

# **AHERA Asbestos Management Plan Update**

Veneta Elementary School 88131 Territorial Highway Veneta, Oregon 97487

Prepared for:

Fern Ridge School District #28J

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#### **DISTRICT DATA**

Fern Ridge School District 28J
Public
88834 Territorial Road
Elmira, Oregon 97437
541.935.2253
Veneta Elementary School
88131 Territorial Road
Veneta, Oregon 97487
355
40
1.5

#### **KEY DISTRICT PERSONNEL**

The following individuals have ongoing responsibilities in developing and maintaining the District's Asbestos Program. Their general responsibilities relative to asbestos activities are also listed.

#### Superintendent

Gary Carpenter 88834 Territorial Road Elmira, Oregon 97437 541.935.2253

The Superintendent has overall responsibility for ensuring compliance to the School District's policies and the successful operation of its programs. This responsibility extends to overall responsibility for the District's activities relative to asbestos-containing materials. The Superintendent should approve the appointment of the LEA Designate.

#### **LEA Designate**

James Storey 88834 Territorial Road Elmira, Oregon 97437 541.935.2253

The Local Education Agency (LEA) Designate is required by the Final Rules to ensure the District's continuing compliance with the AHERA requirements. The LEA Designate's specific requirements are described in Section 763.84 of the Final Rules. The LEA Designate must ensure that all records are maintained, satisfactory training provided, notifications sent, and Management Plans are available in compliance with the Final Rules.



#### ACCREDITED INSPECTOR/MANAGEMENT PLANNER

The following accredited Management Planner and Inspector performed inspection and assessments of suspected asbestos-containing building materials at this school district facility. The following Management Planner(s) has recommended appropriate response actions for friable, non-friable, known, or assumed building materials where indicated. All of the above-listed tasks have been performed in accordance with 40 CFR, Part 763, Subpart E.

Jeff Heeren Management Planner/Asbestos Inspector PBS Engineering and Environmental Inc. 3500 Chad Drive, Suite 100 Eugene, Oregon 97408 Accreditation: IMR-22-4941A

Signature

Date

### LABORATORY ACCREDITATION

This asbestos management plan update is based on sample results from a Pre-Renovation Hazardous Building Materials Survey completed by PBS Engineering and Environmental Inc. in September 2014. The following laboratories were utilized for analysis of bulk samples for asbestos content using Polarized Light Microscopy (PLM) with dispersion staining technique. Refer to the survey report for copies of laboratory reports, and analyst signatures in accordance with Section 763.93. As indication that the laboratories meet the applicable requirements of Section 763.87, the laboratory's EPA accreditation numbers are listed below. All work was performed in accordance with procedures described in 40 CFR, Part 763, Subpart E.

LabCor Portland, Inc. 4321 S Corbett Avenue, Suite A Portland, Oregon 97239 503.224.5055 NVLAP Lab Code: 200741-0 NVL Laboratories, Inc. 4708 Aurora Avenue N Seattle, WA 98103 1.888.685.5227 NVLAP Lab Code: 102063-0



# THIS IS TO CERTIFY THAT

# **JEFF HEEREN**

# HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE for ASBESTOS INSPECTOR / MANAGEMENT

# **PLANNER REFRESHER**

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Cauraa	Data
Course	Date:

03/23/2022

Course Location:

Certificate:

Online,

\_\_\_\_\_

IMR-22-4941A

For verification of the authenticity of this certificate contact: PBS Engineering and Environmental Inc.

4412 S Corbett Avenue

Portland, OR 97239

503.248.1939



CCB #SRA0615 4-Hr Training

AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 03/23/2023

ander Fridly

Andy Fridley, Instructor

LEA Designate Documentation

The school must designate and train a person to ensure compliance with the requirements of Section 763.84 of the AHERA final rules. The responsibilities of the LEA designate are listed below and are taken directly from the federal register.

#### LEA Designate

James Storey 88834 Territorial Road Elmira, Oregon 97437 541.935.2253

#### LEA Designate Training

Course Name: Asbestos Class III Operations & Maintenance Refresher Course Training Date: TBD Total Course Hours: 16

#### Course Description:

For anyone who performs small-scale maintenance or repair activities that may impact asbestoscontaining materials (ACM). This course provides hands-on training, so workers can safely perform routine maintenance duties on or around ACM. Examples of Class III asbestos work include repairing or replacing broken pipes or valves that have asbestos wrapping, replacing damaged floor or ceiling tiles, drilling into asbestos wallboard, work on light fixtures, replacing roofing tiles, repairing window glaze or putty and other general building maintenance. This course fulfills the requirements of AHERA, Chapter 40, Part 763 and Federal OSHA 29, CFR, 1926.1101.

#### **LEA Designate Responsibilities**

- 1. Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Subpart E of the Final Rules.
- Ensure that all custodial and maintenance employees are properly trained as required in Subpart E of the Final Rules and all 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 reinspection and surveillance activities that are planned or in progress.



- 4. Ensure that all short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM.
- 5. Ensure that all warning labels are posted in accordance with Section 763.95.
- 6. Ensure that all management plans are available for inspection and notification of such availability has been provided as specified in the management plan under Section 763.93(g).
- 7. Consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under the Final Rules.



School Buildings

#### AHERA GENERAL DATA SHEET

Office of School District Services

Oregon Department of Education 255 Capitol Street NE Salem, OR 97310

Veneta Elementary School	Fern Ridge School District 28J	Lane
Name of School Building	LEA (Center)	County
88131 Territorial Road	Elmira	97487
Address	City	Zip Code
541-935-8225	James Storey	541.935.2253
Building Telephone Number	District's Asbestos Program Manager	Telephone Number

## **CONSTRUCTION DATA**

Year of Construction	on:	1974
Addition Dates:		1990, 2001, 2015
Construction Type	:	Steel <u>X</u> Wood <u>X</u> Concrete <u>X</u> Masonry <u>X</u>
Roof Framing:		Steel Wood Concrete
Heating System:		Steam Hot Water Forced Air X
		Electric Baseboard Heat Pump
Renovation:		Yes X No Year(s) 2015
	DANCY	
USE AND OCCU		
Primary Use:	Education	
No. of School Occupants:	Staff:	40 Students: 355 Maint. /Custodial Staff: 1.5



#### **INSPECTOR AND MANAGEMENT PLANNER**

Name:	Jeff Heeren (Management Planner)			
Business:	PBS Engineering and Environmental Inc.			
Certification:	IMR-22-4941A Exp. Date: 3/23/202			
Name:	Mason Kazer (Inspe	ctor)		
Business:	PBS Engineering an	d Environme	ntal Inc.	
Certification:	IRO-22-0099C	Exp. Date:	3/2/2023	
Course Provider:	PBS Engineering and Environmental Inc.			

#### SUMMARY DATA SHEET

Facility Name and Address: Veneta Elementary School – 88131 Territorial Road, Elmira, OR 97487

Preparer Name and Phone No.: \_\_\_\_\_\_Jeff Heeren 541.686.8684

Date: 3/2023

	SURFACING	THERMAL	SYSTEM INSU	LATION	MISC.
AHERA DAMAGE CATEGORY		LINEAR FT	SQ. FT.	H. F.	
<ol> <li>Damaged or Significantly Damaged TSI</li> </ol>		-	-	_	
2. Damaged Friable Surfacing	-				
<ol> <li>Significantly Damaged Friable Surfacing</li> </ol>	-				
4. Damaged or Significantly Damaged Friable MISC					-
5. ACBM with Potential for Damage	-	-	-	-	-
6. ACBM with Potential for Significant Damage	-	-	-	-	-



<ol> <li>Any Remaining Friable or Suspect Friable ACBM</li> </ol>	-	-	-	-	-
Total Friable ACBM	-	-	-	-	-

8. ACBM – Nonfriable or Suspect Nonfriable*			Refer to Inspection Data
Total ALL ACBM			Refer to Inspection Data

This site was investigated for asbestos-containing building materials (ACBM) by PBS Engineering and Environmental Inc. The list indicates the presence of non-friable ACBM within the building. Known ACBM means that materials were sampled and tested positive (asbestos-containing). Suspect ACBM means that materials were located and not sampled, but based on the experience of the inspector the materials were assumed to contain asbestos.

Known	Known	Suspect	Suspect
Friable	Non-Friable	Friable	Non-Friable
ACBM?	ACBM?	ACBM?	ACBM
No	No	No	No

### SCHOOL DISTRICT RESPONSIBILITIES

The chart below indicates the District's responsibilities to enact the major activities outlined in the management plan and AHERA regulations. The responsibilities are based on the known or suspected presence of friable and non-friable ACBM.

	Survey Findings		
Activity	Known or Suspect Friable	Known or Suspect Non-Friable	No Asbestos Containing
LEA Designate Training	ACBM -	ACBM X	Material -
Custodial / Maintenance Training	-	*	-



Initial Cleaning	-	-	-
Inspection Report & Management Plan on File and Available	-	Х	-
O & M Program	-	*	-
Periodic Surveillance and Reinspections	-	Х	-
Annual Notification	-	Х	-

Legend:

- X Must enact
- Not required
- \* Recommended, but not required



**Building Inspections** 

#### **BUILDING INSPECTION BACKGROUND**

A pre-renovation asbestos survey of the site was conducted by PBS Engineering and Environmental Inc. in September 2014 in accordance with Occupational Safety and Health Administration (OSHA) requirements under CFR 1910.1001 and Lane Regional Air Protection Agency (LRAPA) Title 43. Results of that inspection are provided as a portion of this Asbestos Management Plan (AMP) for the site. As part of the survey, PBS conducted an inspection and sampling of suspect ACBM. All inspection activities were conducted by EPA AHERA-accredited Inspectors, and all analysis of asbestos bulk samples was completed by NVLAP-accredited laboratories.

#### INFORMATION AND ASSESSMENTS

Based on PBS' review of all inspection data, the following information is provided in this report:

- 1. Types, general locations, and general condition of confirmed and suspect friable and nonfriable ACBM in the buildings.
- 2. Categorization of ACBM into appropriate AHERA assessment categories as required under 40 CFR § 763.88.
- 3. A list of abatement options, including prioritization, for managing ACBM (Management Plan Tab 5).
- 4. Cost estimates for the various abatement options of Immediate Health Concerns, High Concerns, and most Moderate Concerns (Management Plan Tab 5).

The assessments discussed in this report are based on the potential for future damage, disturbance, air erosion factors, friability, proximity to air currents, and present condition of ACBM as outlined and recommended in 40 CFR § 763.88. The following assessment categories have been established: Immediate Health Concern, High Concern, Moderate Concern, and Low Concern. The material assessments are based on a physical inspection of each material conducted in December 2022.

Note: This AMP Update report is intended to satisfy the Three Year Reinspection requirement in 40 CFR § 763.85.

#### SUMMARY OF ASBESTOS-CONTAINING MATERIALS

The following materials tested positive, or, based on the experience of PBS field personnel, were not tested and should be considered asbestos-containing. Materials with mixed results are considered positive. Materials not sampled may contain asbestos and should be tested to verify asbestos content prior to impact through demolition, renovation, etc.

All asbestos-containing building materials identified in the 2014 survey of this facility have been removed.



#### **MATERIALS CONTAINING LESS THAN 1% ASBESTOS**

Asbestos was detected in the following materials in concentrations of less than one percent. Under current regulations, the EPA, DEQ, and OSHA classify a material as asbestos-containing if analytical results indicate the material contains greater than 1% asbestos. However, OSHA regulations (29 CFR, 1910.1001, 29 CFR, 1926.1101 and interpretations) require that the material be handled at all times by personnel with appropriate asbestos training and that an OSHA defined competent person select appropriate work procedures and engineering control strategies during material handling operations.

Material	Location	
Covebase Mastic, brown <sup>1</sup>	Throughout 1974 Building	
Vermiculite (loose fill)	1974 Building – perimeter CMU block walls	

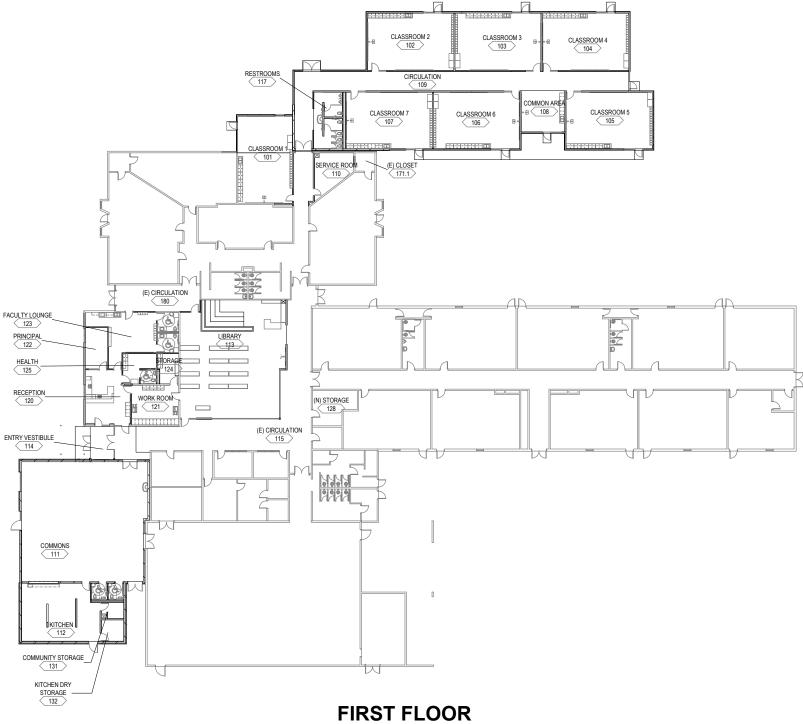
Notes:

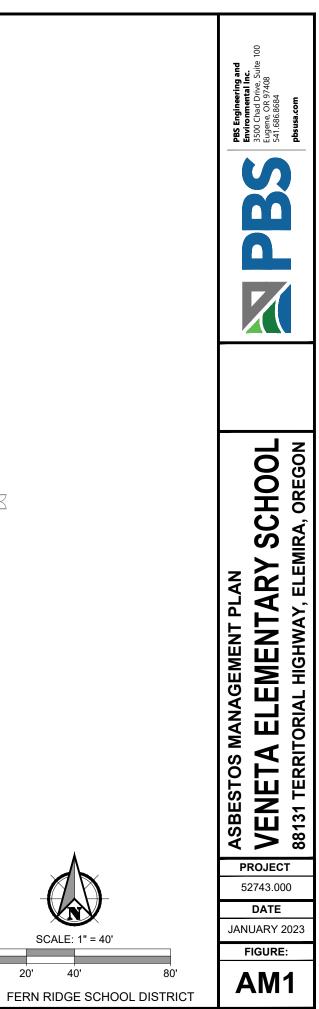
1. Non-original covebase is present in areas where floor coverings have been replaced. However, remnant covebase mastic with trace amounts of asbestos may still be present in these areas.



#### **GENERAL NOTES**

- 1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION ONLY.
- 2. BUILDING DRAWING FOOTPRINT MAY BE INACCURATE AND THE DRAWING IS NOT TO SCALE. ALL MATERIALS IDENTIFIED IN THE ASBESTOS MANAGEMENT PLAN SHOULD BE FIELD VERIFIED.
- 3. ACCESSIBLE AREAS OF THE SITE WERE REINSPECTED TO VERIFY THE PRESENCE OF PREVIOUSLY IDENTIFIED ASBESTOS-CONTAINING MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THIS DRAWING.
- 4. LOOSE FILL VERMICULITE INSULATION CONTAINING LESS THAN ONE PERCENT ASBESTOS HAS BEEN IDENTIFIED IN CEMENT BLOCK WALLS OF THE ORIGINAL 1974 BUILDING. PBS WAS NOT PROVIDED WITH BUILDING ADDITION BOUNDARY INFORMATION; HENCE, THE 1974 BUILDING OUTLINE IS NOT HIGHLIGHTED ON THIS DRAWING.
- 5. A TRACE AMOUNT OF ASBESTOS (<1%) HAS PREVIOUSLY BEEN DETECTED IN ORIGINAL COVEBASE MASTIC IN THE ORIGINAL 1974 BUILDING. THE COVEBASE HAS BEEN REMOVED AND REPLACED IN SOME AREAS DURING FLOORING REPLACEMENT PROJECTS. HOWEVER, REMNANT MASTIC MAY REMAIN BEHIND NEWER COVEBASE APPLICATIONS.
- 6. THIS DRAWING IS NOT INTENDED TO SERVE AS AN ABATEMENT, RENOVATION, OR DEMOLITION SPECIFICATION.





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**Response Actions** 

#### MATERIAL SUMMARY

Known or suspected friable ACBM are listed below in order of hazard priority. The priorities are established by the Accredited Inspector and Accredited Management Planner and are based on the material assessments. The material may be listed more than once if its location varies and if the assessment criterium also significantly changes.

Material	Location	Category	Preventive Measure	Interim Cost
NA	NA	NA	NA	NA

No friable ACBM was identified at this site.

Total Cost for Preventive Measures ......\$0

Costs of Preventive Measures are estimates that assume that the School District will utilize their own trained personnel to enact. Consequently, associated costs such as air monitoring, contractor mobilization, and engineering fees cannot be estimated and are not included.



#### ABATEMENT SUMMARY

Based on the previous material assessments, logical abatement projects of specific areas have been defined and prioritized by the Accredited Management Planner. Abatement costs have been determined for materials determined to be an Immediate Health Concern, High Concern, or Moderate Concern. The District may have other criteria that influence the order, scope, and priority of abatement projects. This summary is intended as a guide and is not a mandate.

No Immediate Health Concerns, High Concerns, or Moderate Concerns were identified in this facility; hence, abatement priorities and estimated costs have not been established.



**Statement of Review** 

Pursuant to section 763.84 and section 763.93 of the EPA AHERA regulations, each management plan must contain a true and correct statement, signed by the LEA designated person that certifies that the general LEA responsibilities have been met. This form is provided to assist you in complying with this portion of the AHERA regulations.

LEA Name:	Fern Ridge School District 28J
LEA Address:	88834 Territorial Road, Elmira, Oregon 97437
Designated Person Name:	James Storey
<b>Designated Person Address:</b>	88834 Territorial Road, Elmira, Oregon 97437
<b>Designated Person Phone:</b>	541.935.2253

#### ASSURANCES

- 1. The activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763.
- 2. All custodial and maintenance employees are properly trained as required in Part 763 and all 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. All workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, post-response action activities, and periodic surveillance and reinspection activities that are planned or in progress.
- 4. All short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.
- 5. All warning labels are posted in accordance with Section 763.95.
- 6. All management plans are available for inspection and notification of such availability has been provided as specified in the management plan under Section 763.93(g).
- 7. The undersigned person designated by the LEA pursuant to Section 763.84(g)(1) has received adequate training as stipulated in Section 763.84(g)(2).
- 8. The LEA has and will consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763.

Date



LEA designated person signature

# **Operations and Maintenance**

#### **OPERATIONS AND MAINTENANCE OVERVIEW**

- **SCOPE:** Implement an Operations and Maintenance Program to maintain the condition of asbestos-containing materials.
- **TRAINING:** Class 1 Minimum: 32-hour training for individuals who work with asbestoscontaining building materials (ACBM) in amounts greater than 3 square feet (SF) or 3 linear feet (LF).

Class 2 Minimum: 8-hour generic material training for individuals who work with flooring, roofing, siding, cement asbestos board panels, and ceiling tiles.

Class 3 Minimum: 16-hour training for individuals engaged in maintenance and repairs. 4-hour single generic material training for individuals who work with gaskets, fire doors, laboratory hoods, etc.

Class 4 Minimum: 2-hour training for individuals engaged in custodial cleaning.

#### **RECORDKEEPING FORMS:** Keep records of all activities.

An Operations and Maintenance (O & M) Program is required by the AHERA regulations for all school buildings with friable ACBM. It is also considered by PBS to be a necessity for any school building with only non-friable ACBM because of the eventual need for repairs and routine or emergency maintenance.

The O & M Program is a set of specific procedures and practices applied to building cleaning, maintenance, renovation, and general operation to maintain the building as free of asbestos contamination as possible. The O & M Program draws heavily on information generated during the inspection process, and should remain in effect until all friable and non-friable ACBMs are removed from the facility. A description of an O & M Program is found in the AHERA Federal Register. 40 CFR Part 763, Appendix B should be read completely.

Properly enacted, this program will document the building owner's prudence in dealing with asbestos in the building. There are three primary objectives of the O & M Program:

- 1. Clean up and repair existing ACBM
- 2. Minimize future fiber release by controlling access to ACBM
- 3. Maintain ACBM until it is eventually removed

Since by law all ACM must be removed from buildings before demolition, the O & M Program is not a permanent solution, nor is it a means by which full-scale asbestos abatement is accomplished. Rather, material is removed only as necessary for maintaining building systems. As an example,



asbestos-containing insulation may be removed around a leaking steam valve to gain access for repairing the valve as part of an O & M Program. Removing material is allowed and anticipated as an integral part of the O & M Program, but the motivation to remove material must develop from a specific maintenance need. Large abatement projects that require extensive planning and technical expertise are beyond the scope of the O & M Program.

#### COMPONENTS

Maintaining asbestos in place may be the only affordable option for many school districts. It is a multi-faceted program and involves many parts of this management plan. The major components are as follows:

- Periodic surveillance
- Specific maintenance and cleaning practices
- Medical surveillance
- Training employees and workers
- Notification and labeling
- Recordkeeping

Creating and enacting the O & M program is central to the management plan. Information to accomplish this task is found in this section and also through training courses for the LEA Designate and maintenance workers.

The heart of any asbestos program is the inspection and the inspection documentation. Understand the inspection report and the location of ACBMs.

An O & M Program for asbestos materials will highly impact the school's maintenance activities and will involve the cooperation of all maintenance staff members. Once mastered, the procedures will become routine and the additional burden of asbestos-containing materials will become an accepted practice.

#### POLICIES

One of the most complicated areas of the AHERA rules is understanding what activities you can or should perform with your own trained staff, short of having everyone trained as a full-scale worker. Consideration should be given to further training beyond the minimum requirement as one way to assure competency when conducting activities that impact asbestos. The district should set policies that clarify the confusion between State and Federal laws and to reflect the uniqueness of their operation and facilities. Policies should be set with input from many sources such as the School Board, legal representative, parents, teachers, and outside consultants.

Following are general policies established by the District:

- 1. All maintenance activities shall be by inner school permit system. The LEA Designate shall sign off that asbestos-containing materials are being properly treated for each remodeling or maintenance project.
- 2. It is the general policy of the District that all asbestos related work shall be performed by outside contractors.
- 3. The District has appointed an Asbestos Program Manager to oversee all asbestos-containing building materials operations and activities.
- 4. Maintenance and custodial staff that come in contact with asbestos-containing building materials will be provided with a minimum of 2 hours of asbestos awareness training in accordance with AHERA and OSHA regulations. Training records should be placed in the Recordkeeping section of the management plan.
- 5. All removal of ACM greater than 3 SF or 3 LF shall be performed by an outside contractor with their accredited personnel regardless of the quantity of material removed.
- 6. Any fiber release episode shall be immediately reported to the Asbestos Program Manager. The area shall be isolated and demarcated. Outside contractors will be contacted to clean-up and repair asbestos-containing materials.
- 7. Air monitoring and inspection tasks will be performed by a third-party air monitoring technician.
- 8. Perform an annual workplace review of asbestos programs to evaluate safe working conditions, training, labeling and updates to asbestos-containing building material actions.
- 9. Perform a visual surveillance every six months of friable and non-friable asbestos-containing building material with a potential for damage.

#### Fern Ridge School District Asbestos Management Plan Policy Chart

ΑCTIVITY	IN-HOUSE	OUTSIDE CONTRACTOR OR CONSULTANT	SHARED BY IN-HOUSE & OUTSIDE
Special Cleaning in Proximity of Friable ACM	Х		
O & M Activities			х
Material Disturbance Less Than 3 SF or 3 LF		х	
Material Disturbance Greater Than 3 SF or 3 LF		Х	



ΑCTIVITY	IN-HOUSE	OUTSIDE CONTRACTOR OR CONSULTANT	SHARED BY IN-HOUSE & OUTSIDE
Training Provider		х	
Project Design and Specifications		х	
Air Monitoring		х	
Abatement Project Management		Х	

#### PERMIT SYSTEM

Minimizing inadvertent disruption of ACBM during maintenance and renovation operations is often one of the most difficult tasks faced by the LEA Designate appointed Asbestos Program Manager. Initiating a permit system, where all work orders or requests are funneled through the Asbestos Program Manager is a simple yet effective way of controlling disruption of ACM during these activities. The EPA "Green Book" is an excellent source of information on permit systems. The NIBS "Guidance Manual, Asbestos Operations & Maintenance Work" presents a detailed comprehensive model permit system.

In the permit system, all requests for maintenance/renovation activities (other than emergency responses) are given to the Asbestos Program Manager prior to the issuance of a work order to proceed. He or she then checks the building's management plan for information about the presence of ACBM where work is to be performed. The manager should also physically inspect the area in question to ensure asbestos records reflect actual conditions.

If no asbestos is present, the work order is issued and the planned actions can proceed. If asbestos is present, the Asbestos Program Manager will contract with an outside contractor to perform abatement activities needed to complete the work. An example permit is included in this section.

For all jobs where potential contact and disturbance of ACM exists, the Asbestos Program Manager or a designated supervisor qualified by training and experience should visit the work site when the work begins to ensure that the job is being performed properly. In worst-case situations (e.g., large amounts of ACM or contamination), noncritical maintenance/renovation work should be deferred until the ACM in the area can be abated by an abatement contractor.

#### **RESPIRATOR PROGRAM**

The District has established a Respirator Program if personnel, who are trained, are to remove, encapsulate, or repair asbestos-containing materials, are required to enter contaminated areas, or are otherwise required to wear a respirator as part of their work. The minimum recommended level



of training for maintenance personnel involves a two-day course of hands-on education. The details of Respirator Programs are discussed in depth during that training, but should at least include:

- 1. **Policy Statement.** A written statement of management policy, including assignment of individual responsibility, accountability, and authority for required activities of the respiratory protection program.
- 2. **Standard Procedures.** Written standard operating procedures governing the selection and use of respirators. Respirator selection (from NIOSH/MSHA-approved and certified models) is based on the hazards to which the worker is exposed.
- 3. **Medical Exam.** Medical examination of workers to determine whether or not they may be assigned an activity where respiratory protection is required.
- 4. **Proper Use and Training.** User training in the proper use and limitations of respirators and evaluation of the skill and knowledge obtained by the worker through training.
- 5. **Fit Test.** Respirator fit testing. The fit testing should be performed by an industrial hygienist. Testing is done prior to wearing a respirator and at least every six months thereafter.
- 6. **Cleaning.** Regular cleaning and disinfecting of respirators.
- 7. **Inspection.** Routine inspection of respirators during cleaning, and at least once a month and after each use for those respirators designated for emergency use.
- 8. **Storage.** Storage of respirators in convenient, clean and sanitary locations.
- 9. **Air Monitoring.** Surveillance of work area conditions and degree of employee exposure through air monitoring. OSHA regulations require that documentation is available that assures that the respirator in use is adequate protection.
- 10. **Program Evaluation.** Regular inspection and evaluation of the continued effectiveness of the respirator program.

The Respirator Program involves medical testing of personnel who must wear respirators, respirator selection, respirator fit-testing and proper care and maintenance of the respirator. The Respirator Program must be written and records kept. If the Owner's program requires that a Respirator Program be established, the Asbestos Program Manager must be responsible for implementation and adherence to the established procedures.



#### FIBER RELEASE EPISODES

SCOPE:	Response to accidental disturbance of friable ACBM Minor Fiber Release: Less than 3 SF or 3 LF Major Fiber Release: 3 SF or 3 LF or more	
TRAINING:		16-hour O & M Training Accredited Project Designer and Accredited Abatement Worker
FORMS:	Form A	

An accidental disturbance of asbestos material resulting in asbestos fibers being released into the air is considered a Fiber Release Episode. If less than 3 square feet or 3 linear feet are dislodged, it is considered a minor fiber release. If greater than 3 square feet or 3 linear feet is dislodged, it is a major fiber release. Follow the guidelines below as appropriate:

#### MINOR FIBER RELEASE EPISODE

- 1. **16-Hour Training.** Personnel with a minimum of a 16-hour O & M training course can perform clean-up.
- 2. **Restrict Area.** Immediately restrict access to the area to only those persons necessary to enact clean-up. Shut off air handling equipment if necessary to prevent fiber dispersal to other areas of the building. Other sources of air movement such as open windows, openings under closed doors, etc. must be considered and dealt with accordingly.
- 3. **Wet Material.** The material or debris should be thoroughly wetted and disposed of in labeled and sealed 6 mil plastic bags.
- 4. **Clean Area.** Prior to cleaning the horizontal surfaces such as floors, etc., lightly mist the air with amended water. Begin at the high point of the room and end low to the floor. This is to trap airborne asbestos fibers. Allow time for mist to settle. Using a HEPA vacuum and/or wet methods clean the affected area. The area cleaned should extend at least three feet in all directions from locations of obvious debris. Dispose of rags, water, etc. properly.
- 5. **Repair.** Repair damaged areas with asbestos-free materials. Use the method described in the technical sections.

Note: Determine if episode can recur and institute preventative measures. Consultations with other people within or outside the school may be appropriate. Air monitoring while cleaning up and afterwards may be desired.



#### MAJOR FIBER RELEASE EPISODE

- 1. **Restrict Area.** The school maintenance staff should immediately restrict access and post warning signs to the area. So as not to exacerbate the situation, trained personnel should enter area only as absolutely necessary. Shut off air handling system or modify to prevent asbestos fibers from spreading. Other sources of air movement such as open windows, openings under closed doors, etc. must be considered and dealt with accordingly.
- 2. Design the response action using accredited Project Designer.
- 3. Accredited full scale abatement personnel must be used to perform clean-up.
- 4. Review nearby materials for inclusion and compare various response actions.
- 5. Execute the response action with proper management and air monitoring.

Notify the local air pollution control and other authorities as necessary. If building occupants are involved and they come in contact with ACMs, stay calm, do not brush material from clothing and avoid trampling material. HEPA vacuum and wet wipe clothing and skin. Treat physical injuries requiring immediate first aid before decontamination of individuals and clothing.

#### FIBER RELEASE OR O & M ACTIVITY?

Much confusion may exist as to the difference between a Fiber Release Episode and an O & M activity. It is a key issue in that only 3 square feet or linear feet of material may be removed by 16-hour trained maintenance personnel during a fiber release episode, but no such clearly defined limit exists for an O & M activity. The difference is the motivation for the action taken and the material's condition prior to the activity.

A Fiber Release Episode is accidental damage to friable asbestos material. The damage results in asbestos fibers being released into the air. Some examples would be students causing damage to a textured ceiling material or school personnel damaging a boiler jacket while moving equipment in the boiler room. The response to these situations would be as described for Fiber Release Episodes.

Removal of ACBM as an O & M activity is motivated by the need to safely maintain a mechanical system or other building component. Examples would be a leaking steam valve insulated with asbestos material, or moving asbestos-containing ceiling tiles to gain access to the ceiling space to alter the air handling system. The removal is a precursor to another activity and the material being removed is likely in good condition and thereby not releasing vast quantities of asbestos fibers.

Materials that are excessively damaged and releasing fibers must be encountered using the procedures described as a Fiber Release Episode. Materials that are in generally good condition, but must be removed for the purposes of maintaining the building, are addressed as O & M activities.



#### **GENERAL GUIDELINES**

When trained personnel are required to remove, encapsulate or repair asbestos-containing material in the course of their regular maintenance activities, the following general guidelines should be followed. The procedures represent a general, prudent standard and may be modified by management policy. These guidelines are for planned or emergency disturbance of ACM resulting from maintenance needs. Prior to the O & M activity, it is assumed that the material is in relatively good condition and does not meet the criteria of a Fiber Release Episode. A Fiber Release Episode is the accidental damage which causes an immediate release of asbestos fibers into the air. Fiber Release response is discussed in the previous section. Additional O & M guidelines for the specific materials found in the building are presented in the technical sections that follow.

- 1. **Restrict Access.** Restrict entry into the area to only those necessary to perform the maintenance project. All personnel in the area must be protected as described in the technical sections. Access may be restricted through physical means or by scheduling.
- 2. **Post Signs.** Signs must be posted at all reasonable points of entry into the affected work area to prevent entry by unauthorized persons.
- 3. **Shut Off Air Handlers.** The building's air handling system must be shut off or modified to prevent air movement which could carry fibers outside of the affected work area. Other sources of air movement such as open windows, openings under closed doors, portable fans, etc., must be considered and dealt with accordingly.
- 4. **Air Monitoring.** Determine if historical air monitoring exists for the planned activity and if clearance air sample results are necessary. OSHA requires sufficient personal air monitoring results to verify that the correct respirator has been selected.
- 5. **Use Proper Work Practices.** See the technical sections for the appropriate procedures. Trained personnel must use good work practices such as wet methods, HEPA vacuums, HEPA exhaust fans, mini-enclosures, glove bags, prompt clean-up and disposal, etc. to inhibit the spread of released fibers.
- 6. **Clean Area.** After the necessary disturbance of the ACM, the fixtures, components and surfaces in the immediate and affected area should be HEPA-vacuumed or wet-cleaned.
- 7. **Dispose of Debris.** Asbestos debris, used glove bags, contaminated rags, etc. must be placed in sealed, leak tight containers or 6-mil plastic bags. The bags and containers must be properly labeled. Dispose of at an approved landfill with appropriate disposal manifest.



#### **PROTECTION LEVELS**

The following methods of personnel protection are referenced in the technical sections. Only trained personnel with proper medical approval and fit-test can wear respirators. All respirators must be approved by NIOSH/MSHA (National Institute for Occupational Safety and Health; Mine Safety and Health Administration) and be equipped with HEPA filter disposable cartridges (magenta/purple color code). It is assumed that adequate oxygen supply is present in the work area as none of the respirators listed supply additional air to the wearer. The HEPA cartridges filter minute dust particles and are not effective for filtering organic vapors, paint mists, etc.

LEVEL	RESPIRATOR	PROTECTIVE CLOTHING
ONE	Half-face negative pressure	Disposable gloves
TWO	Half-face negative pressure	Disposable gloves Single layer disposable coveralls
THREE	Half-face negative pressure	Disposable gloves Double layer disposable coveralls
FOUR	Full-face powered air-purifying	Disposable gloves Double layer disposable coveralls

#### PERSONAL DECONTAMINATION PROCESS

After completion of the maintenance activity, the worker must properly decontaminate. The process is generally the same for all Protection Levels. The worker should follow the steps below as appropriate to the level of protection.

- 1. **HEPA Vacuum Outer Coverall.** HEPA vacuum outer layer of disposable coveralls. Carefully remove, turning coveralls inside-out.
- 2. **HEPA Vacuum Inner Coverall.** HEPA vacuum inner layer of disposable coveralls. Carefully remove, turning coveralls inside-out.
- 3. **Remove Gloves.** Carefully remove gloves, turning gloves inside out.
- 4. **Dispose of Coveralls and Gloves.** Dispose of coveralls, gloves and other contaminated items in 6-mil plastic bags that are leak tight. Place in a second properly labeled 6-mil plastic bag.
- 5. **Wash.** Wash hands, face and other exposed skin. This is good hygiene practice, and wastewater should not be asbestos-contaminated if the worker was involved in routine procedure with a low fiber level. If high fiber levels are expected, contain and filter the water prior to disposal in sanitary sewer system.



6. **Respirator.** Remove respirator and clean. Detach cartridges and dispose.

#### **COMMON MATERIALS AND DEFINITIONS**

- 1. **AHERA:** Asbestos Hazard Emergency Response Act. 40 CFR Part 763. Federal regulation requiring public elementary and secondary schools to develop and implement an asbestos management plan (O & M program).
- 2. **Amended Water:** Clean potable water containing a surfactant additive. The surfactant additive shall be 50 percent polyoxyethylene ether and 50 percent polyethylene ester, or equivalent, and shall be mixed with water at a concentration of one ounce surfactant to 5 gallons of water, or as recommended by the manufacturer in the case of an equivalent.
- 3. **ACM:** Asbestos containing material. Any material containing more than 1 percent asbestos.
- 4. **Asbestos:** Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that has been chemically treated and/or altered.
- 5. **Disposal Containers:** Disposal containers shall be suitable to receive and retain any asbestos containing or contaminated materials until disposal at an approved site. The containers shall be labeled in accordance with OSHA and EPA regulations. Containers must be both air and watertight, and have hard top, bottom and sides such as steel or fiberboard.
- 6. Encapsulants: Encapsulants shall be of the bridging or penetrating variety and shall be listed as "satisfactory" by the EPA. Penetrating Encapsulant: No. 207 Special Sealer #33775 27A as manufactured by Makus-Cincinnatus, Inc.; "Asbestop 30B-2" as manufactured by Asbesco Corp.; "Cable Coating 22-P" as manufactured by American Coatings Corp., or approved. Bridging Encapsulant: Decadex Firecheck, manufacturer's standard color "Magnolia", as manufactured by Pentagon Plastics, Inc.; "Cable Coating 2-B", manufacturer's standard color gray, as manufactured by American Coatings Corp.; or approved.
- 7. **Glove Bag:** A manufactured device consisting of a transparent impervious plastic bag-like enclosure with a seamless bottom and inward projecting glove-like appendages through which material and tools may be handled, an internal tool pouch, provisions for fastening and sealing at the top and sides, and a receptacle in the bottom to hold asbestos waste. The glove bag is affixed around asbestos-containing material to be removed and contains all fibers released during the process. Glove bags are used to remove insulation from small sections of pipe and fittings. Glove bags shall not exceed 60 inches x 60 inches and are not installed on pipe insulation when temperatures exceed 150 degrees.
- 8. **HEPA Filter:** A High Efficiency Particulate Air (absolute) filter capable of trapping and retaining 99.97 percent of asbestos fibers greater than 0.3 microns in length.



- 9. **HEPA Vacuum Equipment:** High Efficiency Particulate Air (absolute) filtered vacuuming equipment with a filter system capable of collecting and retaining asbestos fibers. Filters should be of 99.97 percent efficiency for retaining fibers of 0.3 microns in length or larger.
- 10. **HEPA Fan Unit:** An air-purifying fan which draws air through a HEPA filter.
- 11. **Mini-Enclosure:** A small temporary enclosure of 6 mil plastic sheeting constructed around a work area to contain airborne asbestos fibers. The enclosure shall accommodate no more than two persons and shall conform to the configuration of the space. The enclosure shall be placed under negative pressure using a HEPA vacuum. Prior to use the enclosure shall be inspected for leaks and smoke tested. Prior to reuse the enclosure shall be cleaned with amended water and HEPA vacuumed. Attached to the mini enclosure is a three-foot by three-foot equipment room with impermeable plastic bottom, top and sides to be used for decontamination purposes.
- 12. **Plastic Bags:** Plastic bags shall be 6-mil polyethylene printed with warning labels per OSHA and EPA regulations.
- 13. **Rewettable Lagging Cloth:** Twelve ounce glass fabric lagging cloth saturated with dried lagging adhesive. "Dip Lap" as manufactured by Claremont Co. or equivalent.
- 14. **Tack Coat:** A coat of penetrating encapsulant applied to all surfaces from which asbestoscontaining materials have been removed.
- 15. **Warning Labels and Signs:** Warning labels and signs shall be posted as required by OSHA and EPA regulations.
- 16. **Wet Cleaning:** The process of eliminating asbestos from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with amended water.

### DISPOSAL

The Operations and Maintenance Program will intermittently generate small quantities of asbestos debris and contaminated waste. It may not be feasible to transport waste directly to an approved landfill at the time the waste is generated. Consequently, each school should establish an area to safely store disposal bags prior to transport to the landfill.

The area should be securely locked, inaccessible to students, teachers and non-maintenance personnel, and directly open to the outside if possible. Used disposal bags must be double-bagged, kept sealed and should be stored in a labeled steel or fiberboard drum. Once a bag is sealed, it should not be reopened. This allows reuse of the drum container, if the outer bag of the double-bagged waste remains undamaged. If the bags are damaged, the drum container must also be



disposed of as contaminated waste unless it can be effectively cleaned. The landfill dump receipt and other records should be kept as part of the recordkeeping process and a summary of those activities kept in all of the management plans.

Contaminated water must either be double-bagged as asbestos waste or passed through a HEPA water filtration device. If cleansed through a filtration device, the water may be disposed of through the building's plumbing system.



# Recordkeeping

Use this section to maintain all completed forms

These forms include:

Forms A and A1 Forms B and B1 Form C Maintenance Work Authorization Form Notification Letters

**Form Masters** 

# ASBESTOS ACTIVITY RECORD FORM A.

ACBM RESPONSE ACTION ACBM PREVENTATIVE N CLEANING 0&M ACTIVITY	ON IEASURE	BUILDING:	to (stop)
FIBER RELEASE EPISODE			
DESCRIPTION OF MEASUR			
REASON WHY SELECTED:			
CONTRACTOR (if used):			
ADDRESS:		STATE:	ZIP:
WORKERS USED:			
NAME	TRAINING		IDENTIFICATION NO.
DISPOSAL OR STORAGE S			
		_CITY:\$	TATE: ZIP:
AIR SAMPLING DATA:			
DATES:			
COLLECTION DATE(S):			LYZING SAMPLES:
DESCRIPTION OF LOCATIO	ONS OF SAMPLES	S: ADDRESS: CITY: ST	ATE:ZIP:
			/SIS:
COMPANY/PERSON COLLECTING SAMPLES:		S: PERSON(S) ANALY	ZING SAMPLES:
SIGNATURE:			
PROJECT DESIGNER:			
		This signature certifie	s that this testing lab is enrolled n for PCM or is accredited by

## ASBESTOS ACTIVITY COMPLETION RECORD FORM A1

ACM ABATEMENT PROJECT	OWNER:			
ACM PREVENTATIVE MEASURE	BUILDING:			
	LOCATION	J:		
EMERGENCY RESPONSE: SMALL or LARGE	DATE:	(start)		(stop)
DESCRIPTION OF ACTION:				
WORK AREA:				
LOCATION OF REMAINING ACM/PACM:				
TYPE OF ACM/PACM REMAINING:				
QUANTITY OF ACM/PACM REMAINING:				
NAME:				
ADDRESS:				
CITY:	ST.	ATE:	ZIP:	
SIGNATURE:				

### PERIODIC SURVEILLANCE FORM B

Periodically asbestos-containing materials (ACM) should be observed to document any changes in conditions. Walk through the building to observe current conditions. Be sure to note both friability and damage for every material by checking the appropriate category. This form is to be kept in the periodic surveillance section and should be used anytime you notice a change in ACM conditions or accessibility.

## DO NOT TOUCH ASBESTOS-CONTAINING MATERIAL WITHOUT PROPER TRAINING

Facility Name: \_\_\_\_\_

Building:

Date of Observation:

MATERIAL	LOCATION	DAMAGED?	FRIABLE?	COMMENTS	
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
		Yes No	Yes No		
Non-friable Mat	erials:				
Remarks:					
Ву:		Title:			

### NEWLY DISCOVERED ACM FORM B1

Occasionally previously unknown ACM or PACM is discovered during routine maintenance or removal projects. These materials are to be reported to the Asbestos Program Manager within 24 hours of discovery. Complete all sections of this form and be sure to identify the type of material, the location and the quantity (your best estimate). This form is to be kept in the periodic surveillance section and should be used anytime you or contractor discovers new ACM/PACM.

# DO NOT TOUCH ASBESTOS-CONTAINING MATERIAL WITHOUT PROPER TRAINING

Facility N	ame:		
Building:			
	MATERIAL	LOCATION	QUANTITY
1			
2			
3			
4			
5			

**DESCRIPTION OF CONDITION:** 

Remarks:

# TRAINING RECORD FORM C

CLASS 4	FACILITY NAME:
2-HOUR AWARENESS	
CLASS 3 16-HOUR WORKER (O & M)	FIRM NAME:
CLASS 1 & 2 FULL-SCALE WO	RKER
Trainee's Name:	
Address:	
City, State, Zip:	
Job Title:	
Training Course:	
Training Course Location:	
Training Course Provider:	
Training Course Description:	
Course Length:	
Instructor:	
Date taken:	
Accreditation Number (if applicable):	
Expiration Date of Accreditation (if appl	icable):
Comments:	

# MAINTENANCE PERMIT REQUEST JOB REQUEST FORM FOR MAINTENANCE WORK

Name:	Date:
Telephone No.:	Job Request No.:
Requested Starting Date:	Anticipated Finish Date:
Address, building, and room number(s) (or deso	cription of area) where work is to be performed:
Description of work:	
Description of any asbestos-containing material	that might be affected, if known (include location and type):
Name and telephone number of requestor:	
Name and telephone number of supervisor:	
Submit this application to:	
(The Asbestos Program Manager)	
	Il maintenance work whether or not asbestos-containing ust then be received before any work can proceed.
Granted (Job Request No) With conditions* Denied	
*Conditions:	

## MAINTENANCE PERMIT AUTHORIZATION MAINTENANCE WORK AUTHORIZATION FORM

### AUTHORIZATION

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Authorization is given to proceed with the following maintenance work:

## PRESENCE OF ASBESTOS-CONTAINING MATERIALS

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/worn during the work to protect workers:

(manuals on personal protection can be referenced)

### SPECIAL PRACTICES AND/OR EQUIPMENT REQUIRED:

Signed:

\_\_\_\_\_ Date: \_\_\_\_\_

(Asbestos Program Manager)

#### NOTIFICATION LETTER 1 CONTRACTORS / PROSPECTIVE CONTRACTORS or VENDORS

Dear Mr./Ms. \_\_\_\_\_:

Federal regulations require building owners to notify prospective contractors who may perform work, and contractors who perform work in Medford School District facilities, that asbestos-containing materials are present in the building. We are required to convey the type, location and quantity found in your building. A compiled list of the asbestos-containing materials are found in the following document.

<u>TYPE</u>

## LOCATION

# <u>QUANTITY</u>

Before engaging in construction, repair or maintenance activities you are required to determine if asbestos is present in the materials which will be disturbed. You are to consult the building Asbestos Management Plan (AMP) for guidance regarding the required asbestos construction, repair and maintenance work practices. Any asbestos contamination, which results from failure to follow procedures in the AMP, will be the responsibility of the contractor to resolve. It is your responsibility to ensure that your employees and any subcontractors you employ are notified about the conditions, procedures and requirements for working with asbestos-containing materials in this building including proper training.

Your cooperation is essential for the success of this program. Questions or concerns you may have regarding asbestos-containing materials should be directed to

\_\_\_\_\_, Program Manager at\_\_\_\_\_\_.

Sincerely,

# **Optional Acknowledgment**

Please return a signed copy of this letter to acknowledge your understanding of the asbestos control program in this building and your intent to comply with this program.

Name:	Date:
Signature:	Title:
Company:	