



AHERA 3 YEAR REINSPECTION REPORT **ESSEX ELEMENTARY SCHOOL**

12 Story Street
Manchester Massachusetts 01929
ATLAS PROJECT #6000006958 PHASE # 02

PREPARED FOR:

Mr. Jason Waldron
Facilities Manager
Manchester-Essex Regional School District
36 Lincoln Street
Manchester-by-the-Sea, Massachusetts 01944

PREPARED BY:

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, Massachusetts 01801

January 26, 2023



10 State Street, Suite 100
Woburn, MA 01801
| oneatlas.com

January 26, 2023

Dear Mr. Waldron,

Atlas Technical, LLC was contracted by Manchester-Essex Regional School District located at 36 Lincoln Street Manchester-by-the-Sea, Massachusetts 01944, to perform the asbestos AHERA 3-year re-inspection and provide this Management Plan for the Essex Elementary School located at 12 Story Street Manchester Massachusetts.

This asbestos three-year re-inspection and management plan was performed in compliance with 454 CMR 28.00. Daniel Roy MADLS Lic # AI900970, a Commonwealth of Massachusetts Department of Labor Standards (DLS) certified Asbestos Inspector, on December 28, 2022. A copy of the appropriate licenses and certifications can be found in Section 9.0.

The enclosed asbestos management plan was completed on January 26, 2023, by Michael Weydt, a Commonwealth of Massachusetts Department of Labor Standards (DLS) certified Asbestos Management Planner. The last 3-year inspection was completed by on January 27, 2020, by Ricardo Nunes MADLS Lic # AI000091.

ATLAS TECHNICAL CONSULTANTS LLC

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1. REVIEW OF EXISTING PAPERWORK/RECORD KEEPING

1.1 Response Actions:

Each Local Education Agency (LEA) must keep an updated copy of this management plan in its administrative office for each School under its administrative control or direction. This Plan must be available without restriction to the public-school personnel and their representatives, parents, and representatives of EPA and the State, for inspection during normal business hours.

Section 763.94 (Recordkeeping) of the AHERA Final Rule (40 CFR Part 763, Subpart E) and 454 CMR 28.13(10) requires that the following paperwork be obtained for all abatement activities: copies of all accreditations and licenses, copies of the company's (Abatement Contractor) license, copies of any required notifications, copies of disposal receipts, and records of the particulars of the job as to activity, location, and personnel used with their signatures, where applicable.

1.2 A Summary of Atlas' Record Review Indicated the Following:

- Response Actions Completed by Independent Abatement Contractors.
- No information was available for review.

- Six-Month Periodic Surveillance,
- No information was available for review.

- Three-year inspection reports
- No information was available for review.

- Annual Notifications,
- No information was available for review.

- Current custodial training certificates,
- No information was available for review

- Initial Asbestos inspection report,
- No information was available for review.

1.3 2023 Response Actions Priority List

All identified ACM and suspect materials assumed to be ACM that are not on the Response Actions Priority List should be maintained in accordance with the School's AHERA Management Plan.



2. AHERA INSPECTION REPORT

2.1 AHERA Terms, Abbreviations, and Acronyms

AHERA Rule	Asbestos Hazard Emergency Response Act 40 CFR Part 763 Subpart E – Asbestos-Containing Materials in Schools Rule, including Appendices A, B, C, and D & 454 CMR 28.13 Requirements for Schools Subject to AHERA
Section	Sections 763.80 - 763.99 in the Rule
LEA	The Schools' Local Education Agency (as defined in the Rule)
Plan	The AHERA Management Plan for the School
Part	Subsections of the Plan
EPA	Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
NESHAPS	National Emission Standards for Hazardous Air Pollutants
ACM	Asbestos-containing Building Material (as defined in the Rule)
ACM	Asbestos-containing Material
PACM	Presumed Asbestos-containing Material
Non-ACM	Non-Asbestos-containing Material
S No.	Bulk Sample Number
F	Friable
NF	Non-friable
HA	Homogeneous Area
FS	Functional Space
O&M	Operation and Maintenance Program <i>(Anything related to O&M shall only pertain to special cleaning and its frequency.)</i>
MIS	Miscellaneous Building Material (as defined in the Rule)
CT	Ceiling Tile
FT	Floor Tile
FBGL	Fiberglass
TSI	Thermal Systems Insulation (as defined in the Rule)
SURF	Surfacing Materials
HVAC	Heating, Ventilation, and Air Conditioning System
N/A	Not Applicable
MA DLS	Massachusetts Department of Labor Standards <i>(Formerly DOS – Division of Occupational Safety)</i>

Other relevant terms, abbreviations, and acronyms may be found within regulations included in the Appendices.



2.2 Statement of Compliance

AHERA INSPECTION REPORT FOR MANAGEMENT PLAN

Essex Elementary School 12 Story Street Manchester Massachusetts

This School was inspected to comply with the Asbestos Hazard Emergency Response Act (AHERA), signed into law by President Reagan in 1986. This AHERA Inspection Report is derived from the inspection and classification of asbestos-containing material conducted by an Atlas accredited Asbestos Inspector. Suspected asbestos-containing materials have been previously sampled, analyzed, and assessed in accordance with 454 CMR 28.00.

Asbestos-containing materials were previously classified according to guidelines in the AHERA regulations. Based on a bulk sample's asbestos content and the sample's condition, location, and hazard potential, Atlas' accredited Asbestos Management Planner recommended a response action if deemed necessary, or the material should be maintained in good condition in accordance with the existing AHERA Management Plan.

In the event any of the materials identified in this Plan become damaged (e.g., loose, dislodge, fall apart, etc.), the LEA and designated person shall make a proper determination in making a response, e.g., call a licensed contractor to remove and dispose of the debris and make repairs or re-adhere the material.

Requirements of the Asbestos Hazard Emergency Response Act, Subpart E (Asbestos-containing Materials in Schools) were complied with for the purpose of this Inspection Report.

The following Consultant Accreditation Page identifies the inspectors and management planners who contributed to this Plan. Also provided are the certificate numbers, signatures, and each signature date.



CONSULTANT ACCREDITATION


Atlas Technical, LLC
Woburn, Massachusetts

1. Accredited Asbestos Inspector

Name Daniel Roy

MA DLS Accreditation Number AI900970 (Exp. Date 03/08/23)

Date January 26, 2023


Signature 

2. Accredited Asbestos Management Planner

Name Michael Weydt

MA DLS Accreditation Number AP900474 (Exp. Date 08/08/23)

Date January 26, 2023


Signature 

3. Accredited Senior Asbestos Management Planner

Name Ricardo Nunes

MA DLS Accreditation Number AP900470 (Exp. Date 11/15/23)

Date January 26, 2023

Signature 

3. ASBESTOS INFORMATION

3.1 General

"Asbestos" is the term used to describe certain fibrous silicate minerals that were formerly widely used for insulating, construction, and other purposes. Asbestos fibers were used throughout the construction industry due to their properties of non-flammability, high tensile strength, and low heat conductance. In the northeast United States, the most commonly encountered types of asbestos are "chrysotile" and "amosite." Other types of asbestos are found in a wide variety of construction materials.

Asbestos poses a health hazard when very small asbestos fibers, approximately five micrometers in length, are released into the air and inhaled into the lungs. Once in the lungs, these fibers can either be expelled or become trapped. If they become trapped, the body cannot break the fibers down, and the lungs try to encase the foreign material with tissue. This process can cause scarring of the lung tissue that may ultimately result in impaired lung elasticity and subsequent chronic dysfunction. This disease is called asbestosis.

Asbestos diseases may manifest in other forms that are equally dangerous, such as mesothelioma, a form of lung cancer. The latency period of these diseases has been determined by medical professionals to be anywhere between ten- and thirty-years following exposure. For additional information regarding the health hazards of asbestos, consult Health Hazards of Asbestos, U.S. Department of Labor, Occupational Safety and Health Administration (OSHA 3040), and Guidance for Controlling Friable Asbestos-Containing Materials in Buildings, U.S. Environmental Protection Agency (EPA 560/5-83-002, March 1983). These documents are available from the regional office of the U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza, New York, New York 10007, 212-264-2525.

Asbestos-containing building materials (ACM) can be categorized into two groups: (1) friable; and (2) non-friable. Friable asbestos-containing material can be crumbled, pulverized, or reduced to dust or powder using hand pressure. The presence of friable ACM creates the need for the most urgent attention. In contrast, the presence of non-friable ACM should be documented, and proper handling procedures established to avoid allowing the material to deteriorate to a friable and potentially hazardous condition. Non-friable ACM and friable ACM must be assessed periodically to determine their potential for fiber release.

3.2 AHERA Classifications

AHERA classifies asbestos-containing materials as thermal system insulation, miscellaneous materials, or surfacing materials.

3.2.1 Thermal System Insulation (TSI)

The most common asbestos-containing thermal system insulation (TSI) is the following: air cell, which is an asbestos-containing paper; calcite and magnesia, which are powdery fibrous silicas; and preformed asbestos lagging or blocks. These types of TSI were used for many years as insulation wrapped around pipes, boilers, ducts, and hot water tanks in order to reduce thermal heat loss and prevent condensation.

When asbestos-containing insulation and its outer wrapping are in good condition, there is a minimal chance that asbestos fibers will become airborne, provided the insulation is not disturbed. Intact insulation may remain in place as long as its location and condition are documented and proper education is provided to individuals who may potentially disturb the insulation, thereby causing a fiber release episode.

If TSI is intact and in good condition, it must be maintained in order to monitor its condition since the physical condition of the insulation may change, thereby increasing the potential for fiber release. A fiber release episode may occur if asbestos insulation is frayed, punctured, ripped, water damaged, or vandalized. Whenever a fiber release occurs, the insulation should be repaired, encapsulated, enclosed, or removed in order to decrease the potential hazard to both human health and the environment.

3.2.2 Miscellaneous Materials

Floor and ceiling tiles are categorized as miscellaneous interior building materials. Of the two, ceiling tiles are the most common friable materials. Ceiling tiles may release asbestos fibers upon the slightest disturbance. Air currents from HVAC systems may also cause erosion of ceiling tiles and subsequent asbestos fiber release. Routine maintenance of pipes above asbestos-containing ceiling tiles can cause some fibers to be released due to disturbance of the tiles. Under normal conditions, non-friable miscellaneous ACM has virtually no potential for fiber release. However, if these materials are sanded, drilled, broken, or otherwise structurally disturbed, they can release fibers into the air and the environment.

3.2.3 Surfacing Materials

Acoustical troweled-on-plaster and sprayed-on fireproofing are categorized as surfacing ACM. Fireproofing insulation was applied as a fluffy coating to provide two to four-hour fire protection, so structural beams would not warp and collapse during a fire. Insulation of this type has a high potential to release fibers into the air upon any physical contact or by the action of air currents. Asbestos-containing plaster was also used for fireproofing and for acoustical purposes. Non-friable surfacing ACM with a low potential for disturbance also presents a low potential for fiber release.

3.3 Methods of Survey Classification and Response Action Determination

This School was inspected for ACM by a trained and licensed Atlas inspector. The inspector assessed the building materials and categorized similar materials into a homogeneous area (HA) group. The HA are listed by number, with a description of the material and a list of areas containing the material, called functional spaces. Bulk samples of each suspect HA were taken according to Section 763.86 of the Rule. Sample locations are described or noted on the building diagrams.

The inspector recorded the following for each HA: the approximate square or linear footage, activity in the area, risk factors, condition of the ACM, type of damage, if any, and the distribution of damage. These factors were considered when developing the response actions presented in this Plan.



These factors, the future building uses, and planned renovations all should be considered when the LEA must choose among the alternative response actions recommended or otherwise available for reducing the hazard to human life and the environment posed by the presence of ACM.

3.4 Asbestos Treatment Methods

Three categories of alternative treatments are available to treat or control asbestos-containing materials. Conditions that must be considered when determining the appropriate treatment method for ACM are location, quantity, physical condition, future uses, renovation or demolition plans, and any social, political, or economic constraints that may apply. The following are brief descriptions of the three categories of alternative treatments.

3.4.1 Repair and Encapsulation

Repair and encapsulation generally offer the least expensive form of treatment. Although this brings the material back to its original and/or non-friable condition, the activity must still be documented in an O&M Program to monitor the future condition of the material and its potential for hazard. This method, however, leaves the ACM in the building, where it will continue to age and deteriorate.

3.4.2 Enclosure

An enclosure offers a more expensive but more secure solution for some ACM. Building an impermeable case around asbestos-containing pipes or plaster can prevent the release of asbestos fibers due to deterioration and physical disturbance. However (as is also true for repair and encapsulation), the NESHAPS legislation requires that if future plans call for renovation, repair, or demolition, the ACM must first be removed. Enclosed ACM must also be included in an O&M Program.

3.4.3 Removal

Although initially the most expensive option, removal is often the most permanent and cost-effective solution. Not only are future potential hazards associated with asbestos-containing materials eliminated, but repair and periodic surveillance and inspection (as required with the options described above) also become unnecessary. Future problems or costs for asbestos control are thus eliminated.

3.5 Response Action Recommendation / Implementation

Regardless of the abatement method chosen, it is important to bear in mind that any disturbance of friable asbestos-containing material can cause fibers to be released if proper procedures and precautions are not observed.

Asbestos abatement workers licensed in Massachusetts must be employed to perform any large-scale operation (one involving greater than three square or three linear feet of asbestos). It is recommended that a Massachusetts DLS-certified asbestos project monitor be employed to ensure the safety of employees and building occupants and that proper work practices and procedures are followed during all phases of an



abatement project. Collecting samples to determine ambient air fiber levels upon project completion is also required. It is also recommended that ambient air fiber levels be measured before and during a project. These added precautionary measures greatly increase a school's ability to document and record pertinent data, thereby reducing its potential liability.

3.6 Risk Assessment and Asbestos Control

Actual risk due to asbestos exposure cannot be quantitatively defined, nor can the relationship between an exposure and its consequential effect be estimated. The only precise quantitative statement that can be made concerning asbestos is that zero exposure will give zero risk. It is generally agreed, however, that the greater the exposure, the greater the risk.

The above consideration, combined with the fact that over time, any building material will decay and eventually most systems will be replaced by newer, more advanced, and efficient systems, is the basis for the recommendation that, whenever possible, all exposed friable asbestos be removed and that any remaining asbestos-containing materials be controlled with an asbestos O&M Program. Recommended control methods are outlined in the Operation and Maintenance Program in Part VII. Appendix B of the Rule should be consulted regularly as a guide for specific work practices for jobs requiring contact with asbestos in a school. Again, remember that NESHAPS regulations currently in force require the proper removal of ACM before any major renovation, repair, or demolition occurs.



4. LOCAL EDUCATION AGENCY (LEA)

4.1 LEA Responsibilities

1. All aspects of the inspection and management plan are carried out in accordance with the Rule.
2. Custodial and maintenance staff receives proper training as required by all federal and state regulations.
3. Workers and building occupants or their legal guardians are informed at least once each school year about all asbestos-related activities that are planned or are in progress.
4. Short-term workers who may come in contact with asbestos are informed about the locations of ACM and assumed ACM.
5. Required warning labels are posted in routine maintenance areas according to 454 CMR 28.12
6. Parent, teacher, and employee organizations are notified yearly of the availability of the Plan. The School maintains a copy of the Plan at the School for an inspection per 454 CMR 28.12(9)(a).
7. Per 454 CMR 28.13(1), the LEA shall designate a person to ensure that requirements under this section are properly implemented and ensure that the designated person receives adequate training as described in 454 CMR 28.05(4)(b).
8. Consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under 454 CMR 28.10 (4)(a) 3 and 29 CFR Part 1926.1101(k)(7) m.



4.2 Confirmation of Designated Person

LEA	<u>Manchester-Essex Regional School District</u>
School	<u>Essex Elementary School</u>
Address	<u>12 Story St Manchester, MA</u>
Telephone	<u>978-768-7324</u>
Designated Person	<u>Mr. Jason Waldron</u>
Title	<u>Facilities Manager</u>
Address	<u>36 Lincoln Street, Manchester, MA 01944</u>
Telephone	<u>Office: 978-526-2055 x 3115 and Cell 978-500-3163</u>
Qualifications:	
Training	<u>MIIA/DLS</u>
Training Facility	<u>College of the Holy Cross</u>
Town, State	<u>Worcester, MA</u>
Certificate Number	<u>N/A</u>
Hours of Training	<u>4 Hours</u>
Date, of Course,	<u>March 7, 2017</u>

4.3 Recommendation to LEA

There is an increasing number of regulations regarding the handling, removal, transportation, and disposal of asbestos-containing materials. The LEA must be kept informed of and perform all response actions and other asbestos-related activities in accordance with all federal, state, and local regulations regarding asbestos. In addition to AHERA 40 CFR Part 763 Subpart E, these regulations include, but are not limited to, 454 CMR 28.00 (Massachusetts DLS); 29 CFR 1926.1101 and 29 CFR 1910.134 (OSHA); 40 CFR Part 763, Subpart G (EPA Worker Protection); 40 CFR Part 61, Subpart M (NESHAPS); 310 CMR 7.15 (Massachusetts DEP); 49 CFR Part 100-177 (DOT); and all amendments and mandatory appendices and regulations cited within these regulations.

The regulations are meant to protect the health and safety of those working with and around asbestos and building occupants. Given the LEA's responsibility to protect both human health and the environment of the school building's occupants, and the high potential liability associated with asbestos remediation projects, the LEA must ensure that the interests of the building's occupants are protected.

All response actions must be designed and conducted by persons accredited and licensed to conduct such activities. Design specifications should be sufficiently explicit to avoid conflicts or confusion that may arise concerning the scope of work and required procedures. It is recommended that the LEA contract a Massachusetts-certified and licensed Asbestos Abatement Project Monitor to help ensure that projects are carried out safely, thoroughly, and in compliance with all applicable laws and regulations. Areas adjacent to the project should be sufficiently monitored throughout the project to provide clear documentation of



project integrity. Final inspection and air clearance must be achieved as required in Section 763.90(i) of the Rule before any response action may be considered successfully completed.

The LEA must consider any conflict of interest that may potentially arise when retaining accredited designers and contractors to perform asbestos-related activities. Generally, it is recommended that the LEA choose separate accredited entities: one for project design (including project oversight, visual clearance inspection, and air monitoring); and another to conduct the asbestos project according to the design. Appendix A of the Rule states that "air sampling operations must be performed by qualified individuals completely independent of the abatement contractor."



5. PUBLIC NOTIFICATION

5.1 Occupant Notification

In accordance with 454 CMR 28.13 3, the LEA will notify in writing, at least once yearly, all relevant occupants of the School of all asbestos-related activities that take place at the School. Relevant occupants include but are not limited to building occupants or their legal guardians; staff, including teaching, administrative, custodial, maintenance, and all other personnel; all parent, teacher, employee, and administrative organizations; and/or any similar organizations at the School which serve similar functions.

Asbestos activities include but are not limited to inspections, response actions, including removal, encapsulation, enclosure, repair, and post-response action activities, including periodic surveillance and re-inspection. In addition, 454 CMR 28.13 requires the LEA to inform occupants at least once per year that the AHERA Management Plan exists and is available for review in the School's Administration Office.

In accordance with the aforementioned 454 CMR 28.13, the LEA must maintain a dated copy of all such notifications. The list of relevant groups to be notified will be added to and updated as necessary and should also be kept on file.

5.2 Plan for Notification

In accordance with 454 CMR 28.13 3, all school building occupants will be informed by written notification about all asbestos-related activities at least once every school year.

Building occupants to be notified include, but are not limited to, all students, their legal guardians, and all staff members and their committees, representatives, and organizations.

As of September 2022, building occupants at the School include the following:

- Students
- Legal guardians of students
- Staff (including teaching, custodian, maintenance,
- Administrative and all other personnel)

The LEA may choose various methods of notification to building occupants. The method of notification, such as written notification via posted notices at the School or through publications such as a legal notice in the local newspaper, must be documented, and details of the new notification methods used must be included in the Management Plan. Copies of the annual public notice must be included in the Management Plan.

5.3 ACM Locations

According to 454 CMR 28.13 4, the LEA must ensure that all short-term workers who may come in contact with asbestos in the School (e.g., telephone, plumbing, HVAC, electrical workers, etc.) are provided information regarding the locations of identified or assumed ACM. In addition, as required by 454 CMR 28.13. 2, all members of the School's maintenance and custodial staff must be informed of the locations of ACM identified throughout each school building in which they work.



5.4 Asbestos Activities

Prior to the start of asbestos abatement and/or associated remediation projects, proper notifications must be made by the appropriate entities to all applicable federal, state, and local agencies and authorities. The local Health, Building, and Fire Departments are often good places to begin researching local regulations and notification requirements. Notifications may include but are not limited to the following.

5.5 National Emissions Standards for Hazardous Air Pollutants (NESHAPS)

NESHAPS requires notification whenever asbestos is being removed according to the quantities involved, as follows:

5.5.1 Demolition

Ten (10) days' notice for any asbestos abatement project. Notification must include friable and potentially friable ACM.

5.5.2 Renovation

Ten (10) days' notice for any asbestos abatement project. Notification must include friable and potentially friable ACM.

NESHAPS notifications are submitted to the EPA Region I Office per 40 CFR Part 61, Subpart M.

5.6 Massachusetts Department of Labor Standards (DLS)

The Massachusetts Department of Labor Standards (DLS) must be given proper notice when any asbestos abatement project or an associated project involving more than three linear or three-square feet is planned. The Commissioner of the DLS must be notified at least ten days prior to the project start date (postmark or hand delivery), or in the case of an emergency, within one working day after the project start date (DLS 454 CMR 28.00).

5.7 Massachusetts Department of Environmental Protection (DEP)

The Massachusetts DEP requires proper notification and ten days prior notice (one-day prior notice in the event of an emergency) before the start date of all asbestos removal projects (310 CMR 6.00, 7.00, and/or 8.00).

*Contact the agencies denoted above or refer to the appropriate regulations for further information requiring proper notification procedures and guidelines.



6. ASBESTOS-CONTAINING MATERIALS RESPONSE ACTIONS

6.1 Response Action Determination Summary

Response Action Determinations were made using the EPA recommended method to determine the risk to human health associated with exposure to asbestos within a given ACM category. Appropriate response actions that are consistent with applicable regulations and protect human health and the environment are then recommended in order to best respond to and/or control ACM.

6.2 Response Action Descriptions

The following is a brief and general description of the Response Actions recommended in the Plan. The Client indicates that the following response actions will only be undertaken by a licensed contractor in accordance with all applicable federal, state, and local regulations governing the handling and disposal of asbestos. Refer to the Table at the end of Part V for a complete list of ACMS and recommended response actions.

6.2.1 Removal

Removal means the complete removal and disposal of designated asbestos-containing material of any kind. If ACM debris is present, the area must be isolated, and the debris cleaned up immediately.

6.2.2 Repair

Repair means restoring a damaged area to its original intact condition. This includes making the damaged area airtight to prevent the release of fibers into the air. If ACM debris is present, the area must be isolated, and the Designated Person and Atlas contacted immediately. A DLS licensed contractor will conduct all related work. Record all repaired ACM in the O&M Program.

6.2.3 Encapsulation

Encapsulation means the application of a material with a bonding or sealing property to prevent the release of airborne fibers. If ACM debris is present, the area must be isolated, and the Designated Person and Atlas contacted immediately. A DLS licensed contractor will conduct all related work. Record encapsulated ACM in the O&M Program.

6.2.4 Enclosure

Enclosure means creating an airtight structure around an affected area to prevent the release of airborne fibers and significantly reduce the possibility of future physical disturbance or damage to the ACM. Any damaged ACM must be repaired prior to the enclosure. If ACM debris is present, the area must be isolated, and the Designated Person and Atlas contacted immediately. A DLS licensed contractor will conduct all related work. Record the enclosed area in the O&M Program.

6.2.5 Operation & Maintenance

An O&M program describes a structured plan of action to maintain ACM in a condition that protects the health and safety of the occupants in a building and provides for remedial action in the event that ACM is disturbed. In an occurrence of damage to ACM, the custodial or maintenance staff will restrict entry into the area by physically isolating the area and notify the Designated Person and Atlas for further direction.

6.3 AHERA Material/Condition Assessment Key for Functional Spaces As found in the School Report

1. Damaged or significantly damaged TSI.
2. Damaged friable surfacing material.
3. Significantly damaged friable surfacing material.
4. Damaged or significantly damaged friable miscellaneous material.
5. ACM with potential for damage.
6. ACM with potential for significant damage.
7. Any remaining friable known or suspect ACM.
8. Damaged or significantly damaged non-friable ACM. Note that this category is not listed in the AHERA regulations but is provided for reference in this report.

6.4 Method of Response Action Determination for Surfacing and Miscellaneous ACM

1. Friable Surfacing or Miscellaneous ACM with Significant Damage

Response Action 1: Remove

Immediately isolate the functional space and restrict access unless the licensed management planner determines that isolation is not necessary to protect human health and the environment; and

Remove the material in the functional space or, depending upon whether the licensed management planner determines that enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.

2. Friable Surfacing or Miscellaneous ACM with Damage and High Potential for Disturbance

Response Action 1: Remove

Immediately isolate the area and restrict access if necessary to avoid imminent and substantial endangerment to human health or the environment,



Institute preventive measures appropriate to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated,

Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented.

3. Friable Surfacing or Miscellaneous ACM with Damage and Moderate Potential for Disturbance

Response Action 4: Enclose

Institute preventive measures. Repair ACM to return to airtight, intact condition, and enclose with an impermeable encasement to prevent physical disturbance. Continue with O&M.

4. Friable Surfacing or Miscellaneous ACM with Damage and Low Potential for Disturbance

Response Action 3: Encapsulate

Institute preventive measures. Repair damaged material to return to intact condition and encapsulate to reduce the possibility of fiber release. Continue with O&M.

5. Friable Surfacing or Miscellaneous ACM with No Damage and High Potential for Damage

Response Action 4: Enclose

Institute preventive measures. Enclose material to reduce the effects of future disturbance. Continue with O&M.

6. Friable Surfacing or Miscellaneous ACM with No Damage and Moderate Potential for Damage

Response Action 3: Encapsulate

Institute preventive measures. Encapsulate material to reduce the possibility of fiber release. Continue with O&M.

7. Friable Surfacing or Miscellaneous ACM with No Damage and Low or no Potential for Damage

Response Action 5: O&M Program

Continue with O&M until condition factors change, requiring an additional response.

8. Non-Friable Surfacing or Miscellaneous ACM

Response Action 5: O&M Program

Continue with O&M until condition factors change, requiring an additional response.

6.5 Method of Response Action Determination for Thermal System Insulation (TSI) ACM

1. Damaged or significantly damaged thermal system ACM

Response Action, Isolate the area and restrict access.

- 1 Repair the damaged area, or
- 2 Remove the damaged material if it is not feasible, due to technological factors, to repair the damage, and
- 3 Maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition.

2. Damaged Thermal System Insulation with High Potential for Disturbance

- 1 Response Action 1: Remove - Institute preventive measures and remove material as soon as possible.

3. Damaged Thermal System Insulation with Moderate Potential for Disturbance

- 1 Response Action 4: Enclosure - Institute preventive measures.
- 2 Repair insulation to airtight condition and enclose with an impermeable encasement to protect against further physical damage.
- 3 Continue with O&M.

4. Damaged Thermal System Insulation with Low Potential for Disturbance

- 1 Response Action 2: Repair - Repair to airtight condition and take preventive measures necessary to eliminate any potential disturbance.
- 2 Continue with O&M.

5. Undamaged Thermal System Insulation with High Potential for Disturbance

- 1 Response Action 1: Remove - Institute preventive measures. Remove to prevent the high possibility of disturbance to the ACM.

6. Undamaged Thermal System Insulation with Moderate Potential for Disturbance

- 1 Response Action 4: Enclose - Institute preventive measures. Enclose the ACM within an airtight barrier to prevent potential disturbance of ACM.
- 2 Continue with O&M.

7. Undamaged Thermal System Insulation with Low or No Potential for Disturbance

- 1 Response Action 5: O&M - Continue with O&M



**Table 1 – Summary Table of Asbestos-Containing Materials
Essex Elementary
12 Story St Manchester Massachusetts**

Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Principal's Office	12" x 12" Brown Floor Tile	300 SF	150 SF	150 SF	Non-Friable	5	Under Carpeting	Maintain the material in good condition in accordance with the O&M Plan
Secretary's Office	12" x 12" Brown Floor Tile	300 SF	150 SF	150 SF	Non-Friable	5	Under Carpeting	Maintain the material in good condition in accordance with the O&M Plan
Guidance Office (ELL)	9" x 9" Floor Tile	550 SF	470 SF	470 SF	Non-Friable	6	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Student Support Room	9" x 9" Floor Tile	550 SF	470 SF	470 SF	Non-Friable	6	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 18	Joint Compound and Associated Gypsum Wall Board	Not Identified	1,000 SF	1,000 SF	Friable	6	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 19	Joint Compound and Associated Gypsum Wall Board	Not Identified	1,000 SF	1,000 SF	Friable	6	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Kitchen Storage Room	12" Pipe Insulation	20 LF	20 LF	20 LF	Friable	6	Good Condition/Damaged ACBM Repaired	ACM debris is cleaned up and the damaged pipe insulation is repaired. No records were available of this work. LEA should include details of this response action in records, per AHERA requirements.
Older Section of School, Hallway	Purple Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Older Section of School, Classroom # 19	Purple Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 1	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan



Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
1 st Floor - Classroom # 2	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 3	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 4	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 5	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 6	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 7	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 8	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 9	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 11	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 13	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 14	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 15	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Classroom # 16	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan



Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Basement Floor Rec Room	Black Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 18	Gray Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 20	Gray Sink Sealant	Not Identified	1 Sink	1 Sink	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Exit Door #1	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Basement - Exit Door # 6 (Art Room)	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor - Exit Door # 9 (Gymnasium)	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor – Classroom # 7	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor – Classroom # 8	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor – Classroom # 15	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor – Classroom # 16	Interior Door Frame Caulking	Not Identified	17 LF on 1 Door Frame	17 LF on 1 Door Frame	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Basement Floor – Boiler Room	Fire Door	1 Door (Assumed)	1 Door (Assumed)	1 Door (Assumed)	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
1 st Floor – Old Section Hallways	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	3,500 SF	3,500 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan



Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Classroom # 1	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 2	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 3	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 4	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 5	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 6	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 7	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 8	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan

Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Classroom # 9	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 10	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 11	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 12A	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	350 SF	350 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 12B	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	350 SF	350 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 13	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 14	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan



Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Classroom # 15	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 16	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 17	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 18	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 19	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 20	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Classroom # 30	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Nurses Office	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	700 SF	700 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan



Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Psych Office/Special Education	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	400 SF	400 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Book Room	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	200 SF	200 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Student Support Room	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	400 SF	400 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Library	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	2,000 SF	2,000 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Foreign Language Room (#29)	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	150 SF	150 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Counselor's Room	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	300 SF	300 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Library Office	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	200 SF	200 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan
Gym Office	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	100 SF	100 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan



Location	Material	Quantity Reported in 2013 AHERA Inspection	Quantity Observed in 2019 3-Year Re-inspection	Quantity Observed in 2023 3-Year Re-inspection	Friable / Non-Friable	Material/ Condition Assessment Code	Comments	Response Action Recommendation
Speech Room (#30)	Black Mastic and Associated Non-ACM Floor Tile	Not Identified	200 SF	200 SF	Non-Friable	5	Good Condition	Maintain the material in good condition in accordance with the O&M Plan

Material Condition/Assessment Code Definitions: According to the 454 CMR 28.13(5)(c) Assessment, the following categories are provided to assess the ACM, suspected ACM, or assumed ACM in the school building: (1) Damaged or significantly damaged thermal system ACM, (2) Damaged friable surfacing ACM, (3) Significantly damaged friable surfacing ACM, (4) Damaged or significantly damaged friable miscellaneous ACM, (5) ACM with potential for damage, (6) ACM with potential for significant damage, (7) Any remaining friable ACM or friable suspected ACM. The materials listed above may exist in additional locations within the school building that was inaccessible during this inspection. They should be assumed asbestos-containing wherever they are encountered throughout the building.



7. RESPONSE ACTION DETERMINATION SUMMARY

7.1 RESPONSE ACTION DETERMINATION SUMMARY

In compliance with the AHERA Rule, the LEA must establish and implement an Operation & Maintenance (O&M) and Repair Program for each School that contains ACM. The purpose of an O & M program and its required periodic surveillance and re-inspection is to monitor and control the condition and location of any remaining ACM in the School and to reassess the potential for hazards to human health and the environment that it poses.

The following summary of 454 CMR 28.13(1) highlights the LEA's responsibilities with respect to all ACM that remains in the School.

7.2 LEA Responsibilities

1. Establish and implement an Operation & Maintenance (O & M) and repair program for all material identified or assumed to be ACM, including both friable ACM and non-friable ACM with the potential to become friable due to activities performed.
2. Implement the initial cleaning of any areas containing friable ACM or assumed friable ACM present after the inspection has been completed and before response actions.
3. Implement the following procedural techniques for all O&M activities that involve the disturbance of friable ACM:
 - a. Restrict entry into the area by persons other than those necessary to perform the maintenance project, either by physically isolating the area or by scheduling.
 - b. Post signs to prevent entry by unauthorized persons.
 - c. Shut off or temporarily modify the air handling system and restrict other sources of air movement.
 - d. Use work practices or other controls, such as wet methods, protective clothing, HEPA vacuums, mini-enclosures, and glovebags, as necessary to inhibit the dispersal of released fibers.
 - e. Clean all fixtures or other components in the immediate work area.
 - f. Place asbestos debris and contaminated cleaning materials in a sealed, leak-tight container.
5. Make sure that all response actions involving more than three linear or square feet of ACM will be designed by a Massachusetts-accredited designer and performed by Massachusetts-accredited contractors and consultants. The Commonwealth of Massachusetts requires that proper notifications be made as necessary to the Department of Labor Standards (DLS), the Department of Environmental Protection (DEP), and/or the U.S. EPA (per NESHAPS).
6. Ensure that the following procedures are adhered to in the event of a minor fiber release episode or the falling or dislodging of three linear or square feet or less of friable ACM:

- a. Massachusetts accredited contractors will repair the area of damaged ACM with materials such as asbestos-free spackling, plaster, cement, or insulation, seal with latex paint or other encapsulants, or immediately have the appropriate response action implemented as required by 454 CMR 28.02.
7. Make certain that the following procedures in 454 CMR 28.16 (6) (d) are adhered to in the event of a major fiber release episode or the falling or dislodging of more than three linear or square feet of friable ACM:
 - a. Restrict entry into the area and post signs to prevent entry by persons other than those necessary to perform the response action.
 - b. Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building.
 - c. The response action for any major fiber release episode must be designed by persons accredited to conduct response actions.
8. Post warning labels immediately adjacent to all ACM or assumed ACM located in routine maintenance areas as described in 454 CMR 28.13(11).
9. Make certain the designated person and custodial and maintenance staff are properly trained in accordance with the Rule and all other applicable federal, state, and local regulations. Staff members and the building's maintenance staff will not disturb ACM. Outside contractors (plumbers, electricians, installers, etc.) who will be required by the Client to handle or disturb ACM are required by the Massachusetts DLS to be trained by a state-certified training provider regarding proper handling procedures for asbestos.
10. Once the Plan is in effect, the LEA must implement periodic surveillance of all remaining ACM in the facility for changing conditions and hazard assessment every six months after the Plan is in effect. Staff members who have completed the aforementioned sixteen-hour training can perform this.
11. Make certain that re-inspection of all remaining ACM is conducted by an accredited asbestos inspector every three years while ACM remains in the School in accordance with 454 CMR 28.13 (3)
12. Make certain that all short-term workers (generally outside contractors) are provided with information regarding the locations of ACM and assumed ACM, per 454 CMR 28.13 (3).

7.3 Training Requirements and Worker Protection

In compliance with 454 CMR 28.13(8), all maintenance and custodial staff must receive at least two hours of asbestos awareness training before implementing the O & M Program described in this Plan. The Essex Elementary School maintenance personnel training certificates are attached in Section 10.0.

New staff personnel must similarly be trained within sixty days of commencement of employment. personnel who will conduct activities that may result in the disturbance of ACM must receive an additional fourteen hours of training, as required by the Rule. As described in 454 CMR 28.13(8), awareness training must include information regarding: the forms and uses of asbestos; the health effects associated with asbestos exposure; the locations of ACM identified throughout the School; how to recognize damage, deterioration,



and delamination of ACM; the name and telephone number of the person designated by the LEA; and the availability and location of the Plan.

As described in 454 CMNR 28.04 (1), all LEA employees who perform O & M and repair activities involving ACM and who are not covered by OSHA 29 CFR 1926.1101 or are approved by Section 19 of the Occupational Safety and Health Act are extended worker protection provided by the EPA at 40 CFR 763.121. According to the EPA's "AHERA Fact Sheet," the LEA may choose to institute the provisions of Appendix B of the Rule in the case of small-scale, short-duration projects rather than comply with the full EPA Worker Protection Rule.

7.4 Periodic Surveillance & Re- Inspection

The LEA must conduct a periodic surveillance in each building every six months after the Plan is in effect. An assigned person trained in accordance with 454 CMR 28.05(4)(c) or (f) shall visually inspect all areas that are identified in the Plan as ACM or assumed ACM, record the date of the surveillance, his or her name, any changes in the condition of the materials, and submit to the Designated Person a copy of a such record to be included in the Plan, in accordance with 454 CMR 28.05(4)(c) or (f).

At least once every three years after the Plan is in effect, the School must conduct a re-inspection of all friable and non-friable, assumed, and identified ACM. The re-inspection must be conducted by a Massachusetts accredited inspector and performed in accordance with 454 CMR 28.05(4)(c) or (f).

Once the Plan has been approved by the Governor's Designee, the Plan is considered to be "in effect" so that the first periodic surveillance will have to occur before the expiration of six months from the "effective date." Likewise, the first re-inspection will have to take place within three years of the effective date.

It is recommended that the effective date and appropriate periodic surveillance and re-inspection dates be entered into the Plan in tabular form and posted to serve as a frequent schedule reminder.

7.5 Warning Signs

In accordance with 29 CFR Part 1926.1101(k)(7), the LEA is responsible for prominently placing warning signs immediately adjacent to all identified or assumed friable and non-friable ACM located in all routine maintenance areas in the School.

The warning signs must be readily visible and easy to read, with large print and bright color (normally black print on bright yellow background), and read as follows:

**CAUTION:
ASBESTOS. HAZARDOUS.
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT**

7.6 Preventive Measures

Preventive measures include any action or actions taken in order to eliminate or reduce the possibility of disturbing ACM. All preventive measures must be appropriately recorded according to 454 CMR 28.13 (7). Examples of precautions to take include the following:



1. Do not cut, sand, drill, break, nail into, or otherwise disturb ACM or create dust.
2. Avoid contact damage to any ACM. Remove any adjacent items that may contact ACM.
3. Keep suspended ceiling tiles in place wherever any ACM exists above them. Do not remove or displace ceiling tiles without taking the proper precautionary measures outlined in 'ACM Above Ceilings' in Part VII below.
4. Do not hang fixtures, wires, etc., from ACM.
5. Prevent water damage to ACM.
6. Do not disturb asbestos-containing materials when replacing lights, etc.
7. Do not allow doors or dividers to rub against ACM.
8. Isolate, redirect, or eliminate direct airflow onto any friable or damaged ACM.

Note: Always take proper precautions when working around ACM. Report any damaged ACM to the Designated Person and Atlas **Immediately**.

7.7 Cleaning

7.7.1 Initial Cleaning

Areas of the school where identified and assumed friable ACM and damaged or significantly damaged Thermal System Insulation ACM are present are required according to Section 763.91(c)(1) of the Rule to be cleaned at least once after the completion of the inspection and before the initiation of any response actions other than O & M.

7.7.2 Additional Cleaning

In addition to initial cleaning and that which is required after any fiber release episode, the LEA is required to perform additional cleaning according to Section 763.91(c)(2) of the Rule. According to Section 763.91(c)(1) of the Rule, additional cleaning recommendations include, but are not limited to, cleaning all proximate surfaces of the areas previously identified:

- a. Areas containing ACM where a suspect film or dust occurs.
- b. Anytime any friable or non-friable ACM becomes damaged or significantly damaged.
- c. Anytime the LEA's Designated Person determines cleaning is necessary to protect the health and environment of the building occupants. It is important that all cleaning be completed prior to the initiation of other response actions that may be necessary. The initial cleaning will prevent or greatly reduce the possibility of further contamination within an affected area as well as surrounding areas, and reduce the possibility of exposure to school workers and all other building occupants.

7.8 Custodial and Maintenance Procedures:

Personnel conducting custodial or maintenance work shall take extreme care not to disturb or damage ACM. If damage occurs or is discovered the Report of Damaged Asbestos Containing Material (Appendix D) should be completed and sent to the Asbestos Program Manager.

7.8.1 Resilient Flooring Maintenance:

All vinyl and asphalt-based flooring materials (e.g., tiles, sheet flooring) shall be maintained in accordance with these instructions unless the Asbestos Program Manager demonstrates that the flooring does not contain asbestos. The following work practices apply to the handling of asbestos flooring material:

- Sanding of asbestos flooring material is prohibited.
- Stripping of finishes shall be conducted using *low abrasion* pads at machine speeds less than 300 revolutions per minute (rpm) and using wet methods.
- Burnishing or dry buffing may only be performed on asbestos flooring that has sufficient finish so that the pad cannot contact the asbestos flooring material.

Low speed spray buffing is strongly recommended over the high speed burnishing process. Burnishing has a very strong potential to disturb or release asbestos fibers for reasons beyond the control of the machine operator. Uneven floor surfaces and insufficient thickness of floor finish can cause fiber releases in potentially high concentrations.

7.8.2 Dry or Spray Buffing of Resilient Flooring

Do not buff damaged flooring. Any loose or damaged flooring should be repaired or replaced before buffing is started. This procedure assumes that the floor has adequate coats of polish, and that the flooring itself will not be damaged or contacted by the buffing equipment. If any flooring damage occurs during buffing, stop work and notify DOE or the Asbestos Program Manager.

- Using scraper and water, remove all foreign matter from the finished surface (gum, tar, stickers, etc.).
- Spot or damp mop to remove stains and spills. Mix chemical cleaner or restorer with water and apply according to manufacturer's recommendations. Spot or damp mop to remove stains and spills. If dry buffing will be performed, apply restorer chemical as required.
- Allow floor to dry thoroughly.
- Spray or dry buff as appropriate:
- To spray-buff, spray small area with spray-buff solution and buff using manufacturer's recommended pad or brush at recommended RPM. Repeat procedure until entire area is spray-buffed.

- To dry buff, buff or dry burnish with manufacturer's recommended pad or brush at recommended RPM.

7.8.3 Cleaning/Polishing of Resilient Flooring

Do not polish loose or damaged resilient flooring. Any damage should be repaired before cleaning begins using the applicable work practice(s). Stop work if any damage occurs and notify the Asbestos Program Manager.

- Mix scrubbing chemical with water as recommended by manufacturer and apply liberal amount (do not flood) using mop. Allow to soak for amount of time recommended by manufacturer. Keep floor adequately wet by reapplying cleaning solution if drying occurs. Work small areas at a time.
- Using floor scrubbing machine, manufacturer's recommended pads and operating speed, clean floor to remove embedded dirt and surface marks.
- Remove spent scrubbing solution with wet vacuum or mop.
- Rinse area using clean mop and clean rinse water. Remove water with wet vacuum or mop. Damp mop area to clean up any remaining water or streaks.

7.8.4 Stripping of Floor Wax from Resilient Flooring

Do not strip damaged flooring. Any loose or damaged flooring should be repaired or replaced before stripping is started. Wet stripping, if performed properly, should not cause damage to resilient flooring. If any flooring damage occurs during stripping, stop work and notify DOE or the Asbestos Program Manager. Do not dry strip, scrape, sand, or grind resilient asbestos flooring to remove any blemishes or imperfections.

- After proper mixing of stripping chemical, adequately wet floor by mop applying liberal amounts of the solution. Allow chemical to soak for amount of time recommended by manufacturer. If areas become dry, reapply solution to keep floor adequately wet.
- After wax or finish has softened, strip flooring using least abrasive pad and low speed setting (300 RPM maximum). Keep floor adequately wet during machine operation. Do not over strip. Stop stripping when the old wax or finish is removed. Work small areas at a time.
- Remove dirty stripping solution with wet vacuum or "strip" mop.
- With "rinse" mop, apply liberal amount of clean water to area stripped and remove water with wet vacuum or mop. Repeat rinse procedures.
- If some spots of wax or finish remain, re-strip those areas.
- When applying new wax or finish, do so according to manufacturer's recommendations.

7.9 ACM Waste

Waste generated from asbestos projects must be properly stored and disposed. A minimum of a half-face negative pressure respirator and disposable clothing, with a hood and booties, are required when handling asbestos-containing materials. The following procedures must be implemented when handling asbestos-containing waste:



1. All waste must be placed in either sealed barrels or two six-mil polyethylene disposal bags. All waste containers must have two labels as required by both OSHA and the U.S. Department of Transportation (DOT). The labels are worded as follows:

OSHA Label:

**Danger
Contains Asbestos Fibers
May Cause Cancer
Causes Damage to Lungs
Do Not Breathe Dust
Avoid Creating Dust**

DOT Label:

**RQ Hazardous
Substance,
Solid, NOS
ORM-E, NA 9188
(Asbestos)**

2. Waste must be adequately wet. Once the debris is in the barrel or disposal bag, sufficient water must be added so that there is a noticeable amount.
3. Disposal bags must be sealed to reduce airspace and make them leak-tight. Twisting and sealing with duct tape is one method to prevent leaks at the opening of the bag. All waste must be double-bagged and sealed. In the case of a glove bag, the use of one labeled bag around the glove bag is considered double bagging. If the second bag is used to dispose of other contaminated waste and water, a third labeled bag must then be properly sealed around both.
4. Place the bags into a drum or other rigid container equipped with secure or locking ring lids and label with the same information described above.
5. The drums or container must be secured in a temporary storage area previously identified at your facility. This should be an area with limited access and preferably with a locked entry door.
6. Record the date and amount of waste placed in the temporary storage area. A log sheet should be established for this purpose.
7. Keep the temporary storage area clean by using good work practices. If any bags of waste break, clean the area using the 'Asbestos Debris Cleanup Procedures' in Part VII, and in compliance with all applicable regulations.
8. Before the temporary storage area is full or the expiration of the maximum allowable storage date, make arrangements to have the asbestos waste picked up and delivered to an approved asbestos waste disposal site.
9. Make advance arrangements with the waste disposal facility to ensure that your waste will be accepted.
10. Arrange to have the asbestos waste delivered safely to the previously identified disposal facility.
11. Receipts from both the transporter and landfill for each shipment of waste must be kept on file. Record all dates, destinations, and responsible persons involved in



transporting the waste from the temporary storage area to the disposal facility previously identified in the Plan. For further information concerning storage, transportation, and disposal of asbestos-containing waste, contact the Massachusetts DEP.



8. SAFE WORK PRACTICES & PROCEDURES FOR ASBESTOS-CONTAINING MATERIALS

8.1 Introduction

The following safe work practices and procedures are minimum requirements and/or recommended guidelines for working with or around asbestos-containing materials. School personnel may perform Work involving three linear or square feet or less of ACM and small-scale or short-duration projects, provided they have received the required sixteen-hour asbestos O&M training.

All school employees who perform small-scale or short-duration projects must be provided with appropriate personal protective equipment. This equipment includes, at a minimum, half-face negative-pressure respirators equipped with High Efficiency Particulate Air (HEPA) filters and full-body Tyvek disposable coveralls or their equivalent. The following procedures will be performed only after first donning this minimum personal protective equipment.

Activities that will disturb greater than three linear or three-square feet of ACM must be designed and performed by persons or companies licensed in Massachusetts to perform such activities. All asbestos activities must be performed in compliance with all applicable federal, state, and local regulations. Notifications to appropriate agencies are necessary. Isolation of the affected area is usually required. All asbestos work must also be performed in such a manner as to minimize the release of asbestos fibers and protect the health and environment of all building occupants.

8.2 Equipment

In addition to protective equipment such as disposable clothing and respirators, the following equipment may be necessary to perform work involving asbestos.

1. DUCT TAPE

Heavy-gauge tape is used to seal glove bags and secure adjacent polyethylene sheets.

2. POLYETHYLENE OR PLASTIC SHEETING

Plastic sheeting (6-mil thick) is used to seal off an area where an asbestos project is taking place to prevent contamination of other areas also used to seal the waste.

3. SURFACTANT

A chemical wetting agent added to water improves water's ability to penetrate asbestos-containing material.

4. DISPOSAL BAGS

Six-mil-thick bags are used to dispose of asbestos-containing materials. All bags must be properly labeled according to OSHA and DOT regulations.

5. RETRACTABLE UTILITY KNIFE

They are used to cut asbestos-containing materials or equipment during removal. Always use **retractable** utility knives so as not to risk puncturing glove bags.

6. GLOVE-BAG

A pre-manufactured polyethylene bag is generally used as a containment around asbestos-containing insulation on pipes or valves so that the insulation may be removed without releasing asbestos fibers into the ambient air. The glove bag consists of a 6- to 12-mil-thick polyethylene bag fitted with long-sleeve gloves, a tool pouch, and an opening for a HEPA vacuum hose and garden sprayer wand. The size, quality, style, and cost vary depending on the manufacturer.

7. WARNING SIGNS

Warning signs are posted at the entrance to the work area and a sufficient distance to allow all building occupants adequate forewarning of the occurrence of an asbestos-associated project. The purpose of warning signs is to keep unauthorized personnel away from the work area. The OSHA warning sign is worded as follows:

**DANGER
 ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE
CLOTHING IS REQUIRED IN THIS AREA**

8. HEPA VACUUM CLEANER

A High-Efficiency Particulate Air (HEPA) filtered vacuum cleaner capable of trapping and retaining 99.97% of all particles larger than 0.3 microns. The HEPA vacuum cleaner has an extensive filtering system consisting of primary, secondary, and HEPA filters that trap fine particles.

9. RE-WETTABLE FIBERGLASS CLOTH

A canvas-like material impregnated with glue. The cloth is saturated with water, molded over an asbestos-containing pipe and boiler insulation, and hardens as it dries. When completely dry, it is sealed with latex paint. Because the cloth contains fiberglass, it is best to wear gloves when handling this material.

10. GARDEN SPRAYER

A garden sprayer is filled with amended water. It is used to wet asbestos-containing material or lock down fibers remaining on the substrate from which it has been removed. When performing the glove-bag technique, a garden sprayer with a 2-3 gallon capacity is sufficient. It is best to have a hose at least six feet long. If the hose is not sufficiently long, it can be replaced or extended with flexible tubing.

11. ENCAPSULANT

A substance applied to asbestos-containing materials that control the release of asbestos fibers. Encapsulant is applied over re-wettable fiberglass cloth after the cloth has dried. Latex paint is suitable for this purpose. Be sure the encapsulant chosen has a fire rating appropriate to the area where it is used.



12. SPRAY BOTTLE

A spray bottle filled with water is used to wet any suspect debris.

13. SMOKE TUBES AND ASPIRATOR BULB

Used to test glove bags for leaks and respirator fit testing.

14. RE-SEALABLE STORAGE BAGS

If repairs to pipe insulation are completed using the glove-bag technique, the patching material (i.e., re-wettable fiberglass cloth) must remain free of asbestos contamination. Placing the material inside a storage bag will prevent contamination.

15. RAGS, NYLON BRISTLE SCRUB BRUSHES (OR SCRUB PADS)

These items are used to clean the surface of a pipe or valve once asbestos-containing insulation has been removed. The scrub brush or pad is particularly useful when removing debris from threading. These items cannot be decontaminated and must be discarded as asbestos waste.

16. PATCHING COMPOUND (OR CEMENT)

It is used to fill in cracks or holes in pipe or boiler insulation.

17. STAPLE GUN AND STAPLES

They are used to secure polyethylene sheeting and glove bags temporarily.

18. BUCKET

Preferably plastic and washable. Do not use wooden buckets. It is used to catch asbestos debris and to wash equipment following use.

8.3 Pipe Insulation Repair

Pipe insulation, pipe fitting insulation, boiler insulation, or other forms of thermal system insulation are present at The Vogel School. If needed, pipe insulation can often be easily repaired using a patching compound and re-wettable fiberglass cloth. Follow all applicable regulations, including Massachusetts DLS 454 CMR 28.10(5), and proceed as follows.

1. Isolate and seal off the work area, as required in 454 CMR 28.10(4)(a)7. If the repair is to pipe insulation, a glove bag may be used instead.
2. Use duct tape to seal a piece of six-mil polyethylene sheeting to the floor in the immediate work area. If floor debris is present, the first vacuum all visible debris using a HEPA vacuum.
3. Thoroughly wet the damaged area with a light mist of amended water using a spray bottle.
4. Remove any loose debris on the damaged insulation using the HEPA vacuum.
5. Prepare patching compound according to the manufacturer's instructions. Patch the hole or crack.

6. Wet a piece of re-wettable fiberglass cloth thoroughly and place it over the damaged area. Cover all exposed insulation.
7. Properly clean and carefully peel the polyethylene sheeting off the floor, rolling the sheet so that the contaminated side is inward. Place the sheet into a six-mil polyethylene disposal bag.
8. Place all cleanable tools in a re-sealable storage bag and take the bag to a sink to clean the tools.
9. Remove the disposable suit and place it in an asbestos disposal bag. Double-bag all waste and dispose of it according to all applicable regulations.
10. Remove, clean, and store the respirator.
11. When the re-wettable fiberglass cloth has dried, paint with latex (which has an appropriate fire rating) to ensure an airtight seal.

8.4 Asbestos-Containing Ceiling Tiles

Asbestos-containing ceiling tiles or non-asbestos-containing ceiling tiles that physically enclose other ACM (e.g., spray-on fireproofing) require special treatment. Preventive measures must be taken to ensure that the underlying area is not contaminated. Any movement of these tiles can result in the release of asbestos fibers. Any work that will result in disturbance of these tiles must be done after occupied school hours and only by workers that have received proper asbestos training. Plastic sheeting must be placed on the floor to contain falling debris. See the following Section, 'ACM Above Ceilings,' for proper procedural techniques.

After ceiling tile activities are complete, the plastic sheeting must be HEPA-vacuumed and wet-wiped until all visible debris has been removed. Suits and other presumed contaminated equipment and debris must be cleaned or adequately sealed and disposed of according to all applicable regulations.

8.5 ACM Above Suspended Ceilings (e.g., Spray-on Fireproofing)

Based on the information provided to Atlas, no asbestos-containing spray-on fireproofing was located at Manchester Memorial Elementary School

8.6 Non-friable ACM

Asbestos-containing or assumed asbestos-containing materials, such as floor tile, are non-friable in their undamaged state. However, routine maintenance and renovation activities can disturb non-friable ACM and cause it to become friable. When non-friable material is removed, friable asbestos-containing dust and fibers may be released. For this reason, any activities that may break these non-friable materials must be undertaken with care, including applying control methods and preventive measures.

Control methods to minimize the possibility of creating asbestos dust include using water mist to significantly reduce the release of dust and fibers and isolate the area when disturbing non-friable ACM. Precautions must be taken so as not to allow non-friable materials to become damaged and damaged, thereby causing fibers to be released. Cutting, sanding, abrading, or drilling will promote

fiber release from non-friable ACM. As a further safety measure, personal protective clothing should be worn when disturbing these materials.

Asbestos-containing or assumed asbestos-containing floor tiles are non-friable in their undamaged state. Small-scale (less than three square feet) repair of these floor tiles may be performed, but the control methods described above must be applied. At no time should any amount of floor tiles be sanded, drilled, damaged, or otherwise damaged. Large-scale repair and/or removal of floor tiles will require plans designed by a Massachusetts-licensed designer. In this event, a simplified containment system may be constructed for the ACM locations.

Note: Refer to 'Preventive Measures in Part VII above and Appendix B of the Rule for additional information regarding appropriate work practices.

8.7 Glove-Bag Technique

The glove-bag technique is primarily used to remove or repair asbestos-insulated pipes or valves. This procedure requires two people. Follow all applicable regulations and proceed as follows.

1. MATERIALS NEEDED

- a. Glove-bag
- b. Two garden sprayers
- c. Surfactant
- d. Duct tape
- e. Disposal bags
- f. Retractable utility knife
- g. Scrub brush or scrub pad, rags
- h. Re-wettable fiberglass cloth
- i. Re-sealable storage bags
- j. Heavy-duty hand stapler and staples
- k. Polyethylene sheeting
- l. Asbestos warning signs
- m. Smoke tubes
- n. Aspirator bulb
- o. HEPA vacuum cleaner
- p. Bucket of water
- q. Disposable clothing
- r. Half-face negative pressure respirator
- s. Bridging encapsulant
- t. Spray bottle

2. TECHNIQUE

Preparation Activities

- a. All persons not immediately involved in glove-bag activities must be excluded from the work area. Sufficient physical barriers must be installed to limit access to the work area for the duration of the glove-bag operation.
- b. All employees who perform glove-bag operations must be provided with appropriate personal protective equipment, at a minimum, half-face negative pressure respirators equipped with HEPA filters and full-body disposable Tyvek suits or equivalent.
- c. All moveable objects must be removed from the work area. Any reusable items that may previously have been contaminated with asbestos must be HEPA-

vacuumed and/or wet-wiped. Non-moveable objects may be sealed with six-mil polyethylene sheeting and duct tape.

- d. Check the integrity of the pipe insulation. If the insulation is loose, damaged, or if it is believed that cutting into the insulation will worsen its condition, do not proceed. Old, deteriorated pipe insulation may become loose during the repair or removal process, generating airborne asbestos fibers.
- e. Gather all necessary tools and supplies. Use the garden sprayers to mix the surfactant, water, and encapsulant separately according to the manufacturers' guidelines.
- f. Cut two pieces of re-wettable fiberglass cloth to cap the ends of the insulation. The inner diameter should be one-half inch smaller than the diameter of the pipe itself (not the insulation). The outer diameter of the cap should be about three inches longer than the diameter of the pipe insulation. Cut a slit through one side of the cap. Cut additional pieces of cloth in strips to be used as a patch if necessary. Place pieces in the re-sealable storage bag.
- g. Seal off the work area and post asbestos warning signs, as required by DLS 454 CMR 28.10(4) & (7).
- h. Put on the negative pressure respirator and perform negative and positive pressure checks. Put on disposable clothing.
- i. Adhere six-mil polyethylene sheeting to the floor in the immediate work area with duct tape.
- j. Place two layers of duct tape around the pipe at each end where the glove bag will be attached. Determine the distance by holding the glove bag up to the pipe to determine the length. The duct tape serves two purposes: (1) it provides a good surface on which to seal the ends of the glove bag, and (2) it minimizes the possibility of releasing fibers when the tape is removed.
- k. With the retractable utility knife, cut from the top of the glove bag down the side seams to create incisions approximately twelve inches long.
- l. Run duct tape horizontally along one of the top flaps for reinforcement.
- m. Place the utility knife, rags, nylon scrub brush or scrub pad, and re-wettable fiberglass cloth into a re-sealable storage bag and place them in the tool pouch of the glove bag.
- n. Place the glove bag around the section of pipe to be worked on and staple the top with staples approximately one inch apart.
- o. Fold the stapled section over and tape it horizontally to the glove bag with short duct tape.
- p. Lift the glove bag so that the bottoms of the side incisions are flush against the bottom of the pipe insulation. There should be adequate room at the top of the glove bag to reach over the top of the pipe. If the glove bag is not lifted and taped, there may be insufficient room to cut the top of the pipe insulation. Seal all seams, holes, cracks, etc., securely with duct tape.

- q. Poke a hole at the top of the glove bag large enough to allow the end of the smoke tube to be inserted.
- r. Pre-cut a few pieces of duct tape and set them aside to seal the holes and any leaks. If a hole is not provided, tape a portion of the bag below the gloves and cut a cross-slit. Insert the HEPA vacuum hose and reseal the bag around the hose securely with duct tape.
- s. Holding the smoke tube into a wastebasket, carefully snip off both ends of the smoke tube using a pair of scissors. Eye protection should be worn to protect against stray pieces of glass. Place one end of the smoke tube into the aspirator bulb and insert the other into the glove bag.
- t. Squeeze the aspirator bulb until there is adequate smoke. Do not allow too much smoke to enter the bag.
- u. Take out the smoke tube, patch the hole and squeeze the bag. Seal any leaks with duct tape. Place the smoke tube in a bucket of water for 5-10 minutes and discard.
- v. Insert the wand of the garden sprayer into the same hole used for the smoke tube. Tape the wand securely with duct tape.

Removal and/or Repair Activities

- a. If an aluminum jacket is present on the insulation, remove it with tin snips and wire cutters. Fold the sharp edges inward to prevent cutting the waste disposal bag and place gently in the bottom of the bag. Be careful not to cut yourself on the sharp edges. The insulation should now be exposed.
- b. Wet the asbestos pipe insulation thoroughly and begin cutting with the retractable utility knife. Water should be sprayed on the cutting area and sides of the bag throughout the process to reduce dust levels in the glove bag. Use a HEPA vacuum to filter air, if necessary. As the material is cut off gently, place the insulation in the bottom of the bag. Wet the material on the bottom of the bag as well as any remaining debris on the pipe.
- c. Clean all debris off the pipe with water, scrub brush, and rags. Clean excess debris from the exposed ends remaining on the pipe.
- d. Wet the cloth end pieces made from the re-wettable fiberglass cloth and apply them to exposed ends of asbestos.
- e. Enclose all visible insulation with patch strips as necessary. Any asbestos that has been exposed as a result of the glove-bag operation must be properly repaired, encapsulated, or enclosed prior to removal of the glove-bag.



Disposal and Cleanup Activities

- a. Spray the entire inside of the bag and clean off the retractable utility knife and all cleanable equipment and tools that will be used in the future. The rags and scrub brush should be left in the bag and discarded with the rest of the waste since they cannot be adequately cleaned.
- b. With the HEPA vacuum running, carefully remove the clean surfactant sprayer and quickly replace it with an encapsulant sprayer. Use an encapsulant to lock down invisible fibers and respray the entire bag.
- c. Grab the cleaned tools with one glove and invert the glove to the outside of the bag. Tie off the glove with string or duct tape in two areas and cut the glove between the two sealed areas. Place the section of the glove containing the tools in the water bucket. Open this glove underwater and re-clean all tools in the water. Remove any gross chunks of debris and place them in a pre-labeled asbestos disposal bag. Dispose of the inverted glove in the disposal bag.
- d. Twist the glove-bag several times at the midsection (below the water sprayer hole) and seal it. This will isolate the contained debris in the bottom of the bag while the glove bag is removed from the pipe.
- e. With the HEPA vacuum running, carefully remove the encapsulant wand from the bag and tape the hole promptly and securely.
- f. With the HEPA vacuum on the low flow setting, gently collapse the glove bag. Carefully remove the vacuum nozzle and seal off the hole with duct tape.
- g. Finish twisting the bag to form an airtight constriction. Firmly secure the constriction with duct tape.
- h. Slip the disposal bag around the glove bag (still attached to the pipe). Slowly cut open the top of the glove bag and carefully fold it down into the disposal bag. Do not remove the duct tape attached to the pipe.
- i. Remove the air from the disposal bag, twist the top of the outer bag, gooseneck the tie and seal securely with duct tape. It is recommended that the disposal bag be double-bagged. Make sure the outside bag is appropriately labeled. All waste must be disposed of properly. Carefully place the bag in a sealed, labeled, leak-tight container for temporary storage until disposal. Dispose of ACM as described in 'ACM Waste' in Part VII.
- j. Finish cleaning the tools in the water bucket and carefully pour wash water into the disposal bag, rinse the bucket with a sprayer, and dispose of this water in the disposal bag. Properly clean the floor and, if necessary, polyethylene sheeting, using either HEPA vacuum or wet methods, and fold the polyethylene sheeting inward and place it in a disposal bag. Remove the disposable suits and put them in the disposal bag.
- k. Remove the respirator, clean, and store.
- l. After re-wettable fiberglass cloth has dried, paint with latex to ensure ACM is sealed airtight.

Additional glove-bag techniques and requirements are described in Appendix B of the Rule, Appendix G of OSHA 29 CFR 1926.1101, and DLS 454 CMR 28.10(5).

8.8 Mini-Enclosure Operations

1. Persons not immediately involved in asbestos-related activities are to be excluded from the work area. Use physical barriers where necessary to limit access to the work area for the duration of the work.
2. Construct airtight barriers to prevent the release of asbestos fibers. Where feasible, glove-bags are permitted in place of barriers to remove insulation on pipes and ducts.
3. Adequately wet the asbestos before disturbing it. Removed asbestos and asbestos-contaminated items will be containerized in two six-mil polyethylene bags or double-wrapped in six-mil polyethylene sheeting. If the material has sharp edges, double-wrap or bag it and then place the material in metal, fiber, or plastic drums that can be sealed.
4. Properly repair, enclose, or encapsulate friable asbestos exposed during asbestos work.
5. HEPA-vacuum and wet-wipe until there is no visible debris or dust.
6. Asbestos-containing waste must be containerized, transported, and disposed of at an approved asbestos landfill in accordance with all applicable regulations.

8.9 Asbestos-Debris Clean up Procedures

Any debris suspected of containing asbestos found on the floor, tops of ceiling tiles, or other building structures should be cleaned up immediately. Asbestos debris is extremely friable. Remember, any suspected debris equal to or greater than three linear or square feet must be cleaned up by an accredited and licensed asbestos abatement contractor according to a plan designed by an accredited and licensed project designer.

1. **WHEN ASBESTOS-CONTAINING DEBRIS IS DRY OR DAMP AND SMALL IN SIZE**
 - a. Isolate and seal the work area and post warning signs, as required by DLS 454 CMR 29.10.
 - b. Thoroughly wet mop, using a bucket of water, rags, and/or mops, all of the structures and items on which the debris has fallen. Be sure all visible debris is removed.
 - c. Vacuum the floor using a HEPA vacuum. Again, be sure all visible debris is removed.
 - d. When the area is dry, inspect for any visible asbestos debris. Sometimes wet asbestos debris becomes hidden during the cleanup. If any visible asbestos material is found, repeat the wet-mop or HEPA-vacuuming procedure until no visible asbestos debris is observed.
 - e. Dispose of the protective clothing, mop heads, and rags into a six-mil polyethylene disposable bag. Pour the water from the bucket into the disposal bag also. Twist the top of the polyethylene bag and seal it with duct tape. Double-bag the waste material with another six-mil polyethylene bag. Dispose of the bagged asbestos waste according to all applicable regulations.
 - f. Remove the respirator, clean it, and place it in a re-sealable storage bag.
 - g. Clean the bucket in a sink, if available, and thoroughly rinse the sink used.

- h. Remove critical barriers and the posted warning signs.

2. WHEN ASBESTOS DEBRIS IS TOO WET OR TOO LARGE TO BE VACUUMED

- a. Isolate and seal the work area and post warning signs as required by DLS 454 CMR 28.10.
- b. Thoroughly wet the asbestos material and the surrounding area to a distance of six inches with the garden sprayer. Use a light mist of water when wetting the area and the material, as a heavy stream of water could dislodge and disperse asbestos fibers.
- c. If the material is intact and too large to be easily handled with a shovel, pick up the wet material and place it in a six-mil polyethylene disposable bag.
- d. Scoop up smaller debris with a shovel, dustpan, or garden trowel and place it in a six-mil polyethylene bag. Use another washable item, such as another garden trowel or ice scraper, to push the material into the shovel, dustpan, or trowel. **Do NOT USE A BROOM OR BRUSH!** A broom or brush cannot be decontaminated, increasing the possibility of dispersing asbestos fibers into the air.
- e. Wet mop the entire area and items that the asbestos material contacted, using a bucket of water, rags, and mops. If the floor is carpeted, vacuum the carpet with a HEPA-filtered vacuum cleaner. If the carpet is wet, or the debris is wet, the carpet must be steam-cleaned. A HEPA-filtered vacuum cleaner cannot be used to pick up water or wet material unless the vacuum is designed to do so.
- f. Wash the items used in the cleanup, including hands, shovel, ice scraper, etc., by holding items over the six-mil disposal bag and washing them thoroughly with the garden sprayer. Pour the bucket of contaminated water into the disposal bag.
- g. Place the protective clothing, mop heads, and rags in a six-mil polyethylene disposable bag and dispose of it as contaminated waste. Twist the top of the polyethylene bag and seal it with duct tape. Double-bag the waste material with another six-mil polyethylene bag.
- h. Place the respirator in a re-sealable storage bag and take it to a sink to clean.
- i. Clean the respirator, re-clean the bucket, and thoroughly rinse the sink. Store the respirator after cleaning.
- j. Remove the barriers and posted warning signs.



8.10 Asbestos Emergency Procedures

An asbestos emergency is one in which there is an unexpected change in the condition of asbestos-containing material that results in the release of asbestos fibers. This is called an asbestos fiber release episode. Fiber release episodes have the potential to contaminate the area and expose the building occupants to asbestos fibers.

The following procedures should be followed in the event of an emergency:

1. Remove occupants from the immediate area and contact the appropriate building supervisor and the School's Designated Person.
1. Isolate the area as described in DLS 454 CMR 28.10.
3. Trained personnel who perform the work should wear the appropriate disposable clothing and respiratory protection.
4. Vents and ducts leading into or out of the emergency area should be shut down and sealed with six-mil polyethylene sheeting and duct tape according to DLS 454 CMR 28.10 (8).
5. If the asbestos debris or material is less than three linear or square feet, continue following the "Asbestos Debris Cleanup Procedures" described above. If the asbestos material is greater than or equal to three square or linear feet, **DO NOT TOUCH OR REMOVE THE ASBESTOS**. Contact a Massachusetts-licensed asbestos abatement contractor and a Massachusetts-accredited project designer.

8.11 HEPA Vacuum

The HEPA vacuum cleaner is the **ONLY** vacuum cleaner designed to clean asbestos debris. Using a household or shop vacuum will contaminate the vacuum cleaner itself and expose the user and the area to high levels of airborne asbestos dust.

It is crucial that personnel read and follow the manufacturer's directions for the proper use and maintenance of the HEPA vacuum. Some HEPA vacuum cleaners cannot pick up wet materials. Consult the manufacturer's directions.

CLEANING AND MAINTENANCE

When the inside of the vacuum cleaner needs to be accessed, whether to change a filter, a bag, or a part, the following procedures must be followed.

1. Gather the necessary equipment required by this section, including:
 - a. Half-face negative pressure respirator
 - b. Re-sealable storage bag or similar substitute
 - c. Disposable clothing
 - d. Bucket of water
 - e. Sponges or rags
 - f. Disposal bags
 - g. Duct tape
2. Take the HEPA vacuum cleaner to a location away from non-authorized personnel.
3. Put on the half-face negative pressure respirator and disposable clothing.



4. Perform the necessary maintenance or repair according to the manufacturer's instructions. Place any contaminated, used, or worn parts, bags, and filters in the six-mil polyethylene disposal bag.
5. With a damp rag or sponge, clean visible debris from the interior and exterior of the vacuum cleaner.
6. Pour the bucket of water into the disposal bag. Thoroughly rinse the bucket and pour the rinse water into the disposal bag.
7. Place the sponge or rag in the six-mil polyethylene disposal bag, disposable clothing, and other contaminated items.
8. Seal the six-mil bag securely with duct tape, making sure there are no leaks in the bag. Place the used and sealed disposal bag into a second labeled six-mil polyethylene bag. Twist the top of the bag and seal it with duct tape.
9. Remove, clean, and store the respirator.
10. Store and dispose of the asbestos waste properly.



9. RECORDKEEPING

9.1 Summary

Pursuant to requirements specified in the Rule, the LEA is responsible for maintaining adequate records for all the asbestos activities listed below in two locations: (1) the Local Education Agency office; and (2) the School Administration's offices. Refer to 454 CMR 28.13(10) for the specific items required to be recorded for each activity.

It is recommended that the sample forms included in this section be used to guide the LEA in developing its forms. If the sample forms are chosen to be used, the LEA must ensure they provide a record of all the information required by the Rule and all other applicable regulations. The guidance forms included within this section in no way supersede or replace records that may be necessary to comply with any applicable asbestos regulations. The LEA must remain informed, ensure compliance with all new and existing regulations, and update their recording methods accordingly. This is especially important as long as any ACM remains in the School and building occupants may come in contact with or otherwise handle asbestos-containing materials. It is also recommended that the LEA maintain updated copies of the blank forms it chooses to use in this Recordkeeping section.

The following asbestos activities, projects, and occurrences, and the entities involved in such projects, are to be recorded as required in 454 CMR 28.13(10). The activities to be recorded include, but are not limited to:

1. Preventive Measures
2. Response Actions
3. Contractors or Personnel Involved
4. Air Monitoring and Results
5. Personnel Training
6. Periodic Surveillance
7. Cleaning
8. Operation and Maintenance (O&M) activities only by a MADLS Licensed Contractor
9. Major Asbestos Activities
10. Fiber Release Episodes

Additional records required by OSHA (particularly if negative pressure respirators are used) include those required for but are not limited to, medical surveillance and respiratory protection.

9.2 Sample Record Forms

In order to maintain all proper records required, it is essential to establish an organized format for record keeping. The following record forms and recommended formats are provided as guidance for creating and maintaining adequate records. The information requested in the forms should only be viewed as minimum requirements as stated in the Rule. It is important to be sure that additional records be kept as necessary to fully comply with all applicable regulations.

Additional recordkeeping forms, such as medical surveillance or respiratory protection forms, may be recorded and continued as necessary. Keep a blank copy of the record forms used in the Recordkeeping section and revise as necessary. Copy several blank forms. Keep these blanks and completed forms in the Records section.



Project records may be compiled copied as necessary in the case of repeat records, such as Worker Training and grouped together, project by project, in order of occurrence.

FORM A
PERIODIC SURVEILLANCE & RE-INSPECTION SIGNOFF TABLE
SIX-YEAR PLAN
Essex Elementary

Form No. A-

Surveillance Date	Latest Date	Inspector Name	Project Date	Record Form No's
Reinspection Date:				

(Periodic Surveillance every 6 months thereafter. Re-inspection every 3 years thereafter.)

FORM B
ACTIVITY/PROJECT RECORD

Essex Elementary

Project No. _____

Form No. B-_____

Measure or Action: _____

If Periodic Surveillance or Re-inspection, Record Form No(s). _____

Start Date: _____

Completion Date: _____

ACM Type: Check Appropriate Material Type; see appropriate ACM Table or Summary)

F - Friable

NF – Non-Friable

S - Surfacing

T - Thermal

M - Miscellaneous

A - Other ACM

F/S

NF/S

A/F/S

A/NF/S

A/T

F/M

NF/M

A /F/M

A/NF/M

NF/O

ACM Description: _____

Homogeneous Area: _____

Specific Area Location(s): _____

ACM Location in Area(s): _____

HVAC Supply: Passive

Direct

Air Movement: High

Moderate

Low

Air System: Shut Down

Isolated

Not Present

Was Area Isolated? Yes

No

Proper Signs Posted?

Yes

No

Project Description and Methods: _____

Why was action taken? _____

Was Project Resultant of a Major Fiber Release Episode (> 3 feet)? Yes No

Was Project Resultant of a Minor Fiber Release Episode (< 3 feet)? Yes No

FORM B

ACTIVITY/PROJECT RECORD (CONTINUED)

Essex Elementary

Was any ACM Removed? Yes No Total Amount _____

If YES: Storage Record Form No. _____

 Disposal Record Form No. _____

If less than or equal to 3 linear or square feet then:

 School Worker Record Form No. _____

 Worker Training Record Form No(s). _____

 Contractor Record Form No(s). _____

If greater than 3 linear or square feet then:

 Design Consultant Record Form No(s). _____

 Air Monitoring Consultant Record Form No(s). _____

 Laboratory Consultant Record Form No(s). _____

 Contractor Record Form No(s). _____

Does ACM remain in location? Yes No Amount _____

If YES: Describe additional Preventive Measures: _____

* Continue with Operations and Maintenance Program.

If NO: Be sure to update asbestos location blueprint, diagrams, and/or written description and adjust periodic surveillance forms.

Date of Notification to: DLS _____ DEP _____ EPA _____

Inspection Form No(s). _____

Name of Competent or Designated Person: _____

 School Worker Record Form No. _____

Signature: _____ Date: _____

FORM C

SCHOOL WORKER RECORD

Essex Elementary

Project No. _____ Form No. C- _____ Project Date(s) _____

Designated Person _____

[illegible]

FORM D
DESIGN CONSULTANT RECORD

Essex Elementary

Form No. D-_____

Project No: _____ Project Form No.: _____

Consultant Company Name: _____

Address: _____

Telephone: _____

Specification Location: _____

Project Designer Name: _____

State of Accreditation: _____

Accreditation Number: _____

Completion Date Project Designed: _____

Project Designer Signature: _____

FORM E
ABATEMENT CONTRACTOR RECORD

Essex Elementary

Form No. E-_____

Project No. _____ Project Form No. _____

Project Date(s): _____

Designated Person: _____

Contractor Name: _____

Address: _____

Telephone: _____

Contractor's State of Accreditation: _____

Accreditation Number: _____

Worker Name	Date on Site	Date of Accreditation	Accreditation #	Day Supervisor/ Foreman

FORM F

AIR MONITORING CONSULTANT RECORD

Essex Elementary

Form No. F-_____

Project No. _____

Project Form No. _____

Designated Person: _____

Consultant Company Name: _____

Address: _____

Telephone: _____

Air Sample Collection Date: _____

Air Sample Collector's Name: _____

State of Accreditation: _____

Accreditation Number: _____

Collectors Signature: _____

Sample ID	Description	Type In, out, Blk, Pnl, Area	Location / Date & Time Collected	Results

FORM G
LABORATORY RECORD

Essex Elementary

Form No. G-_____

Project No. _____

Project Record Form No. _____

Project Date(s): _____

Designated Person: _____

Consultant Company Name: _____

Address: _____

Telephone: _____

State of Accreditation: _____

Accreditation Number: _____

Check if applicable:

_____ This laboratory is accredited by the National Institute
for Standards and Technology to conduct air sample
analysis using Transmission Electron Microscopy (TEM).

_____ This laboratory is enrolled in the EPA-sponsored
Proficiency Analytical Testing Program for Phase
Contrast Microscopy (PCM).

Sample #	Result of Analysis	Method of Analysis	Date of Analysis	Name of Analyst	Signature

FORM H
DISPOSAL RECORD

Essex Elementary

Form No. H-_____

Project No. _____

Project Record Form No. _____

Project Date(s): _____

Designated Person: _____

Site Name: _____

Address: _____

Telephone: _____

How Material is Containerized: _____

Material Quantity: _____

Date Material Transported
for Disposal: _____

Transporter Name: _____

Address: _____

Telephone: _____

FORM I
STORAGE RECORD

Essex Elementary

Form No. I- _____

Project No. _____ Project Record Form No. _____

Project Date(s): _____

Designated Person: _____

Storage Site: _____

Address: _____

Telephone: _____

Storage Area at Site: _____

Material Quantity: _____

Area Sealed? _____ How: _____

Area Secured? _____ How: _____

Date Material Transported
for Disposal _____

FORM J
WORKER TRAINING RECORD

Essex Elementary

_____ Check if Designated Person

Form No. J-_____

Individual's Name

Individual's Identification No.

Permanent Street Address

Emergency Contact Person

Permanent City, State, Zip Code

Emergency Contact Phone No.

Home Phone No.

Attending Physician

Job Title

Attending Physician's Phone No.

Course Date	Location	Course Title	Training Center Name	Hours	Cert #

THIS INDIVIDUAL IS QUALIFIED TO PERFORM THE FOLLOWING TYPE(S) OF ASBESTOS-RELATED WORK

- 1) Restricted to maintenance work which **does not** involve the disturbance of asbestos-containing building materials.

Signature

Title

Date

FORM K

GLOVE BAG REMOVAL RECORD

Essex Elementary

Form No. K-_____

Date Performed: _____

Designated Person: _____

Performed by: _____

Contractor MA
Certification No.: _____

DEP Notification No.: _____

Work Performed: _____

Worker Name: _____

Worker Massachusetts
Certification No.: _____

Waste Landfill: _____

Waste Transporter: _____



10. DOCUMENTATION

10.1 Inspection Reports



10.2 6-Month Surveillance



10.3 Additional Training



10.4 Additional Notifications

FIBER RELEASE EPISODE GUIDANCE FOR THE DESIGNATED PERSON

A **fiber release episode**, as defined by the Department of Labor Standards (DLS) at 454 CMR 28.02 and AHERA 40 CFR 763.83, means any uncontrolled or unintentional disturbance of asbestos containing material (ACM) resulting in a visible emission.

The use of best practices when responding to a fiber release episode will ensure that building occupants are protected and that the fiber release episode is promptly and effectively remediated. The minimum requirements for responding to a fiber release episode are set forth in 454 CMR 28.13(7)(e)1 and 2. The Designated Person should assess the situation, implement initial steps to contain the release, and contact their asbestos consultant to assist with a prompt and effective response action.

A **minor** fiber release involves the disturbance of three or fewer square or linear feet of ACM. A **major** fiber release involves the disturbance of greater than three square or linear feet of asbestos. The response action for any **major** fiber release episode requires a project design specifying means and methods, and must be conducted by a licensed asbestos contractor. The Local Education Agency (LEA) must notify DLS of any major fiber release within 24 hours of its occurrence, and if necessary, file written notification to the state [454 CMR 28.13(7)(e)2.d].

The initial steps that the Designated Person must take to protect building occupants include:

1. Isolating the area. Restrict access to the area by the general public. Foot traffic through the area can spread the extent of contamination to clean areas of the building, and expose building occupants to asbestos fibers.
2. Post warning signs at all access points to the area. Signs should be large and readily visible. Signs should indicate: Restricted Area. Asbestos Hazard. No entry without proper training and equipment.
3. Shut down or temporarily modify the air handling system to prevent the distribution of airborne asbestos fibers to unaffected areas of the building.
4. Notify DLS within 24 hours of the release. Submit the standardized reporting form to DLS at Zachariah.Costa@mass.gov.
5. Contact the asbestos consultant to evaluate the situation, develop a project design for a major fiber release, and assist the Designated Person in developing a remediation strategy. The strategy may include bulk sampling, air sampling and/or wipe sampling.
6. Contact the asbestos contractor to clean visible debris, and remove or repair damaged or exposed ACM as a result of a major fiber release.

Keep a record of the event in the AHERA management plan: date & location, description of episode, what interim control measures were used, the project design, contractor information and any air testing reports.



FIBER RELEASE EPISODE
NOTIFICATION FORM

Date(s) episode occurred: _____ Time of Day: _____

Was the building occupied Yes No

Name of School: _____

School Address: _____

Location where the episode occurred (include room number or clear designation of the area): _____

Amount of ACM involved: _____ Type of ACM: _____

Describe what happened to create the fiber release episode:

What Preventive measures were used to protect building occupants:

- ☐ Isolate the area-Restrict entry (poly on doors, hard barriers)
- ☐ Post warning signs
- ☐ Modify HVAC to affected area
- ☐ Air testing performed
- ☐ Asbestos Consultant contacted for evaluation
- ☐ Project Design prepared--greater than 3 linear/square feet

Name of Consultant: _____

Name of asbestos contractor _____

Date corrective action was started/will start: _____

Submit this form within 24 hours of event pursuant to 454 CMR 28.13(7)(e)2.d.
to: Zachariah.Costa@mass.gov

Note: retain a copy of this notice in your AHERA management plan.

AHERA RESPONSE ACTION RECORDS CHECKLIST

Local Education Agency (LEA): _____

LEA Designated Person: _____

Name of School: _____

Address: _____

Description of Response Action/Project Design:

- ☐ Methods used
- ☐ Location of response action
- ☐ Start date
- ☐ Completion date

Project Designer

- ☐ Name
- ☐ Certification number

Contractors and Workers Conducting Asbestos Activity

- ☐ Name
- ☐ Address
- ☐ Certification number
- ☐ Name and location of storage/disposal site (attach waste shipment records)

Clearance Documentation

- ☐ Date a visual inspection was conducted
- ☐ Name of person performing the visual inspection
- ☐ Air samples were collected at completion of response action using aggressive methods
- ☐ Name and signature of person collecting air samples
- ☐ Certification number of project monitor collecting samples
- ☐ Date of collection
- ☐ Locations where samples were collected
- ☐ Air samples were analyzed by an accredited laboratory
- ☐ Laboratory name
- ☐ Laboratory certification (NVLAP, AIHA, or Massachusetts certification number)
- ☐ Method of analysis
 - Phase Contrast Microscopy (PCM)
(Chain of custody must show 5 samples per area plus one blank for each batch submitted)
 - Transmission Electron Microscopy (TEM)
(Chain of custody must show 13 samples submitted per area for each batch-includes 3 blanks)
- ☐ Name and signature of analysts
- ☐ Results of analysis (attach lab report)

AHERA RESPONSE ACTION RECORDS CHECKLIST

Attachments:

- ☐ Project Design
- ☐ Sign in logs from Asbestos Contractor for each day of the project
- ☐ Daily logs from project monitor/consulting firm
- ☐ Chain of custody for any air samples collected
- ☐ Laboratory reports for final air clearance
- ☐ Waste shipment record

Update to Asbestos Management Plan After Completing a Response Action

- ☐ Copies of all Response Action Records in both copies of the school's Management Plan, at the LEA administrative office and at the school.
- ☐ Detailed description of the locations of any Asbestos-Containing Building Material (ACM) or suspect ACM which remains in the school once the Response Actions are undertaken.
- ☐ Revisions to the Operations and Maintenance Program if the Response Action results in the removal of asbestos that had required special cleaning, maintenance, or precautions.
- ☐ A re-evaluation of resources needed to manage in place the Asbestos-Containing Material (ACM) that remains in the building.

*This checklist is provided as a courtesy by the Massachusetts Department of Labor Standards, to assist a Local Education Agency (LEA) with ensuring that the LEA's records are complete following an AHERA Response Action. This AHERA Response Action Checklist is **not** intended to provide a detailed overview of the AHERA regulations and should not be used as a substitute for such review.*



OPERATIONS AND MAINTENANCE
SPECIAL CLEANING ACTIVITIES

DATE COMPLETED: _____ ROOMS: _____

DESCRIPTION OF METHOD(S) USED DURING THIS O&M ACTIVITY:

- ☐ HEPA vacuum
- ☐ Wet mop
- ☐ Wet Swiffer
- ☐ Wet rags
- ☐ Other _____

Horizontal Surfaces cleaned:

- ☐ Floors
- ☐ Desks/Chairs
- ☐ Tops of filing cabinets
- ☐ Tops of univents
- ☐ Windowsills
- ☐ Chalk trays
- ☐ _____
- ☐ _____

Waste Disposal:

- ☐ Cleaning rags/cloths bagged while wet
- ☐ HEPA vacuum emptied
- ☐ Waste bags goosenecked with duct tape
- ☐ Waste bags labeled

Cleaning completed by: _____

Date of ACWM collected: _____

Notes:

- Review O&M Plan for specific methods, locations and frequency of cleaning in your school.
- All special cleaning equipment shall be designated only for this cleaning.
- Dirty cleaning rags, etc. shall be picked up monthly by a Massachusetts licensed asbestos contractor. Contractor shall provide a Waste Shipment Record to the LEA.
- Maintain a copy of this form in the AHERA management plan in the O&M activities section.



10.5 Asbestos Activities