

January 20, 2021

Hartford Joint 1 School District ATTN: Doug Carroll 402 West Sumner Street Hartford, WI 53027

RE: AHERA 3-Year Reinspection Hartford Joint 1 School District EMC Project Number: 243-90 ESHC

Mr. Doug Carroll:

Enclosed please find your latest three-year reinspection report. This is a comprehensive report to be filed in the District Office. The designated person must sign Section I of this report.

Please note that this information and individual school/building information is also available at <u>www.emc-wi.com</u> using your school district's login and password.

Please contact me with any questions.

Sincerely,

ance Winstow

Lance R. Winslow EMC

Enc:



AHERA 3 YEAR ASBESTOS REINSPECTION

HARTFORD JOINT 1 SCHOOL DISTRICT

LINCOLN ELEMENTARY SCHOOL ROSSMAN ELEMENTARY SCHOOL

INSPECTION DATE: DECEMBER 14, 2020 REPORT DATE: JANUARY 20, 2021 EMC PROJECT NUMBER: 243-90 ESHC

PREPARED FOR:

HARTFORD JOINT 1 SCHOOL DISTRICT 402 WEST SUMNER STREET HARTFORD, WI 53027

PREPARED BY:

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SECTION I

INTRODUCTION

INTRODUCTION

Environmental Management Consulting, Inc. (EMC) was retained by the Hartford Joint 1 School District to perform a three-year asbestos reinspection of Hartford Joint 1 School District buildings, pursuant to 40 CFR Part 763, Asbestos Containing Materials in Schools; Final Rule and Notice. This inspection was conducted by Jacob T. Harman an EPA and State of Wisconsin Certified Asbestos Building Inspector. The inspection was completed on December 14, 2020.

All persons who contact asbestos in any activity shall consult this plan and the designated person.

The findings of this reinspection are based upon the original Asbestos Inspection and Management Plan. This report is based on the materials identified and assumed to contain asbestos during that original inspection. This report utilized the data collected during the original inspection, previous inspections and the data collected during the current reinspection to draw conclusions. This inspection is intended to comply with AHERA regulations. It shall not be used for the purpose of renovation or demolition without further investigation and inspection by a certified asbestos building inspector.

This plan provides a comprehensive analysis of asbestos containing building materials, recommends necessary response actions, and outlines the procedures for safe asbestos management. James P. Jozwiakowski, An EPA Certified Management Planner made recommendations for ACBM management. The time frame for response action implementation was developed in cooperation with the Hartford Joint 1 School District.

In order to achieve a workable, safe management plan, record and update any changes in the condition of ACBM's, record all response actions and provide for an on-going maintenance program. These procedures are necessities of any safe asbestos management plan.

Inaccessible areas exist within the building. These areas include such places as inaccessible drop ceilings, certain pipe chases, some ventilation shafts, inside walls, inside fire doors and other miscellaneous areas. It is assumed that suspect ACBM exists within these areas. If for any reason, these areas are disturbed or made accessible, appropriate action, must be taken by the building owner. This action includes contacting an EPA Certified Asbestos Building Inspector.

Jacob T. Harman, All-257234 EPA Certified Asbestos Building Inspector

James P. Jozwiakowski, AMP-01214 EPA Certified Management Planner

LEA/Designated Person Acceptance of Inspection

SECTION II

BULK SAMPLING INFORMATION

BULK SAMPLING PROTOCOL

A. Identifying Sampling Areas

After completing a thorough visual inspection of the building, all suspect materials are grouped into "homogeneous" sampling areas. A homogeneous area is one in which the area appears to be uniform in texture, color, appearance, and date of application. If for any reason that material is believed to be different, this material will be grouped into a separate homogeneous group and sampled accordingly. When a material raises doubt, it will be assigned a separate group. All materials will be sampled unless excluded by AHERA regulations.

B. Number of Bulk Samples

After organizing all suspect materials into homogeneous groups, the material is then separated as to surfacing material, thermal system insulation or miscellaneous material. Each separate category requires a different number of bulk samples.

1. Surfacing Material

Size of the <u>Sampling Area</u>	Recommended <u>Number of Samples</u>	Minimum Number of Samples
< 1000 sq ft	9	3
1000 sq ft \ge sampling area < 5000 sq ft	9	5
\geq 5000 sq ft	9	7

2. Thermal System Insulation

At least three bulk samples of each homogeneous group will be collected in a random manner unless the material is assumed to be asbestos containing similarly from any patching material less than 6 square feet that is not assumed to contain asbestos, at least one bulk sample will be extracted.

3. Miscellaneous Material

In accordance with AHERA regulations, bulk samples will be collected in a manner sufficient to determine whether the material is ACM or not. At least two bulk samples will be extracted.

C. Sample Location Selection

The appropriate selection of sampling location again depends on whether the material is categorized as surfacing material, miscellaneous material or thermal system insulation.

1. Surfacing Material

As outlined in AHERA regulation, all friable surfacing material must be sampled in a statistically random manner representative of the homogeneous area. If nine samples are collected evenly throughout the area, they are considered representative. If less than nine samples are collected, a random sampling scheme is applied.

The sampling area will be divided into nine equally sized subareas. Exact measurements are not needed. If the sampling area does not easily fit into a rectangular shape, the area will be divided into separate sampling areas treated as individual units.

After the sampling area is divided into a nine area grid system, sample locations will be determined using a random number diagram. Each homogeneous sampling group will have its own randomly assigned sample location. If more than 18 sampling areas are required, the process will be repeated starting with the first sampling area.

After sample locations are determined within the grid system, bulk samples will be extracted from the area. The sample will be taken from the approximate center of the specified subarea.

2. Thermal System Insulation

Thermal system insulation is typically more varied than surfacing material. A multitude of categories exists. Each one of these areas will be treated as a separate homogeneous sampling area unless they are assumed to contain asbestos. Fiberglass, foam, rubber, cork, plastic and Styrofoam are non-suspect materials and are excluded from sampling.

The number of samples and their locations will be determined individually for each particular sampling group. A minimum of three samples for each homogeneous sampling group will be extracted in a randomly distributed manner. Any change in appearance, texture, or structure will lead to another sampling area.

At least one sample will be collected of patched thermal system insulation that is not assumed to contain asbestos. Also, areas of insulating cement will be sampled with the number of samples at the inspector's discretion.

3. Miscellaneous Materials

Suspect miscellaneous materials are for the most part non-friable and therefore require destructive sampling techniques. For this reason, the materials may simply be assumed to contain asbestos.

If they are to be sampled, separate homogeneous sampling areas again will be determined. At least two samples will be extracted using "convenience sampling" techniques. This method chooses sample locations from exposed ends, damaged areas, or inconspicuous locations.

D. Sample Identification

The exact location of all bulk samples extracted will be marked. A tag sticker or identification button will be applied to the area directly adjacent from the sample. Also, a bulk sample chart will be utilized to note the area, room and exact location within the room of the bulk sample.

- E. Sample Collection Techniques
 - 1. Personal Protection Equipment

As a minimum level of protection, a NIOSH approved, negative pressure half-face mask respirator equipped with HEPA filter cartridges will be utilized in the bulk sampling process. In areas of extreme dust, dirt, or debris, disposable protection clothing, eye protection, and head protection will also be utilized in an as needed basis.

- 2. Sampling Procedures
 - Proper protective equipment will be worn.
 - Sample container will be labeled on both the lid and the container and sample location recorded on a bulk sample chart.
 - Sample location will be marked with identification sticker, tag, or button.
 - Sample area will be moistened and the immediate area wetted.
 - Sample will be extracted using a clean knife or core sampler with all layers of the material being extracted.
 - Sample will be placed in a clean, labeled container and tightly sealed.
 - The exterior of the container will be wet wiped clean.

- The hole in the material sampled will be filled with a caulking material and/or sprayed with a penetrating encapsulant.
- All tools and the immediate area will be wet wiped or HEPA vacuumed.
- All samples will be placed into a sealed plastic bag.
- All protective clothing, wet wipes, drop cloths, and other sampling material will be placed in a plastic bag, sealed, and disposed of properly as asbestos contaminated waste.
- A varied numbering scheme will be utilized on bulk samples as not to allow laboratory grouping.

BULK SAMPLING INFORMATION

No samples were taken during the reinspection.

SECTION III

IDENTIFIED AND ASSUMED ACBM

ASSESSMENT CRITERIA

All suspect material will be assessed to determine its current condition, its probable future condition, and possible corrective or preventive measures that can be taken. First, a determination of the current condition of the material is made. The material will be inspected for three types of damage. These include deterioration, physical and water.

1. DETERIORATION

Evidence of deterioration or delamination from the underlying surface (substrate): An assessment of the condition should evaluate 1) the quality of the installation, 2) the adhesion of the friable material to the underlying substrate, 3) deterioration, and 4) damage from vandalism or any other cause. Evidence of debris on horizontal surfaces, hanging material, dislodged chunks; scrapings, indentations, or cracking are indicators of poor material condition.

ACM may deteriorate as a result of either the quality of the installation or environmental factors, which affect the cohesive strength of the ACM, or the strength of the adhesion to the substrate. Deterioration can result in the accumulation of dust on the surface of the ACM, delamination of the material (i.e. separating into layers), or an adhesive failure of the material where it pulls away from the substrate and either hangs loosely or falls to the floor and exposes the substrate. If the coated surface "gives" when slight hand pressure is applied or the material moves up and down with light pushing, the ACM is no longer tightly bonded to its substrate.

2. PHYSICAL DAMAGE

Physical damage is the most apparent to the eye and typically results in a friable condition. Accidental or deliberate physical contact with the material can result in damage. The material will be checked for the following types of marks: scrape marks from equipment, doors, or furniture, graffiti, pieces dislodged or missing, finger marks and accumulation of material on all horizontal surfaces near the material.

3. WATER DAMAGE

Evidence of water damage: Water damage is usually caused by roof leaks, particularly in buildings with flat roofs or a concrete slab and steel beam construction. Skylights can also be significant sources of leaks. Water damage can also result from plumbing leaks with water or high humidity in the vicinity of pools, locker rooms and lavatories.

Water can dislodge, delaminate, or disturb friable ACM that are otherwise in good condition and can increase the potential for fiber release by dissolving and washing out the binders in the material. Materials, which were not considered friable might become friable after water, had dissolved and leached out the binders. Water can also act as slurry to carry fibers to other areas where evaporation will leave a collection of fibers that can become suspended in the air.

The area will be inspected for visible signs of water damage, such as discoloration of or stains on the ACM, stains on adjacent walls or floors; buckling of the walls or floors; or areas where pieces of the ACM material have separated into layers or fallen down, thereby exposing the substrate.

Then the material will classify into one of three conditions:

Poor Condition

Material with one or more of the following characteristics:

- The surface crumbling or blistered over at least one tenth of the surface if the damage is evenly distributed (one quarter if the damage is localized).
- One tenth (one quarter, if localized) of material hanging from the surface, deteriorated, or showing adhesive failure.
- Water stains, gouges, or mars over at least one tenth of the surface if the damage is evenly distributed (one quarter if the damage is localized).

Accumulation of powder, dust, or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

Fair Condition (Damaged)

Material with the following characteristics:

- The surface crumbling, blistered, water-stained, gouged, marred or otherwise abraded over less than one tenth of the surface if the damage is evenly distributed (one quarter if the damage is localized).

Accumulation of powder, dust, or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

Good Condition

Material with no visible damage or deterioration, or showing only very limited damage or deterioration.

POTENTIAL FOR FUTURE DISTURBANCES

Next, the potential for future disturbance will be determined. This is broken down into three areas: potential for contact, influence of vibration, and potential for air erosion.

- 1. Potential for Contact
 - High: Service workers working in the vicinity of the material more than once per week, or The material is in a public area (e.g. hallway, corridor, auditorium) and accessible to building occupants. Fair: Service workers working in the vicinity of the material once per month to once per week, or The material is in a room or office and accessible to the occupants. Service workers working in the vicinity of the material less than once per Low: month, or The material is visible but not within reach of building occupants. Influence of Vibration High: Loud motors or engines present (e.g. some fan rooms), or Intrusive noises or easily sensed vibrations (e.g. major airports, a major highway). Fair: Motors or engines present but not obtrusive (e.g. ducts vibrating but no fan in the area). or

Occasional loud sounds (e.g. a music room).

Low: None of the above.

3. <u>Potential for Air Erosion</u>

2.

High: High velocity air (e.g. elevator shaft, fan room).

Fair: Noticeable movement of air (e.g. airshaft, ventilator air stream).

Low: None of the above.

After the current condition and potential for future damage is determined, the material will be assigned a ranking based on these factors through a decision tree process.

After determining the appropriate hazard rank, the minimum required response action would be assigned. It must be noted that this is the <u>minimum</u> response action allowed based on the assessment criteria. A higher rank resulting in a more stringent response action may be recommended due to extenuating circumstances. These can include planned future activities, pending legislation, or other variable factors. In such a case, a complete explanation will be given.

HAZARD <u>RANK</u>	MATERIAL <u>CONDITION</u>	RESPONSE <u>ACTION</u>
8	Significant damage, with high potential for contact, erosion, or vibration.	Immediate isolation, removal
7	Damaged beyond feasible repair.	Removal, limit accessibility to material
6	Damage with a high potential for future significant damage. significant damage.	Repair, preventive measures
5	Damage with moderate potential for future damage.	Repair
4	Damage with low potential for future damage.	Repair
3	No damage, but high potential for future damage.	O & M with preventive measures
2	No damage, but moderate potential for future damage.	O & M
1	No damage with low potential for future damage.	O & M

BUILDING: Lincoln Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
122	9" FLOOR TILE & MASTIC	160 SF	Ι	G	ОМ	М	2	REMOVED SUMMER 2015
122A	9" FLOOR TILE & MASTIC	140 SF	Ι	G	OM	М	2	REMOVED SUMMER 2015
125	9" FLOOR TILE & MASTIC	912 SF	I	G	OM	М	2	REMOVED SUMMER 2015
126	9" FLOOR TILE & MASTIC	868 SF	I	G	OM	М	2	REMOVED SUMMER 2015
127	9" FLOOR TILE & MASTIC	896 SF	I	G	OM	М	2	REMOVED SUMMER 2015
128	9" FLOOR TILE & MASTIC	896 SF	I	G	OM	М	2	REMOVED SUMMER 2015
129	9" FLOOR TILE & MASTIC	896 SF	I	G	OM	М	2	REMOVED SUMMER 2015
130	9" FLOOR TILE & MASTIC	552 SF	I	G	OM	М	2	REMOVED SUMMER 2015
130A	9" FLOOR TILE & MASTIC	460 SF	I	G	OM	М	2	REMOVED SUMMER 2015
131	9" FLOOR TILE & MASTIC	480 SF	I	G	OM	М	2	REMOVED SUMMER 2015
131A	9" FLOOR TILE & MASTIC	460 SF	I	G	OM	М	2	REMOVED SUMMER 2015
132	9" FLOOR TILE & MASTIC	117 SF	I	G	OM	М	2	REMOVED SUMMER 2015
135	9" FLOOR TILE & MASTIC	143 SF	I	G	OM	М	2	REMOVED SUMMER 2015
145	9" FLOOR TILE & MASTIC	1,344 SF	I	G	OM	М	2	REMOVED JUNE 2014
145B	9" FLOOR TILE & MASTIC	100 SF	I	G	OM	М	2	REMOVED JUNE 2014
148	9" FLOOR TILE & MASTIC	1,120 SF	I	G	OM	М	2	REMOVED JUNE 2014
151	9" FLOOR TILE & MASTIC	144 SF	Ι	G	OM	М	2	REMOVED JUNE 2014
152	9" FLOOR TILE & MASTIC	288 SF	I	G	OM	М	2	REMOVED JUNE 2014

CONDITION: G = GOOD M = MODERATE P = POOR MATERIAL TYPE: T = TSI S = SURFACING M = MISC RESPONSE ACTION: OM = OPERATIONS MAINTENANCE PROGRAM RP = REPAIR RM = REMOVAL I/A/N: I = IDENTIFIED A = ASSUMED N = NEGATIVE

BUILDING: Lincoln Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
153	9" FLOOR TILE & MASTIC	288 SF	I	G	OM	М	2	REMOVED JUNE 2014
154	9" FLOOR TILE & MASTIC	360 SF	I	G	OM	М	2	REMOVED JUNE 2014
155 CAFETERIA	9" FLOOR TILE & MASTIC	3124 SF	I	G	OM	М	2	REMOVED JUNE 2014
157	9" FLOOR TILE & MASTIC	840 SF	I	G	OM	М	2	REMOVED JUNE 2014
158	9" FLOOR TILE & MASTIC	840 SF	I	G	OM	М	2	REMOVED SUMMER 2013
159	9" FLOOR TILE & MASTIC	840 SF	I	G	OM	М	2	REMOVED JUNE 2014
160	9" FLOOR TILE & MASTIC	840 SF	I	G	OM	М	2	UNDER 12"?
161	9" FLOOR TILE & MASTIC	840 SF	I	G	OM	М	2	UNDER 12"?
162	9" FLOOR TILE & MASTIC	840 SF	Ι	G	OM	М	2	REMOVED JUNE 2014
163	9" FLOOR TILE & MASTIC	840 SF	Ι	G	OM	М	2	REMOVED JUNE 2014
164	9" FLOOR TILE & MASTIC	840 SF	Ι	G	OM	М	2	REMOVED JUNE 2014
165	9" FLOOR TILE & MASTIC	840 SF	Ι	G	OM	М	2	REMOVED SUMMER 2013
166	9" FLOOR TILE & MASTIC	840 SF	Ι	G	OM	М	2	REMOVED JUNE 2014
170A PC	TSI FITTINGS	8	А	G	OM	Т	2	REMOVED SUMMER 2015
BOILER ROOM	GASKETS		Ν	G	OM	М	2	REMOVED JUNE 2011
HIDDEN THROUGHOUT	TSI PIPE FITTINGS		А	G	OM	Т	2	HIDDEN
RESTROOM BY ROOM 166	9" FLOOR TILE & MASTIC	100 SF	Ι	G	ОМ	М	2	REMOVED SUMMER 2015

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL CONDITION	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
#2 EXIT LOBBY	TSI PIPE FITTINGS	10 LF	А	G	ОМ	Т	2	
2ND FLR SOUTH HALL	TSI PIPE FITTINGS	27 LF	А	G	OM	Т	2	
BOILER HALL	TSI PIPE FITTINGS	55	А	G	OM	Т	2	
BOILER ROOM 45	BREECHING	440 SQ FT	А	G	OM	Т	2	REMOVED JULY 2014
BOILER ROOM 45	FIRE DOOR	1	А	G	OM	Т	2	
BOILER ROOM 45	TSI PIPE FITTINGS	89	А	G	OM	Т	2	REMOVED JULY 2014
BOY'S LOCKER RM	12" FLOOR TILE & MASTIC	48 SQ FT	Ι	G	OM	М	2	
BOY'S LOCKER RM	TSI PIPE FITTINGS	20 LF	А	G	OM	Т	2	REMOVED JULY 2013
CAFETERIA HALL- FRNT	TSI PIPE FITTINGS	32 LF	A	G	ОМ	Т	2	
CAFETERIA/ART HALL	TSI PIPE FITTINGS	44 LF	А	G	OM	Т	2	
CAFETERIA-BACK	TSI PIPE FITTINGS	46 LF	А	G	OM	Т	2	
CONFERENCE (F5)	TSI PIPE FITTINGS	10 LF	А	G	OM	Т	2	
COPY ROOM (B1)	TSI PIPE FITTINGS	6 LF	А	G	OM	Т	2	
EAST HALL	TSI PIPE FITTINGS	44 LF	А	G	OM	Т	2	REMOVED JULY 2013
EAST ROOM	TSI PIPE FITTINGS	20 LF	А	G	OM	Т	2	
EXIT 4 HALL	TSI PIPE FITTINGS	56 LF	А	G	OM	Т	2	
FRONT OFFICE	TSI PIPE FITTINGS	18 LF	А	G	OM	Т	2	REMOVED JULY 2013

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL CONDITION	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
GIRL'S LOCKER RM	12" FLOOR TILE & MASTSIC (ORANGE)	48 SQ FT	I	G	OM	М	2	
GIRL'S LOCKER RM	TSI PIPE FITTINGS	26 LF	А	G	OM	Т	2	REMOVED JULY 2013
GYM HALLWAY	TSI PIPE FITTINGS	14 LF	А	G	OM	Т	2	
GYM STORAGE	TSI PIPE FITITNGS	39 LF	Ι	G	OM	Т	2	6 REMOVED JULY 2013
HEALTH BATHROOM	TSI PIPE FITTINGS	8 LF	А	G	OM	Т	2	
HEALTH ROOM	TSI PIPE FITTINGS	4 LF	А	G	OM	Т	2	
KITCHEN	TSI PIPE FITTINGS	39 LF	А	G	OM	Т	2	
KITCHEN OFFICE	TSI PIPE FITTINGS	2 LF	А	G	OM	Т	2	
NORTH ART HALL	TSI PIPE FITTINGS	40 LF	А	G	OM	Т	2	
NORTH HALL	TSI PIPE FITTINGS	26 LF	А	G	OM	Т	2	
OFFICE HALL	TSI PIPE FITTINGS	43 LF	А	G	OM	Т	2	
ROOM 102A FAN	PIPE FITTINGS	65	А	G	OM	Т	2	REMOVED 2017
ROOM 103	12" FLOOR TILE & MASTIC	136 SQ FT	Ι	G	OM	М	2	
ROOM 103	TSI PIPE FITTINGS	2 LF	А	G	OM	Т	2	
ROOM 105	TSI PIPE FITTINGS	3 LF	А	G	OM	Т	2	
ROOM 106	TSI PIPE FITTINGS	4 LF	А	G	OM	Т	2	
ROOM 109	TSI PIPE FITTINGS	4 LF	А	G	OM	Т	2	
ROOM 112	TSI PIPE FITTINGS	6 LF	А	G	OM	Т	2	

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
ROOM 113	TSI PIPE FITTINGS	2 LF	А	G	OM	Т	2	
ROOM 114	TSI PIPE FITTINGS	10 LF	А	G	OM	Т	2	
ROOM 116	12" FLOOR TILE & MASTIC	264 SQ FT	Ι	G	OM	М	2	
ROOM 117	TSI PIPE FITTINGS	11 LF	А	G	OM	Т	2	
ROOM 117C FAN ROOM	TSI PIPE FITTINGS	18	A	G	ОМ	Т	2	REMOVED 2017
ROOM 151	TSI PIPE FITTINGS	10 LF	А	G	OM	Т	2	
ROOM 153	TSI PIPE FITTINGS	10 LF	А	G	OM	Т	2	
ROOM 154	TSI PIPE FITTINGS	4 LF	А	G	OM	Т	2	
ROOM 201	TSI PIPE FITTINGS	78 LF	А	G	OM	Т	2	
ROOM 202	TSI PIPE FITTINGS	27 LF	А	G	OM	Т	2	
ROOM 54	TSI PIPE FITTINGS	7 LF	Ι	G	OM	Т	2	
ROOM 55	TSI PIPE FITTINGS	14 LF	А	G	OM	Т	2	
ROOM 56	TSI PIPE FITTINGS	20 LF	А	G	OM	Т	2	
ROOM 57	TSI PIPE FITTINGS	18 LF	А	G	OM	Т	2	
ROOM 58	TSI PIPE FITTINGS	14 LF	А	G	OM	Т	2	
ROOM 59	TSI PIPE FITTINGS	6 LF	I	G	OM	Т	2	
ROOM 61	12" FLOOR TILE & MASTIC	112 SQ FT	Ι	G	OM	М	2	LOOSE TILES UNDER SHELVES

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL CONDITION	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
ROOM 62	12" FLOOR TILE & MASTIC	64 SQ FT	I	G	OM	М	2	
ROOM 63	ROOM DIVIDERS	12 LF	А	G	OM	Т	2	
ROOM 65 BOY'S RR	TSI PIPE FITTINGS	12 LF	А	G	OM	Т	2	
ROOM 66	TSI PIPE FITTINGS	8 LF	А	G	OM	Т	2	
ROOM 67	TSI PIPE FITTINGS	22 LF	А	G	OM	Т	2	
ROOM 68	TSI PIPE FITTINGS	18 LF	А	G	OM	Т	2	
ROOM 69	TSI PIPE FITTINGS	8 LF	А	G	OM	Т	2	
ROOM 71	TSI PIPE FITTINGS	12 LF	А	G	OM	Т	2	
ROOM 72	12" FLOOR TILE & MASTIC	112 SQ FT	Ι	G	OM	М	2	
ROOM 73 GIRL'S RR	TSI PIPE FITTINGS	17 LF	А	G	OM	Т	2	
ROOM 76	TSI PIPE FITTINGS	7 LF	I	G	OM	Т	2	
ROOM 77	TSI PIPE FITTINGS	10 LF	А	G	OM	Т	2	
ROOM 78	TSI PIPE FITTINGS	18 LF	А	G	OM	Т	2	
ROOM 79	TSI PIPE FITTINGS	14 LF	А	G	OM	Т	2	
ROOM 81	TSI PIPE FITTINGS	10 LF	А	G	OM	Т	2	
ROOM 82	TSI PIPE FITITNGS	7 LF	А	G	OM	Т	2	
ROOM 86	12" FLOOR TILE & MASTIC	108 SQ FT	Ι	G	OM	М	2	
SOUTH ART HALL	TSI PIPE FITTINGS	38 LF	А	G	OM	Т	2	

CONDITION: G = GOOD M = MODERATE P = POOR MATERIAL TYPE: T = TSI S = SURFACING M = MISC RESPONSE ACTION: OM = OPERATIONS MAINTENANCE PROGRAM RP = REPAIR RM = REMOVAL I/A/N: I = IDENTIFIED A = ASSUMED N = NEGATIVE

BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE: Jacob T. Harman, All-257234

SURVEILLANCE DATE: December 14, 2020

ROOM	MATERIAL DESCRIPTION	AMOUNT	I A N	MATERIAL CONDITION	RESPONSE ACTION	MATERIAL TYPE	HAZARD RANK	COMMENTS
SOUTH WEST ROOM	TSI PIPE FITTINGS	6 LF	А	G	OM	Т	2	
UPPER FAN ROOM	TSI PIPE FITTINGS	52 LF	А	G	OM	Т	2	26 REMOVED JULY 2013/REMOVED 2017

CONDITION: G = GOOD M = MODERATE P = POOR MATERIAL TYPE: T = TSI S = SURFACING M = MISC RESPONSE ACTION: OM = OPERATIONS MAINTENANCE PROGRAM RP = REPAIR RM = REMOVAL I/A/N: I = IDENTIFIED A = ASSUMED N = NEGATIVE

SECTION IV

RESPONSE ACTIONS

RESPONSE ACTIONS

The LEA/Building owner shall select and implement in a timely matter, the appropriate response action consistent with the assessments made during the inspection. These response actions shall be sufficient to protect human health and the environment.

If material is found to be in good condition, the material must be maintained in this undamaged condition. In such a case, the material would fall under the operations and maintenance program.

If damaged material exists, at a minimum, the material must be repaired, or if severely damaged, removed. In either case, a certified abatement contractor must perform all abatement projects other than operations and maintenance. Strict adherence to all regulations is required.

Within this report, if damaged materials exist, lists containing recommended response actions can be found. These lists recommend the minimum response action allowed by AHERA regulations. It is possible that more stringent recommendations will be made.

At the conclusion of any removal project, the area shall be visually inspected to determine whether or not the action has been properly completed. Next, the LEA/Building owner must perform air clearance testing using aggressive sampling methods. If the analysis reveals results within clearance criteria, the action may be considered complete.

Proper certification and documentation is necessary for all abatement projects.

BUILDING SPECIFIC RESPONSE ACTIONS

Lincoln Elementary School

All remaining assumed ACM throughout the building were found in good condition.

Rossman Elementary School

All remaining assumed ACM throughout the building were found in good condition.

All remaining asbestos containing (or assumed to contain) building materials within the above mentioned schools were found in a non-friable condition. These materials should be maintained in this condition through a proper operations and maintenance program.

Recommended response actions and response action time frames can be found in Section IV. All other asbestos containing building materials shall be maintained under the Operations & Maintenance Program outlined in Section V. Section VI contains all additional requirements.

RESOURCE EVALUATION

LEA'S/BUILDING OWNER'S RESPONSE TO THE ASBESTOS MANAGEMENT PLAN RESPONSE ACTIONS AND RESOURCES REQUIRED

After reviewing the asbestos management planner's <u>recommended</u> response actions, the LEA/Building Owner must choose and implement the response actions that will protect human health and the environment.

The LEA/Building Owner can adopt all or part of the recommended approved response actions. In some instances, it may be necessary for the school district/building owner to meet with the appropriate committee(s) for budgetary purposes before selecting a particular response action. Until this process is complete, it will still be necessary for the LEA/Building Owner to ensure that human health and the environment is protected. In some instances, this may involve isolating an area(s) and restricting access. Whatever the case, the LEA/Building Owner must:

- 1. Decide on the response actions that will be taken;
- 2. Locations where such measures will be taken;
- 3. Reasons for selecting a particular response action;
- 4. Schedule a start and finish date for each selected response action;
- 5. Discuss resources available for selected response actions.

The LEA/Building Owner <u>must</u> document the above items in writing.

If the LEA/Building Owner is going to follow and implement the response actions developed, the designated person should sign the following statement.

* <u>IMPORTANT</u>

LEA'S/BUILDING OWNER'S ACCEPTANCE OF RESPONSE ACTIONS

Hartford Joint 1 School District finds the listing of recommended response actions by James P. Jozwiakowski, Management Planner, to be prudent and justified. Hartford Joint 1 School District has therefore accepted these recommendations in total, and further has committed their implementation within the time frames outlined.

Designated Person

SECTION V

O & M PLAN

OPERATIONS AND MAINTENANCE PROGRAM

The purpose of an O&M program is primarily to clean up asbestos fibers which have been previously released. Also, the program should prevent future release by minimizing ACM disturbance or damage and to continually monitor the condition of the ACM. This specific O&M program shall continue until all ACM has been removed from the structure.

The program should alert all workers and building occupants, to the location of ACM, train custodial and maintenance personnel in proper cleaning and maintenance, implement initial and periodic cleaning using necessary methods, establish a process that assures ACM is not disturbed during minor repairs and/or renovations, and thoroughly re-inspect areas with ACM.

The designated person's duties will consist of implementing the special O&M program. He should serve as a coordinator to building maintenance and the custodial staff. Both the custodial staff and building maintenance staff must support and contribute to the program in order for it to be effective.

An O&M program consists of six (6) major components:

- A. Decontamination/Cleaning
- B. General Maintenance/Cleaning
- C. Emergency Response Procedures
- D. Periodic Surveillance
- E. Reinspection
- F. Recordkeeping

A. DECONTAMINATION/CLEANING

1. INITIAL CLEANING

Custodial staff shall perform the following duties:

Unless the building has been cleaned using equivalent methods within the previous 6 months, all areas of a school building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM are present shall be cleaned at least once after the completion of the inspection required by 763.85(a):

- i. HEPA vacuum or steam-clean all carpets.
- ii. HEPA vacuum or wet-clean all other floors and all other horizontal surfaces.
- iii. Dispose of all debris, filters, mop head's, and cloths in sealed, leaktight containers.

2. ADDITIONAL CLEANING

Additional cleaning shall be required if any asbestos containing building material becomes friable in the future. The guidelines for the additional cleaning are the same as those utilized for initial cleaning. The methods and frequency of these cleaning practices must be documented.

However, it must be noted that improper cleaning on a regular basis may disturb the material and raise fiber levels in the air. Also, in limited-access areas, cleaning would not appreciably reduce exposure to school occupants.

B. GENERAL MAINTENANCE/CLEANING

1. MAINTENANCE/RENOVATION PERMIT SYSTEM

Minimizing inadvertent disruption of ACM during maintenance and renovation operations is often one of the most difficult tasks faced by the asbestos program manager. Initiating a permit system, where all work orders or requests are directed through the "<u>designated person</u>" is a simple yet effective way of controlling disruption of ACM during these activities.

In the permit system, all requests for maintenance/renovation activities are given to the designated person prior to the issuance of a work order to proceed. The designated person then checks the building's asbestos records for information about the presence of ACM where work is to be performed.

The designated person should also physically inspect the area in question to ensure records reflect actual conditions. If no asbestos is present, the work order is issued and the planned actions can proceed.

If ACM is found to be present in the area, the designated person will sign the permit application and either equip properly trained maintenance/renovation workers to deal with the ACM during the operation or dispatch an "emergency response" team to remove the ACM.

2. SPECIAL WORK PRACTICES FOR MAINTENANCE ACTIVITIES

Normal maintenance activities can disturb ACM and raise levels of airborne asbestos. Maintenance workers should be cautioned against conducting any maintenance work in a manner that may disturb ACM.

The nature and extent of special work practices should be tailored to reflect the likelihood that the ACM will be disturbed and that fibers will be released. Four categories of potential disturbance are defined: A) Contact with the ACM is very unlikely; B) Accidental disturbance is possible; C) A small amount of ACM will be disturbed; and D) A large amount of ACM will disturbed.

a. <u>CONTACT WITH ACM UNLIKELY</u>

In some buildings with ACM, many routine maintenance activities can be conducted without contacting the ACM. For example, changing light bulbs in a fixture on a ceiling with asbestos-containing acoustical plaster can usually be performed without jarring the fixture or otherwise disturbing the ACM. In these situations, few precautions other than normal care are needed. The only precaution is to assure the availability of respirators and a HEPA vacuum if needed. These do not have to be taken to the site, but should be available at a known location in the building.

b. <u>POSSIBLE DISTURBANCE OF ACM</u>

Routine maintenance and repair includes work on light fixtures, plumbing fixtures and pipes systems. Where these fixtures or system parts, air registers, HVAC ducts, and other accessible parts of building utility are near friable ACM and release asbestos fibers.

For example, maintenance work on ventilation ducts in an air-handling room where asbestos fireproofing is present only on structural beams could probably be conducted without contacting the ACM. However, the fireproofing could be disturbed accidentally during the course of the work.

The following precautions and procedures should be used if accidental disturbance of ACM is possible:

- * Approval should be obtained from the designated person before beginning work. The designated person should make an initial visit to the work site.
- * The work should be scheduled after normal working hours (nights or weekends), if possible, or access to the work area should be controlled: doors should be locked from the inside and signs posted to prevent unauthorized persons from entering the work area (e.g., "MAINTENANCE WORK IN PROGRESS, DO NOT ENTER". Note, emergency exits must remain in operation.
- * The air-handling system should be shut off or temporarily modified to prevent the distribution of any released fibers to areas outside the work site.

- * A 6-mil polyethylene plastic drop cloth should be placed underneath the location of the maintenance work, extending at least 10 feet beyond all sides of the work site.
- * Workers should wear at least a half-face negative pressure airpurifying respirator with HEPA filters and protective clothing including a body suit and hood.
- * The ACM in the vicinity of the maintenance work should be misted lightly with amended water. Use a mister that produces a very fine spray. Be sure that the electrical system is shut off before spraying around any electrical conduits or fixtures.
- * After the maintenance work is completed, the fixture, register, or other component, and all tools, ladders and other equipment should be HEPA-vacuumed or wiped with a damp cloth.
- * If any debris is apparent on the drop cloth, floor or elsewhere, it should be HEPA-vacuumed.
- * The plastic drop cloth should be wiped with a damp cloth, carefully folded, and discarded as asbestos waste.
- * All clothes, vacuum bags/filters, and other disposable materials should be discarded in sealed and labeled plastic bags as asbestos waste.
- * Workers should HEPA-vacuum respirators and protective clothing at the work site. The clothing should then be discarded as asbestos waste. If the ACM was disturbed during the course of the work, the workers should leave their respirators on, proceed to a shower room, shower with respirators on, and clean their respirators while in the shower.

c. <u>SMALL DISTURBANCES</u>

Some maintenance and repair activities will unavoidably disturb the ACM. For example, installing new sprinkler or piping systems will necessitate hanging pipes from structural members or the ceiling. If the beams or ceilings are insulated with ACM, the ACM will be scraped away to install hangers.

Likewise, pulling cables or wires through spaces with ACM or ACM debris is likely to dislodge pieces of the ACM or disturb ACM debris and dust. Furthermore, anytime tiles are moved to enter the space above a suspended ceiling, settled dust on top of the tiles will be re-suspended.

The following procedures are appropriate for maintenance activities which involve small-scale removal of surfacing ACM or when disturbance of ACM dust and debris or unintentional contact with the ACM is likely.

- * Approval should be obtained from the designated person before beginning work, and the work should be supervised.
- * The work should be scheduled after normal working hours (nights or weekends), if possible, or access to the work area should be controlled: doors should be locked from the inside and signs posted to prevent unauthorized persons from entering the work area (e.g., "MAINTENANCE WORK IN PROGRESS, DO NOT ENTER", or, if the asbestos levels are high enough to trigger the OSHA Rule (the <u>PEL</u> or higher), "DANGER ASBESTOS: CANCER AND LUNG DISEASE HAZARD: AUTHORIZED PERSONNEL ONLY: RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA"). Note, emergency exits must remain in operation.
- * The air handling system should be shut off or temporarily modified to prevent the distribution of fibers from the work site to other areas in the building.
- * Workers should wear, at a minimum, half face negative air purifying respirators with HEPA filters or powered air purifying respirators with HEPA filters and protective clothing, including a body suit, hood, boots, and gloves.
- * A 6-mil polyethylene plastic drop cloth should be placed beneath the location of the maintenance work, extending at least 10 feet beyond all sides of the work site. (In the case of entry into the space above a suspended ceiling, the work site would be the area of the tiles removed to gain access.)
- * If entry to the space above a suspended ceiling is necessary, the entry tile(s) should be removed carefully with as little jarring as possible. The air above the opening, the top of the removed tile, all tiles surrounding the opening, and the ACM likely to be disturbed should be misted with amended water. Use a mister with a very fine spray. A thorough misting in the air helps fibers to settle more quickly.

Cleaning ceiling tiles with a HEPA vacuum cleaner is also effective as long as care is taken not to vibrate tiles and disturb the ACM.

- * During the course of the work, any ACM which is removed should be collected by the HEPA-vacuum. This is best accomplished by placing the vacuum hose just below the ACM being removed.
- * Upon completion of the work, any visible debris on the top of the suspended ceiling, on the drop cloth, on the floor, or anywhere else should be collected by cleaning with a HEPA vacuum.
- * All equipment and tools should be wiped with a damp cloth or HEPA-vacuumed.
- * The plastic sheet should be wiped with a damp cloth, folded, and discarded as asbestos waste.
- * All debris, cloths, and vacuum bags/filters should be discarded in sealed and labeled plastic bags as asbestos waste.
- * Workers should vacuum their disposable suits before leaving the work site (or remove and discard them as asbestos waste and put on a clean disposable suit), proceed to a shower room, shower with their respirators on, and clean their respirators while in the shower.

d. <u>LARGE DISTURBANCES</u>

Any maintenance work which involves removal of 3 or more square feet of surfacing material (or 3 linear feet of thermal system insulation) should be considered a large-scale disturbance of ACM.

An outside abatement contractor must be hired for the removal project before the maintenance work would begin.

- * A certified project designer must design the project.
- * All of the procedures for asbestos removal should be followed -construction of containment barriers and decontamination facilities; use of a negative pressure ventilation system; use of protective clothing and "<u>type C</u>" respirators by workers; proper disposal of asbestos debris; and proper cleanup of the work site followed by air testing. Most of these procedures except the use of "type C" respirators are required by OSHA. Personal air monitoring is also required by OSHA unless <u>SCBA</u> or "type C" respirators are used.

* Clearance air monitoring must be performed as specified in AHERA regulations. A minimum of five (5) aggressive air samples per enclosure must be taken by a certified individual. An approved laboratory to analyze the air samples must be utilized.

3. SPECIAL WORK PRACTICES FOR RENOVATION AND REMODELING

a. <u>RENOVATION</u>

Building renovation or building system replacement can cause major disturbance of ACM. Moving walls, adding wings, and replacing heating or air conditioning systems involve breaking, cutting, or otherwise disturbing ACM that may be present. Prior removal of ACM is highly recommended in these situations. If prior removal is not undertaken, the renovation project should be considered equivalent to an asbestos removal project.

All the procedures and precautions for asbestos removal recommended by EPA and required by OSHA as previously discussed should be employed. A key step in considering a renovation project is checking on the location and type of ACM that may be affected. Clearance should be obtained from the asbestos program manager before serious project planning is begun.

b. <u>REMODELING</u>

Remodeling or redecorating implies less dramatic structural alteration. However, disturbances of ACM or materials contaminated with asbestos fibers is still possible. Where the remodeling involves direct contact with ACM (e.g., painting or wallpapering over ACM), all of the procedures and precautions recommended by EPA and required by OSHA for asbestos removal should be followed.

If "other" types of ACM have to be removed as part of the renovation project, the removal should be done with care to avoid breaking the material. For example, small sections of asbestos containing floor tiles can be removed by applying dry ice or heat from a portable heater to the tops of the tiles and then prying them up. Glued carpet may require a mechanical chipper to separate the carpet from the floor. Before a chipper is employed, test the carpet adhesive for asbestos. If it contains asbestos, all workers should wear either SCBA or "type C" respirators and the project should be treated as an asbestos removal project.

4. GUIDELINES FOR WORKING WITH SPECIFIC MATERIALS

A. Thermal System Insulation

This material is found throughout the building and in inaccessible areas as well.

A HEPA vacuum should be kept nearby to clean up any debris that may result from the disturbance of the asbestos containing thermal system insulation. The surrounding area should be vacuumed by a person with 14-hour asbestos awareness training. All material should be disposed of as asbestos-containing material.

All of the asbestos-containing thermal system insulation must be inspected every six months. Upon the discovery of any damaged or friable materials, corrective action must be taken. The material must be repaired, removed, or enclosed depending on the extent of the damage. This work can only be done by a person with 14 hour training and only if the project is a small scale short duration emergency response action.

This plan must be continued until all of the asbestos-containing thermal system insulation is removed from the building. Work practices, as described in subsection B of the O&M section, should be followed for this material.

B. Floor Tile/Adhesive

The primary consideration of asbestos containing floor tile is routine maintenance and replacement. The floor tile, although damaged in certain areas, does not present a health threat to building occupants because normal daily activity (walking) should not cause a fiber release.

However, maintenance such as buffing, drilling, and removal creates a potential for a fiber release episode. The following criteria should be incorporated in your maintenance program:

- * do not use abrasive floor buffing pads
- * all removal and maintenance (drilling, etc.) should be performed in an enclosure with negative air, and using wet methods
- * any removed asbestos containing floor tile should be double bagged and disposed of at an EPA-approved landfill
- * personal respirator protection and medical surveillance should be used by any person engaging in these activities
- * all of the above activities should be conducted by an accredited reputable abatement contractor.

Since improperly performed floor tile maintenance procedures can result in an increase in asbestos exposure, EPA recommends the following guidelines for stripping asbestos-containing floors:

- 1. <u>AVOID STRIPPING FLOORS</u>. Stripping of floors should be done as infrequently as possible -- perhaps once or twice or less per year depending on circumstances. The frequency should be carefully considered as floor maintenance schedules or contracts are written or renewed.
- 2. <u>PROPERLY TRAIN STAFF</u>. Custodial or maintenance staff that strip floors should be trained to operate properly and safely the machines, pads and floor care chemicals used at the facility.
- 3. <u>FOLLOW APPROPRIATE WORK PRACTICES</u>. Custodial or maintenance staff that strip floors should follow appropriate work practices, such as those recommended here, under informed supervision. Directions from floor tile and floor wax product manufacturers on proper maintenance procedures should be consulted.
- 4. <u>STRIP FLOORS WHILE WET</u>. The floor should be kept adequately wet during the stripping operation. Do NOT perform dry stripping. Prior to machine operation, an emulsion of chemical stripper in water is commonly applied to the floor with a mop to soften the wax or finish coat. After stripping and before application of the new wax, the floor should be thoroughly cleaned while wet.
- 5. <u>RUN MACHINE AT SLOW SPEED</u>. If the machine used to remove the wax or finish coat has variable speeds, it should be run at slow speed (about 175-190 rpm) during the stripping operation.
- 6. <u>SELECT THE LEAST ABRASIVE PAD POSSIBLE</u>. The machine should be equipped with the <u>least abrasive</u> pad possible to strip wax or finish coat from asbestos-containing floors.
- 7. <u>DO NOT OVER STRIP FLOORS</u>. Stop stripping when the old surface coat is removed. Over stripping can damage the floor and may cause the release of asbestos fibers. Do NOT operate a floor machine with an abrasive pad on unwaxed or unfinished floors.

EPA recommends that you leave asbestos-containing floor covering in place, provided the material is in good condition. However, proper maintenance procedures, such as those outlined above, should always be followed.

C. Carpet/Adhesive

If carpet and adhesive is rendered friable by normal daily use and there is a potential for fiber release, then the following precautions should be taken:

- * daily maintenance should be conducted with a HEPA equipped vacuum cleaner
- * material should be included under O & M and be re-evaluated on a 180-day basis
- * disposal of material should be conducted in a manner appropriate and proper to any asbestos containing materials

D. Ceramic Tile & Grout (Assumed to contain asbestos)

This material is in a non-friable condition. This material only requires reinspection every six months at this point. If this material is damaged, or is in danger of becoming damaged during renovation or demolition, it should be treated as asbestos containing building materials. This holds true until the material is properly sampled and analyzed by certified persons and proven not to contain asbestos. If the material is treated as asbestos containing, it must be removed before the renovation or demolition if there is a possibility of disturbance.

E. Baseboards & Adhesives

This material is also in a non-friable condition. This material requires reinspection every six months. If the material becomes damaged, it must be treated as asbestos containing material unless proven otherwise. Unless it is proven no t to contain asbestos, it must be removed before renovation or demolition.

F. Asbestos Containing Ceiling Tile

Any contact to the asbestos containing ceiling tile should be limited. If ceiling tile must be disturbed, the following steps should be taken:

- * only persons with 16 hour Asbestos Management Training should disturb ceiling tiles
- * respirator must be worn during project, and person wearing respirator must be fit tested for that respirator
- * poly sheeting must be placed on floor below ceiling tiles being disturbed
- * HEPA vacuum must be near during the project
- * poly sheeting must be disposed of as asbestos containing materials
- * area around project should be HEPA vacuumed after completion of project

A HEPA vacuum should be on-site at all times. In case of emergency (something is thrown upwards and breaks the ceiling tile apart) broken ceiling tiles should be disposed of as asbestos containing materials, and surrounding area should be vacuumed with a HEPA vacuum. This cleanup operation must be performed by a person with 16-hour Asbestos Management Training.

G. Surfacing Material

Any contact to the asbestos containing surfacing material should be limited. If surfacing material must be disturbed, the following steps should be taken:

- * only persons with 16 hour Asbestos Management Training should disturb the material
- * respirator must be worn during project, and person wearing respirator must be fit tested for that respirator
- * poly sheeting must be placed on floor below the area being disturbed
- * HEPA vacuum must be near during the project
- * poly sheeting must be disposed of as asbestos containing materials
- * area around project should be HEPA vacuumed after completion of the project

H. Transite Wall Board/Ceiling Tile

This material presents no immediate danger as long as it remains intact in a nonfriable condition. Contact to this material, however, should be limited. The material should not be cut, broken, drilled into, or removed without proper techniques. In the case of transite ceiling tiles, they should be disturbed as little as possible. If it is necessary to go above them, proper protective measures should be taken. The measures, as described above for surfacing material, should be utilized.

I. Univents

All univents within the building are assumed to contain asbestos containing materials. These materials are to be included in the tunnel system listing of materials.

The LEA will periodically inspect all univents (a minimum of once every six months) to monitor the condition of the ACBM if it exists. Any friable materials will be brought to the attention of the Designated Person. The Designated Person will dispatch appropriately trained personnel to rectify the problem.

J. Tunnel Systems/Crawl Spaces

Unless otherwise stated, all accessible, partially accessible, or inaccessible tunnels within the building shall be assumed to contain asbestos containing materials.

The LEA shall only access tunnels using properly trained personnel using proper protective equipment and proper techniques. Any friable materials will be brought to the attention of the Designated Person. The Designated Person will dispatch appropriately trained personnel to rectify the problem. The LEA will periodically inspect these areas at a minimum of once every six months.

C. EMERGENCY RESPONSE PROCEDURES

As long as ACM remains in the building, a fiber release episode could occur. Custodial and maintenance workers should report to the designated person, the presence of debris on the floor, water or physical damage to the ACM, or any other evidence of possible fiber release. Fiber release episodes can also occur during maintenance or renovation projects. The designated person should call an abatement contractor or assign a suitable trained in-house team to clean up debris and make repairs as soon as possible. If an outside contractor is to be used, a company should be selected and retained by contract for quick response action as needed.

1. MINOR EPISODES

Minor episodes, such as a small section of insulation falling from a pipe or a worker bumping into a beam and dislodging a small amount of fireproofing ACM are defined as such in the AHERA Rule. They can be treated with standard wet cleaning and HEPA-vacuum techniques.

- * Workers should thoroughly saturate the debris with amended water using a mister with a very fine spray. The debris should then be placed in a labeled, 6-mil plastic bag for disposal and the floor should be cleaned with damp cloths or a mop. Alternatively, the debris can be collected with a HEPA vacuum cleaner.
- * All debris and materials used in the cleanup should be discarded as asbestos waste.
- * Workers should vacuum their disposable suits before leaving the work site (or remove them, discard them as asbestos waste, and put on clean, disposable suits),proceed to a shower room, shower with their respirators on, and clean their respirators while in the shower.
- * The damaged ACM should be repaired with asbestos-free spackling, plaster, cement or insulation, or sealed with latex paint or an encapsulant.

2. MAJOR EPISODES

Major fiber release episodes are very serious events. Large amount of ACM falling from heights of several feet may contaminate an entire building with asbestos fibers. If a fair amount of ACM delaminates or is dislodged from its substrate, the episode should be considered major.

A large breach in a containment barrier for a maintenance or abatement project should also be considered a major episode. AHERA requires that the response action for any major fiber release episode must be designed and conducted by accredited Project Designers. However, the following response procedures should form the basis for response actions.

- * The area should be isolated as soon as possible after the ACM debris is discovered. Where the area can be sealed by doors, they should be locked from the inside (escape corridors must remain in operation) and signs posted to prevent unauthorized personnel from entering the work area ("DANGER -ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY; RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA").
- * The air-handling system should be shut off or temporarily modified to prevent the distribution of fibers from the work site to other areas of the building. If possible, doors, windows, and air registers should be sealed with 6-mil plastic sheets and tape.
- * All the procedures recommended by the EPA and required by OSHA for large-scale removal of ACM should then be used. These include containment barrier, negative pressure ventilation, personal respiratory protection and protective clothing, decontamination facilities, and air testing.
- * The air should be tested for asbestos fibers before the plastic barriers are removed and the area reoccupied. That is, air should be sampled at the specified number of locations and analyzed by either phase contrast microscopy or transmission electron microscopy.

MINOR FIBER RELEASE EPISODE REPORT

OWNER:			DATE:
BUILDING:			_
DESCRIPTION OF EPIS	ODE:		
TYPE OF EPISODE(MA PERSON IDENTIFYING <u>IF MAJOR</u>	JOR OR MINOR): I EPISODE: -MUST HAVE CERT -AIR COR	Minor < 3 Sq. Ft <u>TIFIED PERSO</u> <u>CLEARANCE 1</u> RECTIVE ACT	t Major > 3 Sq. Ft NNEL DESIGN, CLEAN AREA REQUIRED TION
METHOD OF REPAIR/I	RESPONSE ACTION	N:	
ACM REMOVED: YES/ DISPOSAL/STORAGE S ADDRI	NO QUANTITY: _ ITE: ESS:	REN	/IOVAL METHOD:
	EQUIPMENT	/PREVENTIVE	MEASURES
Area Isolate Tyvek Suits Disposal Ba Encapsulant Glovebag	Area IsolatedSigns PostedTyvek SuitsRespiratorsDisposal BagsDisposal DrumsEncapsulant-BridgingEncapsulant-Penetr.GlovebagAmended Water		HEPA Vacuum Goggles Duct Tape Mini Enclosure Isolate Air Handlers
	ST	AFF ASSIGNE	D
NAME	16 HOUR ' YES YES YES YES	IRAINED NO NO NO NO	DATE/TIME START
	YES	NO	
FURTHER ACTION NE	CESSARY:		
SUPERVISOR SIG	GNATURE:		DATE:

D. PERIODIC ACM SURVEILLANCE

Periodic review of the O&M program is essential to insure that the program objectives are being met. A key feature of the review is reinspection of all ACM in the building. Combined with on-going reports of changes in the condition of the ACM made by service workers, the reinspection will insure that any damage or deterioration of the ACM will be detected and corrective action taken. Either the designated person, or someone trained or experienced in ACM assessment, should conduct the inspections. The results should be documented and placed in the permanent asbestos file.

Periodic Surveillance <u>must be</u> completed at least <u>once every six months</u> from the implementation of the asbestos management plan. The surveillance should be completed by someone knowledgeable of the buildings and asbestos containing building materials. Preferably, this would be the designated person.

The following must be completed:

- A. A visual inspection of all areas that are identified in the asbestos management plan as ACBM or assumed ACBM.
- B. The date the surveillance is completed, person conducting the surveillance, and any changes in the conditions of the ACBM or assumed ACBM.
- C. A copy of the completed surveillance record must be submitted to the designated person for inclusion in the asbestos management plan.

Periodic Surveillance Schedule

Date by which the First Periodic Surveillance must be completed:	June 2021
Date by which the Second Periodic Surveillance must be completed:	December 2021
Date by which the Third Periodic Surveillance must be completed:	June 2022
Date by which the Fourth Periodic Surveillance must be completed:	December 2022
Date by which the Fifth Periodic Surveillance must be completed:	June 2023

BUILDING: Lincoln Elementary School

PERSON CONDUCTING SURVEILLANCE:

SURVEILLANCE DATE:

ROOM	MATERIAL DESCRIPTION	AMOUNT	l dentified / A ssumed / N egative	EXISTING MATERIAL CONDITION	CHANGE IN CONDITION Y/N	COMMENTS
122	9" FLOOR TILE & MASTIC	160 SF	I	G	ΥN	REMOVED SUMMER 2015
122A	9" FLOOR TILE & MASTIC	140 SF	I	G	Y N	REMOVED SUMMER 2015
125	9" FLOOR TILE & MASTIC	912 SF	I	G	Y N	REMOVED SUMMER 2015
126	9" FLOOR TILE & MASTIC	868 SF	I	G	Y N	REMOVED SUMMER 2015
127	9" FLOOR TILE & MASTIC	896 SF	l	G	Y N	REMOVED SUMMER 2015
128	9" FLOOR TILE & MASTIC	896 SF	l	G	Y N	REMOVED SUMMER 2015
129	9" FLOOR TILE & MASTIC	896 SF	l	G	Y N	REMOVED SUMMER 2015
130	9" FLOOR TILE & MASTIC	552 SF	I	G	Y N	REMOVED SUMMER 2015
130A	9" FLOOR TILE & MASTIC	460 SF	I	G	Y N	REMOVED SUMMER 2015
131	9" FLOOR TILE & MASTIC	480 SF	I	G	Y N	REMOVED SUMMER 2015
131A	9" FLOOR TILE & MASTIC	460 SF	I	G	Y N	REMOVED SUMMER 2015
132	9" FLOOR TILE & MASTIC	117 SF	I	G	Y N	REMOVED SUMMER 2015
135	9" FLOOR TILE & MASTIC	143 SF	I	G	Y N	REMOVED SUMMER 2015
145	9" FLOOR TILE & MASTIC	1,344 SF	I	G	Y N	REMOVED JUNE 2014
145B	9" FLOOR TILE & MASTIC	100 SF	l	G	Y N	REMOVED JUNE 2014
148	9" FLOOR TILE & MASTIC	1,120 SF	l	G	Y N	REMOVED JUNE 2014
151	9" FLOOR TILE & MASTIC	144 SF	I	G	Y N	REMOVED JUNE 2014
152	9" FLOOR TILE & MASTIC	288 SF	l	G	Y N	REMOVED JUNE 2014
153	9" FLOOR TILE & MASTIC	288 SF	I	G	Y N	REMOVED JUNE 2014
154	9" FLOOR TILE & MASTIC	360 SF	I	G	Y N	REMOVED JUNE 2014
155 CAFETERIA	9" FLOOR TILE & MASTIC	3124 SF	I	G	Y N	REMOVED JUNE 2014

CONDITION: G = GOOD M = MODERATE P = POOR MATERIAL TYPE: T = TSI S = SURFACING M = MISC RESPONSE ACTION: OM = OPERATIONS MAINTENANCE PROGRAM RP = REPAIR RM = REMOVAL

BUILDING: Lincoln Elementary School

PERSON CONDUCTING SURVEILLANCE:

SURVEILLANCE DATE:

ROOM	MATERIAL DESCRIPTION	AMOUNT	I dentified / A ssumed / N egative	EXISTING MATERIAL CONDITION	CHANGE IN CONDITION Y/N	COMMENTS
157	9" FLOOR TILE & MASTIC	840 SF	I	G	ΥN	REMOVED JUNE 2014
158	9" FLOOR TILE & MASTIC	840 SF	I	G	Y N	REMOVED SUMMER 2013
159	9" FLOOR TILE & MASTIC	840 SF	I	G	Y N	REMOVED JUNE 2014
160	9" FLOOR TILE & MASTIC	840 SF	I	G	Y N	UNDER 12"?
161	9" FLOOR TILE & MASTIC	840 SF	Ι	G	Y N	UNDER 12"?
162	9" FLOOR TILE & MASTIC	840 SF	Ι	G	Y N	REMOVED JUNE 2014
163	9" FLOOR TILE & MASTIC	840 SF	Ι	G	Y N	REMOVED JUNE 2014
164	9" FLOOR TILE & MASTIC	840 SF	Ι	G	Y N	REMOVED JUNE 2014
165	9" FLOOR TILE & MASTIC	840 SF	Ι	G	Y N	REMOVED SUMMER 2013
166	9" FLOOR TILE & MASTIC	840 SF	Ι	G	Y N	REMOVED JUNE 2014
170A PC	TSI FITTINGS	8	А	G	Y N	REMOVED SUMMER 2015
BOILER ROOM	GASKETS		Ν	G	Y N	REMOVED JUNE 2011
HIDDEN THROUGHOUT	TSI PIPE FITTINGS		A	G	Y N	HIDDEN
RESTROOM BY ROOM 166	9" FLOOR TILE & MASTIC	100 SF	I	G	Y N	REMOVED SUMMER 2015

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE:

SURVEILLANCE DATE:

ROOM	MATERIAL DESCRIPTION	AMOUNT	l dentified / A ssumed / N egative	EXISTING MATERIAL CONDITION	CHANGE IN CONDITION Y/N	COMMENTS
#2 EXIT LOBBY	TSI PIPE FITTINGS	10 LF	А	G	Y N	
2ND FLR SOUTH HALL	TSI PIPE FITTINGS	27 LF	А	G	Y N	
BOILER HALL	TSI PIPE FITTINGS	55	А	G	Y N	
BOILER ROOM 45	BREECHING	440 SQ FT	А	G	Y N	REMOVED JULY 2014
BOILER ROOM 45	FIRE DOOR	1	А	G	Y N	
BOILER ROOM 45	TSI PIPE FITTINGS	89	А	G	Y N	REMOVED JULY 2014
BOY'S LOCKER RM	12" FLOOR TILE & MASTIC	48 SQ FT	I	G	Y N	
BOY'S LOCKER RM	TSI PIPE FITTINGS	20 LF	А	G	Y N	REMOVED JULY 2013
CAFETERIA HALL-FRNT	TSI PIPE FITTINGS	32 LF	А	G	Y N	
CAFETERIA/ART HALL	TSI PIPE FITTINGS	44 LF	А	G	Y N	
CAFETERIA-BACK	TSI PIPE FITTINGS	46 LF	А	G	Y N	
CONFERENCE (F5)	TSI PIPE FITTINGS	10 LF	А	G	Y N	
COPY ROOM (B1)	TSI PIPE FITTINGS	6 LF	А	G	Y N	
EAST HALL	TSI PIPE FITTINGS	44 LF	А	G	Y N	REMOVED JULY 2013
EAST ROOM	TSI PIPE FITTINGS	20 LF	А	G	Y N	
EXIT 4 HALL	TSI PIPE FITTINGS	56 LF	А	G	Y N	
FRONT OFFICE	TSI PIPE FITTINGS	18 LF	А	G	Y N	REMOVED JULY 2013
GIRL'S LOCKER RM	12" FLOOR TILE & MASTSIC (ORANGE)	48 SQ FT	l	G	Y N	
GIRL'S LOCKER RM	TSI PIPE FITTINGS	26 LF	А	G	Y N	REMOVED JULY 2013
GYM HALLWAY	TSI PIPE FITTINGS	14 LF	А	G	Y N	
GYM STORAGE	TSI PIPE FITITNGS	39 LF	l	G	Y N	6 REMOVED JULY 2013

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE:

SURVEILLANCE DATE:

ROOM	MATERIAL DESCRIPTION	AMOUNT	l dentified / A ssumed / N egative	EXISTING MATERIAL CONDITION	CHANGE IN CONDITION Y/N	COMMENTS
HEALTH BATHROOM	TSI PIPE FITTINGS	8 LF	А	G	Y N	
HEALTH ROOM	TSI PIPE FITTINGS	4 LF	А	G	Y N	
KITCHEN	TSI PIPE FITTINGS	39 LF	А	G	Y N	
KITCHEN OFFICE	TSI PIPE FITTINGS	2 LF	А	G	Y N	
NORTH ART HALL	TSI PIPE FITTINGS	40 LF	А	G	Y N	
NORTH HALL	TSI PIPE FITTINGS	26 LF	А	G	Y N	
OFFICE HALL	TSI PIPE FITTINGS	43 LF	А	G	Y N	
ROOM 102A FAN ROOM	PIPE FITTINGS	65	А	G	Y N	REMOVED 2017
ROOM 103	12" FLOOR TILE & MASTIC	136 SQ FT	l	G	Y N	
ROOM 103	TSI PIPE FITTINGS	2 LF	А	G	Y N	
ROOM 105	TSI PIPE FITTINGS	3 LF	А	G	Y N	
ROOM 106	TSI PIPE FITTINGS	4 LF	А	G	Y N	
ROOM 109	TSI PIPE FITTINGS	4 LF	А	G	Y N	
ROOM 112	TSI PIPE FITTINGS	6 LF	А	G	Y N	
ROOM 113	TSI PIPE FITTINGS	2 LF	А	G	Y N	
ROOM 114	TSI PIPE FITTINGS	10 LF	А	G	Y N	
ROOM 116	12" FLOOR TILE & MASTIC	264 SQ FT	l	G	Y N	
ROOM 117	TSI PIPE FITTINGS	11 LF	A	G	Y N	
ROOM 117C FAN ROOM	TSI PIPE FITTINGS	18	А	G	Y N	REMOVED 2017
ROOM 151	TSI PIPE FITTINGS	10 LF	А	G	Y N	
ROOM 153	TSI PIPE FITTINGS	10 LF	A	G	Y N	

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE:

SURVEILLANCE DATE:

ROOM	MATERIAL DESCRIPTION	AMOUNT	l dentified / A ssumed / N egative	EXISTING MATERIAL CONDITION	CHANGE IN CONDITION Y/N	COMMENTS
ROOM 154	TSI PIPE FITTINGS	4 LF	А	G	Y N	
ROOM 201	TSI PIPE FITTINGS	78 LF	А	G	Y N	
ROOM 202	TSI PIPE FITTINGS	27 LF	А	G	Y N	
ROOM 54	TSI PIPE FITTINGS	7 LF	I	G	Y N	
ROOM 55	TSI PIPE FITTINGS	14 LF	А	G	Y N	
ROOM 56	TSI PIPE FITTINGS	20 LF	А	G	Y N	
ROOM 57	TSI PIPE FITTINGS	18 LF	А	G	Y N	
ROOM 58	TSI PIPE FITTINGS	14 LF	А	G	Y N	
ROOM 59	TSI PIPE FITTINGS	6 LF	I	G	Y N	
ROOM 61	12" FLOOR TILE & MASTIC	112 SQ FT	I	G	Y N	LOOSE TILES UNDER SHELVES
ROOM 62	12" FLOOR TILE & MASTIC	64 SQ FT	l	G	Y N	
ROOM 63	ROOM DIVIDERS	12 LF	А	G	Y N	
ROOM 65 BOY'S RR	TSI PIPE FITTINGS	12 LF	А	G	Y N	
ROOM 66	TSI PIPE FITTINGS	8 LF	А	G	Y N	
ROOM 67	TSI PIPE FITTINGS	22 LF	А	G	Y N	
ROOM 68	TSI PIPE FITTINGS	18 LF	А	G	Y N	
ROOM 69	TSI PIPE FITTINGS	8 LF	А	G	Y N	
ROOM 71	TSI PIPE FITTINGS	12 LF	А	G	Y N	
ROOM 72	12" FLOOR TILE & MASTIC	112 SQ FT	I	G	Y N	
ROOM 73 GIRL'S RR	TSI PIPE FITTINGS	17 LF	А	G	Y N	
ROOM 76	TSI PIPE FITTINGS	7 LF	l	G	Y N	

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BUILDING: Rossman Elementary School

PERSON CONDUCTING SURVEILLANCE:

SURVEILLANCE DATE:

ROOM	MATERIAL DESCRIPTION	AMOUNT	l dentified / A ssumed / N egative	EXISTING MATERIAL CONDITION	CHANGE IN CONDITION Y/N	COMMENTS
ROOM 77	TSI PIPE FITTINGS	10 LF	А	G	Y N	
ROOM 78	TSI PIPE FITTINGS	18 LF	А	G	Y N	
ROOM 79	TSI PIPE FITTINGS	14 LF	А	G	Y N	
ROOM 81	TSI PIPE FITTINGS	10 LF	А	G	Y N	
ROOM 82	TSI PIPE FITITNGS	7 LF	А	G	Y N	
ROOM 86	12" FLOOR TILE & MASTIC	108 SQ FT	I	G	Y N	
SOUTH ART HALL	TSI PIPE FITTINGS	38 LF	А	G	Y N	
SOUTH WEST ROOM	TSI PIPE FITTINGS	6 LF	А	G	Y N	
UPPER FAN ROOM	TSI PIPE FITTINGS	52 LF	A	G	Y N	26 REMOVED JULY 2013/REMOVED 2017

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E. **REINSPECTION**

At least <u>once every three years</u> after the effective date of the asbestos management plan, a reinspection of all friable and non-friable known or assumed ACBM should be conducted. An EPA accredited, Wisconsin certified building inspector shall conduct the reinspection. All items listed under the AHERA regulations, Subpart E, 763.85 (b) & (c) must be addressed.

The following data shall be submitted to the Designated Person <u>within thirty days</u> of the reinspection for inclusion in the asbestos management plan:

- 1. Date of reinspection.
- 2. Name, signature, EPA accreditation and Wisconsin certification numbers of the person conducting the reinspection.
- 3. Any changes in the condition of known or assumed ACBM.
- 4. If samples are taken:
 - a. Exact location of sampling.
 - b. Description of the manner used to determine sampling locations.
 - c. Name and signature of the inspector who collected samples.
 - d. EPA accreditation and Wisconsin certification numbers of the person collecting samples.
- 5. Any assessments or reassessments made of friable material, and the name, signature, and certification number of the inspector performing the assessments.

Reinspection Schedule

Date by which the First Asbestos Reinspection must be completed by:

December 2023

F. RECORDKEEPING

The AHERA rule requires the collection and retention of various records. These records include those pertaining to:

- i. Response actions and preventive measures
- ii. Fiber release episodes
- iii. Periodic surveillance
- iv. Operations and maintenance activities and
- v. Removal records

Records must be maintained in both a centralized location and at the individual school building.

The importance of an accurate and effective recordkeeping system cannot be overstated. Efficiency, in tasks such as periodic surveillance, reinspections and operations and maintenance tasks can be greatly enhanced through this systematic process. Also, many potential legal liabilities can be avoided or reduced through proper documentation.

It is therefore recommended, that all types of asbestos correspondence be accurately documented and kept on file. This includes reports, memos, letters, mailings, and telephone conversations.

SECTION VI

ADDITIONAL REQUIREMENTS

AHERA REVIEW

On October 22, 1986, President Reagan signed into law the Asbestos Hazard Emergency Response Act (AHERA). It requires the inspection of all public and private school buildings, kindergarten through 12th grade.

AHERA was designed to help schools manage asbestos in order to protect human health and the environment. The law was developed to assist in the on-going process of handling asbestos in the building. It was designed to manage the condition of the asbestos, not for complete removal.

AHERA requires the building owner/local education agency to designate a person to ensure the following additional duties are performed:

- A. Properly train all personnel in a building specific manner. This training includes:
 - Designated Person
 - 2 Hour Asbestos Awareness
 - 16 Hour Asbestos Management
- B. Inform all building occupants of the presence of asbestos and asbestos related activities. Notifications must include:
 - Building Occupant
 - Outside Contractor
 - Warning Label
- C. Develop and implement a written respiratory protection program as an essential part of the O & M program. The respiratory protection program includes:
 - Training
 - Fit Testing
 - Inspection
 - Medical Surveillance

A. <u>TRAINING</u>

The building owner or representative thereof, shall ensure, prior to the implementation of the management plan, that all necessary personnel are properly trained. Training requirements are as follows:

1. DESIGNATED PERSON TRAINING

At least one person shall receive training sufficient to meet general responsibilities in 40 CFR 763.84. These responsibilities include:

- a) Ensure that the activities of any persons who perform
- b) Inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with regulations.
- c) Ensure that all custodial and maintenance employees are properly trained as required by applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
- d) 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.
- e) Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.
- f) Ensure that warning labels are posted.
- g) Ensure that management plans are available for inspection and notification of such availability has been provided.

The training shall provide basic knowledge of:

- a) Health effects of asbestos.
- b) Detection, identification and assessment of ACM.
- c) Options for controlling ACBM.
- d) Asbestos management programs.

e) Relevant Federal and State regulations concerning asbestos, including those of the Occupational Safety and Health Administration, U.S. Department of Labor, the U.S. Department of Transportation and the U.S. Environmental Protection Agency.

2. ALL MAINTENANCE AND CUSTODIAL STAFF

- a) The local education agency shall ensure, prior to the implementation of the O & M provisions of the management plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive awareness training of at least 2 hours, whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment. Training shall include, but not be limited to:
 - i) Information regarding asbestos and its various uses and forms.
 - ii) Information on the health effects associated with asbestos exposure.
 - iii) Locations of ACBM identified throughout each school building in which they work.
 - iv) Recognition of damage, deterioration, and delamination of ACBM.
 - v) Name and telephone number of the person designated to carry out general local education agency responsibilities under § 763.84 and the availability and location of the management plan.

3. MAINTENANCE AND CUSTODIAL STAFF WHO MAY CONTACT ASBESTOS

- a) The local education agency shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of ACBM shall receive training described in paragraph (2) (All Maintenance and Custodial Staff) of this section and 14 hours of additional training. Additional training shall include, but not be limited to:
 - i) Description of the proper methods of handling ACBM.
 - ii) Information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry, September 1986 (EPA 560/OPTS-86-001).
 - iii) Hands-on training in the use of respiratory protection, other personal protection measures, and good work practices.

All training information shall be inserted into the recordkeeping section of the on-going management plan.

B. <u>NOTIFICATIONS</u>

Building occupants, guardians of building occupants, outside contractors, and general employees are to have access to the Management Plan and the Inspection Report. Copies are to be made available at a reasonable cost.

These notifications are to include information regarding inspections, reinspections, response actions, periodic surveillance, and planned future activities.

Copies of all notifications shall be inserted into the recordkeeping section of the management plan.

The following steps are to be taken to insure proper notification.

- 1. Building occupants, guardians of building occupants, general staff, and volunteers should be notified <u>yearly</u> on the status of the asbestos management.
- 2. Outside contractors must consult the plan <u>prior to any activity</u>. They must agree to immediately notify the designated person if they contact asbestos. They must sign a statement to this effect.
- 3. Warning labels are to be affixed in designated routine maintenance areas. All labels shall be prominently displayed in readily visible locations and shall remain posted until the ACBM is removed. The warning labels, readily visible due to large size or bright color, shall read: CAUTION: ASBESTOS: HAZARDOUS, DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT.
- 4. Section (j)(3)(v) of the standard requires building owners to post signs at the entrance to mechanical room/areas detailing as follows:
 - 1. asbestos material present
 - 2. location of materials
 - 3. appropriate work practices to ensure material is not disturbed

This is a change from previous requirements.

Environmental Management Consulting, Inc. (EMC) recommends posting the enclosed sign (or one similar, based on what materials are in the room) at the entrance to the following rooms which contain asbestos:

- boiler rooms
- air handling rooms/areas
- pipe chases
- mechanical pipe tunnels
- other mechanical rooms/area

CAUTION

THIS AREA CONTAINS ASBESTOS CONTAINING MATERIALS IN THE FORM OF THERMAL SYSTEM INSULATION.

IT IS ASSUMED THAT ALL INSULATION IS ASBESTOS WITH THE EXCEPTION OF FIBERGLASS.

DO NOT CONTACT OR DISTURB INSULATION IN ANY MANNER

IF DAMAGED MATERIALS ARE PRESENT OR MATERIALS ARE ACCIDENTALLY DISTURBED PLEASE INFORM THE CUSTODIAL/MAINTENANCE STAFF IMMEDIATELY

C. MODEL RESPIRATORY PROTECTION PROGRAM

1. <u>TRAINING</u>

The training, conducted by a competent person, must include instructions on fitting and on how to check the face piece-to-face seal. The employee must be given an opportunity to handle the respirator, wear it in normal air for a period of time to become familiar with it and practice adjusting it, and then wear it in a test atmosphere.

Training should include an explanation of:

- The nature of the respiratory hazard and what may happen if the respirator is not used properly.
- Engineering and administrative controls being used and the need for the respirator to provide added protection.
- Reason(s) for selection of a particular type of respirator.
- Limitations of the selected respirator.
- Methods of donning the respirator and checking its fit and operation.
- Proper wearing of the respirator.
- Respirator maintenance and storage.
- Recognizing, and the proper method for, handling emergency situations.

Users should know that improper respirator use or maintenance may cause over exposure. They should know continued use of poorly fitted and maintained respirators can also cause chronic disease or death from over exposure to air contaminants.

2. <u>FIT-TESTING</u>

The user must receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it and how to determine if it fits properly.

While respirators are designed for maximum efficiency, they cannot protect the wearer without a tight seal between the face piece and wearer. <u>Beards</u> and other <u>facial hair</u> can substantially reduce the effectiveness of a respirator. The absence of dentures can seriously affect the fit of a face piece. To assure proper protection for a face piece it must be checked by the wearer each time he or she puts on the respirator.

Corrective glasses worn by employees also present a problem when fitting respirators. Special mountings to hold corrective lenses inside full-face pieces are available. If corrective lenses are needed, the face piece and lenses must be fitted by a qualified individual to provide good vision, comfort, and proper sealing.

Full-face pieces, half masks, and quarter masks have different fitting characteristics. Of the several brands of each style marketed, each has a different size and fitting characteristic. No respirator will fit everyone. Employers will find it advantageous to purchase several brands of each type in various sizes to assure proper fitting for all workers who must wear one.

Effectiveness of the face piece fit of a respirator can be tested two ways - qualitatively and quantitatively.

Qualitative fit testing involves the introduction of a harmless odorous or irritating substance into the breathing zone of the wearer. Not detecting the substance indicates proper fit.

Quantitative fit testing offers the most accurate, detailed information on respirator fit. It involves the introduction of a harmless aerosol to the wearer while he or she is in a test chamber. While the wearer performs exercises which could induce face piece leakage, the air inside and outside the face piece is then measured for the presence of the harmless aerosol.

3. INSPECTION, CLEANING, MAINTENANCE, AND STORAGE

All respirators must be inspected for wear and deterioration of components before and after each use. Special attention should be given to rubber or plastic parts which can deteriorate. The face piece, especially the face seal surface, headband, valves, connecting tube, fittings, and filters must be in good condition. Respirator inspection must include a check for tightness of connections.

Repairs must be made only by experienced persons using parts specifically designed for the respirator. Manufacturers' instructions should be consulted for any repair and no attempt should be made to replace components or make adjustments or repairs beyond manufacturer's recommendations.

A respirator which has been used must be cleaned and disinfected before it is reissued. Records must be kept of inspection dates and findings. Respirators may be washed in a detergent solution and then sanitized by immersion in a sanitizing solution.

Respirators must be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. Protection against any mechanical damage should also be provided. Respirators should be stored so that face pieces and exhalation valves will rest in a normal position to prevent the rubber or plastic from reforming in an abnormal shape.

Cleaner-sanitizers that effectively clean the respirator and contain a bacteriocidal agent are commercially available. The bacteriocidal agent frequently used is a quaternary ammonium compound. Strong cleaning and sanitizing agents and many solvents can damage rubber or elastomeric respirator parts. Such materials must be used with caution or after consultation with the respirator manufacturer.

4. <u>MEDICAL EXAMINATIONS</u>

Persons assigned to tasks which require the use of a respirator must be physically able to perform the work while using the respirator. The respirator user's medical status must then be reviewed on an annual basis. The local physician must determine what health and physical condition are pertinent.

When respirators are worn in toxic atmospheres, the individual should be provided appropriate laboratory tests. These may include urine, blood, or fecal analysis and other techniques to determine intake and excretion of toxic substances. The findings of these tests, when correlated with other exposure data, such as air sampling data for wearers of such equipment, can serve as an indication of the effectiveness of the program. Positive evidence of exposure should be followed up with appropriate surveillance of work area conditions to determine if there is any relationship to inadequate respiratory protection or a need for additional engineering controls.

SECTION VII

KEY TERMS & DEFINITIONS

KEY TERMS

AHERA	-	Asbestos Hazard Emergency Response Act
TSI, T	-	Thermal System Insulation
S, Surf.	-	Surfacing Material
M, Misc.	-	Miscellaneous Material
Lagging	-	Outer layer of insulation on the boiler or other mechanical systems
Breeching	-	Outer layer of insulation on lines running from the boiler to the stack
ACBM	-	Asbestos Containing Building Materials
RR	-	Restrooms
JC	-	Janitors Closet
LF	-	Linear Feet
Sq Ft	-	Square Feet
Det.	-	Deterioration
Phy.	-	Physical
Wtr.	-	Water

DEFINITIONS

ABATEMENT - Procedures to control fiber release from ACM. Includes removal, encapsulation, enclosure, repair, demolition, and renovation activities.

ACCESSIBLE - When referring to ACM 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.

ACGIH - American Conference of Governmental Industrial Hygienists, 6500 Glenway Ave., Building D-5, Cincinnati, OH 45211.

ACTION LEVEL - Means an airborne concentration of asbestos of 0.1 fiber per cubic centimeter (f/cc) of air calculated as an 8-hour time-weighted average (TWA).

AIHA - American Industrial Hygiene Association, 475 Wolf Ledges Parkway, Akron, OH 44311.

AIR EROSION - Means the passage of air over friable ACBM which may result in the release of asbestos fibers.

AIRLOCK - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least 3 feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

AIR MONITORING - The process of measuring the fiber content of a known volume of air collected during a specific period of time.

AIR SAMPLING PROFESSIONAL - The professional contacted or employed by the building owner to supervise and/or conduct air monitoring and analysis schemes.

ALVEOLI - Microscopic air sacs in the lung tissues where the transfer of gases occur between the lungs and the blood stream.

AMENDED WATER - Water to which a surfactant has been added.

AREA MONITORING - Air sampling for asbestos within the controlled area or outside the controlled area which is representative of the airborne concentrations of asbestos fibers which may reach a worker's breathing zone.

ASBESTOS - The Asbestiform varieties of serpentine (Chrysotile), Reibeckite (Crocidolite), Cummingtonite-grunerite (Amosite), Anthophyllite, Actinolite, and Tremolite.

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.

AUTHORIZED PERSON - Means an individual authorized by management and/or the contractor and required by work duties to be present in regulated areas. The Authorized Person must have been trained in the safe handling and disposal of asbestos and have current medical examinations and respiratory fit tests.

AUTHORIZED VISITOR - The building owner (and any designated representative) and any representative of a regulation or any other agency having jurisdiction over the project.

CERTIFIED INDUSTRIAL HYGIENIST (CIH) - An industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene.

CLEAN ROOM - An uncontaminated area or room, which is a part of the worker decontamination enclosure system with provisions for storage or worker's street clothes and clean protective equipment.

CLEARANCE CRITERIA - An established level of acceptance for declaring an area that has under gone asbestos abatement work environmentally safe for re-occupancy.

COMPETENT PERSON - Means one who is capable of identifying existing asbestos hazards in the work place and who has the authority to take prompt corrective measures to eliminate them as specified in OSHA standard 29 CFR 1926.58 (f).

DAMAGED FRIABLE SURFACING ACM - Friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or has delaminated such that its bond to the substrate (adhesion) is inadequate, or, for any other reason, lacks fiber cohesion or adhesion qualities.

DAMAGED OR SIGNIFICANTLY DAMAGED THERMAL SYSTEM INSULATION ACM -Thermal system insulation ACM on pipes, boilers, tanks, ducts, or other thermal system insulation equipment where the insulation has lost its structural integrity, its covering, in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that is not able to contain fibers.

DECONTAMINATION ENCLOSURE SYSTEM - A series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers and equipment.

DESIGNATED PERSON - The person designated by the local education agency (LEA) or the building owner to ensure that the activities of the Federal Register Part III 40 CFR Part 763.84 is carried out.

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 - Means a particulate form of asbestos, 5 micrometers (microns) or longer, with a length-todiameter ratio of at least 3 to 1.

FRIABLE - material that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Includes previously non-friable material after the material becomes damaged to the extent that when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure.

HIGH-EFFICIENCY PARTICULATE AIR (HEPA) - Refers to a filtering system capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles 0.3 micrometers in diameter or larger.

LOCAL EDUCATION AGENCY (LEA) - 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 non-public, nonprofit elementary, or secondary school building. 3) The governing authority of any school operated under the defense dependents' education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921 et seq).

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.

NEGATIVE PRESSURE VENTILATION SYSTEM - A portable exhaust system equipment with HEPA filtration and capable of maintaining constant low velocity airflow into contaminated areas from adjacent uncontaminated areas.

NON-FRIABLE - Means material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

OPERATIONS & 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.

OSHA - Occupational Safety and Health Administration, 200 Constitution Avenue, Washington, DC 20210.

PERMISSIBLE EXPOSURE LEVEL (PEL) - Means an airborne concentration of asbestos of 0.2 fibers per centimeter (f/cc) of air calculated an 8-hour TWA.

PREVENTIVE MEASURES - Means actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the materials 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.

SIGNIFICANTLY DAMAGED FRIABLE ACM - Means damaged friable ACM where the damage is extensive and severe.

SURFACING MATERIAL - Means material in a school building that is sprayed-on, trowelled-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.

SURFACTANT - A chemical wetting agent added to water to improve penetration.

THERMAL SYSTEM INSULATION - 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.

VIBRATION - Means the periodic motion of friable ACBM, which may result in the release of asbestos fibers.

VISIBLE EMISSIONS - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

SECTION VIII

CERTIFICATES



AMP-1214 Exp: 03/20/2021 10/04/1965 Training due by: 03/20/2021







ACS-121592 Exp: 03/10/2022 03/19/1987 Training due by: 03/10/2022



ACS-208554 Exp: 93/28/2021 04/15/1993 Training due by: 03/28/2021















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All-208554 Exp: 10/28/2021 04/15/1993 Training due by: 10/28/2021





















