

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

**Maintenance & Storage Buildings
at Peebles Elementary School
70 Trowbridge Road
Bourne, Massachusetts**

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

**Bourne Public Schools
Bourne, Massachusetts**

September 26, 2014



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



FUSS & O'NEILL
EnviroScience, LLC

September 26, 2014

Mr. Edward Donoghue
Director of Business Services
Bourne Public Schools
36 Sandwich Road
Bourne, MA 02532

RE: 2014 Three Year AHERA Management Plan Update
Maintenance & Storage Buildings at Peebles Elementary School
Fuss & O'Neill EnviroScience, LLC No. 20121141.A9E

Dear Mr. Donoghue:

Fuss & O'Neill EnviroScience, LLC (EnviroScience) is pleased to submit the enclosed three-year Asbestos Hazard Emergency Act (AHERA) asbestos re-inspection and management plan update performed at the Maintenance & Storage Buildings at Peebles Elementary School located at 70 Trowbridge Road in Bourne, Massachusetts. This report is an important document that must be kept on file at the school, as well as at a central location where all the Asbestos Management Plans are stored.

If you should have any questions regarding this report, please contact me at 617-282-4675 extension 4703. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Dustin A. Diedricksen
Project Manager

Timothy M. Downey
Senior Project Manager

146 Hartford Road
Manchester, CT
06040
t 860.646.2469
800.286.2469
f 860.533.5143

www.fando.com

Connecticut
Massachusetts
Rhode Island
South Carolina

DD/ftc

Enclosure

Table of Contents

Asbestos Hazard Emergency Response Act Three-Year Re-Inspection and Management Plan Update Maintenance & Storage Buildings at Peebles Elementary School

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

Appendices

End of Report

APPENDIX A	CHECKLIST FOR EXISTING RECORDS
APPENDIX B	RE-INSPECTION FORM 1A
APPENDIX C	RE-INSPECTION FORM 2
APPENDIX D	SAMPLE 6-MONTH PERIDOC REINSPECTION FORM
APPENDIX E	PREVENTIVE MEASURES
APPENDIX F	ENVIROSCIENCE ASBESTOS STATE CERTIFICATIONS AND EPA ACCREDITATIONS



1 Introduction

1.1 Background

The Clean Air Act of 1977 required the United States Environmental Protection Agency (EPA) to develop standards to address the potential health aspects associated with adverse effects of asbestos exposure as an indoor contaminant. In October 1986 the EPA promulgated the Asbestos Hazard Emergency Response Act (AHERA).

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

In accordance with the AHERA regulations, a building leased or acquired on or after October 12, 1988 that is to be used as a school building must 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 must be inspected within 30 days after commencement of such use.

The regulatory requirements are still in full force and effect for any 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) Asbestos and Lead Program is responsible for AHERA regulation enforcement.

1.2 Local Education Agency (LEA) Responsibilities

- A. The LEA is responsible for compliance with AHERA regulation Title 40 CFR, Part 763, Subpart E. The following responsibilities must be followed. (Refer to above-mentioned regulation for full LEA requirements and responsibilities):
1. The LEA must designate a person to ensure that all of the AHERA requirements are properly implemented. The Designated Person must receive adequate training to perform their duties.
 2. The LEA must ensure that management plans are maintained in a central location, as well as at each facility, and such plans and records are available for inspection or review at all times.
 3. The LEA must inform all workers, building occupants or their legal representative(s) in writing at least once each school year about asbestos-related activities, and the availability of the AHERA management plans for the school buildings.
 4. The LEA must ensure proper accreditation for all persons who perform asbestos inspections, asbestos re-inspections, develop/update management plans, develop response

actions, and perform required response actions, including operations and maintenance activities that may disturb ACBM.

5. The LEA must provide training for all custodial and maintenance staff who regularly perform building maintenance where ACBM are present. The training must be provided upon initial hire, as well as updated annually.
6. The LEA must provide information (disclosure) to any workers who may perform short-term work and come in contact with asbestos in school buildings where ACBM or presumed ACBM are present.
7. The LEA must ensure that warning labels are placed to identify known ACBM or presumed ACBM in routine maintenance areas.
8. The LEA must ensure that periodic surveillance is performed at least once every six months after a management plan is in effect 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 a management plan is in effect, a re-inspection is performed in all school buildings that it leases, owns, or otherwise uses that contains ACBM or presumed ACBM.

Refer to abovementioned regulation for full requirements and responsibilities.

1.3 Key Personnel

The following are key personnel responsible in part for this Asbestos Management Plan:

A. Local Education Agency (LEA)

LEA: Bourne Public Schools
Address: 36 Sandwich Road
Bourne, Massachusetts 02532
Phone: (508)-759-0660
Fax: (508)-759-1107

B. Designated Person: Mr. Edward Donahue
Director of Business Services
Address: 36 Sandwich Road
Bourne, Massachusetts 02122
Phone: (617) 282-4675
Fax: (617) 282-8253

C. Asbestos Consultant

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: Jonathan Hand
MADLS Certification Number: AI041945
Expiration Date: 03/14/2015

E. Asbestos Management Planner:

Planner: Dustin A. Diedricksen
MADLS Certification Number: AP-900425
Expiration Date: 04/28/2015

2 Building and Mechanical System Description

The Maintenance Building is a one-level wood framed structure, which includes three garage bays with overhead doors, a boiler room, and a restroom. The Storage Building is a two-level structure of three large garage bays on the lower level, and storage space on the upper level. The total areas of the Maintenance and Storage Buildings are approximately 1,200 and 2,030 square feet of space, respectively.

One heater in each building provides forced hot air through ductwork.

Based on visual observations, it appeared that no renovation or construction activities had been performed at either building since the last re-inspection.

3 Three Year Re-Inspection

3.1 Re-inspection Procedures

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

On August 22, 2014, Mr. Jonathan Hand of Fuss & O'Neill EnviroScience, LLC (EnviroScience) performed the re-inspection.

A. During the re-inspection, the following required tasks were performed:

1. A visual re-inspection and reassessment of 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 homogeneous area that contained newly 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 management plans are stored.

Please see *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 1A**, identifies previous inspection data gathered during the initial AHERA inspection and subsequent re-inspection (see *Appendix B*). This form is useful to reference response actions (if any), which have been performed since the last inspection, as well as identifies the last known conditions of ACBM in the building. It additionally provides the inspector a “quick glance” reference when performing the re-inspection.

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

No bulk samples were collected as part of this re-inspection.

Using EPA protocol and criteria, the following existing ACBM were identified in the building at the time of this three-year re-inspection. Please refer to the above-mentioned Re-inspection Forms for specific locations of the materials.

Table 1
Presumed Asbestos-Containing Building Materials

Homogeneous Material	Location(s)	Reference
Gray Fiber-Reinforced Cement Board Panels (Transite)	2-Story Storage Building Left Side Garage Bay	Presumed ACBM
9" x 9" Floor Tile	2-Story Storage Building Restroom (Presumed Underneath 12" x 12" Floor Tile)	Presumed ACBM (Inaccessible/Not Observed)
Mastic Associated with Above	2-Story Storage Building Restroom (Presumed Underneath 12" x 12" Floor Tile)	Presumed ACBM
12" x 12" Floor Tile	2-Story Storage Building Restroom	Presumed ACBM
Mastic Associated with Above	2-Story Storage Building Restroom	Presumed ACBM
9" x 9" Tan Floor Tile	Maintenance Garage Bathroom	Presumed ACBM
Mastic Associated with Above	Maintenance Garage Bathroom	Presumed ACBM
Drywall	2-Story Storage Building Center & Right Garage Bays & First Floor Walls & Ceiling	Presumed ACBM
Joint Compound	2-Story Storage Building Center & Right Garage Bays & First Floor Walls & Ceiling	Presumed ACBM

Mr. Dustin A. 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 ACBMs

No newly-identified ACBMs or suspect ACBMs were identified during this re-inspection.

AHERA regulations pertain to interior identified or presumed 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), prior to disturbance, samples of these and other exterior suspect ACM must be collected and analyzed for asbestos content prior to disturbance.

4.4 Physical Assessment of ACBMs

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

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

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

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

Material locations, assessments, and recommended response actions are listed in the re-inspection forms.

5 Management Plan Update

5.1 Recommended Response Actions

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

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

It should be noted that only locations with assessments of 1 or 2 are recommended for removal or repair. All remaining ACBM in the school shall be placed in an O & M Program. The condition of such materials will be monitored until all the ACBM have been removed from the building. A successful O & M Program shall include the following elements:

1. Cleaning: All areas of the school where friable ACBM or friable suspected ACBM assumed to be ACBM are present shall be cleaned at least once after the completion of the initial inspection. Additional cleaning may be necessary if the Management Planner makes a written recommendation indicating methods and frequency of such cleaning.
2. O & M Activities: The LEA shall ensure that the procedures described below are followed to protect building occupants for any O & M activities that may disturb known or assumed ACBM:
 - a) Restrict entry into the area either by physically isolating or by scheduling.
 - b) Post asbestos warning signs to prevent entry by unauthorized persons.
 - c) Deactivate or temporarily modify the air-handling system.
 - d) Use proper work practices and engineering controls such as wet methods, protective clothing, HEPA-vacuums, mini enclosures/ glove bags etc. to inhibit spread of fibers.
 - e) Place asbestos debris and other contaminated materials in a sealed, leak-tight container for proper disposal.
3. Minor Fiber Release Episodes: The LEA shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., disturbance of 3 linear/square feet or less of friable ACBM):
 - a) Saturate the debris using wet method.
 - b) Place the debris in a sealed, leak-tight container and wet clean the area.
 - c) Repair the area of damaged ACBM with materials, such as asbestos-free spackling, plaster or insulation or seal with an encapsulant.
4. 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 more than 3 linear/square feet of friable ACBM):
 - a) Restrict entry into the area and post asbestos warning signs at all approaches to area.
 - b) Deactivate or temporarily modify the air handling system to prevent the spread of fibers to other areas of the school.
 - c) **The response for any major fiber release episode must be designed by persons accredited to design asbestos response actions in a school, and conducted by persons accredited to conduct asbestos response actions in a school.**
 - d) 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 a management plan is in place, the LEA shall conduct periodic surveillance in the school that contains ACBM or assumed to contain ACBM. The person conducting periodic surveillance shall visually inspect the identified ACBM in the school referenced in the AMP, record the date of surveillance, their name, and any changes in the condition of the materials and submit the record to the LEA Designated Person for inclusion in the AMP.

Please see *Appendix D* for a sample Periodic Surveillance Form used for conducting periodic surveillance.

5.3 Preventive Measures

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

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

6 EPA Accreditation Requirements

The MADLS certifications and EPA accreditations for the individuals (Jonathan Hand and Dustin A. Diedricksen) involved in performing this re-inspection and updating the management plan are provided in *Appendix F*.

Report prepared by Environmental Analyst, Jonathan Hand

Reviewed by:



Dustin A. Diedricksen
Project Manager



Timothy M. Downey
Senior Project Manager

Appendix A

Checklist for Existing Records

Checklist for Existing Records

Local Education Agency (LEA): Bourne Public Schools
36 Sandwich Road
Bourne, MA 02122

School Building: Maintenance and Storage Building (at Peebles Elementary School)

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

DOCUMENTATION		LOCATION	
		LEA Office	School
1.	Original AHERA Inspection/Management Plan	1994	No
2.	Three Year Re-Inspections (List Dates)	1998, '01, '04 & '11	No
3.	Notifications to Parents/Guardians and Teachers (Yearly Since Last Re-Inspection)	Yes (In Student Handbook)	Yes (In Student Handbook)
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)	Yes	No
6.	Record of Awareness Training for Maintenance Staff	Yes	No
7.	Outside Vendor Awareness Notification	Yes	No
8.	Warning Signs and Labels (Required Posting in Boiler Room and Mechanical Spaces Only)	Yes	No
9.	Record of Response Actions (Includes Any Abatement Done Since Last Re-Inspection)	N/A	N/A

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

Inspector (LEA Office): Jonathan Hand

Date: August 22, 2014

Inspector (School): Jonathan Hand

Date: August 22, 2014

Appendix B

Re-Inspection Form 1A



Re-inspection Form 1 (A) – List of Previously Identified ACBM

School: Maintenance and Storage Buildings

Date(s) of Original Inspection: 1988

Address: 70 Trowbridge Road, Bourne, MA

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

Homogeneous Material			Material Category	Friability	Assessment Category (1-7)	Recorded Locations	Response Actions Taken/Renovations/ Other Comments
Sample Number	Asbestos Content	Material Description					
Presumed ACBM	Presumed ACBM	Gray Fiber-Reinforced Cement Board Panels (Transite)	M	NF	5	2-Story Storage Building Left Side Garage Bay	
Presumed ACBM	Presumed ACBM	9" x 9" Floor Tile	M	NF	5	2-Story Storage Building Restroom (Presumed Underneath 12" x 12" Floor Tile)	
Presumed ACBM	Presumed ACBM	9" x 9" Floor Tile	M	NF	5	Maintenance Garage Bathroom	3 SF Damaged
Presumed ACBM	Presumed ACBM	Mastic Associated with 9" x 9" Floor Tile	M	NF	5	2-Story Storage Building Restroom (Presumed Underneath 12" x 12" Floor Tile)	
Presumed ACBM	Presumed ACBM	Mastic Associated with 9" x 9" Floor Tile	M	NF	5	Maintenance Garage Bathroom	
Presumed ACBM	Presumed ACBM	12" x 12" Floor Tile	M	NF	5	2-Story Storage Building Restroom	
Presumed ACBM	Presumed ACBM	Mastic Associated with 12" x 12" Floor Tile	M	NF	5	2-Story Storage Building Restroom	
Presumed ACBM	Presumed ACBM	Drywall	M	NF	5	2-Story Storage Building: Center & Right Garage Bays & First Floor Walls & Ceilings	
Presumed ACBM	Presumed ACBM	Joint Compound	M	NF	5	2-Story Storage Building: Center & Right Garage Bays & First Floor Walls & Ceilings	

EA = Each; LF = Linear Feet; SF = Square Feet

Information abstracted by: Jonathan Hand

Date: September 17, 2014

Material Category: TSI = Thermal System Insulation, S = Surfacing, M = Miscellaneous

Friability: F = Friable, NF = Non-friable

Re-inspection Form 1 (A) – List of Previously Identified ACBM

Page 2 of 2

School: Maintenance and Storage Buildings

Date(s) of Original Inspection: 1988

Address: 70 Trowbridge Road, Bourne, MA

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

AHERA Assessment Category:

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

Appendix C

Re-Inspection Form 2



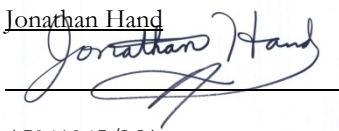
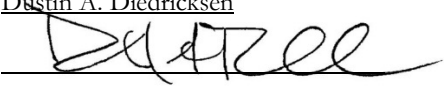
School: Maintenance and Storage Buildings at Peebles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: Gray Fiber-Reinforced Cement Board Ceiling Panels

Sample ID Number: Presumed ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building Left Side Garage Bay	M	NF	200 SF	Resilient Paneling. This Material is in Good Condition.	Clean Break at One Corner. No Visible Debris. Continue O&M	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: 9/22/14	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature: <u></u> Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>03/14/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature: <u></u> Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						



School: Maintenance and Storage Buildings at Peebles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: 9" x 9" Floor Tile

Sample ID Number: Presumed ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building Restroom	M	NF	36 SF	Resilient Floor Covering. This Material is in Good Condition.	Continue O&M	Ongoing
Maintenance Building Restroom	M	NF	36 SF	Damaged Resilient Floor Covering	Repair Continue O&M	Replace 3 Missing Floor Tile ~ 3 SF
Were additional samples of this ACBM collected? No					Date of Management Planner Review: <u>9/22/14</u>	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature: <u></u> Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>04/30/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature: <u></u> Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

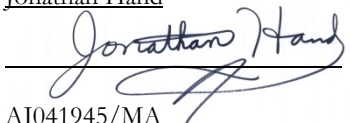
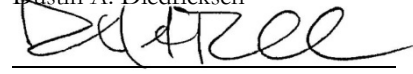
School: Maintenance and Storage Buildings at Peebles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: Mastic Associated with 9" x 9" Floor Tile

Sample ID Number: Presumed ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building Restroom & Maintenance Building Restroom	M	NF	72 SF	Mastic Associated with Resilient Floor Covering. This Material is in Good Condition.	Continue O&M	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: <u>9/22/14</u>	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature:  Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>04/30/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature:  Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

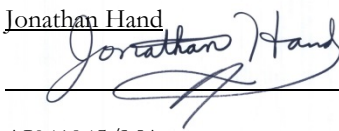
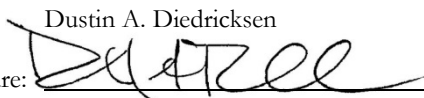
School: Maintenance and Storage Buildings at Peebles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: 12" x 12" Floor Tile

Sample ID Number: Presumed ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building Restroom	M	NF	36 SF	Resilient Floor Covering. This Material is in Good Condition.	Continue O&M	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: <u>9/22/14</u>	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature: <u></u> Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>04/30/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature: <u></u> Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

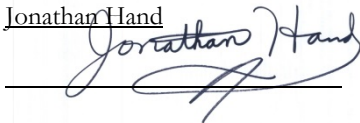
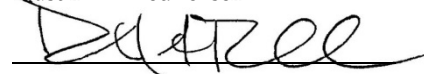
School: Maintenance and Storage Buildings at Pebbles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: Mastic Associated with 12" x 12" Floor Tile

Sample ID Number: Presumed ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building Restroom	M	NF	36 SF	Mastic Associated with Resilient Floor Covering. This Material is in Good Condition.	Continue O&M	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: <u>9/22/14</u>	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature:  Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>04/30/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature:  Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

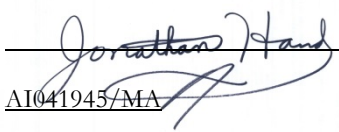
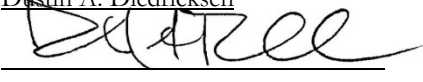
School: Maintenance and Storage Buildings at Pebbles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: Drywall

Sample ID Number: Presumed ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building: Center & Right Garage Bays & First Floor Walls & Ceilings	M	NF	6,000 SF	Finishing Material Used for Room Partitions. This Material is in Good Condition.	Continue O&M	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: <u>9/22/14</u>	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature:  Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>04/30/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature:  Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

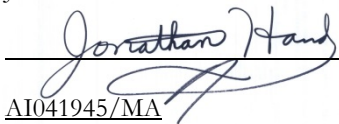
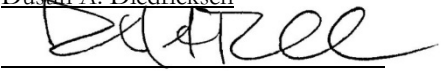
School: Maintenance and Storage Buildings at Pebbles Elementary School

Address: 70 Trowbridge Road, Bourne, MA

Date(s) of Re-inspection: 8/22/14

Homogeneous Material: Joint Compound

Sample ID Number: Presume ACBM

Re-Inspection Findings for ACBM					Management Planner Recommendations	
Location(s) of ACBM by Assessment Category	Material Category	Friability	Estimated Quantity	Physical Description	Risk Assessment and Recommended Response Action(s)	Date Action Required
2-Story Storage Building: Center & Right Garage Bays & First Floor Walls & Ceilings	M	NF	6,000 SF	Finishing Material Used to Fill Joints and Nail Holes in Drywall. This Material is in Good Condition.	Continue O&M	Ongoing
Were additional samples of this ACBM collected? No					Date of Management Planner Review: <u>9/22/14</u>	
Inspector's Name: <u>Jonathan Hand</u> Inspector Signature: <u></u> Certification #/State: <u>AI041945/MA</u> Expiration Date: <u>04/30/15</u>					Management Planner Name: <u>Dustin A. Diedricksen</u> Management Planner Signature: <u></u> Certification #/State: <u>AP-900425/MA</u> Expiration Date: <u>04/28/2015</u>	
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____						

Appendix D

Sample 6-Month Periodic Inspection Form



Sample 6-Month Periodic Surveillance Form

Local Education Agency (LEA): Bourne Public Schools

Facility Address: Maintenance & Storage Buildings, 70 Trowbridge Road, Bourne, MA

Date of Surveillance: _____

ACBM Damage Report

Asbestos-Containing Building Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Estimated Damaged Quantity	Comments

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

Surveillance conducted by: _____ Date: _____

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

Appendix E

Preventive Measures



Preventive Measures for Various Asbestos-Containing Materials

A. Surfacing Materials

“Surfacing Materials” means materials in a school building that are sprayed-on, troweled-on, or otherwise applied to surfaces. These include sprayed-on 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. The following procedures, when properly implemented, will reduce the potential for fiber release:

1. Sprayed-on fire-proofing
 - 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-on 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 plaster
 - a) Identify the materials and post warning signs.
 - b) Maintain the materials in intact state and undamaged condition. Avoid storing/stacking on/near the materials to reduce contact damage.
 - c) Prevent water leakage. If the material is significantly damaged, removal is the best option. For minor damage, repair or enclosure is a temporary solution.
 - d) Train the custodial people who are responsible for care and maintenance of surfacing materials.

B. Thermal System Insulation (TSI)

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



TSI are generally considered friable asbestos-containing materials. This means they can be easily damaged, increasing the potential for fiber release. The following procedures, when properly implemented, 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-fittings, tank and duct insulation
 - 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 all other asbestos-containing materials in a school building that do not fall under the categories of Surfacing Materials or TSI. These include floor tiles, floor tile and carpet mastic, gypsum wallboard and joint compound, ceiling tiles, glue daubs, transite panels, laboratory counter tops, wall base and associated glue, window 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. Gypsum wallboard and joint compound assembly

- a) Since there may exist a number of different homogeneous assemblies in a building, all sheetrock/joint compound must be assumed to be ACBM unless sample result prove otherwise. If any specific areas are going to be disturbed, the material in that area should be sampled.
- 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 area above the ceiling tiles. Maintain the ceiling tiles in undamaged condition. Replace any damaged or water-stained tile.

- b) If the ceiling tiles are negative for asbestos, sample and analyze the glue daubs to ascertain whether these are asbestos-containing before the tiles are replaced.
4. Transite Panels, Laboratory Counter Tops, Window Caulking and Glazing Compounds
- a) Reduce the likelihood of fiber release.
 - b) Maintain transite panels, lab tabletops and window caulking and glazing compounds in undamaged condition.
5. Carpet Glue, Blackboard/ Tack Board Glue, Sink Undercoating, Floor Tile Mastic, Baseboard and Mastic
- a) Reduce the likelihood of fiber release by leaving base cove and carpets in place.
 - b) Maintain carpets and base cove in good condition. Sample and analyze the glue and the mastic to ascertain whether these are asbestos-containing if the renovation activities are going to impact the carpet and the baseboard.

Appendix F

EnviroScience Asbestos State Certifications and EPA Accreditations

Commonwealth of Massachusetts
Department of Labor Standards

Heather E. Rowe, Director

Asbestos Management Planner



DUSTIN A. DIEDRICKSEN

Eff. Date 04/28/14

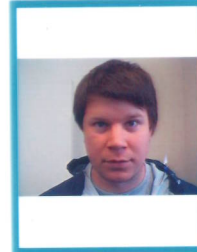
Exp. Date 04/28/15

AP900425

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

BOSR

15





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 24, 2014

Course Dates

14-8967-136-208040

Certificate Number

January 24, 2014

Examination Date

January 24, 2015

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

Heather E. Rowe, Director

Asbestos Inspector



JONATHAN L. HAND

Eff. Date 03/14/14

Exp. Date 03/14/15

AI041945

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

WBR

WB-RENEW

15



Fuss & O'Neill EnviroScience, LLC

146 Hartford Road, Manchester, CT 06040 – (860) 646-2469

This is to certify that


Jonathan Hand

XXX-XX-8836

has successfully completed the
4 Hr. Asbestos Inspector Refresher
Asbestos Accreditation under TSCA Title II
40 CFR Part 763



John Rowinski, Principal Instructor



Robert L. May, Jr., Training Manager

January 6, 2014

Date of Course

AI-R-01/14-1

Certificate Number

January 6, 2014

Examination Date

January 6, 2015

Expiration Date