

Three – Year Asbestos Re-Inspection and Management Plan Update

Maintenance & Storage Buildings
at Peebles Elementary School
70 Trowbridge Road
Bourne, MA 02532

Bourne Public Schools
Bourne, Massachusetts

December, 2011



FUSS & O'NEILL
EnviroScience, LLC

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

For Compliance with
EPA Asbestos Hazard Emergency Response Act (AHERA)
40 CFR Part 763



FUSS & O'NEILL
EnviroScience, LLC

January 3, 2012

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

RE: 2011 Three Year AHERA Management Plan Update
Maintenance & Storage Buildings at Peebles Elementary School
Fuss & O'Neill EnviroScience, LLC No. 20070914.A7E

Dear Mr. Donoghue:

Fuss & O'Neill EnviroScience, LLC (EnviroScience) is pleased to submit the enclosed report of the three-year AHERA asbestos re-inspection and management plan update performed for 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 Management Plans are preserved.

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

Sincerely,

Robert L. May, Jr.
Vice President

Stephen W. Connelly
Senior Vice President

50 Redfield Street
Suite 100
Boston, MA
02122
t 617.282.4675
f 617.282.8253

www.fando.com

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1 INTRODUCTION

1.1 Background

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

The AHERA regulations required that all local education agencies conduct inspections of each school building that they lease, own, or otherwise use as a school building in order to identify all 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.

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

The regulatory requirements 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 (DLS), formerly known as the Division of Occupational Safety (DOS), Asbestos and Lead Program is responsible for enforcement of the AHERA regulations.

1.2 Local Education Agency (LEA) Responsibilities

- A. The LEA is responsible for compliance with AHERA regulation 40 CFR Part 763. The following responsibilities must be adhered to (refer to above mentioned regulation for full 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 his/her 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, teachers, parents of students, or legal guardians 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/or perform required response actions including operations and maintenance activities that may disturb asbestos.
5. The LEA must provide training for all custodial and maintenance staff who regularly perform building maintenance where asbestos containing building materials (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 known ACBM or presumed ACBM are provided with warning labels in routine maintenance areas.
8. The LEA must ensure that periodic surveillance is performed at least once every six months, after 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.

1.3 Accreditation

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

Designated
Person: Mr. Edward Donoghue
Director of Business Services
Address: 36 Sandwich Road
Bourne, Massachusetts 02532

C. Asbestos Consultant Data

Firm: Fuss & O'Neill EnviroScience, LLC.

Address: 50 Redfield Street, Suite 100
Boston, Massachusetts 02122
Phone: (617) 282-4675
Fax: (617) 282-8253

D. Asbestos Inspector

Inspector: Mr. Dustin Diedricksen
Accreditation
Number: AI041867
State of
Accreditation: Massachusetts
Expiration Date: 04/26/12

E. Asbestos Management Planner:

Planner: Mr. Robert May
Accreditation
Number: AP041719
State of
Accreditation: Massachusetts
Expiration Date: 03/27/12

1.2 Inspection History and Schedule

A. Original AHERA Inspection
Management Plan

Report Date: September 1994
Prepared By: EnviroScience Consultants, Inc.
Address: Newington, Connecticut

B. Three Year Re-Inspections

1. August 1998 prepared by EnviroScience Consultants, Inc.
2. July 2001 prepared by EnviroScience Consultants, Inc.
3. August 2004 prepared by EnviroScience Consultants, Inc.

2 Three Year Re-inspection

2.1 Re-inspection Procedures

This three-year asbestos re-inspection was conducted in accordance with the requirements of the following regulations:

- United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) regulation (40 CFR Part 763, Section 763.85 (b)).

Mr. Dustin Diedricksen of Fuss & O'Neill EnviroScience, LLC (EnviroScience) performed the re-inspection on September 2, 2011. Mr. Diedricksen is an accredited Asbestos Inspector in the Commonwealth of Massachusetts (License No. AI041867).

- A. During the re-inspection the following required tasks were performed:
1. A visual re-inspection and re-assessment of all friable known or assumed asbestos-containing building materials (ACBM).
 2. A visual re-inspection of ACBM that was previously considered non-friable to determine if the present condition of the material has made it friable.
 3. Identification and assessment of any homogeneous area that contained new friable ACBM since the last inspection or re-inspection.

Note: The limits of an AHERA inspection involve visible and accessible areas only. ACBM may exist in concealed chases, above fixed ceilings, or concealed below floors. Additionally, materials such as glue associated with chalkboards and tackboards, flooring adhesives and mastics, and concealed thermal system insulation may contain asbestos, and are presumed to be present.

2.2 Limited Building Description

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

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

No renovation or construction had been performed since the last inspection.

3 RE-INSPECTION REPORT

3.1 Review of Existing Records

An important part of this AHERA re-inspection involved checking documentation that was required to be present at the building being inspected as well as at the central location where all management plans are preserved.

Please see *Appendix A* for details of our findings.

3.2 Re-inspection Summary

The on-site portion of the re-inspection was documented on forms modeled from examples provided by the United States Environmental Protection Agency (USEPA). A single form has been created which summarizes the inventory of materials by type, location, quantity, and category. Each location of a given material type is provided an exposure assessment including friability, a previous condition assessment category consistent with AHERA rankings, a current assessment category ranking, and notes regarding the current assessment. The forms also identify any previous recommendations from last recorded three-year inspection and current recommendations based on the re-inspection.

Any newly identified materials are also recorded and identified as newly identified materials. Note no samples were collected of materials as part of the re-inspection. Any newly identified materials are presumed to contain asbestos.

The information obtained during this re-inspection was transmitted to Mr. Robert May, an accredited Management Planner, so that response actions relative to the condition of the ACBM could be designed. Mr. May is a licensed Asbestos Management Planner in the Commonwealth of Massachusetts (License No. AP041719).

3.3 Newly Identified ACBM Material

No newly identified materials were determined and/or assumed to be ACBM.

Any suspect material encountered during renovation/demolition that is not specifically identified in this report as a non-ACM should be assumed to contain asbestos unless sample results prove otherwise. AHERA inspections do not satisfy the requirements for the U.S. EPA survey requirements for compliance with the National Emission Standards for Hazardous Air Pollutants (NESHAP). A NESHAP survey should be performed prior to renovation or other planned disturbance within a building.

3.4 Physical Assessment of ACBMs

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

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

All ACBM identified during the inspection and still remaining in the school were reassessed using the AHERA guidelines for assessment of ACBM. The assessment categories are listed as follows:

- 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 located in *Appendix B*.

4 MANAGEMENT PLAN UPDATE

Our inspector could not locate copies of any past or present AHERA documentation at the facility.

4.1 Recommended Response Actions

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

Operations and Maintenance (O & M)

All ACBM in both the Maintenance Building and Storage Building shall be managed in place in accordance with the original AHERA Operations and Maintenance (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 includes the following elements:

- a) Cleaning: All areas of the school-associated buildings where friable ACBM or friable suspected ACBM assumed to be ACM 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.

- b) O & M Activities: The LEA shall ensure that the procedures described below are followed to protect building occupants from any O & M activities that may disturb known or assumed ACM:
- (1) Restrict entry into the area either by physically isolating or by scheduling.
 - (2) Post warning signs to prevent entry by unauthorized persons.
 - (3) Shut off or temporarily modify the air-handling system.
 - (4) 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.
 - (5) Place all asbestos debris and other contaminated materials in a sealed, leak-tight container for eventual disposal.
- c) 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 ACM):
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, insulation, etc., 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 more than 3 linear/square feet of friable ACBM):
1. Restrict entry into the area and post warning signs.
 2. Shut off or temporarily modify the air handling system to prevent spread of fibers to other areas of the school.
 3. The response for any major fiber release episode must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.
 4. The LEA shall notify the Massachusetts Department of Labor Standards (DLS) formerly known as the Division of Occupational Safety (DOS) 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.

4.2 Periodic Surveillance

At least once every six (6) months after a management plan is in place, the LEA shall conduct periodic surveillance in the school building that contains ACBM or assumed to contain ACM. The person conducting periodic surveillance shall visually inspect all areas in the school-affiliated Maintenance and Storage Buildings that have been identified in the management plan as having

ACBM. In addition, he/she shall record the date of surveillance, his/her name, and any changes in the condition of the materials, and submit the record to the LEA Designated Person for inclusion in the management plan.

Please see *Appendix C* for Periodic Surveillance Forms that may be used for conducting periodic surveillance.

4.1 Preventive Measures

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

Note that limited access is granted to both the Maintenance Building and Storage Building.

Please see *Appendix D* for preventive measures designed for various types of ACM that may exist in these school outbuildings.

5 EPA CERTIFICATION REQUIREMENTS

The certificates and the licenses for the individuals (Dustin Diedricksen and Robert L. May Jr.) involved in performing the re-inspection and updating the management plan are provided in *Appendix E*.

APPENDIX A

CHECKLIST FOR EXISTING RECORDS

CHECKLIST FOR EXISTING RECORDS

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

School Building: Maintenance & Storage Buildings (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 shall be verified to be present and complete as part of three year re-inspection.

DOCUMENTATION		LOCATION	
		School	LEA Office
1.	Original AHERA Inspection/Management Plan (1994)	Not seen	No
2.	1998 Three year Re-inspection	Not seen	No
3.	2001 Three year Re-inspection	Not seen	No
4.	2004 Three year Re-inspection	Not seen	No
5.	Notifications to Parents/Guardians and Teachers (yearly since last re-inspection)	Not seen	No
6.	Designated Person Identified and Proper Training (person must be named and have appropriate training)	Not seen	No
7.	Designated Person Periodic Surveillance (every six months since last re-inspection)	Not seen	No
8.	Record of Awareness Training for Maintenance Staff	Not seen	No
9.	Outside Vendor Awareness Notification	Not seen	No
10.	Warning Signs and Labels (required posting in Boiler room and mechanical spaces only)	Not seen	No
11.	Record of Response Actions (includes any abatement done since last re-inspection)	Not seen	No (N\A)

Inspector: John Coletti

Date: December 12, 2011



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APPENDIX B

RE-INSPECTION FORM



ASBESTOS RE-INSPECTION FORM

Inspection Date: September 2, 2011

Maintenance & Storage Buildings (at Peebles Elementary School)
Town of Bourne

Inspector: Dustin Diedricksen

ACM Type Transite Ceiling Paneling

Sample Reference # B1

ACM Inventory			Exposure Assessment				Response Action	
Location	Estimate Quantity	Material Category	Friable	Previous Conditions	Current Assessment Category	Current Assessment Description	Previous Recommendations	Current Recommendations
Storage Building: Left Side Garage Bay	225 SF	MISC	N	5	5	Good (Clean Break at Corner of Transite Panel with No Visible Debris)	Continue O&M	Continue O&M

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



50 Redfield St, Suite 100, Boston, MA 02122
282-8253

(617) 282-4675 Fax (617)

ASBESTOS RE-INSPECTION FORM

Inspection Date: September 2, 2011

Maintenance & Storage Buildings (at Peebles Elementary School)
Town of Bourne

Inspector: Dustin Diedricksen

ACM Type 9x9 Vinyl Floor Tile

Sample Reference # B2

ACM Inventory			Exposure Assessment				Response Action	
Location	Estimate Quantity	Material Category	Friable	Previous Conditions	Current Assessment Category	Current Assessment Description	Previous Recommendations	Current Recommendations
Storage Building: Restroom	ND	MISC	N	5	5	Good (Assume underneath 12x12 Floor Tile)	Continue O&M	Continue O&M
Storage Building: 1 st Floor Storage Area	N/A	MISC	N	5	Removed	Removed	Continue O&M	Document Removal of Floor Tile; Remove from O&M Plan

ND = Not Determined; N/A = Not Applicable

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



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ASBESTOS RE-INSPECTION FORM

Inspection Date: September 2, 2011

Maintenance & Storage Buildings (at Peebles Elementary School)
Town of Bourne

Inspector: Dustin Diedricksen

ACM Type Sheetrock & Joint Compound

Sample Reference # B3

ACM Inventory			Exposure Assessment				Response Action	
Location	Estimate Quantity	Material Category	Friable	Previous Conditions	Current Assessment Category	Current Assessment Description	Previous Recommendations	Current Recommendations
Storage Building: Center & Right Garage Bays, First Floor Walls & Ceiling	ND	Surfacing	Y	5	5	Good	Continue O&M	Continue O&M

ND = Not Determined

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



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APPENDIX C

PERIODIC SURVEILLANCE FORM

PERIODIC SURVEILLANCE FORM – List of ACBM Asbestos-Containing Materials

School Building: Maintenance & Storage Buildings
 (at Pebbles Elementary School)
 Address: 70 Trowbridge Rd, Bourne, MA

Date(s) of Original Inspection: 1994
 Date(s) of Subsequent Re-Inspections: 1998, 2001, 2004

Periodic Inspection Date: _____ Conducted By: _____

Asbestos Containing Material	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Quantity Damaged	Comments
Transite Ceiling Paneling	Storage Building: Left Side Garage Bay	Good				Clean Break at Corner of Transite Panel with No Visible Debris
9x9 Vinyl Floor Tile	Storage Building: Restroom	Good				Assume underneath 12x12 Floor Tile
Storage Building: Center & Right Garage Bays, First Floor Walls & Ceiling	Sheetrock & Joint Compound	Good				Not Included in August 2009 Sampling of Suspect ACBM; Assumed Positive

Surveillance conducted by: _____

 (signature)

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

Date: _____

Conditions: G = Good
 D = Damaged
 SD = Significant damage



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APPENDIX D

AHERA CERTIFICATES