe-Fitting Associated with Fiberglass Pipe Insulation	Boiler Room	G				
White Pipe Fitting Insulation	Boiler Room (Behind Boiler #1)	G				
White Pipe Fitting Insulation	Pipe Tunnel	G				
White Pipe Fitting Insulation	Nurse's Office (beneath Sink)	G				
White Pipe Fitting Insulation	Kitchen (Unit Ventilators)	G				
White Pipe Fitting Insulation	Supply Room near Custodial Office	G				
White Pipe Fitting Insulation	Supply Closet	G				
9" x 9" Tan with Specks Floor Tile	Boiler Room Entry	D				
9" x 9" Multi-Colored Specks Floor Tile	At Double Doors in Hallway Outside Clinic	G				

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Asbestos-Containing Building Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Estimated Damaged Quantity	Comments
9" x 9" Multi-Colored Specks & Tan with Specks Floor Tile	Classroom 1	D				
9" x 9" Gray with Streaks & Blue with Streaks Floor Tile	Classroom 2	D				
9" x 9" Gray with Streaks & Blue with Streaks Floor Tile	Hallway Between Classrooms 1 & 2	D				
9" x 9" Beige with Specks & Gray with Specks Floor Tile	Classroom 3	G				
9" x 9" Gray with Specks & Light Gray with Specks Floor Tile	Classroom 4	G				
9" x 9" Green with White Streaks Floor Tile	Classroom 5	D				
9" x 9" Blue with Streaks Floor Tile	Classroom 6	D				
9" x 9" Beige with Specks Floor Tile	Classroom 7	G				
9" x 9" Beige with Specks Floor Tile	Classroom 8	D				
9" x 9" Multi-Colored Specks & Tan with Specks Floor Tile	Classroom 9	D				
9" x 9" Gray with Specks Floor Tile	Classroom 10	D				
9" x 9" Beige with Specks Floor Tile	Classroom 11	D				
9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Classroom 12	G				

Asbestos-Containing Building Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Estimated Damaged Quantity	Comments
9" x 9" Beige with Multi-Colored Specks Floor Tile	Classroom 13	G				
9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Classroom 14 (Former Library)	D				
9" x 9" Brown with Streaks & Green with Blue Streaks Floor Tile	Classroom 15	D				
9" x 9" Brown with Multi-Colored Specks & Tan with Multi-Colored Specks Floor Tile	Classroom 16	G				
9" x 9" Beige with Multi-Colored Specks Floor Tile	Classroom 17	G				
9" x 9" Beige with Multi-Colored Specks Floor Tile	Classroom 18	G				
9" x 9" Tan with Blue & Brown Streaks Floor Tile	Classroom 19	D				
9" x 9" Green with White Streaks Floor Tile	Principal's Office	G				
9" x 9" Multi-Colored Specks Floor Tile	Nurse's Office	G				
9" x 9" Multi-Colored Specks Floor Tile	Main Office Hallway from Classroom 15 to Doors Outside Restrooms	G				
9" x 9" Multi-Colored Specks Floor Tile	North Wing Hallway	G				
9" x 9" Tan with Specks Floor Tile	Teacher's Room & Supply Room (Classroom 20)	G				

Asbestos-Containing Building Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Estimated Damaged Quantity	Comments
9" x 9" Beige with Multi-Colored Specks Floor Tile	Foyer & Hallway Outside of Teacher's Room	G				
9" x 9" Beige Floor Tile	Cafeteria/Gym	IA				
9" x 9" Beige with Multi-Colored Specks Floor Tile	Hallway at Gym Wing	G				
9" x 9" Floor Tile	Custodian's Office	D				
Fire Door Core Insulation	Boiler Room & Emergency Generator Room	G				

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: _____

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Appendix G

Preventive Measures

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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.

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.

3. Fire Door

   a) Identify the locations and label the materials.
   b) Since there may be a number of different types of fire doors throughout a building, fire door cores must be considered to have asbestos-containing interior insulation unless sample result prove otherwise. Prior to performing any maintenance on any door (lock change, drilling, etc.), the door should be surveyed by qualified personnel to rule out the existence of an asbestos core.
   c) 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 H

Fuss & O'Neill EnviroScience Asbestos Accreditations & Certifications

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

William D. McKinney,
Director

Asbestos Inspector

ROBERT C. MALLETT

Eff. Date 06/01/17
Exp. Date 06/01/18

18

AI900557

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

BOSR BOS-RENEW



This is to certify that

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

Course Location

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

January 5, 2017
Course Dates

17-0369-106-260110
Certificate Number

January 05, 2017
Examination Date

January 05, 2018
Expiration Date

Training Director

16 Upton Drive, Wilmington, MA 01887 Telephone 978.658.5272 www.ieetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION


Commonwealth of Massachusetts
Department of Labor Standards
William D. McKinney, Director
Asbestos Management Planner
DUSTIN A. DIEDRICKSEN
Eff. Date 03/21/17
Exp. Date 04/05/18
AP900425
Member of C.O.N.E.S.
BOSR BOS-RENEW
18

This is to certify that

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

Course Location

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

January 19, 2017	**January 19, 2017**	
Course Dates	Examination Date	
17-0393-136-208040	**January 19, 2018**	
Certificate Number	Expiration Date	Training Director

16 Upton Drive, Wilmington, MA 01887 Telephone 978.658.5272 www.ieetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION