

**Asbestos-Containing Material
Three-Year Re-Inspection Assessment
Early Childhood Center
1200 South Children's Home Road
Sidney, Ohio 45365**

Prepared For:
Shelby County Board of Developmental Disabilities
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1.0 EXECUTIVE SUMMARY

The Shelby County Board of Development Disabilities Early Childhood Center is located at 1200 South Children's Home Road in Sidney, Ohio. The original building was constructed in 1952 with brick and steel as the basic construction materials. There was one addition to the original building in 1963. Ceilings are acoustical plaster, floors are vinyl floor tile and interior walls consist of concrete block, smooth hard plaster and some drywall. Roof is built-up. Homogeneous areas in the additional south building are identified with triple letters in the appendix.

1.1 Newly Friable Material

Upon completion of the re-inspection, ERAtech Environmental, Inc. (*ERAtech*) did not identify any previously non-friable homogeneous areas as "Newly Friable Material". Newly Friable Material would be considered asbestos-containing building material (ACBM) which was non-friable at the time of the previous inspection which has now become friable.

1.2 Previously Friable Material

Upon re-inspection, ERAtech Environmental, Inc. identified no previously friable homogeneous areas which have had a change in condition since the last re-inspection (i.e. have changed from a poor condition to a good or fair condition).

1.3 Regulatory Changes

In 1994 OSHA revised the asbestos standard. OSHA now requires that surfacing materials, thermal system insulation and floor tile and resilient flooring (see Appendix B for definitions) be tested for asbestos content or be presumed to contain asbestos if installed prior to 1980. The minimum sampling requirements were evaluated during this re-inspection and additional sampling accomplished as needed. However, in the event of any renovation or demolition activities, additional sampling may be required by NESHAP prior to starting these activities. The bulk sampling must be conducted by an ODOH certified asbestos hazard evaluation specialist (AHES) and the samples must be analyzed by a NVLAP accredited lab or equivalent. These requirements also apply to renovation work as minor as pulling carpet up for replacement. Prior to pulling the carpet, the LEA should have an AHES collect a sample of each type of carpet adhesive and verify if floor tile is present below carpet. It is the responsibility of each LEA to verify if the planned renovation/demolition activity is acceptable and/or legal at that time laws and regulations do change from time to time and the LEA is ultimately responsible for ensuring compliance.

2.0 INTRODUCTION

The Shelby County Board of Development Disabilities contracted with ERAtech Environmental, Inc. to conduct a comprehensive building re-inspection program for ACBM at the Shelby County Board of Development Disabilities Early Childhood Center located at 1200 South Children's Home Road in Sidney, Ohio. Based upon the results of the re-inspection, a report per the Asbestos Hazard Emergency Response Act (AHERA) was developed.

The purpose of the re-inspection program was 1) to physically re-inspect and reassess the condition of all ACBM identified in the school's Management Plan, 2) to identify those building materials that may have become friable since the previous asbestos re-inspection, and 3) to recommend appropriate strategies to control or eliminate potential hazards associated with any changes in the condition of ACBM identified in the school's Management Plan.

The re-inspection was scheduled through Mr. Travis Mayabb, who is the Designated Person for the Shelby County Board of Development Disabilities. Mr. Douglas Kohnen, an Asbestos Hazard Evaluation Specialist (Ohio #ES33758) with ERAtech Environmental, Inc., conducted a detailed walk-through re-inspection of the Shelby County Board of Development Disabilities Early Childhood Center on January 13, 2020.

Section 1 of this report is the Executive Summary that briefly discusses newly friable ACBM and any changes in the condition of the ACBM that was identified in the previous Asbestos Re-inspection Report and Management Plan. Newly identified materials, regulatory changes and building descriptions are also addressed in this section.

The Re-inspection Report (Sections 3 through 7) describes the building re-inspection procedures used, the material reevaluation and physical reassessment methods used, and discusses the hazard assessment techniques and subsequent response action recommendations. It also presents Table 7-1 which displays the results of the re-inspection.

Appendix A contains relevant certifications and accreditations of ERAtech Environmental, Inc.'s inspector and management planners who contributed to the re-inspection and reassessment associated with the Asbestos Re-inspection Report.

Appendix B is a Glossary of terms that are commonly used throughout the Re-inspection Report and the asbestos industry in general.

Appendix C presents current floor plans of the buildings provided by the school.

Appendix D has the job request forms to be utilized as a means to prevent the disturbance of any ACM. These forms should be used regardless of project and/or job size. Forms should be duplicated and used by maintenance and all contractors working in school.

Appendix E contains the six month surveillance table for conducting this required inspection. This table should be kept with this report for easy access.

BUILDING RE-INSPECTION

3.0 RE-INSPECTION PROCEDURES

Upon arrival at the building, the inspector conducted a review of the existing Management Plan and any other asbestos-related reports as well as a cursory review of available drawings and building specifications to identify those building areas that would require re-inspection. This information helped to familiarize the inspector with the building itself and with the location and nature of known and assumed ACBM identified in the Management Plan.

The inspector conducted a detailed walk-through re-inspection of those areas of the Shelby County Board of Development Disabilities Early Childhood Center which were identified in the Management Plan as having known or assumed ACBM. During this re-inspection, the inspector looked for, re-inspected, and re-assessed the condition of all ACBM identified in the Management Plan. Materials identified as non-friable ACBM in the Management Plan were touched to determine whether they had become friable since the previous re-inspection.

4.0 PHYSICAL REASSESSMENT

4.1 THEORY OF PHYSICAL REASSESSMENT

Per AHERA, it is the responsibility of the field inspector to physically reassess any friable ACBM that is identified in the Management Plan (a material is friable if it can be reduced to powder by hand pressure, and is non-friable if it can't). This responsibility is outlined in the "Flow Chart for AHERA Inspection and Assessment", provided as Figure 4-1. In addition, the inspector is responsible for re-inspecting and touching any material identified in the Management Plan as non-friable ACBM to determine whether it has become friable and assessing such material if it has become friable.

The first factor that the field inspector must determine is the condition of the ACBM. The condition may be categorized as either of the following categories:

- 1 - Significantly damaged or damaged thermal system insulation ACM
- 2 - Damaged friable surfacing ACM
- 3 - Significantly damaged friable surfacing ACM
- 4 - Significantly damaged or damaged friable miscellaneous ACM
- 5 - ACBM with potential for damage
- 6 - ACBM with potential for significant damage
- 7 - Any remaining friable ACBM or friable suspected ACBM

Since there are many factors that can determine condition, this judgment is necessarily somewhat subjective, allowing the inspector to take unique situations into account when assigning the most reasonable estimate of condition.

The second factor that an inspector must determine when performing a Physical Assessment is the potential for disturbance. This factor is defined as the worst condition for either frequency of potential contact, influence of vibration, or potential for air erosion as outlined in Figure 4-2.

The values for the condition and potential for disturbance are used in the Asbestos Re-inspection Report to determine the Hazard Assessment for the ACBM, as described in Section 6 of the Re-inspection Report.

FIGURE 4-1. FLOW CHART FOR AHERA INSPECTION AND ASSESSMENT

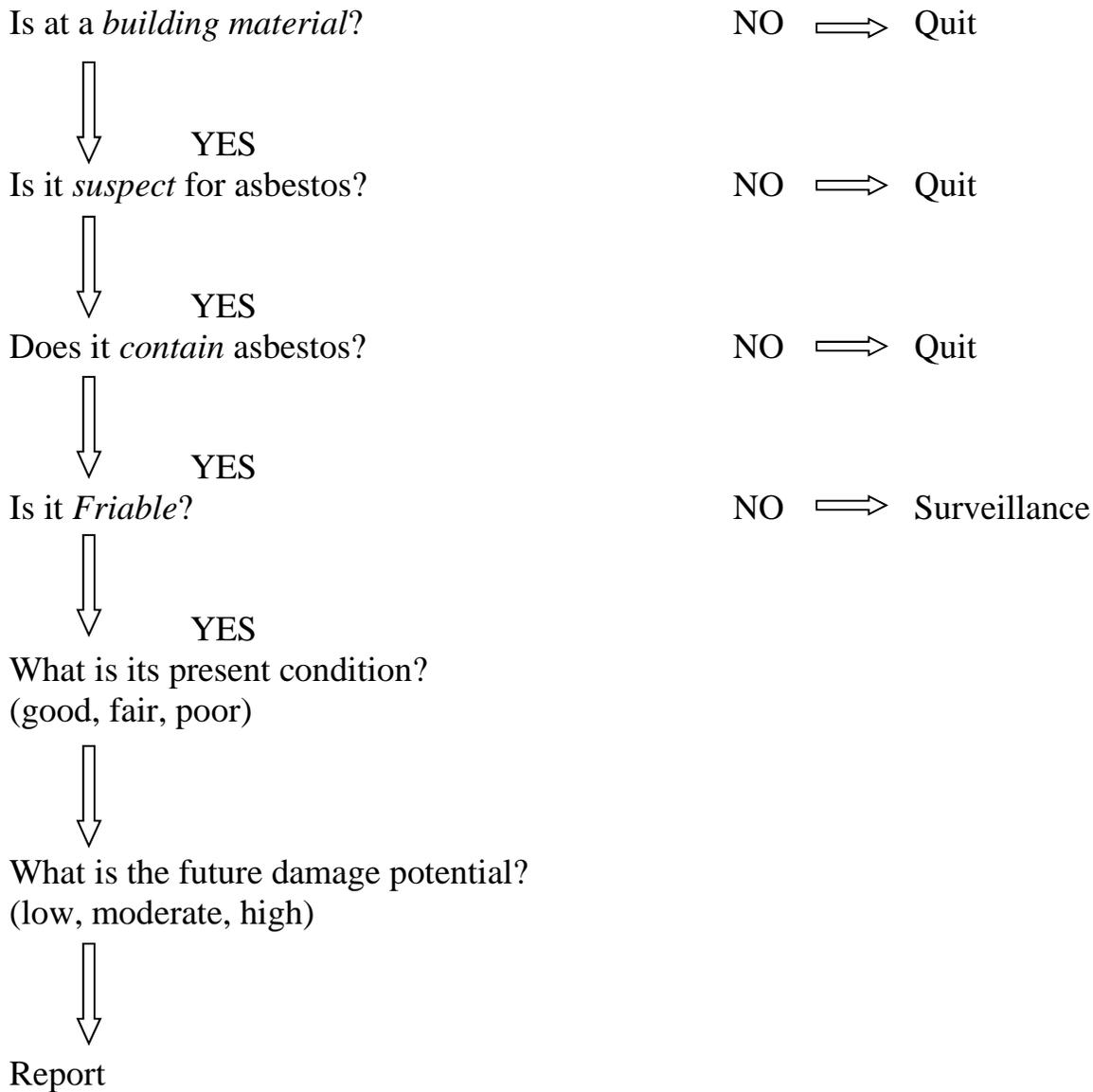


FIGURE 4-2. CLASSIFICATION OF THE POTENTIAL FOR DISTURBANCE

Potential for Disturbance	Frequency of Potential Contact	Influence of Vibration	Potential for Air Erosion
High Potential ("Potential for Significant Damage")		Any High Value	
Moderate Potential ("Potential for Damage")		Any Moderate Value	
Low Potential		All Low Values	

AHERA Definitions

Potential Damage

- (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 O & M practices, changes in occupancy, or recurrent damage.

Potential Significant Damage

Same as potential damage, plus:

- (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.

4.2 PHYSICAL REASSESSMENT FOR THE SHELBY COUNTY BOARD OF DEVELOPMENT DISABILITIES EARLY CHILDHOOD CENTER

The Physical Reassessment of all ACBM identified in the Management Plan of the Shelby County Board of Development Disabilities Early Childhood Center is summarized in Table 7-1 located in Section 7 of the Asbestos Re-inspection Report.

5.0 MATERIAL QUANTITIES OF ACBM

Per AHERA, the inspector must state how the quantities of ACBM were determined. For the Shelby County Board of Development Disabilities Early Childhood Center, these quantities were estimated in the building itself.

The quantities of ACBM for each Homogeneous Area can be found in Table 7-1 located in Section 7 of the Asbestos Re-inspection Report.

6.0 HAZARD ASSESSMENT

6.1 THEORY OF HAZARD ASSESSMENT

To each category of ACBM must be applied a Hazard Assessment, which will be used to determine the appropriate Recommended Response Action.

The basis of the Hazard Assessment is the inspector's Physical Reassessment, and is derived by using the Decision Tree method as outlined in Exhibit 6-1. A brief description of the Decision Tree method is as follows:

- If the inspector has assessed the ACBM as Poor (significantly damaged), there is no sense in trying to estimate any potential for future damage; the material is in very bad shape now, and an appropriate response action must be performed as soon as possible.
- If the ACBM has been assessed as Fair (damaged), some estimate should be made of the potential for future damage; it is obvious that any ACBM that has a "potential for significant damage" should have a higher Hazard Assessment than ACBM with a "low" possibility of potential disturbance.
- The same logic that applies to ACBM assessed as Fair applies to ACBM that has been assessed as Good.

The above analysis will categorize the ACBM into one of the seven Hazard Ranks that are shown in the Decision Tree Exhibit. These Hazard Ranks are then converted into "Removal Priorities", and then into "Response Actions" as shown in Exhibit 6-2.

**EXHIBIT 6-1. CLASSIFICATION FOR HAZARD POTENTIAL
(DECISION TREE DISPLAY)**

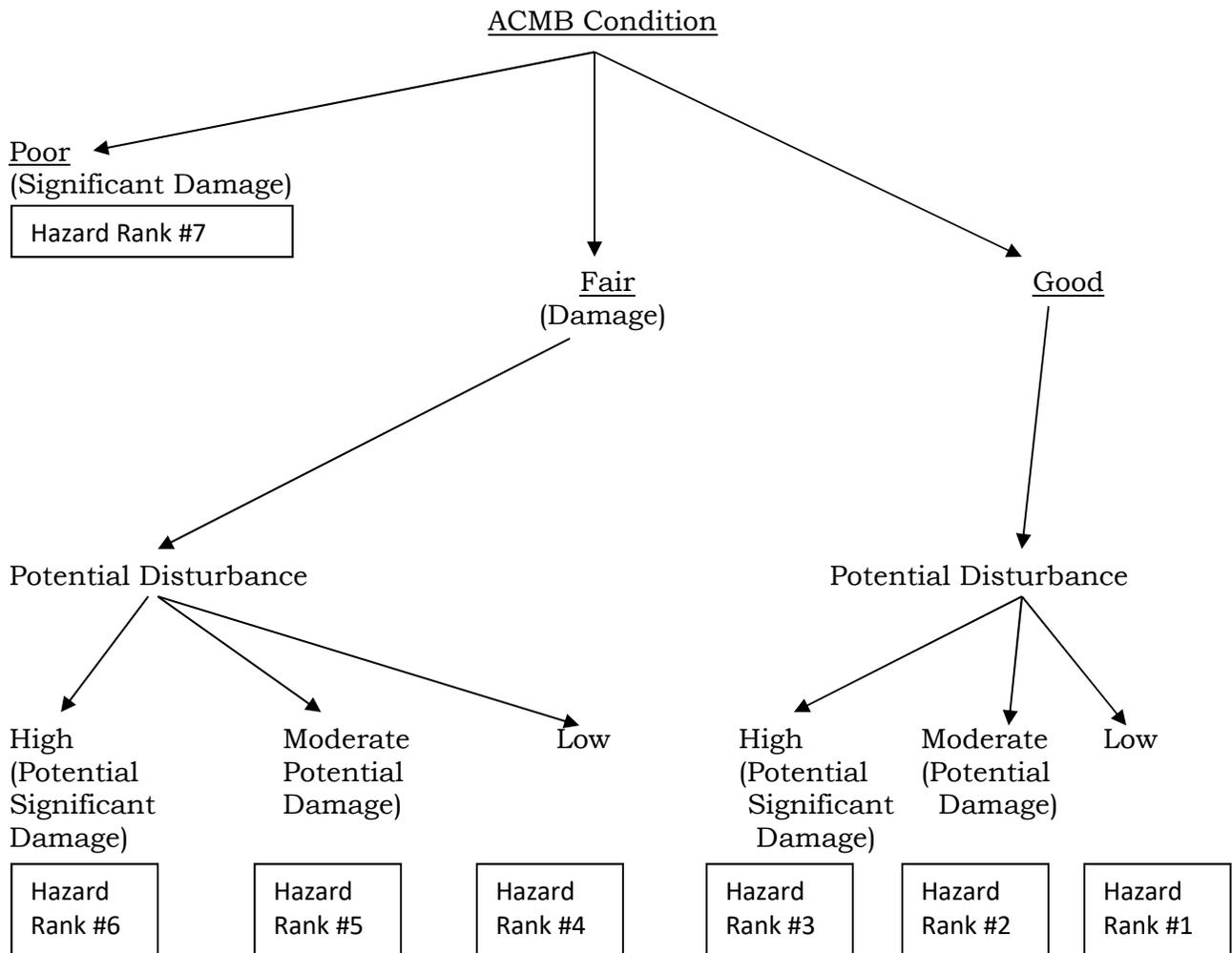


EXHIBIT 6-2. CONVERSION TO RESPONSE ACTIONS

HAZARD RANK '	REMOVAL PRIORITY	AHERA CATEGORIES	RESPONSE ACTIONS REQUIRED BY AHERA
7	1	Significantly Damaged	Evacuate or isolate the area if needed. Remove the ACBM (or enclose or encapsulate if sufficient to contain fibers) Repair of thermal system insulation is allowed if feasible and safe. O & M required for all friable ACBM.
6	2	Damaged and Potential for Significant Damage	Evacuate or isolate the area if needed. Remove, enclose, encapsulate, or repair to correct damage. Take steps to reduce potential for disturbance. O & M required for all friable ACBM.
5	3	Damaged and Potential for Damage	Remove, enclose, encapsulate, or repair to correct damage. O & M required for all friable ACBM
4	4	Damaged	Same as Hazard Rank 5.
3	5	Potential for Significant Damage	Evacuate or isolate the area if needed. Take steps to reduce potential for disturbance. O & M required for all friable ACBM.
2	6	Potential for Damage	O & M required for all friable ACBM.
1	7	No Problem	O & M required for all friable ACBM, but measures need not be as extensive as above.

7.0 RESPONSE ACTION DESCRIPTIONS

RESPONSE ACTION 1

Material Type: Sound Dampening (under the sink) Black and Grey varieties

Condition: Good – Non-friable

Disturbance Potential: Low

Hazard Rank: 1

Response: - Repair future

- Institute an Operations and Maintenance Program.
Include in six-month periodic surveillance.
- Include in three-year re-inspections.

Rationale: Repair future damage to reduce potential health hazards. This exposed asbestos-containing material is classified currently as non-friable.

Schedule for Compliance: Continual

RESPONSE ACTION 2

Material Type: Mastic under Black Floor Tile/Edging

Condition: Good - Non-friable

Disturbance Potential: Low

Hazard Rank: 1

Response: Do not drill, sand, score, or abrade the flooring.

- Institute an Operations and Maintenance Program.
Include in six-month periodic surveillance.
- Include in three-year re-inspections.

Rationale: Mastic should remain in a non-friable state unless mechanical damage causes excessive damage.

Schedule for Compliance: Continual

RESPONSE ACTION 3

Material Type: Fire Doors

Condition: Good - Non-friable

Disturbance Potential: Low

Hazard Rank: 1

Response: Do not drill, sand, score, or abrade the fire doors.

- Institute an Operations and Maintenance Program.
Include in six-month periodic surveillance.
- Include in three-year re-inspections.

Rationale: Fire doors should remain in a non-friable state unless mechanical damage causes excessive breakage.

Schedule for Compliance: Continual

RESPONSE ACTION 4

Material Type: Sound Dampening Gasket

Condition: Good - Non-friable

Disturbance Potential: Low

Hazard Rank: 1

Response: Institute an Operations and Maintenance Program.

 Include in six-month periodic surveillance.

 – Include in three-year re-inspections.

Schedule for Compliance: Continual

RESPONSE ACTION 5

Material Type: 12"x12" Red & Blue Floor Tiles/Edging

Condition: Good - Non-friable

Disturbance Potential: Low

Hazard Rank: 1

Response: Do not drill, sand, score, or abrade the floor tiles rendering them friable.

- Institute an Operations and Maintenance Program.
Include in six-month periodic surveillance.
- Include in three-year re-inspections.

Rationale: Floor tiles should remain in a non-friable state unless mechanical damage causes excessive breakage.

Schedule for Compliance: Continual

APPENDIX A
CERTIFICATIONS AND ACCREDITATIONS

APPENDIX B
GLOSSARY

Asbestos .the asbestiform varieties of: chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite.

Asbestos Containing Material (ACM) .any material or product containing more than one (1) percent asbestos.

Asbestos Containing Building Material (ACBM) .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.

Condition of surfacing and miscellaneous material-

**A. Poor Condition
(Equivalent to "significantly damaged")**

Material with one or more of the following characteristics:

1. Surface crumbling or blistering over at least one tenth of the surface if the damage is evenly distributed (one quarter if damage is localized).
2. Large areas of material hanging from the surface, delaminating, or showing adhesive failure.
3. Water stains, gouges, or mars over at least one tenth of the surface if the damage is evenly distributed (one quarter if the damage is localized)

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

**B. Fair Condition
(Equivalent to "damaged")**

Material with the following characteristics:

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

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

C. Good Condition

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

Condition of thermal system insulation-

**A. Poor Condition
(Equivalent to "significant damage")**

Material with one or more of the following characteristics:

1. Mostly missing jacket
2. Crushed, heavily gouged or punctured insulation on at least one tenth of pipe runs/risers if the damage is evenly distributed (one quarter if the damage is localized).

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

**B. Fair Condition
(Equivalent to "damage")**

Material with one or more of the following characteristics:

1. A few water stains or sections of missing jackets.
2. Crushed insulation or water stains, gouges, punctures, or mars, on up to one tenth of the insulation if the damage is evenly distributed (or up to one quarter if the damage is localized).

C. Good Condition

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

Encapsulation . treatment of ACM 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 .an airtight, impermeable, permanent barrier around ACM to prevent the release of asbestos fibers into the air.

Fiber Release Episode .any uncontrolled or unintentional disturbance of ACM resulting in a visible emission.

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

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

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

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

Potential for disturbance-

A. Potential for contact with the material

High: Service workers work in the vicinity of the material more than once per week, or

The material is in a public area (e.g., hallway, auditorium) and accessible to building occupants.

Moderate: Service workers work in the vicinity of the material once per week to once per month, or

The material is in a room or office and accessible to the occupants.

Low: Service workers work in the vicinity of the material less than once per month, or

The material is visible but not within reach of building occupants.

B. Influence of vibration

High: Loud motors or engines present (e.g., some fan rooms), or

Intrusive noises or easily sensed vibrations

(e.g., major airports, a major highway).

Moderate: Motors or engines present but not obtrusive (e.g., ducts vibrating but no fan in the area), or

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

Low/None: None of the above

C. Potential for air erosion

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

Moderate Noticeable movement of air (e.g., air shaft, ventilator air stream).

Low/None: None of the above

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

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

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

Surfacing Material 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 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.

APPENDIX C
FLOOR PLANS

APPENDIX D
JOB REQUEST FORMS

Job Request Form

No: _____

Name _____ Date: _____

Telephone No.: _____ Job Request No.: _____

Requested Start Date: _____ Anticipated Finish Date: _____

Building, room number(s), or description of area where work is to be performed:

Description of Work: _____

Description of any asbestos-containing materials that might be affected, if known:

Submit this application to:

(Asbestos Program Manager)

Note: An application must be submitted for all maintenance work whether or not asbestos-containing material might be affected. An authorization must be received before any work can proceed.

_____ Granted (Job Request No. _____)

_____ With Conditions*

_____ Denied

*Conditions:

Work Authorization Form.

Signed: _____ Date: _____

Asbestos Program Manager

No: _____

Authorization

Authorization is given to proceed with the following maintenance work:

Presence of Asbestos-Containing Materials

_____ Asbestos-containing materials are not present in the vicinity of the maintenance work

_____ ACM is present, but its disturbance is not anticipated; however, if conditions change, the Asbestos Program Manager will re-evaluate the work request prior to proceeding

_____ ACM is present, and may be disturbed

Work practices if Asbestos-Containing Materials are Present

The following work practices shall be employed to avoid or minimize disturbing asbestos:

Personal Protection if Asbestos-Containing Materials are Present:

The following equipment/clothes shall be used during the work to protect the workers: _____

Special Practices and /or Equipment Required:

Signed: _____ Date: _____
Asbestos Program Manager

