

**ARCHDIOCESAN
INFORMATION PACKET
FOR ASBESTOS IN
PARISHES, SCHOOLS AND
ARCHDIOCESEAN FACILITIES**

**Corporation of the Catholic Archbishop of Seattle
710 Ninth Avenue
Seattle, Washington 98104**

**Contact the Office of Property and Construction Services if
you have any asbestos-related questions and/or concerns at:
(206) 382-4851 or toll-free at 1(800) 809-4923.**

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Asbestos

Asbestos is a naturally occurring mineral fiber that commonly has been used in building construction materials for insulation and as a fire-retardant. Asbestos is still being produced and distributed.

Asbestos fibers have been found to be a health hazard and there are local, state and federal regulations that govern in-place maintenance, removal, and worker/general public safety. An Asbestos Containing Material (ACM) means any material containing more than 1% asbestos. A building material containing asbestos is referred to as Asbestos Containing Building Material (ACBM).

There are two sets of regulations that govern Asbestos in Archdiocesan facilities:

- The Washington State Department of Labor and Industries governs worker safety with asbestos regulations. You may encounter the Federal Government's Occupational Safety and Health Administration (OSHA) program and for Washington State, OSHA defers to state regulations.
- The Federal government has developed several laws and regulations designed to govern the use of asbestos and better protect the public. In 1986, the Asbestos Hazard Emergency Response Act (AHERA) was signed into law as Title II of the Toxic Substance Control Act (TSCA). Additionally, the Asbestos School Hazard Abatement Reauthorization Act (ASHARA), passed in 1990, required accreditation of personnel working on asbestos activities in schools and public and commercial buildings. Both AHERA and ASHARA rules affect our active Catholic Schools. There is information in this packet specifically addressing the AHERA program in our schools.

This manual is intended to explain policy and provide guidance on the following:

1. Archdiocese of Seattle Asbestos Policy and Contacts
2. Role of the Facility Manager
3. Role of the Janitor, Custodian and Maintenance Staff
4. Training Information
5. Staff Information Update Form
6. New Hire Asbestos Awareness Worksheet

ARCHDIOCESE OF SEATTLE ASBESTOS POLICY

The following is the policy as set forth by the Archdiocese regarding asbestos management for Archdiocesan facilities.

1. It is the policy of the Archdiocese to comply with the laws regarding asbestos and provide for the health and safety of all employees, students and occupants of all Archdiocesan buildings.
2. It is the policy of the Archdiocese that whenever an asbestos-containing building material (ACBM) reaches the end of its useful life and can no longer be maintained through an operation and maintenance program, it should be removed from building. If ACBMs are present, parishes will follow an operation and maintenance program that protects the health and safety of the occupants.
3. It is the policy of the Archdiocese that there will be no direct nor indirect relationship between accredited persons who perform Archdiocesan inspections, write project specifications or management plans or provide air monitoring services and persons performing repair or abatement activities.
4. It is the policy of the Archdiocese that all employees who are required to be trained either as an inspector, janitor, custodian or maintenance staff, or in any other asbestos-related capacity comply with the laws regarding employee protection. All employees who have asbestos-related training shall provide a copy of their certificate, and if any related medical condition exists, an annual medical report to the Office of Property and Construction Services. This information shall also be included in the employee's personal file.
5. It is the policy of the Archdiocese that all work to remove ACBMs uses the Archdiocesan Hazardous Material Contract and be executed by the Corporation of the Catholic Archbishop of Seattle.

CONTACTS

To answer your asbestos-related questions and/or concerns, please contact:

Annie Roy,
Or Ed Foster, Director
(206) 382-4851
Archdiocese of Seattle
Office of Property and Construction Services
710 Ninth Ave.
Seattle, Washington 98104

EMERGENCY

In the event of an emergency asbestos situation, please contact the following numbers

Property and Construction Services
206-382-4851 or 1-800-809-4923 (days)
206-382-2064 (after hours)

ROLE OF THE FACILITY MANAGER

Each parish or Archdiocesan facility will designate one knowledgeable person to represent the facility and follow asbestos-related procedures in all buildings. These duties will include the following procedures:

DUTIES

1. LIAISON ACTIVITIES

The facility manager will act as a liaison between the pastor, parish council, maintenance and custodial staff, principal and school staff (if applicable) and the Office of Property and Construction Services.

2. RECORDKEEPING

The facility manager should become knowledgeable about the location of asbestos-containing building materials (ACBMs) in the parish building(s). Contact the Office of Property and Construction Services for assistance in identifying and locating ACBMs. The facility manager shall review, organize, and inform the Office of Property and Construction Services about all asbestos-related activities.

3. TRAINING

The facility manager should review the asbestos records semi-annually to determine if all maintenance and custodial staff members have the required training and understand the asbestos manual. Training of new janitors, custodians, and maintenance staff is required within 60 days of employment. This training certifies the participant for Class IV work, as defined by the Washington State Department of Labor and Industries, involving cleanup of asbestos-containing materials where ACBM may be contacted but not disturbed. Any repair or abatement of ACBM must be done by a certified asbestos worker, which is Class I, II, or III work.

4. GOOD FAITH ASBESTOS SURVEY

Prior to the beginning of any renovation, remodeling or new construction project, the facility manager shall contact the Office of Property and Construction Services for compliance with the Washington State Good Faith Asbestos Survey. This survey is given to any contractor at the time they are assembling a proposal for the work. This survey will identify all ABCMs that will be encountered during the project.

5. ABATEMENT

The Office of Property and Construction Services will assist the facility manager in determining the best course to remove any ABCMs during a renovation, remodeling, new construction or maintenance project. All asbestos abatement contracts must use the Archdiocesan Hazardous Material Contract and be executed through the Corporation. The facility manager will be responsible for coordinating abatement activity. They will be responsible to, and coordinate abatement with, the pastor, principal (if applicable), and the Office of Property and Construction Services.

The facility manager shall notify all building occupants that asbestos abatement will be taking place. Contact with the building occupants can be done by newsletter or by mailing out the Asbestos Abatement Notification Letter. Contact the Office of Property and Construction Services for this letter.

In the event of a fiber release episode, the facility manager, along with the facility staff members, shall:

- Isolate the area and post signs: “No Access without Facility Manager's Approval”.
- Contact the Office of Property and Construction Services, or if after hours, the emergency contact number listed inside this information packet and coordinate a response activity with the parish staff members.
- Follow the procedures outlined in the **Archdiocesan Asbestos Operations and Maintenance Handbook**.

ROLE OF THE JANITOR, CUSTODIAN, AND MAINTENANCE STAFF

The roles for janitor, custodian, and maintenance staff members regarding asbestos-containing building materials (ACBMs) are as follows:

1. To safeguard the health of the occupants, employees, students, and themselves by following governmental regulations.
2. To have two hours of “Asbestos Awareness” training within sixty (60) days of starting employment. A certificate of this training must be included in the employee personnel file and Archdiocesan file. Annual ‘refresher’ training is also required. This training certifies the participant for Class IV work, involving cleanup of asbestos-containing materials where ACBM may be contacted but not disturbed. Any repair or abatement of ACBM must be done by a certified asbestos worker, which is Class I, II, or III work.
3. To assist the accredited asbestos inspector by being available during the time of any inspection to answer questions, provide access, and provide building plans, specifications, copies of previous surveillance/inspections and specifications for abatement projects.
4. To know the location of all asbestos and assumed asbestos building materials.
5. To contact the facility manager and/or Office of Property and Construction Services about any disturbance of asbestos-containing materials.
6. To follow state regulations when any amount of asbestos is removed, repaired, or encapsulated, or when a building is demolished or remodeled by assisting the Facility Manager and other parish staff with abatement activities.
7. Together with the Facility Manager, to keep required records accurately and carefully. Send updated information to the Office of Property and Construction Services in a timely manner.
8. To notify any outside vendors, e.g., telephone installers, repairmen, etc., of the location of any known ACBMs.
9. To contact the Facility Manager and/or Office of Property and Construction Services whenever any asbestos-related questions arise during the work at your parish.

TRAINING INFORMATION

Under Washington State Department of Labor and Industries regulations, maintenance and custodial work in buildings containing asbestos-containing materials requires any employee involved with ‘hands-on’ maintenance activities to have “Asbestos Awareness” training. This training is required within 60 days of hire and a “refresher training course” is required annually. Your current training certificate is to be kept on file with the Office of Property and Construction Services and in your “Employee Personal File.”

The Office of Property and Construction Services, in conjunction with the Human Resources Department, offers an annual Fall Safety Training class. This training satisfies both the Department of Labor and Industries and the Environmental Protection Agency AHERA (applicable to schools) training requirements.

Contact the Office of Property and Construction Services at: **(206) 382-4851** or toll-free at: **1 (800) 809-4923** for more information.

BLOOD-BORNE PATHOGENS

In addition to the Asbestos training, training is required in order to safely contain and dispose of blood-borne pathogens. This training is required immediately upon hire and an annual refresher course is required. A training DVD that contains information on common blood-borne pathogens and how to use proper procedures and basic personal protective equipment when cleaning up bodily fluids is available from the Office of Property and Construction Services. This DVD satisfies both initial and refresher training requirements.

STAFF INFORMATION UPDATE

The Archdiocesan Office of Property and Construction Services requires that this form be completed and turned in when any change occurs. This will provide an up-to-date database of Archdiocesan Facility Managers, Janitors, Custodians, and Maintenance staff. Please send this to: The Office of Property and Construction Services; Archdiocese of Seattle; 710 9th Ave. Seattle, Washington 98104.

(please print)

Name _____

Job Title _____

Parish _____ City _____

Circle one answer:

Has the Facilities Maintenance Staff Member completed the required "Safety Training"?

Yes No

Has the Facilities Maintenance Staff Member completed the required "Asbestos Awareness Training"?

Yes No

Has the Facilities Maintenance Staff Member completed the "Annual Asbestos Refresher Training"?

Yes No

Does the current Archdiocesan employee understand the responsibilities and duties as set forth by the Archdiocese? Yes No

Please sign below acknowledging responsibilities and duties as member of Facilities Maintenance Staff:

Signature

Date

ASBESTOS AWARENESS WORKSHEET NEWLY HIRED EMPLOYEES

Part One - Personal Information

Name _____

School of Employment/City _____ Date of Hire _____

Position or Job Title _____

Part Two - Instructions for Completion of Awareness Training

1. Read the Asbestos Information Packet.
2. Watch the Introduction and Asbestos General Awareness DVD.
3. Complete the following:

Is there asbestos in your Parish buildings other than the boiler room? (Circle one)

Yes No

Will you disturb any ACBMs in the performance of your work? (Circle one)

Yes No

Will you personally remove any ACBMs from your facility? (Circle one)

Yes No

If ACBMs are damaged, who do you contact? _____

Do you have a current asbestos certification of any type at the present time? (Circle one)

Yes No

If yes, explain _____

Part Three – Questions

If you have any questions about this worksheet, the DVD, or asbestos, please contact Annie Roy at (206) 382-4851, toll-free at 1-(800) 809-4923, or email: annier@seattlearch.org
Or you can also contact Ed Foster at (206) 382-2064, or email: edf@seattlearch.org

PLEASE RETURN THIS WORKSHEET AND DVD TO:

Annie Roy, Office of Property and Construction Services, Archdiocese of Seattle,
710 Ninth Ave., Seattle, WA 98104

Trainee Signature

Date

Pastor, Facility Manager, or Principal Signature

Date

Asbestos Hazard Emergency Response Act (AHERA)

In 1988, the Asbestos Hazard Emergency Response Act (AHERA) became mandatory in all public and private schools in the United States.

The law requires that all schools manage all asbestos-containing building materials (ACBM) in their schools by maintaining, removing, encapsulating or otherwise encasing these materials in such a manner that no asbestos fibers will become airborne.

All maintenance and custodial personnel of the Catholic Archdiocese of Seattle must receive at least two hours of training within sixty (60) days of being hired, which:

- Explains the law.
- Explains the adverse health effects of asbestos exposure.
- Shows the employee where asbestos may be present in the school.
- Shows the employee how to recognize damage to any asbestos located in the school.
- Teaches the employee how to avoid damaging any asbestos.
- Teaches the employee how to isolate damaged asbestos.
- Explains how to report damaged asbestos.

A two-hour training video is available and can be utilized to satisfy this AHERA requirement. After viewing the video, the AHERA Designated Person must show the employee the AHERA Management Plan and the location of all asbestos located in the building. Each employee will be required to sign a form stating that they have received this training. The form must be returned to the Office of Property and Construction Services within thirty (30) days of the training.

All employees and students and their guardians must be notified annually of the status of all asbestos-containing building material (ACBM) in any school-owned building. This public document must always be available for review at the School Office or the Office of Property and Construction Services located at 710 9th Ave., Seattle WA. All AHERA reports are public documents that must be made available to any person upon request.

Except for school buildings certified as “Asbestos-Free,” each building must be re-inspected every three years. The Three Year Re-Inspection Report is available in the AHERA records located at the School Office or at the Office or the Office of Property and Construction Services.

The Department of Labor and Industries in Washington State has worker protection rules that mandate asbestos mitigation working conditions.

EPA’s National Emissions Standard for Hazardous Air Pollutants (NESHAPS) regulates the release of asbestos particulates into the air along with regulations by the clean air agency for your region.

The Washington Department of Ecology (DOE) regulates the disposal of asbestos-containing products.

ASBESTOS OPERATIONS AND MAINTENANCE HANDBOOK

A Guide for Facilities Maintenance Personnel

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Asbestos Operations and Maintenance Handbook

A) Purpose and Objectives

The Archdiocese is committed to providing a safe working environment for all workers and will provide the training needed to comply with regulations. For all active Catholic Schools, the Environmental Protection Agency through the AHERA program and the Washington State Department of Labor & Industries both have regulations governing in-place maintenance and removal of all asbestos-containing materials or presumed asbestos containing materials. If there is not an active Catholic School, only the Department of Labor and Industry regulations will apply.

In order to determine which materials are ACBMs (Asbestos Containing Building Materials) the Archdiocese has inspected, or will inspect, all buildings for asbestos containing materials prior to a renovation, construction, or maintenance project. The asbestos inspection report is available for all workers to review prior to beginning any project. Workers are expected, and required, to familiarize themselves with the potential of encountering asbestos and other hazardous materials prior to beginning work and these objectives include:

- Clean up existing contamination
- Minimize future fiber release by controlling access to ACBMs
- Maintain ACBM until it is eventually removed

It is required to abate asbestos-containing materials if they have reached the end of their useful life and can no longer be maintained.

B) Training

All maintenance and custodial workers, as a minimum, will be trained as class IV asbestos workers as required by Washington Department of Labor & Industries regulations. This training satisfies the requirement for training required by the AHERA program.

Class IV worker training consists of an initial 2-hour worker course given by an approved course sponsor. Each worker shall maintain a current worker certificate with an annual refresher course. Options for additional Class III training (e.g. small scale, short duration ACBM removal or repair) will be reviewed on an as needed basis.

It is anticipated that all work involving class I, II or III asbestos workers will be performed under the Archdiocese Hazardous Material Contract by a licensed asbestos abatement contracting firm approved by the Office of Property and Construction Services with the contract executed by the Corporation.

C) General Cleaning Practices

INITIAL CLEANING

Initial cleaning, as referred to in the AHERA regulations for schools, was completed in all areas where friable surfacing material was originally identified. The procedures below are listed only for clarification should a major fiber release episode occur.

Custodial Staff should:

- Steam-clean all carpets throughout the affected area or vacuum with a High Efficiency Particulate Air (HEPA)-filtered cleaner. Spray the vacuum cleaner bags with water before removing, place in sealed, leak-tight, 6-mil plastic bags and dispose of as asbestos material at an approved landfill site. Discard vacuum filters in a similar manner.
- HEPA vacuum all soft-surface materials such as curtains, fabric chairs and books. Discard vacuum bags and filters in sealed bags as stated above.
- HEPA vacuum or wet clean all non-carpeted floors. Wipe all shelves and other horizontal surfaces with damp cloths. Use a mist spray bottle to keep cloth damp. Discard cloths and mop heads in sealed plastic bags as stated above in Item 1.

PRIMARY CLEANING TECHNIQUES

All maintenance and custodial workers should have received training to properly deal with actual or suspect asbestos containing debris. Workers should avoid patching or repairing any damaged surfacing ACBM until the facility manager has assessed the situation. These are primary cleaning techniques for ACBM.

- Spray all suspect asbestos-containing debris with water and place the debris in plastic bags using a dustpan. Rinse the pan with water into the bag.
- HEPA vacuum all carpets.
- Wet-mop all other floors and wipe all other horizontal surfaces with damp cloths.
- Mist filters in a central air ventilation system with water from a spray bottle as the filters are removed. Place filters in plastic bags prior to disposal.
- All debris, filters, mop heads, and cloths should be placed in sealed, leak-tight, 6 mil plastic bags. The facility manager should be notified for appropriate disposal.

D) Special Work Practices For Maintenance Activities

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

The O & M program includes provisions for each type of ACBM that is present in the building:

1. **Surfacing materials**: Sprayed-on or troweled-on materials, such as acoustical plaster on ceilings or fireproofing materials.
2. **Thermal Surfacing Insulation (TSI)**: Insulation on pipes, fittings, boilers, etc.
3. **Other ACBM**: vinyl flooring, ceiling tiles, transite wallboard, etc.

The nature and extent of special work practices should be tailored to reflect the likelihood that the ACBM will be disturbed and fibers released. Four categories of potential disturbance are defined:

- a. Contact with the ACBM is unlikely;
- b. Accidental disturbance of ACBM is possible;
- c. Disturbance of ACBM is intended or likely:
 - i. A small amount of ACBM (less than three square feet of three linear feet) will be disturbed;
 - ii. A large amount of ACBM (three or more square feet or linear feet) will be disturbed.

The following sections on surfacing materials, thermal system insulation, and other types of ACBM describe the work practices in detail.

NOTE: Class IV trained workers are not authorized to perform repairs of TSI pipe insulation.

1) Surfacing Materials

Maintenance activities affecting asbestos-containing surfacing materials generally involves either cleaning or repairs where the material has been damaged by an occupant, the environment or other maintenance activities.

a. Contact with ACBM is Unlikely

In some buildings with ACBM, many routine maintenance activities can be conducted without contacting the ACBM. For example, changing light bulbs in a fixture on a ceiling with asbestos-containing acoustical plaster can usually be performed without jarring the fixture or otherwise disturbing the ACBM. (The top of the fixture should have been wet-cleaned previously to remove settled fibers.) In these situations, few precautions other than normal care are needed. Assure the availability of respirators and a HEPA vacuum if needed. These do not have to be taken to the site, but should be available at a known location in the building. Where maintenance is performed in parts of the building free of ACBM, no special precautions are usually necessary.

b. Accidental Disturbance of ACBM is Possible

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

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

The following precautions and procedures should be used if accidental disturbance or ACBM (or dust and debris containing asbestos fibers) is likely:

- Approval should be obtained from the facility manager before beginning work. The facility manager will make an initial visit to the work site.
- The work should be scheduled after normal working hours (nights or weekends), if possible, or access to the work area should be controlled: doors should be locked from the inside and signs posted to prevent unauthorized persons from entering the work area (e.g., "MAINTENANCE WORK IN PROGRESS, DO NOT ENTER," or, if asbestos levels are, or are anticipated to be, high enough to trigger Department of Labor and Industries Rules (the PEL or higher), "DANGER - ASBESTOS: CANCER AND LUNG DISEASE HAZARD: AUTHORIZED PERSONNEL ONLY: RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA". Note: emergency exits must remain in operation.
- The air-handling system should be shut off or temporarily modified to prevent the distribution of any released fibers to areas outside the work site.
- A 6-mil polyethylene plastic drop cloth should be placed underneath the location of the maintenance work, extending at least 10 feet beyond all sides of the work site. Alternatively, a rectangular enclosure constructed of 6-mil plastic on a frame can be positioned underneath the maintenance area to inhibit the spread of fibers from the ACBM.
- The ACBM in the vicinity of the maintenance work should be misted lightly with amended water (water to which a surfactant – wetting agent – has been added to increase the ability of the liquid to penetrate the ACBM). Use a mister that produces a very fine spray. Be sure that the electrical system is shut off before spraying around any electrical conduits or fixtures.
- After maintenance work is completed, the fixture, register, or other component, and all tools, ladders and other equipment should be HEPA-vacuumed or wiped with a damp cloth.

- If any debris is apparent on the drop cloth, floor or elsewhere, it should be HEPA-vacuumed.
- The plastic drop cloth (or enclosure) should be wiped with a damp cloth, carefully folded, and discarded as asbestos waste.
- All clothes, vacuum bags/filters, and other disposable materials should be discarded in sealed and labeled plastic bags as asbestos waste.

c. Disturbance of ACM Intended or Likely

Some maintenance and repair activities will unavoidably disturb the ACM. For example, installing new sprinkler or piping systems will necessitate hanging pipes from structural members or the ceiling. If the beams or ceilings are insulated with ACM, the ACM will be scraped away to install hangers. Likewise, pulling cables or wires through spaces with ACM or ACM debris is likely to dislodge pieces of the ACM or disturb ACM debris and dust. Projects that cannot be performed without the disturbance of asbestos-containing materials will be suspended until the area can be abated by certified asbestos workers prior to ongoing maintenance work.

- i. Small Scale Disturbance (Class III Trained Worker, minimum)
For maintenance activities which involve small-scale (less than 3 square feet) removal of surfacing ACM or when disturbance of ACM dust and debris or unintentional contact with the ACM is likely, see the previous section 1) b.
- ii. Large Scale Disturbance (Class I or Class II Trained Worker, minimum)
Any maintenance work, which involves removal of 3 or more square feet of surfacing materials (or 3 linear feet of thermal system insulation), should be considered a large-scale disturbance of ACM. Planned maintenance projects involving the disruption of this amount of asbestos material will be subject to contractor work.

The Archdiocese of does not maintain certified asbestos abatement workers on staff to properly conduct the necessary pre-maintenance removal. Certified asbestos workers must follow the applicable regulations in effect at the time of the abatement. The work will typically follow the procedures listed below:

- All of the procedures for asbestos removal must be followed -- construction of containment barriers and decontamination facilities; use of protective clothing and "type C" respirators by workers; proper disposal of asbestos debris; and proper cleanup of the work site followed by air testing.
- Once the work site has been adequately isolated and all precautionary measure has been taken, the work could begin. If the

work involves cutting, drilling, grinding, or sanding the ACBM, special tools equipped with HEPA vacuum attachments must be used. Where the ACBM is simply scraped off the substrate, the hose from a HEPA vacuum cleaner should be placed just below the removal site to catch the ACBM. Upon completion of the work, the vacuum bags and filters should be discarded as asbestos waste.

- Where the ACBM was disturbed as part of the maintenance activity, it should be repaired with non-asbestos plaster or spackling compound or sprayed/painted with an encapsulant or latex paint (see section 5.1.3 of the EPA Purple Book for specifications). This should be done before any final cleanup of the work site.

2) Thermal System Insulation

Maintenance activities affecting asbestos-containing thermal system insulation generally involves plumbing-type repairs, or repairs to the heating, ventilation and air conditioning (HVAC) system. Frequently, the ACBM must be removed to provide access to the valve, flange, duct, or related system part needing maintenance.

a. Contact With ACBM is Unlikely

Maintenance activities or repairs that can be performed without contacting or disturbing the ACBM require little more than normal care and good workmanship. (Respirators and a HEPA vacuum cleaner should be available if needed.) For example, valves that are either uncovered or covered with non-asbestos insulation can be repacked or repaired without disturbing asbestos insulation on nearby pipes. As with surfacing ACBM, the only precautions necessary are to make sure that a HEPA vacuum cleaner and air-purifying respirators are available if needed.

b. Accidental Disturbance of ACBM is Possible

Even maintenance tasks that involve no direct contact with ACBM may cause accidental disturbance. For example, vibrations created by maintenance activities in one part of piping network will be transmitted to other parts. Vibrations could then cause fibers to be released from insulation which is exposed (not covered with a protective jacket) or not in good condition. If in doubt about the possibility of fiber release, thoroughly inspect the thermal system insulation before undertaking the maintenance or repair work. Then, either correct the problem before starting, or assume that the maintenance work may cause accidental disturbance and fiber release. In this case, the following procedures should be used:

- Work approval and site preparation procedures as described under Surfacing Material should be followed.
- Plastic sheets (6-mil polyethylene) should be cut and taped around any insulation that might be accidentally disturbed. The plastic should be misted with amended

water before taping it shut. If the locations where insulation could be disturbed are too numerous for the isolation with plastic, workers should perform the maintenance work wearing air-purifying respirators, at a minimum, and protective clothing, including disposable suits and hoods.

- Cleanup procedures, as described under Surfacing Material, should be followed. Special care should be taken when removing the plastic from the insulation to minimize disturbance of any ACM dust or debris that may have fallen from the insulation.

c. Disturbance of ACM Intended or Likely

i. Small Scale Disturbance

Where asbestos-containing insulation must be removed to maintain or repair the thermal system, the ACM will obviously be disturbed. As with surfacing ACM, the amount to be removed or manipulated will determine the procedures to be used, and **only by certified Class I or Class II asbestos abatement workers.**

ii. Large-Scale Disturbances

Maintenance activities, which involve removal of 3 linear feet or more of asbestos-containing insulation (e.g., several valves need attention in a utility room or block insulation needs to be removed for boiler repair), should be considered large-scale disturbances. **Non-emergency maintenance projects that require the removal of more than (3) linear feet of material shall be conducted by certified asbestos abatement workers.**

Contractor Practices:

In some situations, glove bag techniques may be appropriate and the procedures described above under "small disturbances" should be followed. When glove bags are not feasible, the abatement activities should be conducted using all the procedures recommended for large-scale asbestos removal. ACM removal is conducted by abatement contractors.

The choice between conducting multiple glove bag operations and isolating the entire work site is largely one of convenience and cost. However, if the maintenance activities are likely to cause a disturbance of ACM on pipes, boilers, or ducts at sites other than just those undergoing repair (due to vibration, for example), then the entire room or area should be isolated and large-scale asbestos removal procedures employed.

3) Other types of ACBM

Include vinyl asbestos floor tiles, asbestos ceiling tiles, transite wallboard and counter tops, asbestos roof tiles, and various textile products such as stage curtains. ACBM, per the AHERA Rule, does not include fabrics or exterior products. Disturbance of these materials should be avoided. Where this is not possible, procedures should be used as described above for large-scale removal of ACBM. Cutting, drilling, grinding, or sanding of ACBM must be performed by certified asbestos workers with tools equipped with HEPA-filtered vacuum systems.

Vinyl Asbestos Tiles: The Office of Property and Construction Services does not recommend covering or encapsulating 9x9 vinyl asbestos tile (VAT). The reason for this is two-fold. Firstly, some flooring manufacturers will not warrant their material installed directly over vinyl asbestos tile. Secondly, at some point in the future, the new flooring material will need to be replaced. It is very difficult to remove the new floor covering without damaging or disturbing the vinyl asbestos tile. Should this occur, both the new flooring and the existing flooring will become an asbestos removal project thus increasing the cost to remove this material.

E) Special Work Practices for Renovation and Remodeling

All renovation and demolition work within Archdiocese is governed by:

- The local air pollution control authority
- Washington State Department of Labor & Industries
- US-EPA regulations through the AHERA program
- Archdiocesan policies and procedures

All work must comply with the above mentioned regulatory and archdiocesan requirements including inspection, worker practices, permits and post-project inspection.

Renovation and Remodeling

Building renovation or building system replacement or remodeling can cause major disturbance of ACBM. Moving walls, adding wings, and replacing heating or air conditioning systems involve breaking, cutting, or otherwise disturbing ACBM that may be present. Prior to any renovation project a Good Faith Asbestos Survey is completed. Contact the Office of Property and Construction Services to assemble this survey, which must be done by the building owner and given to any contractor at the time they are bidding the project. The contractor performing the work cannot assemble the Survey. The Good Faith Survey will assist the parish or school in determining the extent of any asbestos-containing materials and an appropriate response to handling these materials during the project

F) Emergency Response Procedures

As long as ACBM remains in the building, a fiber release episode could occur. Custodial and maintenance workers should report the presence of debris on the floor, water or physical damage to the ACBM, or any other evidence of possible fiber release to the facility manager or

the Office of Property and Construction Services if necessary. The fiber release episode will need to be classified as either a Minor or Major Fiber Release Episode.

Minor Fiber Release Episodes

Minor episodes are fully addressed in the L&I training requirements for all maintenance and custodial workers. A small section of insulation (less than 3 linear feet) falling from a pipe, or a careless worker bumping into a beam and dislodging a small amount of fireproofing ACM (less than 3 square feet), would be classified as such. Small disturbances can be treated with standard wet cleaning and HEPA-vacuum techniques:

- Workers should wear half-face respirators with HEPA vacuum filters.
- Workers should thoroughly saturate the debris with amended water (a surfactant is added) using a mister with a very fine spray. The debris should then be placed in a labeled, 6-mil plastic bag for disposal and the floor should be cleaned with damp cloths or a mop. Alternatively, the debris can be collected with a HEPA vacuum cleaner.
- All debris and materials used in the cleanup will be discarded as asbestos waste.
- Workers should properly dispose of all cleaning equipment, disposable suits and debris by transporting the material in approved plastic bags to an approved asbestos disposal facility.

The damaged ACM will need to be repaired **only by certified Class I or Class II asbestos abatement workers.**

Major Fiber Release Episodes

Major fiber release episodes are serious events. Large amounts of ACM falling from heights of several feet may contaminate an entire building with asbestos fibers. If 3 square feet or more of surfacing ACM or 3 linear feet or more of thermal system insulation is dislodged from its substrate, the episode should be considered major. A large breach in a containment barrier for a maintenance or abatement project should also be considered a major episode.

AHERA Regulations require that the response action to a major fiber release episode must be designed and conducted by accredited project designers. Should this occur, immediately contact the Office of Property and Construction Services for assistance. The following response procedures will be needed until an asbestos abatement firm can clean up the area.

- The area should be isolated as soon as possible after the ACM debris is discovered. Where the area can be sealed by doors, they should be locked from the inside (escape corridors must remain in operation) and signs posted to prevent unauthorized personnel from entering the work area ("DANGER - ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY;

RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA").

- The air-handling system should be shut off or temporarily modified to prevent the distribution of fibers from the work site to other areas of the building. If possible, doors, windows, and air registers should be sealed with 6-mil plastic sheets and tape.
- Each fiber release episode MUST be documented and a copy of this documentation sent to the Office of Property and Construction.

G) Warning Signs

Warning signs must be placed in areas that generally are accessed by maintenance personnel only, but the general public may be able to enter. Typically, this involves the boiler room, crawl spaces, or attics. The warning sign should read:

"DANGER - ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY;"

Or, should the work area require respirators and protective clothing:

"DANGER - ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY; RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA."

H) Recordkeeping

All written records discussed in this section should be maintained as part of a thorough recordkeeping process. To review, these include:

- The written O & M Plan itself, including work practices;
- Building plans, drawings, or sitemaps;
- Survey data, sampled test results;
- Descriptions, dates, and attendants of training programs;
- Copies of all permits and documentation of custodial, maintenance, renovation, and all asbestos-related actions performed.

I) Other related information

T.S.I. (pipe insulation): The most probable hazard with asbestos is deterioration of asbestos-containing pipe. When in good shape, pipe wrap is hard like a cast. Over time, it can turn into a fine powder. The most important preventative step you can take is to perform a periodic surveillance of all pipe wrap. You may observe powder on a surface below

deteriorated pipe wrap or notice a section has become soft. This means deterioration has occurred. If the exterior wrap is opened, the powder may fall, creating a dust cloud of asbestos which may or may not be seen. This is the most likely scenario for damaging inhalation of asbestos fibers. If deterioration has occurred, contact Property and Construction Services immediately at (206) 382-2064.

Lead: Lead in *interior paint only* was banned in 1978. Exterior paints are still allowed to contain moderate amounts of lead. Lead is primarily a concern for buildings with children 6 years old or younger. Any building which is used for daycare, pre-school, or kindergarten must be tested by a certified Lead Inspector for lead in dust after any kind of renovation or construction work. See additional information in Appendix 11 on Lead. Air monitoring for lead is required by anyone doing demolition in any building built before 1980. If lead content is above 50 micrograms per cubic meter, appropriate protective measures must be taken, including the correct respirator, gloves, etc.

Maintenance of Vinyl Asbestos Tile

(Revised from "Guidelines for the Maintenance of Asbestos-Containing Floor Coverings," developed by Rhode Island Department of Health and the Environmental Protection Agency, New England)

Vinyl Asbestos Tile (VAT) is the most prevalent source of asbestos-containing material in our facilities and most likely will be for years to come. Although VAT is considered non-friable, the frictional forces exerted on these materials during routine floor-care maintenance operations can release asbestos fibers.

The principle types of floor covering maintenance performed routinely on resilient floor tiles include:

- 1) spray-buffing and dry burnishing; and
- 2) wet scrubbing and stripping followed by refinishing.

The following are guidelines on the maintenance of asbestos-containing floor coverings. When properly implemented, these guidelines should help you reduce the potential for the release of asbestos fibers into the air.

Stripping of Vinyl Asbestos Floor Coverings

Training - Custodial and maintenance personnel who are responsible for the care and maintenance of asbestos-containing floor coverings should be thoroughly trained to safely and properly operate the machines, pads and floor care chemicals used at the facility.

Frequency of Stripping - Stripping of vinyl asbestos floor coverings should be done as infrequently as possible (e.g., once per year maximum and preferably when the building is unoccupied). Excessive stripping of floors using aggressive techniques will result in increased levels of asbestos fibers in the air.

Prior to Stripping - Prior to machine operation, apply an emulsion of chemical stripper in water to the floor. Use a mop to soften the wax or finish coat.

Stripping Operations - When stripping floors becomes necessary, the machine used for stripping the finish should be equipped with the least abrasive pad as possible (black pads are usually the most abrasive and white pads the least abrasive). Consult with your floor tile and floor finish product manufacturer for recommendations on which pad to use on a particular floor covering. Incorporate the manufacturer's recommendations into your floor maintenance work procedures.

The machine used to remove the wax or finish coat should be run at a low rate of speed (i.e., ranging between 175-300 rpm) during the stripping operation. There is a direct correlation between machine speeds and the release of asbestos fibers from asbestos containing floor coverings. The higher the machine speed, the greater the probability of asbestos fiber release.

Never perform dry stripping. Always strip floors while wet. Do not operate a floor machine with an abrasive pad on un-waxed or unfinished floor containing asbestos materials.

Consult with floor tile and floor finish product manufacturers concerning specific or unique problem(s) on the maintenance of your floors.

After Stripping - After stripping and before application of a high solids floor finish, the floor should be thoroughly cleaned, while wet, preferably with a Wet-Vac HEPA filtration vacuum system.

Finishing of Vinyl Asbestos Floor Coverings

Use of Sealer and Solids Finish - Prior to applying a finish coat to a vinyl asbestos floor covering, apply 2 to 3 coats of sealer. Continue to finish the floor with a high percentage solids finish.

It is an industry recommendation to apply several thin coats of a high percentage solid finish to obtain a good sealing of the floor's surface, thereby minimizing the release of asbestos fibers during finishing work.

Spray-Buffering Floors - When spray-buffering floors, always operate the floor machine at the lowest rates of speed possible and equip the floor machine with the least abrasive pad as possible. A recent EPA study indicated that spray-buffering with high-speed floor machines resulted in significantly higher airborne asbestos fiber concentrations than spray-buffering with low speed machines.

Burnishing Floors - When dry-burnishing floors, always operate the floor machine at the lowest rate of speed possible to accomplish the task (i.e., 1200-1750 rpm), and equip the floor machine with the least abrasive pad as possible.

Cleaning After Stripping & Sealing Floors - After stripping a floor and applying a new coat of sealer and finish, use a wet mop for routine cleaning whenever possible. When dry mopping, a petroleum-based mop treatment is not recommended for use.