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- Radon Measurements
- Mold Investigations
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- Hazardous Materials Assessments
- Asbestos Training Services
- Mercury Vapor Assessments

## **AHERA Asbestos Management Plan**

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**Grigsby Intermediate School**  
100 Jamaica Road  
Carlisle, Ohio 45005

Prepared for:

**Carlisle Local Schools**  
724 Fairview Drive  
Carlisle, Ohio 45005  
(937) 746-0710

**Report Date: October 14, 2016**  
**Project Number: 16-068-001**

**Ohio | Indiana | Kentucky | Michigan**

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## DISCLAIMER

In drafting this Asbestos Management Plan, the Management Planner has attempted to inspect all areas of any building or structure where asbestos might be located. In conducting each inspection, the Management Planner has relied on information provided by employees and/or agents of the school district. The Management Planner, therefore, disclaims any responsibility for failing to mention in the Management Plan any area or areas which remain unknown to the Management Planner for any of the following reasons:

1. Inaccessible areas such as structural voids, pipe chase and/or tunnel accesses which are nailed shut, covered over, or located under or behind heavy equipment (i.e. shop equipment, cabinets, etc.).
2. Sub-flooring or other materials located under existing floor covering including adhesives and mastics.
3. Any thermal system insulation which may be hidden under the outer pipe wrap.
4. Exterior material, structural materials, and building materials not covered under AHERA, which may be regulated by the National Emission Standards for Hazardous Air Pollutants (NESHAP) in event of renovation or demolition.
5. Areas behind wall resulting from remodeling or renovation.
6. Entire length of tunnel or crawl space due to significant contamination, presence of water, or insufficient head space.
7. Any material above ceiling not visually inspected due to ceiling construction, such as interlocking metal squares or panels.
8. Miscellaneous materials which may be present within the school, such as boiler gaskets and fittings, interior components of duct work and/or plenum work, kitchen exhaust hoods, etc.

The above list is not intended to be inclusive, but is representative of instances where detection of possible areas of asbestos contamination is outside the control of the Management Planner and could not be detected through standard inspection practices.

**AHERA management plans apply only to certain assessable areas of school buildings, including interior areas, tunnels, crawlspaces, porticos, covered exterior hallways or walkways, and any portion of a mechanical system used to condition interior spaces. Most building materials located on exterior portions of the building and inaccessible interior areas of the building are not covered by this management plan; therefore, this Management Plan does not meet the**

**requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), which requires that a thorough asbestos inspection, including selective demolition, be conducted prior to any renovation or demolition activity. Please contact Dayton Environmental Testing, LLC (DET) prior to the start of any renovation or demolition activity so that a thorough asbestos inspection can be performed.**

Third-party use of this Management Plan shall be at their own risk. DET places no restrictions on the reproductions of this Management Plan, other than reproductions must be of the entire document to avoid the dissemination of out of context information.

DET makes no warranty or guarantee of its work product and/or professional opinion. DET does not assume liability for the use of any information, methods or materials contained herein, or for damages arising from such use. DET does not assume responsibility for any injury to individuals or property, or for any financial loss, sustained as a result of the use or application of this Management Plan.

## 1.0 INTRODUCTION

### 1.1 Background

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

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

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

AHERA requirements are very comprehensive in scope. Schools are required to appoint a designated person who is trained to oversee asbestos activities within the school district and ensure compliance with this New Rule. These rules require that only accredited personnel are used by the schools to conduct inspection, develop Management Plans, design and carry out response action, and conduct surveillance of school buildings at six-month intervals; proper training and awareness for custodians, maintenance staff, and short-term workers; annual notifications to building occupants and parents; and maintenance of records satisfied. An annual updating of the plan is also required.

This document is the Management Plan for this school building and provides the information, recommendations, and responses required under the law. It was the intent of the authors who developed this plan to present a useful and meaningful text for the readers and users of the plan. A glossary of terms and acronyms that appear in the text of this plan are, therefore, provided to the reader. An index to the Management Plan is provided, also.

For further information regarding this Management Plan, feel free to contact your Local Educational Agency (LEA) Designated Person.

## 1.2 Contact Information

Table 1.2.1 - Local Education Agency and School Information	
<b>Local Education Agency:</b> Carlisle Local Schools	<b>Telephone Number:</b> (937) 746-0710
<b>Address:</b> 724 Fairview Drive, Carlisle, Ohio 45005	
<b>Name of School:</b> Grigsby Intermediate School	<b>Telephone Number:</b> (937) 746-8969
<b>Address:</b> 100 Jamaica Road, Carlisle, Ohio 45005	<b>County:</b> Warren

Table 1.2.2 - Designated Person Information			
<b>Name of Designated Person:</b> Mr. James Branson		<b>Telephone Number:</b> (937) 608-7995	
<b>Address:</b> 724 Fairview Drive, Carlisle, Ohio 45005			
<b>Course Name:</b>	<b>Training Agency:</b>	<b>Date:</b>	<b>Hours of Training:</b>

Table 1.2.3 - Management Planner(s) Information	
<b>Name:</b> Michael B. Lee	<b>Telephone Number:</b> (937) 751-7872
<b>Firm:</b> Dayton Environmental Testing, LLC	
<b>Address:</b> 35 Compark Road, Suite 203, Dayton, Ohio 45459	
<b>State of Accreditation:</b> Ohio	<b>Accreditation Number:</b> ES34954

By signing below, I confirm that I am fully accredited by the State of Ohio to carry out the functions of management planner and that I've completed an EPA-approved training course.

Management Planner's Signature: *Michael B. Lee* Date: October 14, 2016

### 1.3 School Building List

The following table provides information for each school building covered by this AHERA Management Plan:

<b>Table 1.3.1 – School Building List</b>				
<b>Name of Building</b>	<b>Original Construction or Addition</b>	<b>Address</b>	<b>Construction Date(s)</b>	<b>ACBM* Status</b>
Grigsby Intermediate School	Original Construction	250 Jamaica Road, Carlisle, Ohio 45004	Unknown	Building has friable and non-friable ACBM and friable and non-friable suspected ACBM Assumed to be ACM

\*ACBM – Asbestos-Containing Building Material

\*\*ACM – Asbestos-Containing Material

### 1.4 Designated Person Assurances/True and Correct Statement

In accordance with 40 CFR ' 763.93(i) of the Environmental Protection Agency Asbestos-Containing Material in Schools regulation, the undersigned Local Education Agency (LEA) Designated Person (DP) hereby certifies that the following general responsibilities of the LEA under 40 CFR ' 763.84 have been or will be met:

1. Ensure that the activities of any persons who perform inspections, re-inspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763, Subpart E.
2. Ensure that all custodial and maintenance employees are properly trained as required by Part 763, Subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
3. Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic re-inspection and surveillance activities that are planned or in progress.
4. Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations for Asbestos-Containing Building Materials (ACBM) and suspected ACBM assumed to be Asbestos-Containing Materials (ACM).



5. Ensure that warning labels are posted in accordance with ' 40 CFR 763.95.
6. Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under ' 40 CFR 763.93(g).
7. Designate a person to ensure that requirements under ' 763.84 are properly implemented and ensure that the designated person receives adequate training to perform duties assigned under ' 763.84. Such training shall provide, as necessary, basic knowledge of: health effects of asbestos; detection, identification, and assessment of ACM; options for controlling ACBM; asbestos management programs; relevant Federal and State regulations concerning asbestos, including those in Part 763, Subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Transportation and the U.S. Environmental Protection Agency.
8. Consider whether any conflict of interest may arise from the inter-relationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763, Subpart E.

Name of Designated Person:

Designated Person's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **1.5 Evaluation of Resources**

The following resources are necessary for the school district to comply with the requirements under AHERA:

- A person or persons to conduct periodic surveillance activities
- Two-hour awareness training of all maintenance and custodial employees
- Additional 14-hour training and medical clearances for employees that will be involved in the implementation of operations and maintenance activities, and will respond to minor fiber release episodes
- Accredited asbestos inspector/management planner
- Accredited asbestos project designer, if removal, encapsulation, or enclosure of ACBM is necessary
- Accredited abatement contractor and abatement workers if removal, repair, encapsulation, enclosure, and operations and maintenance activities (not conducted by school personnel) of ACBM is necessary
- Operations & Maintenance Budget

- Personal Protection Budget
- Costs associated with future re-inspections

## **2.0 INITIAL INSPECTION, RE-INSPECTIONS, AND PERIODIC SURVEILLANCES**

### **2.1 Initial Inspection**

DET could not determine the date of the initial inspection. The previous re-inspection was dated August 26, 2013.

### **2.2 Re-Inspections**

AHERA requires that at least once every three years after a management plan has been in effect, a re-inspection must be made by an accredited inspector of all friable and non-friable known or assumed ACBM in each school building that the LEA leases, owns, or otherwise uses as a school building (40 CFR ' 763.85(b)(1)-(2)).

- **The next 3-year re-inspection must be completed no later than October 2019**

### **2.3 Periodic Surveillances**

At least once every six (6) months after a management plan is in place, the LEA shall conduct periodic surveillance in the school that contains ACBM or assumed to contain ACM. The person conducting periodic surveillance shall visually inspect all areas in the school that have been identified in the management plan as having ACBM, record the date of surveillance, his/her name, and any changes in the condition of the materials and submit the record to the LEA Designated Person for inclusion in the management plan. The periodic surveillances will be conducted in accordance with the following schedule:

- **1<sup>st</sup> periodic surveillance due: April 2017**
- **2<sup>nd</sup> periodic surveillance due: October 2018**
- **3<sup>rd</sup> periodic surveillance due: April 2018**
- **4<sup>th</sup> periodic surveillance due: October 2019**
- **5<sup>th</sup> periodic surveillance due: April 2019**

### 3.0 RESPONSE ACTIONS

#### 3.1 Selecting a Response Action or Other Action

AHERA requires that an accredited management planner recommend an appropriate response action for all areas of thermal system insulation (TSI) and friable ACBM remaining in the school. The final decision, on which action should be taken, however, rests with the LEA.

AHERA identifies five possible response actions for managing asbestos in schools, as listed below. Activities which create a high probability that ACBM will be damaged or weakened to such an extent that it would be rendered friable are also considered response actions. Small scale, short duration activities are not considered response actions.

- **Operations and Maintenance (O&M) Program** - This is a program of work practices designed to maintain friable ACBM in good condition and ensure cleanup of asbestos fibers previously released. An effective O&M program can prevent further release by minimizing and controlling friable ACBM disturbance or damage. An O&M program is not appropriate as an initial response action for any damaged or significantly damaged material.
- **Repair** - This involves returning damaged ACBM to an undamaged condition or to an intact state by replacing limited sections or patching damaged areas.
- **Encapsulation** - This involves the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers. The encapsulant either creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant). Both types of encapsulants are applied to the material surface using airless spray equipment at low pressure to reduce release of fibers during the application.
- **Enclosure** - This involves creating an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air. The barrier is typically attached physically or sprayed on. For example, materials such as PVC or corrugated metal may be fastened around insulated piping, or a barrier may be constructed around asbestos fireproofing on structural members by spraying material that cures into a hard shell.
- **Removal** - This involves the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

Under AHERA, the response action to be taken must be "sufficient to protect human health and the environment." Once it is determined which response actions meet these criteria, the LEA may choose the action that is the "least burdensome." ACBM is reassessed and recommended response actions reviewed every three years as part of the re-inspection process.

The LEA is required to implement an O&M program whenever any friable ACBM is present or assumed to be present in a building.

Response actions other than small-scale, short-duration repairs must be designed and conducted by an accredited Asbestos Hazard Abatement Project Designer.

To determine if a response action is required and, if so, what response actions are available to the School District to address damaged ACBM or the prevention of damage to friable ACBM in the school buildings, the following seven Physical Assessment Categories will be used:

Category	Description	Response Action Options
1	Damaged or significantly damaged thermal system insulation	<ul style="list-style-type: none"> <li>• Repair the damaged area</li> <li>• Remove the damaged material if it is not feasible, due to technological factors, to repair the damage</li> <li>• Maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition</li> </ul>
2	Damaged friable surfacing ACM	<ul style="list-style-type: none"> <li>• Encapsulate</li> <li>• Enclose</li> <li>• Remove</li> <li>• Repair</li> </ul>
3	Significantly damaged friable surfacing ACM	<ul style="list-style-type: none"> <li>• Immediately isolate the functional space and restrict access, unless isolation is not necessary to protect human health and the environment</li> <li>• Remove the material in the functional space or, depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.</li> </ul>
4	Damaged or significantly damaged friable miscellaneous ACM	<ul style="list-style-type: none"> <li>• Immediately isolate the functional space and restrict access, unless isolation is not necessary to protect human health and the environment</li> <li>• Remove the material in the functional space or, depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.</li> </ul>

Category	Description	Response Action Options
5	ACBM with a potential for damage	<ul style="list-style-type: none"> <li>At least implement an Operations and Maintenance (O&amp;M) program</li> </ul>
6	ACBM with a potential for significant damage	<ul style="list-style-type: none"> <li>Implement an O&amp;M program</li> <li>Institute preventative measures appropriate to eliminate the reasonable likelihood that the ACBM or its covering will become significantly damaged, deteriorated, or delaminated</li> <li>Remove or enclose the material as soon as possible if appropriate preventative measures cannot be effectively implemented</li> <li>Consider isolating the area and restricting access to the ACBM if necessary to avoid an imminent and substantial endangerment to human health or the environment</li> </ul>
7	Any remaining friable ACBM or friable suspected ACBM	<ul style="list-style-type: none"> <li>Should at least implement an Operations and Maintenance (O&amp;M) program</li> </ul>

### 3.2 Completion of Response Actions

Upon the conclusion of any response action, an accredited person designated by the school district will perform final clearance activities within each functional space where the response action was completed, to determine whether the action has been properly completed. Final clearance activities include both a visual inspection and final air sampling and analysis.

- Visual Inspection** - A visual inspection involves visually examining the asbestos removal area for evidence that the abatement has been successfully completed, including thorough clean-up. The inspection should be conducted as rigorously as possible, with all spaces and surfaces where the abatement was conducted being extensively examined for residual ACBM debris.

The presence of any visible residue on surfaces within the abatement area indicates a need for additional cleaning of the surfaces. Only after visual inspection clearance has been completed may final air sampling be done. The results of the visual inspection shall be documented and signed by the person conducting the visual inspection. If an area passes visual inspection but then fails to meet air sampling and analysis requirements after that inspection, the site must be re-cleaned and an additional visual inspection be conducted to detect any material that may have been uncovered or released during re-cleaning.

- Final Air Sampling and Analysis** - Section 763.90 of the AHERA Rule requires that the LEA accomplish final air sampling and analysis of all removal, encapsulation, or enclosure projects by using the transmission electron

microscopy (TEM) method, unless the project involves no more than 160 square feet or 260 linear feet of ACBM, in which case phase contrast microscopy (PCM) may be used. Note that no final air clearance is required for small-scale, short-duration O&M projects.

Sampling operations for airborne asbestos following an asbestos abatement action must be performed by qualified individuals completely independent of the abatement contractor to avoid possible conflict of interest. EPA recommends that the LEA obtain professional assistance to perform the sampling and analysis.

Response Action documentation is kept in an abatement project manual that is specific to the particular abatement activity. The following list is of the response actions conducted in the building since the inception of AHERA. Small scale short duration activities are also included on this list for completeness, even though they are not considered response actions.

## **4.0 OPERATIONS AND MAINTENANCE**

### **4.1 Plan for Operations and Maintenance (O&M)**

All maintenance and custodial staff who work in buildings that contain ACM or assumed ACBM have received the required two-hour Awareness Training. In addition, maintenance and custodial staff whose duties may cause them to come into contact with asbestos-containing materials have received an additional Fourteen Hours Training, as specified in Paragraph 763.92 (a) (2).

The School District has made its decision that its employees will only be involved with Small-scale, Short Duration Projects.

The School District ensures that the following procedures will be followed for any O&M Activities that disturb friable ACBM:

- 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;
- Post signs to prevent entry by unauthorized persons;
- Shut off or temporarily modify the air-handling system and restrict other sources of air movement;
- Use work practices or other controls such as wet methods, protective clothing, HEPA vacuums, mini-enclosures and glove bags as necessary to inhibit the spread of any released fibers;
- Clean all fixtures or other components in the immediate work area;
- Place the asbestos debris and other cleaning material in a sealed, leak-tight container.

The School District intends to comply with the provisions of Appendix A to Subpart E of 40 CFR Part 763 when performing small-scale, short duration O&M activities. The School District also intends to comply with all applicable EPA, OSHA, and Industrial Commission of Ohio worker protection regulations. The School District is responsible for implementing a medical surveillance program and respiratory protection program. Additionally, the School District shall provide the proper personal protective equipment to each staff member performing small-scale, short duration O&M activities.

### **4.2 Cleaning Procedures**

Initial cleaning is required at least once of all areas in a school building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable assumed ACBM are present following inspection of the building and prior to the initiation of any response action, other than O&M activities or repair. Initial cleaning of these



areas will be performed by maintenance and custodial staff who have received the Two-Hour Awareness Training.

The following work practices are established for these cleaning activities:

- Avoid bumping pipes, walls, and other surfaces with brooms, mops, vacuum cleaners, and other cleaning equipment.
- Do not use dry brooms, mops, dust cloths or standard vacuum cleaners, which will simply re-suspend fibers.
- All dusting and mopping shall be conducted using wet cleaning techniques (mops or cloths dampened with water or a dust suppressant) or with vacuum cleaners equipped with HEPA filters:
- All curtains, books, upholstered furniture, carpets, and other irregular surfaces shall be cleaned with a HEPA-vacuum cleaner.
- All non-carpeted floors shall be wet-mopped, and all other horizontal surfaces such as the tops of light fixtures and file cabinets shall be wiped with damp cloths or HEPA-vacuumed.
- Spray (mist) bottles of water or a dust-suppressant shall be used to keep the mops and cloths damp.
- Cleaning materials (mop heads, cloths, and HEPA filters) shall be washed after each cleaning; when changed these materials must be discarded as asbestos waste and placed in 6-mil plastic bags, the bags sealed and labeled: "DANGER – CONTAINS ASBESTOS FIBERS – AVOID CREATING DUST – CANCER AND LUNG DISEASE HAZARD," and the bags deposited in a landfill approved by Ohio EPA to accept asbestos waste. Small quantities of waste could also be stored in labeled drums or other durable containers, in secured areas on-site, and a disposal company could then transport the waste to an appropriate landfill periodically.
- HEPA filters should be removed from vacuum cleaners with great care. Consult manufacturer's instructions for filter removal. Workers should wear at least air-purifying respirators and shall mist the filters with water as they are removed.
- Ladders, mops, buckets, vacuum cleaners, and all cleaning equipment shall be washed or wiped with damp cloths when the cleaning is finished.
- Whenever changing filters in the HVAC system of building containing friable ACM, the filters must be misted with water or amended water as they are removed, placed in plastic bags, sealed, and discarded as asbestos waste. Worker should wear at least an air-purifying respirator.

### **4.3 Housekeeping Preventative Measures**

- **Vacuuming** - Where vacuuming methods are selected, HEPA filtered vacuuming equipment must be used and emptied in a manner that minimizes the reentry of asbestos into the workplace.
- **Waste Disposal** - Asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing consigned for disposal shall be collected and disposed of in sealed, labeled, and impermeable bags or other closed, labeled, impermeable containers.
- **Care of Asbestos-Containing Flooring Material** - All vinyl and asphalt flooring material shall be maintained in accordance with the following work practices unless it is demonstrated that the material does not contain asbestos:
  - Sanding of flooring material is prohibited.
  - Stripping of finishes shall be conducted using low-abrasion pads at a speed lower than 300 rpm and wet methods.
  - Burnishing or dry buffing may be used only on flooring which has sufficient finish so that the pad cannot contact the flooring material.
- **Dust and debris in an area containing accessible thermal system insulation or surfacing material, or visibly deteriorated ACM:**
  - Shall not be dusted, swept dry or vacuumed without using a HEPA filter.
  - Shall be promptly cleaned up and disposed of in leak-tight containers.

### **4.4 Other Preventative Measures**

Employees shall be informed of the following activities that are prohibited when asbestos-containing materials are involved:

- Not to drill holes in asbestos-containing materials.
- Not to hang plants or pictures on structures covered with asbestos-containing materials.
- Not to sand asbestos-containing floor tile.
- Not to damage asbestos-containing materials such as pipe wrap while moving furniture or other objects.
- Not to install curtains, drapes, or dividers in such a way that they damage asbestos-containing materials.
- Not to dust floors, ceilings, moldings or other surfaces in asbestos-contaminated environments with a dry brush or sweep with a dry broom.
- Not to use an ordinary vacuum cleaner to clean up asbestos-containing debris.

- Not to remove ceiling-tiles below asbestos-containing materials without wearing the proper respiratory protection, clearing the area of other people and observing asbestos removal waste disposal procedures.
- Not to remove ventilation system filters dry.
- Not to shake ventilation system filters.

#### 4.5 Maintenance Activities

- Small-scale, Short Duration activities (projects involving 3 square feet or less or 3 linear feet or less), as defined in Appendix B to Subpart E of 40 CFR Part 763<sup>5</sup>, will be performed only by those maintenance and custodial staff who have received the sixteen hours of training. Work practice procedure described above will be followed as indicated before; these projects will be limited in scope, dealing primarily with minor repairs of materials, which do not require removal.
- Large projects (projects requiring more than three square feet or three linear feet) will be conducted by outside contractors (utilizing fully trained and accredited workers, project designers, and contractor supervisors). Air clearance and site inspection by the LEA will be made following these projects for the purpose of determining if the action has been properly completed.

#### 4.6 Fiber Release Episodes

Custodial and maintenance workers must report to the LEA Designated Person the presence of asbestos debris on the floor, water or physical damage to the ACM, or any other evidence of possible fiber release. Note that fiber release episodes can also occur during maintenance or renovation project.

Each fiber release episode must be documented and included in the updated management plan.

- **Minor Episodes (involving the falling or dislodging of 3 square or linear feet or less of friable ACM)** -Only maintenance and custodial staff who have received the sixteen hours of training will be utilized using standard wet cleaning and HEPA vacuuming techniques described above; these personnel will follow the Small-scale, Short duration guidelines outlined in Appendix B to Subpart E of 40 CFR Part 763.
- **Major Episodes (involving the falling or dislodging of more than 3 square or linear feet of friable ACM)** - If more than 3 square feet of surfacing ACM or more than 3 linear feet of thermal system ACM delaminates or dislodges from its substrate, the episode must be considered major. A large breach in containment barrier for a maintenance or abatement project should also be considered a major episode. Should major fiber release episodes occur, the following procedures shall be immediately implemented:

- Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action
- Shut off, or temporarily modify, the air-handling system to prevent the distribution of fibers to other areas in the building
- The response action for any major fiber release episode must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions

Only accredited project designers and contractors will be utilized in the event of a major fiber release episode. Air clearance and site inspection by the LEA will be made for the purpose of determining if the action has been properly completed.

#### **4.7 Transport and Disposal of Asbestos Waste**

The School District intends to comply with the provisions of Appendix D to Subpart E of 40 CFR Part 763 regarding the transport and disposal of asbestos waste. A chain-of-custody recordkeeping procedure will be utilized to assure proper containerization, transport, and disposal of asbestos waste.

#### **4.8 Recordkeeping**

Section 763.84 of CFR Part 763 required that all schools ensure that (1) inspections, re-inspections, periodic surveillance, and response action activities are properly carried out; (2) custodial and maintenance employees are properly trained; (3) workers and building occupants are informed each year about inspections, response actions, and post-response action activities, including re-inspection and periodic surveillance; (4) short-term workers (e.g. telephone repair workers, and pest control operators) who may come into contact with asbestos in a school are provided information about locations of asbestos containing building material; (5) warning labels are posted as required; and (6) management plans are available for review, and that parent, teacher, and employee organizations are notified of the availability of the plan. Extensive records are required to be kept to support compliance with these regulations.

Under 40 CFR ' 763.94(h), for each major and minor fiber release episode occurring as a result of operations and maintenance activities under 40 CFR ' 763.91(f), the asbestos management plan must include a record of the following information: date and location of the episode, method of repair, preventive measure or response action taken, and if ACM is removed, the name and location of the storage and disposal site of the ACM.

The Preventative Measures and Response Action Activities form will be used to document the name, signature and accreditation number of the persons performing major asbestos activities, copies of state accreditations, start and completion date, location where activity occurred, description of preventative measure used, and name and location of disposal site, if ACM was removed.

Following a response to a fiber release episode, a Preventative Measures and Response Action Activities Report form will be completed and placed under Appendix K of this Management Plan.

## 5.0 PLAN TO INFORM - NOTIFICATIONS

### 5.1 Annual Notification

AHERA requires, at least once each school year, the LEA must notify in writing parent, teacher, and employee organizations of the availability of the AMP and must include in the AMP, a description of the steps taken to notify such organizations, and a dated copy of the notification. In the absence of any such organizations for parents, teachers, or employees, the LEA must provide written notice to that relevant group of the availability of the AMP and must include in the AMP a description of the steps taken to notify such groups, and a dated copy of the notification. Copies of these letters shall be kept in Appendix D.

### 5.2 Occupants

AHERA requires the LEA to take steps to inform workers and building occupants, or their legal guardians, about inspections, re-inspections, response actions, and post-response action activities, including periodic re-inspection and surveillance activities that are planned or in progress. Under 40 CFR ' 763.84(c), the LEA must inform them about these activities at least once each school year.

As applicable with AHERA, OSHA, and other regulations, workers and building occupants will also be notified about planned or ongoing inspections, periodic surveillances, response actions and post-response action activities in the respective school buildings.

Warning labels are to be attached immediately adjacent to any friable and non-friable ACBM and assumed ACBM located in routine maintenance areas of each school building.

The labels shall be prominently displayed in a readily visible location and remain posted until the ACBM is abated. The label will be in print of large size or bright color and read:

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

### 5.3 Short-Term Workers and Contractors

Contactors entering the school property and conducting work on the interior of the buildings will be required to review the Management Plan prior to starting work at the site to assure that ACBM will not be damaged during work activities. The contractor will be required to sign a "Certificate of Worker's Acknowledgement" form located in Appendix D acknowledging they have reviewed the Management Plan and that their activities will not disturb ACBM in any of the buildings. Completed Certificate of

Worker's Acknowledgement forms will be placed in Appendix J of this Management Plan. If ACBM is required to be disturbed to fulfill the contractor scope of work, the designed person should be notified prior to the start of work.

## 6.0 DEFINITIONS

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

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

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

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

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

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

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

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

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

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

**Damaged friable surfacing ACM** means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is



inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

**Damaged or significantly damaged thermal system insulation ACM** means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Potential significant damage** means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable

likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage. (3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

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

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

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

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

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

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

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

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

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

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

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

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

**Transmission electron microscopy (TEM)** refers to the method outlined in 40 CFR ' 763, Appendix A to Subpart E, for the identification of asbestos in air samples.\*  
**Vibration** means the periodic motion of friable ACBM which may result in the release of asbestos fibers.

## 7.0 ACRONYMS

**ACM** -Asbestos-containing material

**ACBM** -Asbestos-containing building material

**AHERA** -Asbestos Hazard Emergency Response Act

**DOT** -Department of Transportation

**DP** -AHERA Designated Person

**EPA** -U.S. Environmental Protection Agency

**HEPA** -High-efficiency particulate air

**LEA** -Local Education Agency

**NIOSH** -National Institute for Occupational Safety and Health

**NIST** -National Institute of Standards and Technology

**NVLAP** -National Voluntary Laboratory Accreditation Program

**O&M** -Operations and maintenance

**OSHA** -Occupational Safety and Health Administration

**PCM** -Phase contrast microscopy

**PLM** -Polarized light microscopy

**TEM** -Transmission electron microscopy

**TSI** -Thermal system insulation

**BUILDING FLOOR PLANS**



The use of this building floor plan is intended to determine the locations of functional spaces as described on the AHERA Re-Inspection Assessment and Recommendations Summary included in Attachment B of the Inspection/Management Plan Report. This summary includes: the type, description, location, estimated quantity, friability, current condition, potential for damage, and recommend response actions, if any, for each friable and non-friable known or assumed ACBM within the building.

<b>Building Floor Plans</b> <b>Grigsby Intermediate School</b> 100 Jamaica Road, Carlisle, Ohio 45005		
Description: 1st Floor		Drawn By: MBL
Project #: 16-068-001	Date: October 14, 2016	<b>PAGE</b> <b>1</b> <b>OF</b> <b>1</b>
	35 Compark Road, Suite 203 Dayton, Ohio 45459 (937) 751-7872 <a href="http://www.daytontesting.com">www.daytontesting.com</a>	

**AHERA INSPECTION ASSESSMENT AND  
RECOMMENDATIONS SUMMARY**



Type: M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing Condition: ND = No Damage, D = Damage, SD = Significant Damage Potential for Damage: NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment				Response Action						
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	300	765	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	300	765	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
7	Main Building	Original Construction	Laboratory Counters/Sinks	Black/Gray	M	300	60	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
9	Main Building	Original Construction	Drywall/Joint Compound	White	M	300	40	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	301	770	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	301	770	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
7	Main Building	Original Construction	Laboratory Counters/Sinks	Black/Gray	M	301	60	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
9	Main Building	Original Construction	Drywall/Joint Compound	White	M	301	40	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	302	765	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	302	765	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
7	Main Building	Original Construction	Laboratory Counters/Sinks	Black/Gray	M	302	60	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	303	755	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	303	755	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
7	Main Building	Original Construction	Laboratory Counters/Sinks	Black/Gray	M	303	20	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	304	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	304	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	306	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						

\*NA = Not Applicable

**Type:** M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing **Condition:** ND = No Damage, D = Damage, SD = Significant Damage **Potential for Damage:** NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment				Response Action						
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	306	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	307	765	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	307	765	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	308	765	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	308	765	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	309	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	309	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	309	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	310	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	310	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	311	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	311	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	311	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	312	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	312	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	313	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	313	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						

\*NA = Not Applicable

Type: M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing Condition: ND = No Damage, D = Damage, SD = Significant Damage Potential for Damage: NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment					Response Action					
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	313	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	314	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	314	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	315	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	315	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	315	755	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	315	755	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	316	745	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	316	745	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	317	210	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	317	210	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	317	210	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	318	940	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	318	940	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
6	Main Building	Original Construction	Sink Undercoating	Pink	M	318	4	Sinks	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	319	765	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	319	765	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						

\*NA = Not Applicable

**Type:** M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing **Condition:** ND = No Damage, D = Damage, SD = Significant Damage **Potential for Damage:** NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment					Response Action					
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	320	1,000	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	320	1,000	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	321	545	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	321	545	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	321	815	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	321	300	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
9	Main Building	Original Construction	Drywall/Joint Compound	White	M	321	600	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
21	Main Building	Original Construction	Cove Base Mastic	Various Colors	M	321	150	Linear Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	322	595	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
21	Main Building	Original Construction	Cove Base Mastic	Various Colors	M	322	100	Linear Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	323	455	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	323	1,000	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	331	310	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	331	310	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
7	Main Building	Original Construction	Laboratory Counters/Sinks	Black/Gray	M	331	20	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	332	310	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	332	310	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						

\*NA = Not Applicable

Type: M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing Condition: ND = No Damage, D = Damage, SD = Significant Damage Potential for Damage: NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment				Response Action						
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
7	Main Building	Original Construction	Laboratory Counters/Sinks	Black/Gray	M	332	20	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
18	Main Building	Original Construction	Boiler Units	Assumed Internal Components	M	Boiler Room	2	Boiler Units	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
19	Main Building	Original Construction	Boiler Breeching Insulation	Gray	T	Boiler Room	35	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
20	Main Building	Original Construction	Tank Insulation	Gray	T	Boiler Room	135	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Boy's RR (Near 305)	175	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Boy's RR (Near Copy)	200	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Boy's RR (Near Lounge)	55	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	Comp. Lab	440	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	Comp. Lab	440	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	Comp. Lab	440	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
12	Main Building	Original Construction	Pipe Insulation	Various Forms and Types (e.g. water lines, steam lines, roof drains, etc.)	T	Concealed Areas of Building	500	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	Copy	415	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	Copy	340	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Copy RR	75	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	Counselor	145	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	Counselor	145	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Counselor	145	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	Custodian	135	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						

\*NA = Not Applicable

Type: M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing Condition: ND = No Damage, D = Damage, SD = Significant Damage Potential for Damage: NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment				Response Action						
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Custodian	135	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Girl's RR (Near 305)	175	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Girl's RR (Near Copy)	200	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
8	Main Building	Original Construction	2' X 4' Cement Ceiling Tiles	Gray	M	Girl's RR (Near Lounge)	55	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	Gymnasium	4,000	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Hallways	7,700	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
21	Main Building	Original Construction	Cove Base Mastic	Various Colors	M	Hallways	60	Linear Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	Kitchen	130	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	Kitchen	150	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Kitchen	1,925	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	Kitchen	2,040	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	Library	1,200	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	Library	1,200	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Library	1,200	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
3	Main Building	Original Construction	2' X 2' Acoustical Ceiling Tile	White and Gray, Various Patterns	M	Lounge	310	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	Lounge	310	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
1	Main Building	Original Construction	9" X 9" Floor Tile and Associated Mastic	Various Colors	M	Main Office	600	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						

\*NA = Not Applicable

Type: M = Miscellaneous, T = Thermal Systems Insulation, S = Surfacing Condition: ND = No Damage, D = Damage, SD = Significant Damage Potential for Damage: NPD = No Potential for Damage, PD = Potential for Damage, PSD = Potential for Significant Damage

Homogenous Area (HA)									ACM Assessment				Response Action						
HA#	Building	Addition	Material	Color/Description	Type	Functional Space	Quantity	Unit	Asbestos Determination	Friability	Current Condition	Potential for Damage	Category	Repair	Remove	Encapsulate	Enclose	Isolate Area	O&M
2	Main Building	Original Construction	Carpet Mastic	Various Colors	M	Main Office	600	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Main Office	600	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
5	Main Building	Original Construction	12" X 12" Floor Tile and Associated Mastic	Various Colors	M	Stage	445	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
15	Main Building	Original Construction	Stage Curtain	Red	M	Stage	50	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
16	Main Building	Original Construction	Stage Curtain	Tan	M	Stage	300	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
17	Main Building	Original Construction	Flexible HVAC Duct Connectors	Various Colors	M	Stage	20	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
4	Main Building	Original Construction	2' X 4' Acoustical Ceiling Tile	Various Colors and Patterns	M	Stor.	32	Square Feet	Non-ACBM	FRIABLE	*NA	*NA	*NA						
10	Main Building	Original Construction	Door and Window Caulking	Various Colors	M	Throughout Building	12,000	Linear Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
11	Main Building	Original Construction	Window Glazing Compound	Gray	M	Throughout Building	6,500	Linear Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
12	Main Building	Original Construction	Pipe Insulation	Various Forms and Types (e.g. water lines, steam lines, roof drains, etc.)	T	Throughout Building	400	Linear Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓
13	Main Building	Original Construction	Fire Doors and Insulated Doors	Various Colors	M	Throughout Building	85	Doors	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
14	Main Building	Original Construction	Chalkboard, Bulletin Board, and Dry-Erase Board Mastic	Various Colors	M	Throughout Building	4,000	Square Feet	Assumed ACBM	NON-FRIABLE	*NA	*NA	*NA						
12	Main Building	Original Construction	Pipe Insulation	Various Forms and Types (e.g. water lines, steam lines, roof drains, etc.)	T	Throughout Building (Above Ceilings, Inside Walls, Tunnels, Pipe Chases, etc.)	2,000	Square Feet	Assumed ACBM	FRIABLE	ND	PD	5						✓

**MANAGEMENT PLANNER'S GENERAL  
RECOMMENDATIONS**



## MANAGEMENT PLANNER'S GENERAL RECOMMENDATIONS

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The following represents the recommendations for the asbestos within the Grigsby Intermediate School Building:

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All ACBM in the school shall be managed in place in accordance with the original AHERA Operations and Maintenance (O & M) Program. The condition of such materials will be monitored until all the ACBM have been removed from the building. A successful O & M Program includes the following elements:

- A. Cleaning** - All areas of the school where friable ACBM or friable suspected ACBM assumed to be ACM are present shall be cleaned at least once after the completion of the initial inspection. Additional cleaning may be necessary if the Management Planner makes a written recommendation indicating methods and frequency of such cleaning.
  
- B. O & M Activities** - The LEA shall ensure that the procedures described below are followed to protect building occupants from any O & M activities that may disturb known or assumed ACM:
  - 1. Restrict entry into the area either by physically isolating or by scheduling.
  - 2. Post warning signs to prevent entry by unauthorized persons.
  - 3. Shut off or temporarily modify the air-handling system.
  - 4. Shut off or temporarily modify the air-handling system.
  - 5. Use proper work practices and engineering controls such as wet methods, protective clothing, HEPA-vacuums, mini enclosures/glove bags etc., to inhibit spread of fibers.
  - 6. Place all asbestos debris and other contaminated materials in a sealed, leak-tight container for disposal.
  
- C. Minor Fiber Release Episodes** - The LEA shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., disturbance of 3 linear/square feet or less of friable ACM):
  - 1. Saturate the debris using wet method.
  - 2. Place the debris in a sealed leak-tight container and clean the area.
  - 3. Repair the area of damaged ACBM with materials such as asbestos-free spackling, plaster or insulation or seal with an encapsulant.
  
- D. Major Fiber Release Episode** - The LEA shall ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., disturbance of more than 3 linear/square feet of friable ACBM):
  - 1. Restrict entry into the area and post warning signs.

2. Shut off or temporarily modify the air handling system to prevent spread of fibers to other areas of the school.
3. The response for any major fiber release episode must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

**E. Periodic Surveillance** -At least once every six (6) months after a management plan is in place, the LEA shall conduct periodic surveillance in the school that contains ACBM or assumed to contain ACM. The person conducting periodic surveillance shall visually inspect all areas in the school that have been identified in the management plan as having ACBM, record the date of surveillance, his/her name, and any changes in the condition of the materials and submit the record to the LEA Designated Person for inclusion in the management plan.

**F. Renovation and Demolition Activities** -The EPA's National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulation requires that a facility must conduct a thorough asbestos inspection to determine the presence, condition, and quantity of ACM prior to any renovation or demolition activity. Thorough inspections require identifying asbestos in both interior and exterior parts of the building, including inaccessible areas (requiring selective demolition inspection techniques). **AHERA management plans do not satisfy the requirements of NESHAP for a thorough asbestos inspection. Please contact Dayton Environmental Testing, LLC prior to any renovation of demolition activity so that a thorough asbestos inspection can be performed.**

**G. Preventive Measures for Typical ACM-** The LEA shall institute appropriate preventive measures to eliminate the reasonable likelihood that the all ACBM within the building will become damaged, deteriorated or delaminated. Below are typical recommended preventive measures. If your building has a type of ACBM not covered below, please contact Tackett Environmental Services, Inc. for further guidance with preventive measures:

1. **SURFACING MATERIALS** - "Surfacing Materials" means materials in a school building that are sprayed-on, troweled-on, or otherwise applied to surfaces. These include sprayed-on fireproofing materials on structural members, acoustical plaster, hard plaster on walls and ceilings or other materials applied to surfaces for acoustical, fireproofing, or other purposes.

Surfacing Materials are generally considered friable and can release asbestos fibers if damaged by impact, air erosion, vibration, and/or water intrusion. The following procedures, when properly implemented, will reduce the potential for fiber release:

- Maintain the materials in intact state and undamaged condition. Reduce the likelihood of fiber release by ensuring that the surfacing materials are not damaged by impact, scrapping, dusting, use of leaf blowers, etc.
- Prevent water leakage. If the material is significantly damaged, removal is the best option. For minor damage, enclosure is a temporary solution. Encapsulation of damaged sprayed-on fireproofing material is not recommended.
- Train the custodial people who are responsible for care and maintenance of surfacing materials.

**2. THERMAL SYSTEM INSULATION (TSI) - Thermal System Insulation (TSI)"** means insulating materials applied to pipes, pipe fittings, boilers, breechings, tanks, ducts, or other components to prevent process heat loss or gain, water condensation, or for other purposes.

TSI is generally considered friable ACM. This means it can be easily damaged, increasing the potential for fiber release. The following procedures, when properly implemented, will reduce the potential for fiber release:

- Identify the locations and label TSI. Warning signs should be posted outside locations of TSI.
- Reduce the likelihood of fiber release by ensuring that the insulation is not damaged or otherwise disturbed. Avoid storing/stacking on/near TSI to reduce contact damage.
- Maintain the TSI in intact state and undamaged condition. Repair damaged areas as soon as possible to prevent further deterioration. If repair is not feasible due to extensive damage/deterioration, material will need to be properly removed..
- Train the custodial people who are responsible for care and maintenance of TSI.

**3. MISCELLANEOUS MATERIALS - "Miscellaneous Materials"** are all other asbestos-containing materials in a school building that do not fall under the categories of Surfacing Materials or TSI. These include floor tiles, floor tile and carpet mastic, gypsum wallboard and joint compound, ceiling tiles and associated mastics, transite panels, laboratory counter tops, cove base and associated mastic, window caulking and glazing compounds etc. The following maintenance procedures are recommended for these materials:

- Maintain these materials in intact state and undamaged condition. Reduce the likelihood of fiber release by ensuring that the miscellaneous materials are not damaged by sanding, grinding, abrading, or other activities that may cause asbestos fibers to be released from the material. Below are additional recommendations for certain miscellaneous materials:

**Vinyl Asbestos Floor Tiles (VAT)** -are considered non-friable, however routine maintenance procedures such as spray-buffing, burnishing, wet scrubbing, and stripping can generate asbestos fibers. Following procedures, when properly implemented, will reduce the potential of fiber release:

- Do not sand, grind or abrade the tiles. Stripping of VAT should be done as infrequently as possible. When stripping becomes necessary, follow the appropriate work practices. Never perform dry stripping.
- During spray-buffing or burnishing the floor, operate the machine at the lowest workable speed and use the least abrasive pad. Use a wet mop for routine cleaning whenever possible.
- Routinely check whether chair and desk glides are in good condition and replace when necessary. Worn glides can gouge the floor and cause fiber release.
- Place carpets/floor mats in all entrances to reduce abrasion of floor tiles by sand and pebbles. During winter, have parking lots and walkways swept to the extent possible to avoid the tracking of salt and ice-melting compounds into the school by the students.
- Train the custodial people who are responsible for care and maintenance of VAT.

#### **Ceiling Tiles, and if applicable Associated Mastic**

- Reduce the likelihood of fiber release by limiting access to the area above the ceiling tiles. Maintain the ceiling tiles in undamaged condition.

#### **Fire doors and other Insulated Doors**

- Since there may be a number of different types of doors throughout the building, door cores must be considered to have asbestos-containing interior insulation unless sample result prove otherwise. Prior to performing any maintenance on any door (lock change, drilling, etc.), the door should be surveyed by qualified personnel to rule out the existence of an asbestos core.

## **Crawlspace and Tunnel Areas**

- Reduce the likelihood of fiber release by limiting access to these areas. Entrances to these areas should remain sealed with an airtight covering. Entry should only be made for essential maintenance work by properly trained and authorized persons with proper personal protective equipment.

**APPENDIX**

**D**

## **CURRENT INSPECTION/RE-INSPECTION REPORT**

October 14, 2016

Mr. Jim Branson  
Maintenance Director  
Carlisle Local Schools  
724 Fairview Drive  
Carlisle, Ohio 45005

**Re: AHERA Triennial Re-Inspection Report  
Grigsby Intermediate School  
100 Jamaica Road  
Carlisle, Ohio 45005**

Dear Mr. Branson,

As required by the Asbestos Hazard Emergency Response Act (AHERA), Dayton Environmental Testing, LLC (DET) has completed the triennial re-inspection of the Grigsby Intermediate School building located at 100 Jamaica Road in Carlisle, Ohio (Project Site).

DET Senior Project Manager and Ohio-certified Asbestos Hazard Evaluation Specialist Michael B. Lee conducted the triennial AHERA asbestos inspection of the Project Site on October 5, 2016.

### **Purpose and Scope**

AHERA requires that local education agencies have an accredited Asbestos Hazard Evaluation Specialist conduct a re-inspection at least once every 3 years after a management plan has been established for each "School Building" that they lease, own, or otherwise use as a school building for asbestos-containing building material (ACBM). AHERA defines "School Buildings" as; (1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food, (2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education, (3) Any other facility used for the instruction or housing of students or for the administration of educational or research programs, (4) Any maintenance, storage, or utility facility, including hallway, essential to the operation of any facility described in (1), (2), or (3) of this paragraph, (5) Any portico or covered exterior hallway or walkway, and (6) Any exterior portion of a mechanical system used to condition interior space.

During the inspection of the Project Site, DET inspection of routinely assessable friable and non-friable asbestos-containing building material (ACBM) included the following:

- Visual re-inspection and re-assessment of the condition of all friable known or assumed ACBM
- Visual inspection of material that was previously considered non-friable ACBM and physically touching the material to determine whether it has become friable since the last inspection or re-inspection
- Identification of any homogeneous areas with material that has become friable since the last inspection or re-inspection
- Assessment of the condition of the newly friable materials in areas where samples are collected, and newly friable materials in areas that are assumed to be ACBM
- Re-assessment of the condition of friable known or assumed ACBM previously identified

### **Bulk Asbestos Sampling**

During the re-inspection, DET collected samples of various ceiling tiles located within the building. This sampling was strictly limited to ceiling tile. No other building materials were included in this sampling. All other building materials are currently assumed to be ACBM.

Samples were randomly collected from each homogeneous area sampled in accordance with the sampling procedures described in AHERA. Each sample was collected and placed in a clean, sealable vial or sealed bag and labeled with a unique sample identification number. This sample number was recorded on an Asbestos Bulk Sampling Log and the sample vial or bag. Supplemental information was also recorded on the Asbestos Bulk Sampling Log, including inspection date, the building name (or number), a brief description and location of the sample, and the type of material sampled (e.g. ceiling tile). The Asbestos Bulk Sampling Log is included in Attachment A.

The samples were transported, under chain of custody, to CEI Labs in Cary, North Carolina for analysis. CEI Labs is fully accredited by the National Voluntary Laboratory Accreditation Program (NVLAP # 101768-0), the agency sponsored by the National Institute of Standards and Technology providing EPA accreditation of laboratories analyzing bulk samples for asbestos content by Polarized Light Microscopy (PLM) under AHERA. Bulk samples were analyzed for asbestos content using EPA Method 600/M4-82/020, and when applicable EPA Method 600/R-93/116. Bulk sample analysis incorporates the use of stereoscopic microscopy and PLM coupled with dispersion staining. The analytical methods listed above, which the EPA currently recommends for the determination of asbestos in bulk samples of friable insulation materials, can be used for qualitative identification of six (6) morphologically different types of asbestos fibers: chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite asbestos.



The EPA method specifies that the asbestos content in a bulk sample shall be estimated and reported as a finite percentage (rounded to the nearest percent) within the range of 0 to 100. Minute quantities of asbestos in bulk samples may be reported as "trace" or less than 1 percent (<1%). The analytical method determined the "area percent" asbestos or the percentage of the area of a microscopic field of view that is occupied by asbestos fibers.

The results of bulk samples are reported in a standard written laboratory report. The written report includes the client name, the laboratory identification numbers assigned to each bulk sample upon receipt by the laboratory sample custodian, and the sample number assigned to each bulk sample during the building inspection. The composition of the bulk sample is reported in percentages of asbestos (i.e., chrysotile, amosite, crocidolite, or other) and non-asbestos (i.e., cellulose, fiberglass, synthetic, or other) components.

***Laboratory analysis indicated that asbestos was not detected in any of the ceiling tile samples collected from the Grigsby Intermediate School building on October 5, 2016 by DET; however, some ceiling tile within the building are currently assumed to be ACBM. Please refer to the AHERA Inspection Assessment and Recommendations Summary in Appendix B of the AHERA Management Plan.***

## **Inspection Assessment and Recommendations**

During the inspection, DET assessed routinely assessable friable and non-friable known or assumed ACBM within the building. Building floor plans are included in Appendix A of the AHERA Asbestos Management Plan. The findings of the re-inspection are detailed on the AHERA Inspection Assessment and Recommendations Summary in Appendix B of the AHERA Asbestos Management Plan. This summary includes: the type, description, location, estimated quantity, friability, current condition, potential for damage, and recommend response actions, if any, for each friable and non-friable known or assumed ACBM within the building. General recommendations of the management planner are provided in Appendix C of the AHERA Asbestos Management Plan.

Please note this asbestos inspection was conducted to meet the requirements of AHERA. This inspection does not meet the requirements of NESHAP; therefore, a thorough asbestos inspection is required prior to any renovation or demolition activity.

We sincerely appreciate the opportunity to provide this service to you. Please feel free to contact us if you have any questions regarding this report, or if we may be of further assistance to you.

Respectfully yours,



Michael B. Lee  
Senior Project Manager  
Ohio-Certified Asbestos Hazard Evaluation Specialist # ES34954

Attachments:

- Asbestos Bulk Sampling Log
- Laboratory Analytical Report
- Laboratory Accreditation

**Asbestos Bulk Sampling Log**

Grigsby Intermediate School  
100 Jamaica Road, Carlisle, Ohio 45005  
Project Number: 16-068-001

Sample #	Group #	Collection Date	Material	Color/Description	Sample Location	Collected By
1-1	1	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Directional Side to Side Fissure)	Computer Lab	M. Lee
1-2	1	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Directional Side to Side Fissure)	Room 331	M. Lee
2-1	2	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Recessed with Medium Random Fissures)	Room 321, North Side	M. Lee
2-2	2	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Recessed with Medium Random Fissures)	Room 321, South Side	M. Lee
3-1	3	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Smooth)	Copy Room, North Side	M. Lee
3-2	3	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Smooth)	Copy Room, South Side	M. Lee
4-1	4	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Smooth)	Room 312, North Side	M. Lee
4-2	4	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Smooth)	Room 312, South Side	M. Lee
5-1	5	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Directional Side to Side Fissure)	Room 307	M. Lee
5-2	5	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Directional Side to Side Fissure)	Custodian, Near Room 323	M. Lee
6-1	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 318	M. Lee
6-2	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 306	M. Lee
6-3	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 311	M. Lee
6-4	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 302	M. Lee
6-5	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Hallway Near Room 322	M. Lee
6-6	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Hallway Near Boiler Room	M. Lee
6-7	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 330 Library	M. Lee



October 13, 2016

Dayton Environmental Testing, LLC  
35 Compark Road, Suite 203  
Dayton, OH 45459

**CLIENT PROJECT:** Grigsby Intermediate School; 16-068-001  
**CEI LAB CODE:** B16-8439

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on October 7, 2016. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH  
Laboratory Director





**AMENDED**

---

**ASBESTOS ANALYTICAL REPORT**  
**By: Polarized Light Microscopy**

Prepared for

**Dayton Enviromental Testing, LLC**

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CLIENT PROJECT: Grigsby Intermediate School; 16-068-001

CEI LAB CODE: B16-8439

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 10/13/16

TOTAL SAMPLES ANALYZED: 17

# SAMPLES >1% ASBESTOS:

**TEL: 866-481-1412**

*[www.ceilabs.com](http://www.ceilabs.com)*



**AMENDED**

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Grigsby Intermediate School; 16-068-001    **CEI LAB CODE:** B16-8439

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**METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020**

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1-1		B212828	White,Gray	Ceiling Tile	None Detected
1-2		B212829	White,Gray	Ceiling Tile	None Detected
2-1		B212830	White,Gray	Ceiling Tile	None Detected
2-2		B212831	White,Gray	Ceiling Tile	None Detected
3-1		B212832	White	Ceiling Tile	None Detected
3-2		B212833	White	Ceiling Tile	None Detected
4-1		B212834	White,Brown	Ceiling Tile	None Detected
4-2		B212835	White,Brown	Ceiling Tile	None Detected
5-1		B212836	White,Gray	Ceiling Tile	None Detected
5-2		B212837	White,Gray	Ceiling Tile	None Detected
6-1		B212838	White,Brown	Ceiling Tile	None Detected
6-2		B212839	White,Brown	Ceiling Tile	None Detected
6-3		B212840	White,Brown	Ceiling Tile	None Detected
6-4		B212841	White,Brown	Ceiling Tile	None Detected
6-5		B212842	White,Brown	Ceiling Tile	None Detected
6-6		B212843	White,Brown	Ceiling Tile	None Detected
6-7		B212844	White,Brown	Ceiling Tile	None Detected



**AMENDED**

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Dayton Environmental Testing, LLC  
 35 Compark Road, Suite 203  
 Dayton, OH 45459

**CEI Lab Code:** B16-8439  
**Date Received:** 10-07-16  
**Date Analyzed:** 10-10-16  
**Date Reported:** 10-13-16

**Project:** Grigsby Intermediate School; 16-068-001

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>1-1</b> B212828	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Gray	15%	Fiberglass	15%	Perlite	
		Fibrous			5%	Paint	
		Bound					
<b>1-2</b> B212829	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Gray	15%	Fiberglass	15%	Perlite	
		Fibrous			5%	Paint	
		Bound					
<b>2-1</b> B212830	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Gray	15%	Fiberglass	15%	Perlite	
		Fibrous			5%	Paint	
		Bound					
<b>2-2</b> B212831	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Gray	15%	Fiberglass	15%	Perlite	
		Fibrous			5%	Paint	
		Bound					
<b>3-1</b> B212832	Ceiling Tile	Heterogeneous	15%	Cellulose	75%	Gypsum	None Detected
		White			10%	Silicates	
		Fibrous					
		Bound					
<b>3-2</b> B212833	Ceiling Tile	Heterogeneous	15%	Cellulose	75%	Gypsum	None Detected
		White			10%	Silicates	
		Fibrous					
		Bound					
<b>4-1</b> B212834	Ceiling Tile	Heterogeneous	95%	Cellulose	5%	Binder	None Detected
		White, Brown			<1%	Paint	
		Fibrous					
		Bound					



**AMENDED**

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Dayton Environmental Testing, LLC  
 35 Compark Road, Suite 203  
 Dayton, OH 45459

**CEI Lab Code:** B16-8439  
**Date Received:** 10-07-16  
**Date Analyzed:** 10-10-16  
**Date Reported:** 10-13-16

**Project:** Grigsby Intermediate School; 16-068-001

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous	Cellulose	Non-Fibrous		
<b>4-2</b> B212835	Ceiling Tile	Heterogeneous White,Brown Fibrous Bound	95%	Cellulose	5%	Binder Paint	None Detected
<b>5-1</b> B212836	Ceiling Tile	Heterogeneous White,Gray Fibrous Bound	60% 15%	Cellulose Fiberglass	5% 15% 5%	Binder Perlite Paint	None Detected
<b>5-2</b> B212837	Ceiling Tile	Heterogeneous White,Gray Fibrous Bound	60% 15%	Cellulose Fiberglass	5% 15% 5%	Binder Perlite Paint	None Detected
<b>6-1</b> B212838	Ceiling Tile	Heterogeneous White,Brown Fibrous Bound	85% 5%	Cellulose Fiberglass	5% 5% <1%	Binder Perlite Paint	None Detected
<b>6-2</b> B212839	Ceiling Tile	Heterogeneous White,Brown Fibrous Bound	85% 5%	Cellulose Fiberglass	5% 5% <1%	Binder Perlite Paint	None Detected
<b>6-3</b> B212840	Ceiling Tile	Heterogeneous White,Brown Fibrous Bound	85% 5%	Cellulose Fiberglass	5% 5% <1%	Binder Perlite Paint	None Detected
<b>6-4</b> B212841	Ceiling Tile	Heterogeneous White,Brown Fibrous Bound	85% 5%	Cellulose Fiberglass	5% 5% <1%	Binder Perlite Paint	None Detected





**AMENDED**

**ASBESTOS BULK ANALYSIS**

By: POLARIZING LIGHT MICROSCOPY

**Client:** Dayton Enviromental Testing, LLC  
 35 Compark Road, Suite 203  
 Dayton, OH 45459

**CEI Lab Code:** B16-8439  
**Date Received:** 10-07-16  
**Date Analyzed:** 10-10-16  
**Date Reported:** 10-13-16

**Project:** Grigsby Intermediate School; 16-068-001

**ASBESTOS BULK PLM, EPA 600 METHOD**

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>6-5</b> B212842	Ceiling Tile	Heterogeneous	85%	Cellulose	5%	Binder	None Detected
		White,Brown	5%	Fiberglass	5%	Perlite	
		Fibrous			<1%	Paint	
		Bound					
<b>6-6</b> B212843	Ceiling Tile	Heterogeneous	85%	Cellulose	5%	Binder	None Detected
		White,Brown	5%	Fiberglass	5%	Perlite	
		Fibrous			<1%	Paint	
		Bound					
<b>6-7</b> B212844	Ceiling Tile	Heterogeneous	85%	Cellulose	5%	Binder	None Detected
		White,Brown	5%	Fiberglass	5%	Perlite	
		Fibrous			<1%	Paint	
		Bound					



**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

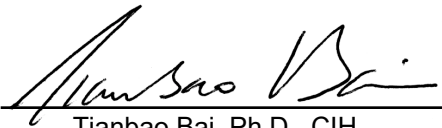
**LIMIT OF DETECTION:** <1% by visual estimation

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

**ANALYST:**   
Daniel Liguori

**APPROVED BY:**   
Tianbao Bai, Ph.D., CIH  
Laboratory Director





730 SE Maynard Road, Cary, NC 27511  
 Tel: 866-481-1412; Fax: 919-481-1442

**CHAIN OF CUSTODY**

**LAB USE ONLY:**  
 CEI Lab Code: B10-8439 (17)  
 CEI Lab I.D. Range: B212828-  
 B212844

<b>Company:</b>	Dayton Environmental Testing, LLC	<b>Client #:</b>	
<b>Address:</b>	35 Compark Road, Suite 203 Dayton, Ohio 45459	<b>Job Contact:</b>	Michael Lee
<b>Project Name:</b>	Grigsby Intermediate School	<b>Email:</b>	<a href="mailto:Lee@DaytonTesting.com">Lee@DaytonTesting.com</a>
<b>Project Address:</b>	100 Jamica Road, Carlisle, Ohio	<b>Tel:</b>	937.751.7872
<b>Project ID #:</b>	16-068-001	<b>Fax:</b>	
		<b>P.O. #:</b>	

ASBESTOS	METHOD	TURN AROUND TIME						
		4 HR*	8 HR*	12 HR*	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600							X
PLM POINT COUNT (400)	EPA 600							
PLM POINT COUNT (1000)	EPA 600							
PLM GRAVIMETRIC	EPA 600							
PLM GRAV w POINT COUNT	EPA 600							
PCM AIR	NIOSH 7400							
TEM AIR	AHERA							
TEM AIR	EPA Level II							
TEM AIR	NIOSH 7402							
TEM BULK	CHATFIELD							
TEM DUST WIPE	ASTM D6480-05							
TEM DUST MICROVAC	ASTM D5755-03							
TEM QUALITATIVE	CEI LABS							
OTHER:								
LEAD PAINT	METHOD	4 HR*	8 HR*	12 HR*	24 HR	2 DAY	3 DAY	5 DAY
LEAD PAINT	EPA SW846 7000B							
LEAD WIPE	EPA SW846 7000B							
LEAD SOIL	EPA SW846 7000B							
LEAD AIR	NIOSH 7082							
OTHER:								

<b>REMARKS: See Attached Asbestos Air Sampling Log.</b>		Accept Samples	
		Reject Samples	
<b>Relinquished By:</b>	<b>Date/Time</b>	<b>Received By:</b>	<b>Date/Time</b>
<i>[Signature]</i>	10/6/16 @ 17:00	<i>[Signature]</i>	10/17/16 9:10 am

\*Call to confirm RUS

Samples will be disposed of 30 days after analysis.

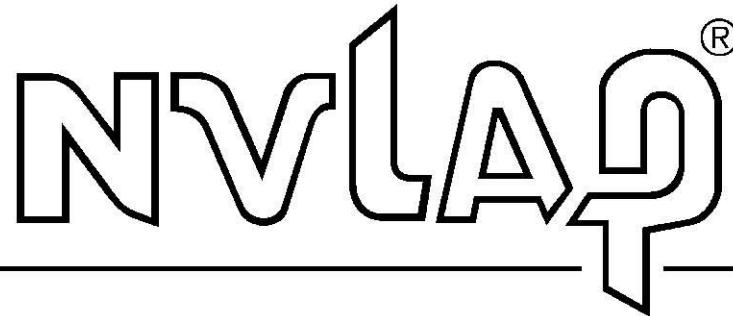
BLU-8439



**Asbestos Bulk Sampling Log**  
Grigsby Intermediate School  
100 Jamaica Road, Carlisle, Ohio 45005  
Project Number: 16-068-001

Sample #	Group #	Collection Date	Material	Color/Description	Sample Location	Collected By
1-1	1	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Directional Side to Side Fissure)	Computer Lab	M. Lee
1-2	1	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Directional Side to Side Fissure)	Room 331	M. Lee
2-1	2	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Recessed with Medium Random Fissures)	Room 321, North Side	M. Lee
2-2	2	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Recessed with Medium Random Fissures)	Room 321, South Side	M. Lee
3-1	3	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Smooth)	Copy Room, North Side	M. Lee
3-2	3	10/5/2016	Ceiling Tile	2' x 2' Ceiling Tile (Smooth)	Copy Room, South Side	M. Lee
4-1	4	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Smooth)	Room 312, North Side	M. Lee
4-2	4	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Smooth)	Room 312, South Side	M. Lee
5-1	5	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Directional Side to Side Fissure)	Room 307	M. Lee
5-2	5	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Directional Side to Side Fissure)	Custodian, Near Room 323	M. Lee
6-1	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 318	M. Lee
6-2	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 306	M. Lee
6-3	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 311	M. Lee
6-4	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 302	M. Lee
6-5	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Hallway Near Room 322	M. Lee
6-6	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Hallway Near Boiler Room	M. Lee
6-7	6	10/5/2016	Ceiling Tile	2' x 4' Ceiling Tile (Random Holes in Spot Pattern)	Room 330 Library	M. Lee

United States Department of Commerce  
National Institute of Standards and Technology



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**Certificate of Accreditation to ISO/IEC 17025:2005**

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NVLAP LAB CODE: 101768-0

**CEI Labs, Inc.**  
Cary, NC

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

---

2016-04-01 through 2017-03-31

*Effective Dates*



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*Dana S. Haman*  
For the National Voluntary Laboratory Accreditation Program

## **PERIODIC SURVEILLANCE FORMS**

# MANAGEMENT PLANNERS TRAINING RECORDS



# OHIO DEPARTMENT OF HEALTH

246 North High Street  
Columbus, Ohio 43215

614/466-3543  
www.odh.ohio.gov

John R. Kasich/Governor

Richard Hodges/Director of Health

February 25, 2016

Michael B Lee  
2574 Crestwell Place  
Kettering OH 45420

RE: Asbestos Hazard Evaluation Specialist  
Certification Number: ES34954  
Expiration Date: 03/10/2017

Dear Michael B Lee:

This letter and enclosed certification card approves your request to be certified as an Asbestos Hazard Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of Health for violation of any of the requirements of 3701-34 of the Ohio Administrative Code.

If you have any questions, please call Kathy Butcher, Licensure Specialist, at 614-644-0226.

Sincerely,

Bill Robbins, Section Chief  
Bureau of Licensure Operations  
Office of Health Assurance and Licensing

State of Ohio  
Department of Health  
Asbestos Program

**Asbestos Hazard Evaluation Specialist**



**Michael B Lee**  
2574 Crestwell Place  
Kettering OH 45420

DOB: 02/10/1978      Certification Number: **ES34954**      Expiration Date: **03/10/2017**

This certification is issued pursuant to Chapter 3710 of the Revised Code and 3701-34 of the Ohio Administrative Code

Certification Card is not valid if altered



# The InService Training Network

## Asbestos Building Inspector and Management Planner Refresher Courses

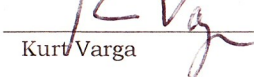


**Michael Lee**

has successfully completed the Asbestos Building Inspector and Management Planner Refresher Courses and passed by at least 70% the course examinations for accreditation under Section 206 of the Toxic Substance Control Act, Title II, and Indiana 326 IAC 18-2  
Provided by: The InService Training Network, Inc., 6813 Flags Center, Columbus, OH 43229 (614) 895-9323

**Course Dates: November 6, 2015**

**Examination Date: November 6, 2015**

**Course Director:**   
Kurt Varga

**Course Location: Magnolia, Ohio**

**Expiration Date: November 6, 2016**

**Certificate Numbers: ITN-IR -5737 & MPR-5737**

**DESIGNATED PERSONS TRAINING RECORDS**

**EMPLOYEE TRAINING RECORDS**

# CERTIFICATE OF COMPLETION

**Jim Branson**

*Has successfully completed the 16-hour Asbestos Operations and Maintenance Training Course meeting the requirements of OSHA's Asbestos in Construction Standard 29 CFR 1926.1101(k)(9)(v) for Workers and Competent Persons performing OSHA Class III activities and the Asbestos Hazard Emergency Response Act (AHERA) 40 CFR Part 763.92(a)(2) for repair personnel performing Small Scale-Short Duration activities. The above listed student has passed a course examination with a minimum score of 70% or better.*

**Course Location:** Ledbetter Road Media Room, 541 Ledbetter Road, Xenia, Ohio

**Date(s) of Course:** March 2, 2016 to March 3, 2016

**Examination Date:** March 3, 2016

**Annual Refresher Course Due By:** March 3, 2017

# Dayton

## Environmental Testing, LLC

*"Protecting You With Our Experience"*

35 Compark Road, Suite 203, Dayton, Ohio 45459 | 937-751-7872

[www.DaytonTesting.com](http://www.DaytonTesting.com)



Michael B. Lee  
Course Instructor

March 3, 2016

Date



Michael B. Lee  
Course Director

March 3, 2016

Date

**BLANK PREVENTATIVE MEASURES AND  
RESPONSE ACTION ACTIVITIES FORM**

## Preventative Measures and Response Action Activities Form

School \_\_\_\_\_

Project Name \_\_\_\_\_ Date \_\_\_\_\_

Contractor's Name \_\_\_\_\_

Contractor's Address \_\_\_\_\_

Disposal Facility Name \_\_\_\_\_

Disposal Facility Location \_\_\_\_\_

Location of the preventative measures and response action:

Description of the preventative measures and response action:

Was an abatement design/specification prepared for this activity?  
 Yes. If yes, attach specifications created to complete the activity  
 No.

Attach to this document accreditation certificates, disposal certificates and results of air sampling report. The air sampling report shall include the following:

- name and signature of the person collecting the air samples,
- the location where the air samples were collected,
- date air samples were collected,
- name and address of the laboratory,
- date and method of analysis (attach laboratory report),
- name and signature of analyst,
- statement that laboratory meets applicable requirements

Please maintain a copy of this completed form and required attachments in Appendix J of the Management Plan.

**COMPLETED PREVENTATIVE MEASURES AND  
RESPONSE ACTION ACTIVITIES FORMS**

**BLANK MAJOR/MINOR FIBER RELEASE FORM**



## Major/Minor Fiber Release Form

School: \_\_\_\_\_

Date of Episode: \_\_\_\_\_

Type of Episode: \_\_\_\_\_ Major Fiber Release \_\_\_\_\_ Minor Fiber Release

Describe the fiber release episode, including the location, type of ACBM, method of repair, and preventative measure or response action taken:

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Names of each person performing work:

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If ACBM is removed, list the name and locations of the storage and disposal site for the ACM:

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Please maintain a copy of this completed form and supplemental documentation in Appendix L of this Management Plan.

**COMPLETED MAJOR/MINOR FIBER RELEASE FORMS**

**BLANK CLEANING FORM**

## Cleaning Form

School \_\_\_\_\_

Project Name \_\_\_\_\_ Date \_\_\_\_\_

Cleaning Location \_\_\_\_\_

Cleaner's Name \_\_\_\_\_

Methods used to complete cleaning:

HEPA vacuum floors

Steam-cleaning carpets

HEPA vacuum other horizontal surfaces

Wet-wipe horizontal surfaces

Dispose of debris, filters, mop heads and all cloths in sealed, leak tight containers

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The purpose of this document is to record cleaning events. Please maintain a copy of this completed form in Appendix N of the Management Plan.

Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

**COMPLETED CLEANING FORMS**



**BLANK CERTIFICATE OF WORKER'S  
ACKNOWLEDGEMENT FORM**

## Certificate of Worker's Acknowledgement

School \_\_\_\_\_

Project Name \_\_\_\_\_ Date \_\_\_\_\_

Contractor's Name \_\_\_\_\_

This school building contains materials that have been identified as asbestos-containing materials.

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH VARIOUS TYPES OF CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NON-SMOKING PUBLIC.

The Owner for the above project requires that prior to initiating any work that would result in disturbance of building materials (i.e. drilling, sanding, removal), it is required that the management plan be referenced to determine if materials associated with work activities contain asbestos.

In the event materials that contain asbestos are to be disturbed, employees must be supplied with the proper respirator, be trained in its use and have received a medical examination. Employees must also be trained in safe work practices and in the use of the equipment found on the job. These things are to have been done at no cost to the employee.

**RESPIRATORY PROTECTION:** You must have been trained in the proper use of respirators, and informed of the type respirator to be used on the above referenced project. You must be given a copy of the written respiratory protection manual issued by your employer. You must be equipped at no cost with the respirator to be used on the above project.

**TRAINING COURSE:** You must have been trained in the dangers inherent in handling asbestos and breathing asbestos dust and in proper work procedures and personal and area protective measures. This training must have been the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).

**MEDICAL EXAMINATION:** You must have had a medical examination within the past 12 months at no cost to you. This examination must have included: health history, pulmonary function tests and may have included an evaluation of a chest x-ray.

By signing this document you are acknowledging only that the Owner of the building you are about to work in has advised you of your rights to training and protection relative to your employer. Please maintain a copy of this completed form in Appendix P of the Management Plan.

Signature \_\_\_\_\_

Printed Name \_\_\_\_\_ Witness \_\_\_\_\_

**COMPLETED CERTIFICATE OF WORKER'S  
ACKNOWLEDGEMENT FORMS**



**ANNUAL NOTIFICATIONS**

## **Carlisle Local Schools**

### **MEMORANDUM**

**TO:** Parents/Guardians, Students, Teachers, Staff and Support Groups

**FROM:** James Branson  
Asbestos Program Manager/Designated Person

**RE:** Annual Notification of Availability of Asbestos Management Plan and Update of Activities  
Carlisle Local Schools

**DATE:** October 14, 2016

On October 22, 1986, President Reagan signed into law the Asbestos Hazard Emergency Response Act (AHERA, Public Law 99-519). The law required the EPA to develop regulations which provide a comprehensive framework for addressing asbestos problems in public and private elementary and secondary schools. On October 30, 1987, EPA published the Asbestos-Containing Materials in Schools Rule (40 CFR Part 763 Subpart E). This new rule requires all school districts to inspect for friable and non-friable asbestos in school buildings, develop Management Plans that address asbestos hazards in school buildings, and implement response actions in a timely fashion.

One of the requirements of this law is to annually notify parents, teachers, staff, and support groups of the availability and location of the school building's Management Plan. The Management Plan for each school is located in the building's Main Office, along with a duplicate copy located in the Program Manager's/Designated Person's Office. Also, please be advised that information regarding any inspections/re-inspections, surveillances, response actions, and post-response action activities, if performed, are also included in the Management Plan and available for your review.

Should you have any questions regarding this memorandum, please contact me at (937) 746-0710 or email me at [James.Branson@carlisleindians.org](mailto:James.Branson@carlisleindians.org)

**PREVIOUS AHERA MANAGEMENT PLAN**