

December 29, 2015

VIA EMAIL: Ernest.Sandland@whrsd.k12.ma.us

Mr. Ernest Sandland Facilities Department Whitman Hanson Regional School District 600 Franklin Street Whitman, MA 02382

AEC Project No. 421902

Subject: AHERA 3-Year Re-inspection Report

Whitman Middle School 100 Corthell Avenue Whitman, Massachusetts

Dear Mr. Sandland:

Please find enclosed the three-year re inspection report for the Whitman Middle School. If you require any further assistance please feel free to contact me at (781) 337-0016.

Thank you for allowing American Environmental Consulting, Inc (AEC) to assist you with this project.

Sincerely,

American Environmental Consulting, Inc

Gregory Hatch

Partner

MA Certified Asbestos Inspector (AI061535) MA Certified Management Planner (AP061534)



AHERA 3-YEAR REINSPECTION REPORT WHITMAN MIDDLE SCHOOL

SUBMITTED TO:

WHITMAN HANSON REGIONAL SCHOOL DISTRICT 600 Franklin Street Whitman, MA 02382

SUBMITTED BY:

AMERICAN ENVIRONMENTAL CONSULTANTS, INC. 814 Broad Street Weymouth, Massachusetts 02189

PROJECT NO. 421902

December 29, 2015



AHERA 3-YEAR REINSPECTION REPORT WHITMAN MIDDLE SCHOOL 100 CORTHELL AVENUE WHITMAN, MASSACHUSETTS

Submitted To:

Mr. Ernest Sandland Facilities Department/LEA Whitman Hanson Regional School District 600 Franklin Street Whitman, MA 02382

Inspector:

Gregory Hatch

Partner
American Environmental Consultants, Inc
Massachusetts Inspector # AI061535

December 29, 2015



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1.0 <u>INTRODUCTION</u>

American Environmental Consultants, Inc (AEC) was retained by the Whitman Hanson Regional School District (WHRSD) to perform a three-year reinspection at the Whitman Middle School located at 100 Corthell Avenue in Whitman, Massachusetts.

The inspection was performed on December 15, 2015 by AEC's Industrial Hygienist, Gregory Hatch, with Massachusetts State Accreditation # AI061535.

The purpose of this inspection is to visually reinspect and reassess all friable and non-friable known or assumed asbestos-containing building material (ACBM) within the school facility in compliance with the United States Environmental Protection Agency's (USEPA) Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763.85 [b]).

The reinspection was conducted in two phases.

PHASE I

- Review the existing management plan and discuss with the designated person response actions completed.
- Review abatement/remedial activities, work orders and training records since management plan implementation, if applicable.
- Obtain 8 1/2" x 11" drawings from the Local Education Agency (LEA).

PHASE II

- Visually re-inspect and reassess the condition of all friable known or assumed ACBM.
- Visually inspect material that was previously identified as non-friable ACBM and touch the material to determine whether it has become friable since the last inspection or reinspection.
- Identify homogeneous areas with materials that have become friable since the last inspection or reinspection.
- Assess the condition of any newly friable materials.
- Submit to the designated person any assessments or reassessments made of <u>friable</u> known or assumed ACBM as identified in the original inspection report.
- Submit a report detailing the results of the reinspection for inclusion into the LEA's management plans.

2.0 <u>DISCUSSION</u>

The management plan on file at the office of the LEA was reviewed and the following summarizes this review.

2.1 <u>Designated Person</u>

Mr. Ernest Sandland Facilities Department Whitman Hanson Regional School District 600 Franklin Street Whitman, MA 02382

The AHERA regulation 763.84[g](1) states that "the general LEA shall designate a person to ensure that requirements under this section are properly implemented". Section 763.84[g](2) further states that "the LEA shall ensure that the designated person receives adequate training to perform duties assigned under this section".

2.2 <u>Yearly Building Occupant Notification</u>

"The designated person must ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress", as per the AHERA regulation section 763.84(c).

The records for previous years have been incorporated into the management plan for the school and a copy is also attached in Appendix G. AEC recommends that copies of the records be incorporated into the management plans to satisfy the requirement to maintain and update the plan.

2.3 Custodial/Maintenance Personnel Training

Custodial and maintenance personnel hired are required to receive a minimum of 2 hours "asbestos awareness training". Training should be provided within 60 days of employment.

Documentation of the 2 hour Asbestos Awareness training for maintenance staff working currently in the building was available during the inspection and is attached in Appendix H. Documentation of training is included in the Management Plan. If any staff remains untrained, training should be provided and documented in the Management Plan.

2.4 Periodic Surveillance

The LEA shall conduct six-month periodic surveillance of all known ACBM present in each school in accordance with the AHERA Regulation. A 2 hour trained staff member may conduct the six-month inspection. The inspection is performed to document any changes in condition in the ACBMs.

Records were available documenting the six-month periodic surveillance inspections. AEC recommends documenting these periodic inspections and, that copies of these records be entered into the management plan to satisfy the requirement to maintain and update the plan. The records should be maintained in a central location. The attached Appendix B can be copied and used as a basis for the re-inspection.

2.5 Warning Labels

As per the AHERA regulation section 763.95[a], "the LEA shall attach a warning label immediately adjacent to any friable and non-friable ACBM and suspected ACBM assumed to be asbestos-containing material (ACM) located in routine maintenance areas (such as boiler rooms) at each school building".

No suspect friable materials were observed in routine maintenance areas.

2.6 Summary of Response Actions

According to the LEA, there has not been any work in the school in the last three years therefore, no records of response actions were found in the management plan since the last AHERA 3-year inspection performed in January 2012.

3.0 REINSPECTION EPA ASSESSMENT SUMMARY

3.1 **ACBM Remaining**

Asbestos-containing and assumed asbestos containing building materials remaining in the building includes:

Surfacing Materials

No suspect surfacing materials were identified

Thermal System Insulation

Most of the thermal system insulation observed was non-ACM. Suspect pipe fitting insulation on domestic water and on roof drains was observed and found to be in good condition. The fitting insulation and roof drain insulation was sampled and determined to be non-ACM.

Miscellaneous Materials

Miscellaneous materials are located in areas throughout the school building. Detailed locations, amounts and condition information can be found in Appendix B and C.

3.2 Additional ACBM Identified

No additional ACBM was identified during the reinspection.

3.3 Results and Recommendations

The identified ACBM remaining in the Whitman Middle School was inspected and found to be in generally good condition.

The materials should continue to be maintained in place under the O & M plan until removal is made necessary by renovations or demolition.

4.0 <u>CONCLUSIONS</u>

The AHERA three year reinspection at the Whitman Middle School was performed on December 15, 2015 in accordance with the AHERA regulations. A management plan audit was performed with additional results and recommendations for correction and updating the management plan listed in Section 2 of this report.

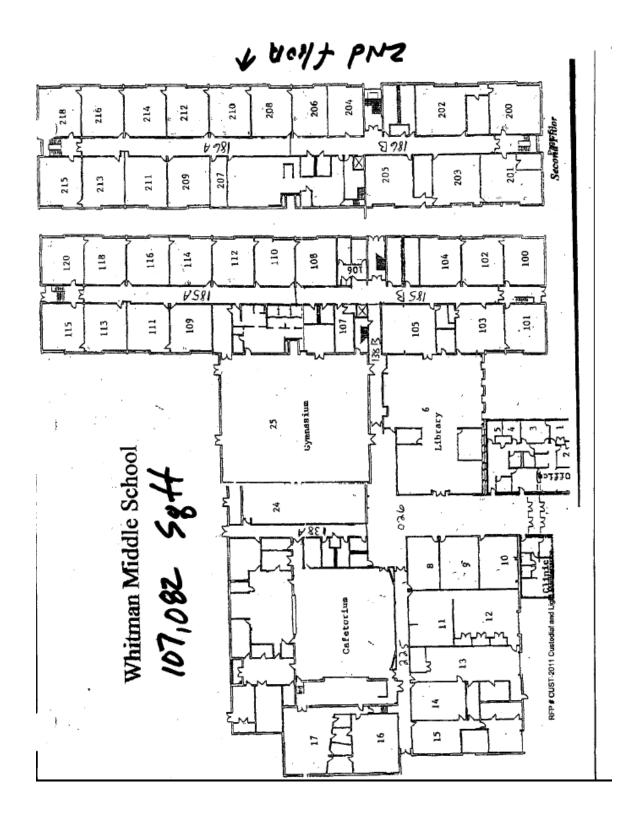
The ACM/PACM was found to be in good condition with a low potential for damage.

Recommendations/schedule/Cost:

- a. There will be a cost for response actions between this re-inspection and the next. This is dependant on renovation and operation/maintenance activities. There will be a cost related to consulting services and abatement contractor services.
- b. There will be time associated with each six month periodic inspection. It is anticipated that this activity would require a full 8 hour shift.

APPENDIX A

FLOOR PLANS



APPENDIX B ACBM REMAINING

ACBM REMAINING

The following abbreviations were used in the Reinspection Assessment Table that follows:

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

The assessment is divided into two categories. The physical assessment and the hazard potential assessment as follows:

PHYSICAL ASSESSMENT:

The physical assessment is divided into the following seven categories and describes the material condition at the time of the inspection:

Physical Condition #1 - Damaged or significantly damaged thermal insulation.

Physical Condition #2 Damaged friable surfacing ACM.

Physical Condition #3 Significantly damaged friable surfacing ACM.

Physical Condition #4 Damaged or significantly damaged friable miscellaneous

ACM.

Physical Condition #5 ACBM with potential for damage.

Physical Condition #6 ACBM with potential for significant damage.

Physical Condition #7 Any remaining friable ACBM or friable suspected ACBM.

HAZARD ASSESSMENT:

The hazard assessment is a combination of the physical assessment combined with the potential for disturbance (i.e. physical contact, vibration air movement) as follows:

Hazard rank #1 – Good condition/Low potential for disturbance

Hazard rank #2 – Good condition/ Moderate potential for disturbance

Hazard rank #3 – Good condition/ High potential for disturbance

Hazard rank #4 – Fair condition/Low potential for disturbance

Hazard rank #5 – Fair condition/Moderate potential for disturbance

Hazard rank #6 – Fair condition/ High potential for disturbance

Hazard rank #7 – Poor condition (significant damage)

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Location: Building- Floor/Room or Area	Building- Floor/Room Type of Material Quantity Homogenous Area		Physical/ Hazard Assessment	Condition	Friable/Non -Friable (F/NF)	
Cafeteria	4'x4' Concave ceiling tile	3,600 SF	HA-1	5/1	Good	F
Classrooms: 11, 12, 14, 16, 17, 108, 110, 111, 113, 116, 208, 210, 214 and hallway areas and Cafeteria Classrooms: 12"x12" beige mottled floor tile 28,000 SF F		НА-2	5/1	Good	NF	
Sporadic classroom and hallway areas and Cafeteria	Mastic	28,000 SF	НА-3	5/1	Good	NF
Kitchen	4" ceramic tile wall grout	600 SF	HA-4	5/1	Good	NF
Kitchen	4" ceramic tile mortar	600 SF	HA-5	5/1	Good	NF
Kitchen	6" Terrazzo floor grout	450 SF	НА-6	5/1	Good	NF
Kitchen	6" Terrazzo floor adhesive	450 SF	HA-7	5/1	Good	NF
Classrooms: 8, 9, 10, 13, Teacher's room, Office bathrooms, Gym Storage, and Hallway areas	12"x12" White with blue floor tile	22,000 SF	НА-8	5/1	Good	NF

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Location: Building- Floor/Room or Area	Type of Material	Quantity	Homogenous Area Number	Physical/ Hazard Assessment	Condition	Friable/Non -Friable (F/NF)
Classrooms: 8, 9, 10, 13, Teacher's room, Office bathrooms, Gym Storage, and Hallway areas	Mastic	22,000 SF	НА-9	5/1	Good	NF
Rooms 13 and 14	Gray duct seal	100 SF	HA-10	5/1	Good	NF
Room 14, Clinic, Main Office	Interior window glaze	100 LF	HA-11	5/1	Good	NF
Room 13, 11, 100, Main Office bathrooms	Black sink undercoat	10 EA	HA-12	5/1	Good	NF
Hallway and Gym storage room	12"x12" Yellow/brown floor tile	2,400 SF	HA-13	5/1	Good	NF
Hallway and Gym storage room	Mastic	2,400 SF	HA-14	5/1	Good	NF
Main Office, Library, Room 105 and 203	Carpet Mastic	7,700 SF	HA-15	5/1	Good	NF
Exercise Room	6" Violet VCB	240 LF	HA-16	5/1	Good	NF
Exercise Room	Mastic	240 LF	HA-17	5/2	Good	NF
Gym	Heavy black VCB	400 LF	HA-18	5/2	Good	NF
Gym	Mastic	400 LF	HA-19	5/2	Good	NF

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Location: Building- Floor/Room or Area	Type of Material	Quantity	Homogenous Area Number	Physical/ Hazard Assessment	Condition	Friable/Non -Friable (F/NF)	
Hallways	12"x12" Green floor tile	2,300 SF	HA-20	5/2	Good	NF	
Hallways	Mastic	2,300 SF	HA-21	5/2	Good	NF	
Hallways	12"x12" Blue floor tile	2,300 SF	HA-22	5/2	Good	NF	
Hallways	Mastic	2,300 SF	HA-23	5/2	Good	NF	
Rooms 104,108, 112,118, 201, 206, 211, 213, 212, 216, 218,	12"x12" light beige floor tile	12,000 SF	HA-24	5/2	Good	NF	
Rooms 104,108, 112,118, 201, 206, 211, 213, 212, 216, 218,	Mastic	12,000 SF	HA-25	5/2	Good	NF	
Storage room (105), Room 114	12"x12" White beige floor tile	450 SF	HA-26	5/2	Good	NF	
Storage room (105), Room 114	Mastic	450 SF	HA-27	5/2	Good	NF	
Rooms 109, 115, 205, 207, 209 and 215	12"x12" White floor tile with gray	6,000 SF	HA-28	5/2	Good	NF	
Rooms 109, 115, 205, 207, 209 and 215	Mastic	6,000 SF	HA-29	5/2	Good	NF	

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Location: Building- Floor/Room or Area	Type of Material	Quantity	Homogenous Area Number	Physical/ Hazard Assessment	Condition	Friable/Non -Friable (F/NF)
2 nd floor classrooms and hallway	Green Cove base	5,500 LF	HA-30	5/2	Good	NF
2 nd floor classrooms and hallway	Mastic	5,500 LF	HA-31	5/2	Good	NF
Room 100	Gray sink undercoat	1 EA	HA-32	5/2	Good	NF
Bathrooms	2" Ceramic tile floor grout	1,800 SF	HA-33	5/2	Good	NF
Bathrooms	2" Ceramic tile floor adhesive	1,800 SF	HA-34	5/2	Good	NF
Bathrooms	4" Ceramic tile wall grout	2,200 SF	HA-35	5/2	Good	NF
Bathrooms	4" Ceramic tile wall adhesive	2,200 SF	HA-36	5/2	Good	NF
Cafeteria	12"x12" Brown mottled VFT	1,400 SF	HA-37	5/2	Good	NF
Cafeteria	Mastic	1,400 SF	HA-38	5/2	Good	NF

6- Month Periodic Re-inspection:	Date Re-inspected:	
Re-inspection done by:		
Changes in Condition:		
		_

APPENDIX C HOMOGENOUS AREA SAMPLING GUIDE

HOMOGENOUS AREA SAMPLING GUIDE

Note: Where mastic is listed, it is associated with the material above. (i.e. Floor tile is followed by mastic and cove base is followed by mastic etc).

Whitman Middle School 3-YEAR REINSPECTION HOMOGENOUS MATERIAL TABLE							
December 29, 2	015	Γ		Γ			No. 421902
Homogenous Material Number	Material	Sampled (Yes/No)	ACM (yes/no)	Date Sampled	How Many Samples	Lab Doing Analysis	Lab Project Number
HA-1	4'x4' Concave ceiling tile	No	N/A	N/A	N/A	N/A	N/A
HA-2	12"x12" beige mottled floor tile	No	N/A	N/A	N/A	N/A	N/A
HA-3	Mastic	No	N/A	N/A	N/A	N/A	N/A
HA-4	4" ceramic tile wall grout	No	N/A	N/A	N/A	N/A	N/A
HA-5	4" ceramic tile mortar	No	N/A	N/A	N/A	N/A	N/A
НА-6	6" Terrazzo floor grout	No	N/A	N/A	N/A	N/A	N/A
HA-7	6" Terrazzo floor adhesive	No	N/A	N/A	N/A	N/A	N/A
HA-8	12"x12" White with blue floor tile	No	N/A	N/A	N/A	N/A	N/A
HA-9	Mastic	No	N/A	N/A	N/A	N/A	N/A
HA-10	Gray duct seal	No	N/A	N/A	N/A	N/A	N/A
HA-11	Interior window glaze	No	N/A	N/A	N/A	N/A	N/A
HA-12	Black sink undercoat	No	N/A	N/A	N/A	N/A	N/A

Whitman Middle School 3-YEAR REINSPECTION HOMOGENOUS MATERIAL TABLE

December 29, 2015 Project No. 421902

December 27, 2		1		T	1 Toject 110: 421702			
Homogenous Material Number	Material	Sampled (Yes/No)	ACM (yes/no)	Date Sampled	How Many Samples	Lab Doing Analysis	Lab Project Number	
HA-13	12"x12" Yellow/brown floor tile	No	N/A	N/A	N/A	N/A	N/A	
HA-14	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-15	Carpet Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-16	6" Violet VCB	No	N/A	N/A	N/A	N/A	N/A	
HA-17	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-18	Heavy black VCB	No	N/A	N/A	N/A	N/A	N/A	
HA-19	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-20	12"x12" Green floor tile	No	N/A	N/A	N/A	N/A	N/A	
HA-21	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-22	12"x12" Blue floor tile	No	N/A	N/A	N/A	N/A	N/A	
HA-23	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-24	12"x12" light beige floor tile	No	N/A	N/A	N/A	N/A	N/A	
HA-25	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-26	12"x12" White beige floor tile	No	N/A	N/A	N/A	N/A	N/A	
HA-27	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-28	12"x12" White floor tile with gray	No	N/A	N/A	N/A	N/A	N/A	
HA-29	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-30	Green Cove base	No	N/A	N/A	N/A	N/A	N/A	
HA-31	Mastic	No	N/A	N/A	N/A	N/A	N/A	

Whitman Middle School 3-YEAR REINSPECTION HOMOGENOUS MATERIAL TABLE

December 29, 2015 Project No. 421902

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Homogenous Material Number	Material	Sampled (Yes/No)	ACM (yes/no)	Date Sampled	How Many Samples	Lab Doing Analysis	Lab Project Number	
HA-32	Gray sink undercoat	No	N/A	N/A	N/A	N/A	N/A	
HA-33	2" Ceramic tile floor grout	No	N/A	N/A	N/A	N/A	N/A	
HA-34	2" Ceramic tile floor adhesive	No	N/A	N/A	N/A	N/A	N/A	
HA-35	4" Ceramic tile wall grout	No	N/A	N/A	N/A	N/A	N/A	
НА-36	4" Ceramic tile wall adhesive	No	N/A	N/A	N/A	N/A	N/A	
HA-37	12"x12" Brown mottled VFT	No	N/A	N/A	N/A	N/A	N/A	
HA-38	Mastic	No	N/A	N/A	N/A	N/A	N/A	
HA-39	2'x4' Sheetrock ceiling tile	Yes	No	12/15/15	2	San Air	15039846	
HA-40	Older 2'x4' faux 2'x2' ceiling tile	Yes	No	12/15/15	2	San Air	15039846	
HA-41	Newer 2'x4' faux 2'x2' ceiling tile	Yes	No	12/15/15	2	San Air	15039846	
HA-42	Fitting Insulation	Yes	No	12/15/15	3	San Air	15039846	
HA-43	2'x4' Newer ceiling tile	Yes	No	12/15/15	2	San Air	15039846	
HA-44	Blue cove base	Yes	No	12/15/15	2	San Air	15039846	
HA-45	Cove base mastic	Yes	No	12/15/15	2	San Air	15039846	
HA-46	Sheetrock	Yes	No	12/15/15	2	San Air	15039846	
HA-47	Joint Compound	Yes	No	12/15/15	2	San Air	15039846	
HA-48	2'x4' Ceiling tile	Yes	No	12/15/15	2	San Air	15039846	

Whitman Middle School **3-YEAR REINSPECTION** HOMOGENOUS MATERIAL TABLE **December 29, 2015 Project No. 421902** Homogenous How Lab Lab **ACM** Sampled **Date** Material Material Many Doing **Project** (Yes/No) Sampled (yes/no) Number Samples Analysis Number

No

12/15/15

San Air

15039846

3

N/A – Not applicable as the material has not been sampled.

Yes

Fitting insulation

on roof drain

HA-49

APPENDIX D EPA AHERA SELF AUDIT CHECKLIST

AHERA Asbestos Management Plan Self-Audit Checklist for Designated Persons*							
School:		Phone:					
Address:							
County:							
Local Educat	ion Agency:	Phone:					
Address:		AND CONTROL OF THE CO					
Designated P	erson:	Phone:					
Address:							
Date Checklis	st Completed by Designated	Person:					
	erson's Signature:						
Yes No N/A N/A - Not Applicable	School:						
	General In	formation					
	1. Has an Asbestos Management Plan be	en developed for your school?					
		(40 CFR § 763.93)					
	2. Does the Local Education Agency (LE management plan in both the LEA's adn	A) have a complete and up-to-date copy of the school's ninistrative office and the school's administrative office?					
	2.14	(40 CFR § 763.93(g)(2)-(3))					
	3. Was the management plan developed by an accredited management planner?	Did you know? Your LEA may require each management plan to contain a statement signed by an accredited management plan developer that he/she has prepared or assisted in the preparation of the plan or has reviewed the plan and that the plan is in compliance with 40 CFR 763, Subpart E. The management plan developer that signs the statement may not also implement the plan (40 CFR § 763.93(f)).					
		(40 CFR § 763.93(e))					

^{*}References to Model Asbestos Management Plan (AMP) forms are to the forms contained in EPA Region 2's guidance manual, published March 2004, entitled: "Model AHERA Asbestos Management Plan for Local Education Agencies." The Model AMP forms and this Self-Audit Checklist are not a substitute for the applicable legal requirements, are not regulations themselves, and are not required to be used/completed under AHERA. Rather, they are provided by EPA Region 2 as guidance to enhance schools' compliance with EPA AHERA regulations regarding the required documentation that must be included in the AMP. These documents do not impose legally binding requirements on any party, including EPA, states, or the regulated community, and are not intended and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States. Please contact your state asbestos coordinator for any applicable state regulations/AMP Forms.



Yes No N/A N/A - Not Applicable	School:
	 4. For each consultant who contributed to the management plan, does the plan include the following: consultant's name? a statement that he/she is accredited under the state accreditation program or another state's accreditation program or an EPA-approved course?
	(40 CFR § 763.93 (e)(12)(i)-(ii))
	Note: Although not required, EPA suggests including in the AMP the name of the training agency, the course name and date, and a copy of the accreditation certificate for each consultant.
	*Tip: See suggested Model AMP Form 1 - Contact Information
	5. Does the management plan include a list of the name and address of each building used as a school building and identify whether the school building has: • friable ACBM (asbestos-containing building material)? • non-friable ACBM? • friable and non-friable suspected ACBM assumed to be ACM (asbestos-containing material)? (40 CFR §§ 763.93(a)(1)-(2) and 763.93(e)(1))
	*Tip: See Model AMP Form 2 - School Building List
	 6. If a new school building was constructed after October 12, 1988 and is asbestos-free, does the management plan include the following and has a copy of same been provided by the LEA to the EPA Regional Office: a statement signed by an architect or project engineer responsible for the construction of the building, or by an accredited inspector, indicating that no ACBM was specified as a building material in any construction document for the building, or, to the best of his or her knowledge, no ACBM was used as a building material in the building?
	(40 CFR § 763.99(a)(7))
	*Tip: See Model AMP Form 2 - School Building List
	7. Does the management plan include a copy of any of the statements required under 40 CFR § 763.99(a)(1)-(7) to support an exclusion from inspection that the school may qualify for under 40 CFR § 763.99 and has a copy of any such statement been provided by the LEA to the Regional Office?
	(40 CFR § 763.99)
	Note: The exclusion under 40 CFR § 763.99(a)(7) is also covered under Checklist question number 6.



Yes No N/A N/A - Not Applicable	School:						
	 (DP): Name, address, and telephone number of the DP? Course name, dates, and hours of training that the DP attended duties? 	 Name, address, and telephone number of the DP? Course name, dates, and hours of training that the DP attended to carry out his or her AHERA duties? Signed statement by the DP that the LEA's general responsibilities under 40 CFR 					
		(40 CFR § 763.93(e)(4) and (i))					
	Note: Although not required, EPA suggests including in the AMP a copy of the DP's training certificates.	the name of the training agency and					
	*Tip: See Model AMP Form 1 - Contact Information and Form 3	· · · · · · · · · · · · · · · · · · ·					
	 9. Does the management plan include the following recommendation. A plan for reinspection required under 40 CFR § 763.85? A plan for operations and maintenance activities (including initing § 763.91? A plan for periodic surveillance required under 40 CFR § 763.91. A description of the management planner's recommendation for § 763.91(c)(2), as part of an operations and maintenance prograthat recommendation? 	tial cleaning) required under 40 CFR 92? or additional cleaning under 40 CFR					
	*Tip: See Model AMP Form 10 - Plan for Reinspection, Form 14 Maintenance Activities, Form 18 - Periodic Surveillance Plan/Repo	- Plan for Operations and					
	10. Does the management plan include an evaluation of resources ractions, reinspections, operations and maintenance, and periodic su	needed to carry out response					
		(40 CFR § 763.93(e)(11))					
	*Tip: See suggested Model AMP Form 4 - Evaluation of Resource	es					
	40 CER 6 762 02(a)(1) for all maining required under employ	ou know? New custodial and maintenance bysees must be trained within 60 days after ag work (40 CFR §763.92(a)(1)).					
		(40 CFR §§ 763.93(h) and 763.94(c))					
	Note: Although not required, EPA suggests including in the AMP to course name, and a copy of the accreditation certificate for each sta	the name of the training agency, the aff person.					
	*Tip: See Model AMP Form 5 - Training Record for Maintenance	and Custodial Staff					



Yes No N/A	School:
N/A - Not Applicable	School.
	12. Does the management plan include a record of the additional 14 hours of training required under 40 CFR § 763.92(a)(2) for maintenance and custodial staff who conduct any activities that will result in the disturbance of ACBM and does the record include the following information: • person's name and job title? • date training was completed? • location of training? • number of hours completed? (40 CFR §§ 763.93(h) and 763.94(c))
	Note: Although not required, EPA suggests including in the AMP the name of the training agency, the course name, and a copy of the accreditation certificate for each staff person.
	*Tip: See Model AMP Form 5 - Training Record for Maintenance and Custodial Staff
	Inspections and Reinspections
	 13. For inspections conducted before 12/14/87 (i.e., the effective date of the 10/30/87 EPA Asbestos-Containing Materials in Schools rule), does the management plan include the following information: date of inspection? blueprint, diagram or written description of each school building that identifies clearly each location and approximate square or linear footage of homogenous /sampling area sampled for ACM? if possible, the exact locations where the bulk samples were collected and the dates of collection? a copy of the analyses of any bulk samples, dates of analyses, and a copy of any other laboratory reports pertaining to the analyses. description of response actions or preventive measures taken, including, if possible, the names and addresses of all contractors, start and completion dates and air clearance sample results? description of assessments of material identified prior to 12/14/87 as friable ACBM or friable suspected ACBM assumed to be ACM, and the name, signature, state of accreditation and if, applicable, the accreditation number of the person making the assessments (i.e., inspector)? (40 CFR § 763.93(e)(2)(i)-(v)) *Tip: See Model AMP Form 6 - Inspection Cover Sheet, Form 8 - Homogeneous Area/Bulk Sample Summary, Form 9 - Homogeneous Area/Bulk Sample Diagram, Form 12 - Implementation of Response Actions, and Form 7 - Room/Functional Space Assessment
	14. Does the management plan include for each inspection and reinspection conducted under 40 CFR § 763.85 the following information: • date of the inspection or reinspection? • name, signature, state of accreditation, and, if applicable, the accreditation number for each accredited inspector performing the inspection or reinspection? (40 CFR § 763.93(e)(3)(i)) Note: Although not required, EPA suggests including in the AMP the name of the training agency, the course name and date, and a copy of the accreditation certificate for each inspector. *Tip: See Model AMP Form 6 - Inspection Cover Sheet



Yes No N/A N/A - Not Applicable	School:
	 15. Does the management plan include for each inspection and reinspection conducted under 40 CFR § 763.85 the following sampling information: Blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of homogeneous areas where material was sampled for ACM? Exact location where each bulk sample was collected and the date of collection of each bulk sample? Homogeneous areas where friable suspected ACBM is assumed to be ACM? Homogeneous areas where nonfriable suspected ACBM is assumed to be ACM? Description of the manner used to determine sampling locations? The name, signature, state of accreditation, and, if applicable, the accreditation number for each accredited inspector that collected samples?
	(40 CFR § 763.93(e)(3)(ii)-(iii))
	Note: For details on how to collect bulk samples, see 40 CFR § 763.86. Although not required, EPA suggests including in the AMP the name of the training agency, the course name and date, and a copy of the accreditation certificate for each inspector that collected the samples.
	*Tip: See Model AMP Form 6 - Inspection Cover Sheet, Form 8 - Homogeneous Area/Bulk Sample Summary, and Form 9 - Homogeneous Area/Bulk Sample Diagram
	 16. Does the management plan include for each inspection and reinspection conducted under 40 CFR § 763.85 the following information on the analysis of the bulk samples and has it been submitted to the DP for inclusion in the plan within 30 days of the analysis: Copy of the analysis of any bulk samples collected and analyzed? Name and address of any laboratory that analyzed bulk samples? A statement that any laboratory used meets the applicable laboratory accreditation requirements of 40 CFR § 763.87(a)? Dates of any analyses performed? Name and signature of the person performing each analysis?
	(40 CFR §§ 763.87(d) and 763.93(e)(3)(iv))
	Note: For details on how to submit bulk samples for analysis, see 40 CFR § 763.87.
	 17. Does the management plan include for each inspection and reinspection conducted under 40 CFR § 763.85 the following assessment information and has it been submitted to the DP for inclusion in the plan within 30 days of the assessment: Written assessments (signed and dated) required to be made under 40 CFR § 763.88 of all ACBM and suspected ACBM assumed to be ACBM? Name, signature, state of accreditation, and, if applicable, the accreditation number of each accredited person making the assessment (i.e., inspector(s))
	(40 CFR §§ 763.88(a)(2) and 763.93(c)(3)(v)
·	Note: Although not required, EPA suggests including in the AMP the name of the training agency, the course name and date, and a copy of the accreditation certificate for each inspector making the assessment.
	*Tip: See Model AMP Form 6 - Inspection Cover Sheet and Form 7 - Room/Functional Space Assessment



Yes No N/A N/A - Not Applicable	School:
	 18. Has the following information about the inspection been recorded and submitted to the DP for inclusion in the management plan within 30 days of the inspection: Inspection report with the date of inspection signed by each accredited inspector making the inspection, the state of accreditation, and if applicable, his/her accreditation number? Inventory of the locations of the homogeneous areas where samples are collected, exact location where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACBM is assumed to be ACM and homogeneous areas where nonfriable suspected ACBM is assumed to be ACM? Description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, state of accreditation, and, if applicable, his or her accreditation number? List of whether the homogeneous areas identified under 40 CFR § 763.85(a)(4)(vi)(B) of this section, are surfacing material, thermal system insulation, or miscellaneous material? Assessments of friable material (signed and dated), the name and signature of each accredited inspector making the assessment, state of accreditation, and if applicable, his or her accreditation number? (40 CFR § 763.85(a)(4)(vi)(A)-(E) and 763.88(a)(2))
	Note: For further details on activities conducted during an inspection (e.g., visually inspect/touch material), see 40 CFR § 763.85(a)(4)(i)-(v)
	*Tip: See Model AMP Form 6 - Inspection Cover Sheet, Form 7 - Room/Functional Space Assessment, Form 8 - Homogeneous Area/Bulk Sample Summary and Form 9 - Homogeneous Area /Bulk Sample Diagram
	 19. Has the following information about the reinspection been recorded and submitted to the DP for inclusion in the management plan within 30 days of the reinspection: Date of reinspection, name and signature of the person making the reinspection, state of accreditation, and if applicable, his or her accreditation number, and any changes in the condition of known or assumed ACBM? Exact location where samples were collected during the reinspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, state of accreditation, and, if applicable, his or her accreditation number? Any assessments or reassessments of friable material, date of the assessment or reassessment, the name and the signature of the accredited inspector making the assessments, state of accreditation, and if applicable, his or her accreditation number?
	(40 CFR §§ 763.85(b)(3)(vii)(A) - (C) and 763.88(a)(2))
	Note: At least once every 3 years after a management plan has been in effect, a reinspection must be conducted by an accredited inspector of all friable and nonfriable known or assumed ACBM in each school building that the LEA leases, owns, or otherwise uses as a school building (40 CFR § 763.85(b)(1)-(2)). For further details on activities conducted during a reinspection (e.g., visually reinspect/touch material), see 40 CFR § 763.85(b)(3)(i)-(vi).
	*Tip: See Model AMP Form 6 - Inspection Cover Sheet, Form 7 - Room/Functional Space Assessment, Form 8 - Homogeneous Area/Bulk Sample Summary, Form 9 - Homogeneous Area/Bulk Sample Diagram



Yes No N/A N/A - Not Applicable	School:
	Response Actions
	 20. Does the management plan include the recommendations made to the LEA regarding response actions under 40 CFR § 763.88(d) and the following information about the accredited management planner: name, signature, state of accreditation, and, if applicable, the accreditation number for each accredited management planner making the recommendations?
	(40 CFR §§ 763.88(d) and 763.93(e)(5))
	Note: Although not required, EPA suggests including in the AMP the name of the training agency, the course name and date, and a copy of the accreditation certificate for each accredited person making the recommendations.
	*Tip: See Model AMP Form 11 - Recommended Response Actions
	21. Does the management plan include a detailed description of preventive measures and response actions to be taken, including the following: Did you know? The LEA may select, from the response actions which protect human health and the environment, the least burdensome action (40 CFR § 763.90(a)).
	 Methods to be used for any friable ACBM? Locations where such measures and actions will be taken? Reasons for selecting the response action or preventive measure? Schedule for beginning and completing each preventive measure or response action?
	Note: For further details on how to conduct response actions, see 40 CFR § 763.90
	*Tip: See Model AMP Form 11 - Recommended Response Actions
	 22. Does the management plan include one of the following statements for the person or persons who inspected for ACBM and who will design or carry out response actions, except for operations and maintenance, with respect to the ACBM: statement that he/she is accredited under the state accreditation program, or that the LEA has used (or will use) persons accredited under another state's accreditation program or an EPA-approved course?
	(40 CFR § 763.93(e)(7))
	*Tip: See note on Model AMP Form 3 - Designated Persons Assurances



Yes No N/A N/A - Not Applicable	School:
	 23. Does the management plan include a detailed written description of each preventive measure and response action taken for friable and nonfriable ACBM and friable and nonfriable suspected ACBM assumed to be ACM, including the following: Methods used? Location where the measure or action was taken? Reasons for selecting the measure or action? Start and completion dates of the work? Names and addresses of all contractors involved and, if applicable, their state of accreditation and accreditation numbers? If ACBM is removed, the name and location of storage or disposal site of the ACM? Note: Although not required, EPA suggests including in the AMP a copy of the accreditation.
	*Tip: See Model AMP Form 12 - Implementation of Response Actions
	24. Does the management plan include the following sampling information required to be collected at the completion of certain response actions specified by 40 CFR § 763.90(i): Name and signature of any person collecting any air sample required to be collected? Locations where samples were collected? Date of collection? Name and address of the laboratory analyzing the samples? Date of analysis? Results of analysis? Method of analysis? Name and signature of the person performing the analysis? Statement that the laboratory meets the applicable laboratory accreditation requirements of 40 CFR § 763.90(i)(2)(ii)? (40 CFR § 763.94(b)(2))
	*Tip: See Model AMP Form 12 - Implementation of Response Actions
	25. Does the management plan include a detailed description in the form of a blueprint, diagram, or written description, of any ACBM or suspected ACBM assumed to be ACM that remains in the school once response actions are undertaken under 40 CFR § 763.90 and is the description updated as response actions are completed? (40 CFR § 763.93(e)(8))
	26. For each homogeneous area where all ACBM has been removed, have records been retained in the management plan for at least 3 years after the next reinspection required under 40 CFR § 763.85(b)(1), or for an equivalent period? Did you know? Significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM must be immediately isolated and access must be restricted unless isolation is not necessary to protect human health and the environment. Then, this material must be removed, or depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclosed or encapsulated (40 CFR § 763.90(d)(1) - (2)).



Yes No N/A N/A - Not Applicable	School:
	Operations and Maintenance
	27. Does the management plan include a record of each cleaning conducted under 40 CFR § 763.91(c), including the following: Name of each person performing the cleaning? Date of the cleaning? Locations cleaned? Methods used to perform the cleaning?
	(40 CFR §§ 763.93(h) and 763.94(e))
	Note: For details on initial cleaning after an inspection and before the initiation of any response action, other than O&M activities or repair, see 40 CFR § 763.91(c)(1) and for details on any additional cleaning recommended by the management planner and approved by the LEA, see 40 CFR § 763.91(c)(2).
	*Tip: See Model AMP Form 16 - Cleaning Record
	 28. Does the management plan include a record of each O&M activity and major asbestos activity, with the following information: Name of each person performing the activity? For a major asbestos activity, the name, signature, state of accreditation and, if applicable, the accreditation number of each person performing the activity? Start and completion date of each activity? Location of the activity? Description of the activity including preventative measures used? If ACBM is removed, the name and location of the storage and disposal site for the ACM?
	(40 CFR §§ 763.93(h) and 763.94(f) and(g))
	Note: The response actions for any maintenance activities disturbing friable ACBM, other than small-scale, short-duration maintenance activities, must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions (40 CFR § 763.91(e)). Although not required, EPA suggests including in the AMP a copy of the accreditation.
	*Tip: See Model AMP Form 15 - Operations and Maintenance Activities
	 29. Does the management plan include a record of each fiber release episode, whether major or minor, with the following information: Date and location of the episode? Method of repair? Preventive measure or response action taken? Name of each person performing the work? If ACBM is removed, the name and location of the storage and disposal site of the ACM?
	(40 CFR §§ 763.93(h) and 763.94(h))
	Note: A major fiber release episode is the falling or dislodging of more than 3 square or linear feet of friable ACBM (40 CFR § 763.91(f)(2)). A minor fiber release episode is the falling or dislodging of 3 square or linear feet or less of friable ACBM (40 CFR § 763.91(f)(1)).
	*Tip: See Model AMP Form 17 - Major/Minor Fiber Release Episode Log



Yes No N/A N/A - Not Applicable	School:		
	Periodic Surveillance		
	 30. Does the management plan include a record of each periodic surveillance performed under 40 CFR § 763.92(b), with the following information: Name of person performing the surveillance? Date of the surveillance? Any changes in the condition of the material? 		
	(40 CFR §§ 763.92(b)(2)(ii)-(iii), 763.93(h) and 763.94(d))		
	Note: A periodic surveillance of each school building must be conducted at least once every 6 months after a management plan has been in effect (40 CFR § 763.92(b)).		
	*Tip: See Model AMP Form 18 - Periodic Surveillance Plan/Report		
	Notification		
	 31. Does the management plan include the following notification information: Description of the steps taken to notify, in writing, at least once a year, parent, teacher and employee organizations of the availability of the management plan for review? Dated copies of all such management plan availability notifications (e.g., letter, newsletter)? Description of the steps taken to inform workers and building occupants, or their legal guardians, about inspections, reinspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress? (Under 40 CFR § 763.84(c), the LEA must inform them about these activities at least once each school year.) 		
	*Tip: See Model AMP Form 19 - Plan to Inform (40 CFR §§ 763.93(e)(10) and 763.93(g)(4))		



Appendix A - Glossary

Unless otherwise noted with an asterisk (*), the following definitions contained in this Glossary can be found under 40 CFR § 763.83:

Act means the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601, et seq.

Accessible when referring to asbestos-containing material means that the material is subject to disturbance by school building occupants or custodial or maintenance personnel in the course of their normal activities.

Accredited or accreditation when referring to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Act.

Air erosion means the passage of air over friable asbestos-containing building material (ACBM) which may result in the release of asbestos fibers.

Asbestos means the asbestiform varieties of: Chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonitegrunerite); anthophyllite; tremolite; and actinolite.

Asbestos-containing material (ACM) when referring to school buildings means any material or product which contains more than 1 percent asbestos.

Asbestos-containing building material (ACBM) means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

Asbestos debris means pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

Damaged friable miscellaneous ACM means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged friable surfacing ACM means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged or significantly damaged thermal system insulation ACM means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its



structural integrity, or its covering, in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

Designated Person means a person appointed by the Local Education Agency (LEA), under 40 CFR § 763.84 (g), who is trained to ensure the proper implementation of AHERA in school buildings. *

Encapsulation means the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

Enclosure means an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

Fiber release episode means any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

Friable when referring to material in a school building means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

Functional space means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

High-efficiency particulate air (HEPA) refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 µm in diameter or larger.

Homogeneous area means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

Local education agency (LEA) means: (1) Any local educational agency as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381). (2) The owner of any nonpublic, nonprofit elementary, or secondary school building. (3) The governing authority of any school operated under the defense dependent's education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921, et seq.).

Miscellaneous ACM means miscellaneous material that is ACM in a school building.

Miscellaneous material means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.



Nonfriable means material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

Operations and maintenance program means a program of work practices to maintain friable ACBM in good condition, ensure clean up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACBM disturbance or damage.

Phase contrast microscopy (PCM) refers to the procedure outlined in NIOSH Method 7400 for the evaluation of fibers in air samples.*

Polarized light microscopy (PLM) refers to the method outlined in 40 CFR § 763, Appendix E to Subpart E, for the identification of asbestos in bulk samples.*

Potential damage means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

Potential significant damage means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage. (3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

Preventive measures means actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

Removal means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

Repair means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

Response action means a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACBM.

Routine maintenance area means an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

School means any elementary or secondary school as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854).



School building means: (1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food. (2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education. (3) Any other facility used for the instruction or housing of students or for the administration of educational or research programs. (4) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of "school building" under paragraphs (1), (2), or (3). (5) Any portico or covered exterior hallway or walkway. (6) Any exterior portion of a mechanical system used to condition interior space.

Significantly damaged friable miscellaneous ACM means damaged friable miscellaneous ACM where the damage is extensive and severe.

Significantly damaged friable surfacing ACM means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

State means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Marianas, the Trust Territory of the Pacific Islands, and the Virgin Islands.

Surfacing ACM means surfacing material that is ACM.

Surfacing material means material in a school building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal system insulation (TSI) means material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Thermal system insulation ACM means thermal system insulation that is ACM.

Transmission electron microscopy (TEM) refers to the method outlined in 40 CFR § 763, Appendix A to Subpart E, for the identification of asbestos in air samples.*

Vibration means the periodic motion of friable ACBM which may result in the release of asbestos fibers.



Appendix B - Acronyms

ACM - Asbestos-containing material

ACBM - Asbestos-containing building material

AHERA - Asbestos Hazard Emergency Response Act

DOT - Department of Transportation

DP - AHERA Designated Person

EPA - U.S. Environmental Protection Agency

HEPA - High-efficiency particulate air

LEA - Local Education Agency

NIOSH - National Institute for Occupational Safety and Health

NIST - National Institute of Standards and Technology

NVLAP - National Voluntary Laboratory Accreditation Program

O&M - Operations and maintenance

OSHA - Occupational Safety and Health Administration

PCM - Phase contrast microscopy

PLM - Polarized light microscopy

TEM - Transmission electron microscopy

TSI - Thermal system insulation



APPENDIX E MANAGEMENT PLANNER TRAINING INFORMATION

MANAGEMENT PLANNER INFORMATION

MANAGEMENT PLANNER: Gregory Hatch

COMPANY: American Environmental Consulting, Inc.

814 Broad Street

Weymouth, MA 02189

(781) 337-0016

SIGNATURE _____ DATE September 23, 2014

Accredited Course: <u>Asbestos Management</u>

Planner Training

State of

Accreditation: Massachusetts

Training

Provided By: Kaselaan & D'Angelo

Refresher Course Training Provided

By: RI Analytical 11/13/2012

Refresher Course

Certificate #: RI132245

State Certification #: AP 061534

Date of Certification: 1/28/14

APPENDIX F SAMPLE ANALYSIS RESULTS

Analysis Report prepared for

AEC Laboratories, LLC

Report Date: 12/24/2015 Project Name: Whitman Middle

School

SanAir ID#: 15039846



NVLAP LAB CODE 200870-0









1551 Oakbridge Drive, Suite B, Powhatan, VA 23139 804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070 Web: http://www.sanair.com E-mail: iaq@sanair.com

AEC Laboratories, LLC 814 Broad Street Weymouth, MA 02189

December 24, 2015

SanAir ID # 15039846

Project Name: Whitman Middle School

Project Number:

Dear G. Hatch,

We at SanAir would like to thank you for the work you recently submitted. The 24 sample(s) were received on Thursday, December 17, 2015 via FedEx. The final report(s) is enclosed for the following sample(s): 121515-01A, 121515-01B, 121515-02A, 121515-02B, 121515-03A, 121515-03B, 121515-04A, 121515-04B, 121515-04C, 121515-05A, 121515-05B, 121515-06A, 121515-06B, 121515-07A, 121515-07B, 121515-08A, 121515-08B, 121515-09A, 121515-09B, 121515-10A, 121515-10B, 121515-11A, 121515-11B, 121515-11C.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino

Asbestos & Materials Laboratory Manager

Sandra Sobiino

SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter

- Analysis Pages

- Disclaimers and Additional Information

sample conditions:

24 sample(s) in Good condition

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139 804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070

SanAir ID Number

15039846

FINAL REPORT

Name: AEC Laboratories, LLC 814 Broad Street Address:

Weymouth, MA 02189

Project Number:

P.O. Number: 15331

Project Name: Whitman Middle School

Collected Date: 12/16/2015

Received Date: 12/17/2015 11:15:00 AM **Report Date:** 12/24/2015 4:43:22 PM Analyst: Toth, Elizabeth

Rutter, Amber

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	<u>ponents</u>	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-01A / 15039846-001	White	5% Glass	95% Other	None Detected
Kitchen 2'x4' Sheetrock Ceiling	Non-Fibrous			
Tile	Homogeneous			

	Stereoscopic	Com	ponents	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-01B / 15039846-002	White	5% Glass	95% Other	None Detected
Dishwasher Room 2'x4' Sheetrock	Non-Fibrous			
Ceiling Tile	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-02A / 15039846-003	Beige	60% Cellulose	10% Other	None Detected
Clinic Old 2'x4' Faux 2'x2'	Fibrous	15% Glass		
Ceiling Tile	Homogeneous	15% Min. Wool		

	Stereoscopic	Compon	ent <u>s</u>	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-02B / 15039846-004 Clinic Old 2'x4' Faux 2'x2' Ceiling Tile	Beige Fibrous Homogeneous	60% Cellulose 15% Glass 15% Min. Wool	10% Other	None Detected

	Stereoscopic	Compo	<u>nents</u>	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-03A / 15039846-005	Beige	60% Cellulose	10% Other	None Detected
Main Entry Hall New 2'x4' Faux	Fibrous	15% Glass		
2'x2' Ceiling Tile	Homogeneous	15% Min. Wool		

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-03B / 15039846-006 Main Entry Hall New 2'x4' Faux	Beige Fibrous	60% Cellulose 15% Glass	10% Other	None Detected
2'x2' Ceiling Tile	Homogeneous	15% Min. Wool		

Certification

Analysis Date: 12/24/2015

Approved Signatory:

J-Statter Date: 12/24/2015 Page 1 of 4

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139 804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070

SanAir ID Number

15039846

FINAL REPORT

Name: AEC Laboratories, LLC Address:

814 Broad Street Weymouth, MA 02189 **Project Number:**

P.O. Number: 15331

Project Name: Whitman Middle School

Collected Date: 12/16/2015

Received Date: 12/17/2015 11:15:00 AM **Report Date:** 12/24/2015 4:43:22 PM

Analyst: Toth, Elizabeth Rutter, Amber

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-04A / 15039846-007	Beige	50% Glass	10% Other	None Detected
Washing Machine Room Fitting	Fibrous	30% Min. Wool		
Insulation On Domestic Pipe	Heterogeneous	10% Cellulose		

	Stereoscopic	Compon	ents ents	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-04B / 15039846-008 Receiving Area Fitting	Beige Fibrous	50% Glass 30% Min. Wool	10% Other	None Detected
Insulation On Domestic Pipe	Heterogeneous	10% Cellulose		

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-04C / 15039846-009	Beige	50% Glass	10% Other	None Detected
Custodian Office Fitting	Fibrous	30% Min. Wool		
Insulation On Domestic Pipe	Heterogeneous	10% Cellulose		

	Stereoscopic	<u>Compon</u>	<u>ents</u>	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-05A / 15039846-010 Room 15 2'x4' New Ceiling Tile	Beige Fibrous Homogeneous	60% Cellulose 15% Glass 15% Min. Wool	10% Other	None Detected

	Stereoscopic	Compo	nents	Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-05B / 15039846-011 Room 14 2'x4' New Ceiling Tile	Beige Fibrous	60% Cellulose 15% Glass	10% Other	None Detected
ROOM 14 2 A4 New Celling lile	Homogeneous	15% Glass 15% Min. Wool		

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-06A / 15039846-012	Blue		100% Other	None Detected
Room 15 Cove Base	Non-Fibrous			
	Homogeneous			

Certification

Analysis Date: 12/24/2015

Approved Signatory:

J-Statter Date: 12/24/2015 Page 2 of 4

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Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-06B / 15039846-013	Blue		100% Other	None Detected
Room 14 Cove Base	Non-Fibrous			
	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-07A / 15039846-014 Room 15 Mastic	Cream Non-Fibrous Homogeneous		100% Other	None Detected

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-07B / 15039846-015 Room 14 Mastic	Cream Non-Fibrous		100% Other	None Detected
	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-08A / 15039846-016	White		100% Other	None Detected
Room 15 (Back Area) Sheetrock,	Non-Fibrous			
Sheetrock	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-08B / 15039846-017	White		100% Other	None Detected
Clinic Sheetrock	Non-Fibrous			
	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-09A / 15039846-018 Same As 08A Joint Compound	Tan Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Analysis Date: 12/24/2015

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J-Statter Date: 12/24/2015 Page 3 of 4

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Toth, Elizabeth Rutter, Amber

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-09B / 15039846-019 Same As 08B Joint Compound	Tan Non-Fibrous Homogeneous		100% Other	None Detected

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-10A / 15039846-020 Room 17 2'x4' Ceiling Tile	Tan Fibrous Homogeneous	60% Cellulose 20% Glass 10% Min. Wool	10% Other	None Detected

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-10B / 15039846-021	Tan	60% Cellulose	10% Other	None Detected
Room 17 Closet/ Storage 2'x4'	Fibrous	20% Glass		
Ceiling Tile	Homogeneous	10% Min. Wool		

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-11A / 15039846-022	Grey	20% Min. Wool	30% Other	None Detected
Exercise Room Fitting	Fibrous	50% Cellulose		
Insulation On Roof Drain	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-11B / 15039846-023	Grey	30% Min. Wool	30% Other	None Detected
Exercise Room Fitting	Fibrous	40% Glass		
Insulation On Roof Drain	Homogeneous			

	Stereoscopic	<u>Components</u>		Asbestos
SanAir ID / Description	Appearance	% Fibrous	% Non-Fibrous	Fibers
121515-11C / 15039846-024	Grey	30% Min. Wool	30% Other	None Detected
Exercise Room Fitting	Fibrous	40% Glass		
Insulation On Roof Drain	Homogeneous			

Certification

Analysis Date: 12/24/2015

Approved Signatory:

Date: 12/24/2015

J-Statter

Page 4 of 4

Disclaimer

The final report cannot be reproduced, except in full, without written authorization from SanAir. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations. The accuracy of the results is dependent upon the clients sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample and information provided by the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

For NY state samples, method EPA 600/M4-82-020 is performed.

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

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labreports@americanenviron.com	ironmental Consultants - 814 Broad St Weymouth, MA 02189	Client Name: American Environmental Consultants -
Fax: 781-337-0986		
Phone: 781-337-0567		Received by:
Weymouth, MA 02189	Date/Time: 12 - 16 - 15 Ca	by: audio For
814 Broad Street	Date/Time: 12-16-15 5:00 Pm	Received by:
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									Titota ascelation of tool States	SAMPLE DESCRIPTION ous Area Type	7		Special		☐ Lead ☐ PCB AEC Laboratories ID:	BULK SAMPLE CHAIN OF CUSTODY	Page of) an	Fax: 781-337-0986	Phone: 781-337-0567	814 Broad Street	AEC Laboratories, LLC

APPENDIX G MEMO TO PARENTS

Whitman-Hanson Regional School District Facilities Management Department

ANNUAL ASBESTOS NOTIFICATION LETTER For School Year 2015-2016

September 17, 2015

Re: Annual Notification of AHERA Management Plan

Dear Parents, Teachers, Employee Organizations, Building Occupants and Legal Guardians of Children:

In accordance with the Asbestos Hazard Emergency Response Act (AHERA) regulations concerning notification of plan availability, please be advised that copies of our District's Asbestos Management Plans are available online at www.whrsd.org under District Departments -> Facilities Services and then selecting Facilities Documents. Plans are also available in our District Central Office during normal operating hours.

The management plans are site-specific guidance documents that the District must follow in managing the asbestos-containing building materials (ACBM) present in some of the schools. The plan is updated to keep it current with on-going operations and maintenance, periodic inspections and response action activities. Our plan is undergoing a regulated review this school year.

Any inquiries regarding the management of asbestos containing materials in our schools should be directed to our district's AHERA Designated Person, Ernest Sandland, Facilities Manager, who can be reached at Whitman Hanson Regional High School; by e-mail at ernest.sandland@whrsd.org and via telephone at 781-618-7435.

Ernest Sandland Facilities Manager