

# GOLETA UNION SCHOOL DISTRICT ASBESTOS MANAGEMENT PLAN

# Authority and Scope

Regulation: 29 CFR 1910.1001 Asbestos

Scope: This Plan establishes minimum requirements for handling, maintenance, use, removal, and disposal by employees, contractors, and other personnel of all friable and nonfriable asbestos-containing materials (ACMs), ACM debris, and presumed asbestos-containing material (PACM).

# **Policy Statement**

It is the policy of Goleta Union School District to comply with all applicable regulations regarding asbestos management and to prevent illness to employees and damage to the environment from the use, removal, and disposal of asbestos. This organization will ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter (f/cc) of air as an 8-hour time-weighted average (TWA) or in excess of 1.0 f/cc of air as averaged over a sampling period of 30 minutes.

Contact with ACM will be restricted to only those staff that have been properly trained and properly licensed. We will provide sufficient training and communications so that this policy is effectively implemented.

Due to the infrequent need to perform asbestos removal, Goleta Union School District has determined that it is not cost-effective to perform or maintain the training, licenses, equipment, and other related activities needed for site personnel to perform asbestos remediation. Instead, Goleta Union School District will use the services of a professional remediation contractor to perform asbestos-related work as required.

# **Plan Administration**

# Table 1Program Contact Information

CONTACT	TITLE	PHONE
Shawn Dahlen	Director of MOT	(805) 681-1231 x2210

Plan Administrator. The Plan Administrator will:

- Manage Asbestos Program and worker exposure issues.
- Ensure through program design and implementation that the health of non-asbestos workers is protected from ACM, along with the environment.
- Maintain the facility Asbestos Hazard Emergency Response Act (AHERA) database and files.
- Ensure that the Medical Surveillance Program is implemented and that records are maintained in compliance with this Plan
- Track ongoing asbestos abatement activities, oversee compliance with regulatory requirements, and update the asbestos survey database.
- Maintain air monitoring and air sampling exposure data.
- Provide guidance on regulatory occupational health requirements.
- Audit contractor performance in asbestos abatement projects.
- Review control measures in operations involving ACM.
- Provide sampling and analysis support to identify ACMs.
- Ensure that air monitoring equipment is calibrated.
- Provide guidance on the requirements of federal, state, and local environmental regulations.
- Obtain and manage blanket notifications.
- Maintain a tracking system of asbestos abatement projects.
- Provide guidance and oversight on the disposal of ACM and any air, water, or soil pollution issues.
- On request, arrange for the temporary storage and proper disposal of asbestos-containing wastes.
- Ensure that employees working with ACM receive the training specified for the engineering, work practice controls, and personal protective equipment (PPE) specified for their operations.

Supervisors. Supervisors will ensure that:

- ACM that may be disturbed in any renovation and maintenance activities is identified in the scope of work and removed only by qualified asbestos abatement or maintenance workers.
- Survey protocols are conducted in accordance with all requirements.

**Employees.** All employees will properly use engineering and work practice controls and PPE specified for their operations.

## Plan Review and Update

This Plan will be reviewed annually by the Safety Committee to ensure the program's effectiveness, and will be updated as needed.

#### **Definitions**

AHERA—Asbestos Hazard Emergency Response Act

ASHARA—Asbestos School Hazard Abatement Reauthorization Act

*Asbestos*—includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered. *Asbestos-containing material (ACM)*—any material containing more than 1 percent asbestos. *Authorized person*—any person authorized by the employer and required by work duties to be present in regulated areas.

*Building/facility owner*—the legal entity, including a lessee, that exercises control over management and recordkeeping functions relating to a building and/or facility in which activities covered by this standard take place.

*Competent person*—one who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

*Employee exposure*—exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.

*Excursion limit (ELT)*—an airborne concentration of asbestos in excess of 1.0 f/cc of air as averaged over a sampling period of 30 minutes.

*Fiber*—a particulate form of asbestos 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.

*Friable ACMs*—any materials containing asbestos that can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACM has little structural strength and contains asbestos fibers that are readily released upon breaking.

*High-efficiency particulate air (HEPA) filter*—a filter capable of trapping and retaining at least 99.97 percent of 0.3 micrometer diameter mono-disperse particles.

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

*Industrial hygienist*—a professional qualified by education, training, and experience to anticipate, recognize, evaluate, and develop controls for occupational health hazards.

*Nonfriable ACMs*—any materials containing asbestos that cannot be crumbled, pulverized, or reduced to powder by hand pressure.

*Presumed asbestos-containing material (PACM)* —thermal system insulation and surfacing material found in buildings constructed no later than 1980. The designation of a material as "PACM" may be rebutted pursuant to paragraph (j)(8) of this section.

*Regulated area*—an area established by the employer to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limits.

*Surfacing ACM*—surfacing material that contains more than 1 percent asbestos.

*Surfacing material*—material that is sprayed, troweled on, or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).

*Thermal system insulation (TSI)*—ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain.

*Thermal system insulation ACM*—thermal system insulation that contains more than 1 percent asbestos.

*Time-weighted average (TWA)*—an airborne concentration of asbestos in excess of 0.1 f/cc as averaged over an 8-hour TWA day.

# Hazard Assessment

Goleta Union School District conducted a hazard assessment of all work areas for the potential for exposure of workers to asbestos.

Asbestos is a generic term applied to a number of naturally occurring mineral silicates that, when crushed or processed, separate into fibers. The most common types of asbestos are chrysotile, amosite, and crocidolite. All forms of asbestos have a tendency to break down into tiny fibers that suspend in the air and can be inhaled or swallowed. Asbestos may be found in valve packing, gaskets, boiler laggings, pipe coverings, brake linings, shielding materials, insulating boards, roofing products, and protective clothing. It can be found in certain cement products, heat insulation, fireproofing materials, patching and taping compounds, roofing products, floor tiles, and ceiling panels/tiles.

Asbestos is not believed to pose a health hazard unless it gets into the air and is inhaled or swallowed. Breathing asbestos fibers increases the risks of developing lung cancer (especially in active smokers), mesothelioma (a cancer of the lung lining), and asbestosis (chronic lung disease).

## Health Risks

Asbestos fibers are aerodynamic, light, and hollow on the inside, which permits them to float and stay airborne. Asbestos is most dangerous when it is airborne and presents a significant risk to human health. The adverse health effects associated with exposure to asbestos are respiratory diseases, such as asbestosis, lung cancer, and mesothelioma. Asbestos is also believed to be linked to cancers of the larynx, esophagus, stomach, and colon/rectum. Since these diseases do not develop immediately after inhalation of asbestos fibers, it may be 20 years or more before symptoms become apparent. Although studies have concluded that high levels of exposure to asbestos in the workplace have caused malignant and nonmalignant diseases, uncertainty continues concerning the probability of malignancies occurring at low levels of exposure. Low-level exposure would include average exposure to asbestos fibers in schools and buildings.

# **Inspections and Surveillance**

The hazard assessment will include an inventory of ACM through survey inspections. An initial inspection and sampling baseline survey was completed.

Goleta Union School District will conduct inspections when necessary, such as before building renovation or demolition when ACM data are not available for that site, or when requested to determine whether ACM is present or can be disturbed by a certain project activity.

Any asbestos found will be abated immediately when acute hazard exists and will be managed in place until a permanent solution is chosen. ACM managed in place, however, presents opportunities for ACM to be damaged or to change in physical condition.

Asbestos field investigation criteria established for inspection and reinspection and sampling are in accordance with AHERA rules. Inspection includes observing and touching all suspect materials, identifying the types of materials, sampling or assuming to contain asbestos, quantifying the suspect materials, and documenting the location.

Accreditation as an Asbestos Inspector is required before performing an inspection, unless only visual observation is conducted. Asbestos field investigation criteria established for inspection and re-inspection and sampling are in accordance with AHERA standards.

## Periodic Surveillance

Goleta Union School District will perform periodic surveillances to maintain up-to-date information to assess the condition for potential future disturbance and health risk. The periodic surveillances can be performed by non-accredited custodial and maintenance workers if inspections are conducted only visually. Accredited individuals can collect samples or touch the areas to determine whether the ACM had become friable.

If an ACM health hazard cannot be properly controlled or abated in a timely manner, periodic visual surveillances every month will be conducted. The following are recommended frequencies to follow up and evaluate the physical condition of the ACM:

- Once a year for friable ACM TSI and surfacing materials
- Once every 3 years for non-friable ACM (such as floor tile, transite, and roofing materials)

## Inventory of Asbestos Locations

Shawn Dahlen has prepared an inventory of locations at the worksite known to have ACM. The inventory is housed in the Maintenance Department and on the District website under the Safety tab.

# **Exposure Monitoring**

All asbestos operations or work that may disturb ACM will be assessed for their potential to generate airborne fibers. Goleta Union School District will perform initial monitoring of employees who are, or may reasonably be expected to be, exposed to airborne concentrations of asbestos at or above the TWA permissible exposure limit (PEL) and/or excursion limit.

No employee may be exposed to an airborne concentration of asbestos in excess of 0.1 f/cc of air as an 8-hour TWA or in excess of 1.0 f/cc as averaged over a sampling period of 30 minutes.

Where exposure may exceed the PEL, employee exposure measurements will be made from breathing zone air samples representing the 8-hour TWA and 30-minute excursion limit for each employee. Initial monitoring will also be performed for all employees who are, or may reasonably be expected to be, exposed to airborne concentrations of asbestos at or above the PEL and/or excursion limit unless the collected data demonstrate that asbestos is not capable of being released in airborne concentrations at or above the PEL or excursion limit when materials are being processed, used, or handled.

If initial monitoring indicates that exposures are above the PEL or excursion limit, periodic monitoring will be conducted at least every 6 months. If either initial or periodic monitoring statistically indicates that employee exposures are below the PEL or excursion limit, monitoring will be discontinued for those employees whose exposures are represented by such monitoring.

Monitoring will be reinitiated whenever there has been a change in the production, process, control equipment, personnel, or work practices that may result in new or additional exposures to asbestos above the PEL or excursion limit, or when the employer has reason to suspect that a change may result in new or additional exposures above the PEL or excursion limit.

Affected employees and their representatives will be allowed to observe monitoring and notified in writing either individually or by posting results in an accessible location within 15 working days after the receipt of the results of monitoring. This written notification will contain the corrective action being taken to reduce employee exposure to asbestos on or below the PEL or excursion limit wherever monitoring results indicate that the PEL or excursion limit has been exceeded. If monitoring is being observed in a regulated area, the observer must be provided proper protective clothing and equipment.

#### Monitoring Methodology

According to the regulation (29 CFR 1910.1001), breathing-zone air samples are taken by pumping air through a filter over a period of 8 hours (to determine the TWA) or 30 minutes (to determine the excursion limit). For TWA determinations, samples are taken for each employee in each job classification and each work area over a full shift. Samples representing 30-minute exposures are taken during operations most likely to result in elevated exposures. The number of fibers present on each sample filter is then determined using microscopic techniques. Sample analysis must be done by a qualified laboratory using the procedures detailed in 29 CFR 1910.1001 or an equivalent method.

## **Certification of Monitors**

Clearance and environmental air sampling will be performed by persons with certification. Persons with certification as an Asbestos Hazard Abatement Specialist may take personal samples only as required by OSHA.

## **Medical Surveillance**

As noted above, exposure to asbestos has been linked to an increased risk of lung cancer, mesothelioma, gastrointestinal cancer, and asbestosis among occupationally exposed workers. Adequate screening tests to determine an employee's potential for developing serious chronic diseases, such as cancer, from exposure to asbestos do not presently exist. However, some tests, particularly chest X-rays and pulmonary function tests, may indicate that an employee has been overexposed to asbestos, thus increasing his or her risk of developing exposure-related chronic disease. It is important for the physician to become familiar with the operating conditions in which occupational exposure to asbestos is likely to occur. This is particularly important in evaluating medical and work histories and in conducting physical examinations. When an active employee has been identified as having been overexposed to asbestos, measures taken by the employer to eliminate or mitigate further exposure should also lower the risk of serious long-term consequences.

The employer is required to institute a medical surveillance program for all employees who are or will be exposed to asbestos at or above the permissible exposure limit (0.1 fiber per cubic centimeter of air). All examinations and procedures must be performed by or under the supervision of a licensed physician, at a reasonable time and place, and at no cost to the employee.

Although broad latitude is given to the physician in prescribing specific tests to be included in the medical surveillance program, the following elements in the routine examination are required:

- Medical and work histories with special emphasis directed to symptoms of the respiratory system, cardiovascular system, and digestive tract.
- Completion of one of the respiratory disease questionnaires.
- A physical examination including a chest X-ray (at the discretion of the examining physician for construction work) and pulmonary function testing that includes measurement of the employee's forced vital capacity (FVC) and forced expiratory volume at one second (FEV1).
- Any laboratory or other test that the examining physician deems by sound medical practice to be necessary or appropriate.

The employer is required to make the prescribed tests available at least annually to those employees covered; more often than specified if recommended by the examining physician; and upon termination of employment, if the employee has not been examined within the past one year period.

The employer is required to provide the physician with the following information: a copy of this standard and appendices; a description of the employee's work assignments as they relate to asbestos exposure; the employee's representative level of exposure to asbestos; a description of any personal protective and respiratory equipment used; and information from previous medical examinations of the affected employee that is not otherwise available to the physician. Making this information available to the physician will aid in the evaluation of the employee's health in relation to assigned duties and fitness to wear personal protective equipment, if required.

The employer is required to obtain a written opinion from the examining physician containing the results of the medical examination; the physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of exposure-related disease; any recommended limitations on the employee or on the use of personal protective equipment; and a statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions related to asbestos exposure that require further explanation or treatment. This written opinion must not reveal specific findings or diagnoses unrelated to exposure to asbestos, and a copy of the opinion must be provided to the affected employee.

#### NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section

#### Medical Surveillance Recordkeeping

An accurate record of all asbestos exposure measurements will be maintained for 30 years. The records for each employee subject to medical surveillance will be maintained for the duration of employment plus 30 years. All employee training records will be kept for 1 year beyond the last date of employment by the employee. All records will be made available to the regulatory agency, the National Institute for Occupational Safety and Health (NIOSH), affected employees, former employees, and their designated representatives.

Records will be maintained concerning the presence and quantity of ACM and PACM in the building and/or facility.

Medical surveillance records will be kept by Human Resources.

## **Regulated Areas**

Access to regulated areas is limited to authorized persons or to persons authorized by law or regulation.

In all cases, the respiratory protection and protective clothing specified for the regulated area will be used until final clearance sampling results indicate clearance has been achieved.

All personnel within the regulated area will be equipped with half-face air purifying respirators with HEPA cartridges and Tyvek<sup>®</sup> suits. At any time that the personal samples show airborne asbestos fibers in concentrations greater than 0.1 f/cc, a full-face air purifying or powered air purifying respirator will be worn. The decontamination unit will be located contiguous with the regulated area.

## Warning Signs

Warning signs will be displayed at each regulated area. In addition, warning signs will be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area. The warning signs will display the following information:

DANGER ASBESTOS CANCER AND LUNG DISEASE HAZARD AUTHORIZED PERSONNEL ONLY

Where the use of respirators and protective clothing is required in the regulated area, the warning signs will include the following: RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

At the entrance to mechanical rooms/areas in which employees reasonably can be expected to enter and that contain ACM and/or PACM, signs will be posted that identify the material that is present, its location, and appropriate work practices that, if followed, will ensure that ACM and/or PACM will not be disturbed.

All employees working in and contiguous to regulated areas will be trained to understand the warning signs.

#### Labels

Warning labels will be affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers. Signs may be posted in lieu of labels as long as they contain information required for labeling. Labels will comply with the requirements of 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard and will include the following information:

DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD

See the facility's Hazard Communication Plan for more information.

## Responsibility of Others

Employees adjacent to construction activities in regulated areas will be responsible for notifying and protecting their employees under the requirements of OSHA standard 29 CFR 1926.1101. Exposure Response Procedure

#### Initial Contact with ACM

There is the potential for finding previously unidentified asbestos. This is especially true for ACM painted over or encapsulated with colored sealant, concealed behind a suspended ceiling, or firmly bound to the matrix and likely discovered when damaged materials/areas become noticeable, accidentally damaged, or when conducting operation, maintenance, and repair activities. The serious potential health risk associated with exposure to asbestos fibers makes it imperative to follow the procedures below when encountering asbestos during construction and/or operation and maintenance (O&M) activities.

#### **Stop Work Procedure**

Stop work whenever work activity involves materials that could contain asbestos. Immediately inform the Director of Maintenance, Operations and Transportation, Shawn Dahlen. If the project is under a contract agreement, crew and workers will immediately inform the Contractor Supervisor.

## Response to Initial Contact Notification

Responsiveness to an asbestos work request for positive identification of ACM is one of the biggest factors in preventing further exposure or damage to ACM or delays in the timely completion of a project. Upon receiving information that a material may contain asbestos, Shawn Dahlen will implement the following actions:

- 1. Verify that the activity is stopped that could result in the release of asbestos fibers.
- 2. Visually inspect the area or material of concern to determine the exact location, type of material, appearance, condition, and activity.
- 3. Consult the asbestos files for records of sampling and/or positive identification of ACM previously conducted in an area or material of concern.
- 4. If the asbestos files indicated negative sampling results for ACM in the confirmed area or material of concern, notify the appropriate personnel to halt further action and authorize when to resume work. Shawn Dahlen will document the inquiry for the record. If new sampling is conducted, update the asbestos files to record negative results.
- 5. If there is no record in the asbestos files for the location, conduct an inspection to determine the location of suspect ACM and request sampling for ACM.
- 6. If the asbestos files indicate there is material previously evaluated to be ACM or when the returned sampling analysis tested positive for asbestos, consult with Shawn Dahlen to establish subsequent action.
- 7. Document the findings and update the asbestos files.

#### Interim Measures

Shawn Dahlen will implement the following temporary measures to minimize further damage and release of fibers pending a response action:

- Protect and secure the activity site until implementation of the response action. Shawn Dahlen will place proper asbestos warning signs and labels to deter people from entering the site area. See the **Regulated Area** subsection for more information.
- Shawn Dahlen will coordinate with building or facility Directors, the contract supervisor, and project engineer/Director, to alert others of the potential hazard and provide basic information to workers and employees located in the immediate area where asbestos is present. Building occupants who are aware of the presence of ACM are less likely to disturb the material.
- Shawn Dahlen will conduct an inspection of the area and institute precautionary measures to protect nearby employees from risk of exposure or plan to evacuate personnel from the risk area, if necessary.

## **Response Action**

Shawn Dahlen will develop a response plan and recommend appropriate response or abatement action on the basis of hazard ranking, prioritized tasking, or immediate health risk.

The next course of action, once the response measure is determined, is as follows:

- Shawn Dahlen prepares the appropriate work order request forms for abatement and coordinates with appropriate asbestos key personnel on project scoping for funding and contracts.
- For projects involving construction or large abatement projects, Shawn Dahlen coordinates with Margaret Saleh to ensure abatement and cleanup activities are in accordance with facility policies and applicable regulations.
- Shawn Dahlen will review documentation to ensure proper asbestos notification to regulatory agencies, permits, training, and certification are in order before starting work.
- Shawn Dahlen will conduct final clearance inspection if removal is the response action and air monitoring is conducted.
- Shawn Dahlen will follow the waste disposal procedures described in 40 CFR 763.
- Shawn Dahlen will review all documents and reports on asbestos-related activities for completeness and compliance, for filing, and for required updates to the asbestos files.

## Agency Notification of Abatement

Federal, state, and local regulatory agencies require notification of asbestos abatement projects.

Asbestos notification includes, but is not limited to, the following required basic information common to all federal, state, and local agencies:

- Project Number/Contractor Project Number
- Type of Project

- Renovation/Abatement
- Planned Renovation/Abatement (Annual)
- Demolition
- Ordered Demolition
- Emergency Renovation/Demolition
- Fire Training Burn
- Facility Information (Name, Location, Point of Contact and Telephone Number, Prior and Present Use of Building, Building Age and Size, County Location, and Number of Structures to be Demolished)
- Facility Owner Information (Name of Facility, Address, Contact Person, Telephone Numbers)
- Abatement Contractor/Demolition Contractor Information and Subcontractors (Name, Address, Telephone Number, Licenses, and Training Certifications)
- Asbestos Project Description and Information (Facility/Area Description for Renovation/Demolition)
- ACM Information (Type, Description and Location, Quantity, Detection Procedure— Sampling, and type of final air clearance method)
- Schedule of Asbestos Abatement and Demolition/Renovation (Dates)
- Waste Transporter and Disposal Site Information
- Description of Abatement Work Practices, Engineering Controls (including Air Monitoring and Firm)
- Waste Handling
- Emergency Demolition/Renovation Projects Information (Description, Date, and Time of Event)
- Ordered Demolition Projects (Copy of Court Order)
- Project Procedures for Surprise Discovery of ACM (Description)
- Certifications (including Names and Certification Numbers) and Signatures of Certifying Owners and Operators

## Asbestos Removal

In consultation with Shawn Dahlen, the decision will be made whether to allow the asbestos or ACM to remain in its current state, encapsulate it, or remove it. If removal option is selected, an asbestos removal plan will be prepared in accordance with EPA regulation 40 CFR 61.145.

Before disposal, all asbestos and ACM must be wetted to minimize the release of air particles and then placed in a leak-tight wrapping that is then placed into another leak-tight wrapping.

In general, wetted, double-bagged asbestos can be disposed in a state-approved solid waste facility. Prior contact with both the disposal facility and the state by Shawn Dahlen will ensure that all local ordinances are known and followed.

# **Exposure Control Methods**

Exposure by employees to asbestos and ACM will be controlled by the following methods:

• Engineering and work practice controls

- Respiratory protection
- Protective clothing and equipment
- Hygiene practices
- Housekeeping procedures

## Engineering and Work Practice Controls

Engineering controls and work practices will be or have been implemented to reduce and maintain employee exposure to or below the TWA and/or excursion limit.

#### **Engineering Controls**

**Ventilation.** Local exhaust ventilation and dust collection systems will remove airborne concentrations of asbestos to or below the TWA and/or excursion limit.

**Hand-operated tools.** Hand-operated and power-operated tools that could produce or release fibers of asbestos will be provided with local exhaust ventilation systems.

#### **Work Practice Controls**

**Wetting.** Insofar as practicable, asbestos will be handled, mixed, applied, removed, cut, scored, or otherwise worked in a wet state sufficient to prevent the emission of airborne fibers that could expose employees to levels in excess of the TWA and/or excursion limit, unless the usefulness of the product would be diminished.

No asbestos cement, mortar, coating, grout, plaster, or similar material containing asbestos will be removed from bags, cartons, or other containers in which they are shipped without being either wetted, enclosed, or ventilated so as to effectively prevent the release of airborne fibers.

**Compressed air.** Compressed air shall not be used to remove asbestos or materials containing asbestos unless the compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air.

Flooring. Sanding of asbestos-containing flooring material is prohibited.

## **Respiratory Protection**

Respirators will be used by employees during:

- Periods necessary to install or implement feasible engineering and work-practice controls
- Work operations, such as maintenance and repair activities, for which engineering and workpractice controls are not feasible
- Work operations for which feasible engineering and work-practice controls are not yet sufficient to reduce employee exposure to or below the TWA and/or excursion limit
- Emergencies

Employees who require respirators will be provided with a tight-fitting, powered air-purifying respirator (PAPR) instead of a negative pressure respirator when the employee chooses to use a

PAPR and it provides adequate protection to the employee. HEPA filters will be provided for powered and non-powered air-purifying respirators.

No employee must be assigned to tasks requiring the use of respirators if, based on his or her most recent medical examination, the examining physician determines that the employee will be unable to function normally using a respirator, or that the safety or health of the employee or other employees will be impaired by the use of a respirator.

## **Respirator Selection**

Respirators will be selected for employee use according to the procedures outlined in the facility's *Respiratory Protection Plan*.

## Protective Clothing

Any employees exposed to asbestos above the TWA and/or excursion limit, or where the possibility of eye irritation exists, will be provided with the appropriate protective work clothing and equipment at no cost to them.

#### **Removal and Storage**

- Employees will use the designated change rooms to remove work clothing contaminated with asbestos.
- Employees must never take contaminated work clothing out of the change room, except those employees authorized to do so for the purpose of laundering, maintenance, or disposal.
- Contaminated work clothing will be placed and stored in closed containers that prevent dispersion of the asbestos outside the container.
- Containers of contaminated protective devices or work clothing that are to be taken out of change rooms or the workplace for cleaning, maintenance, or disposal will bear labels in accordance with the labeling requirements of this Plan. See the **Regulated Areas** section for more information.

#### **Cleaning and Replacement**

- All protective clothing will be cleaned, laundered, repaired, or replaced at least weekly to maintain their effectiveness.
- Blowing or shaking of protective clothing and equipment is prohibited.
- Laundering will be done in a way that will prevent the release of airborne fibers of asbestos in excess of the PEL. Any contaminated clothing given to another person for laundering will be informed of the prohibition against the release of asbestos and informed of the potentially harmful effects of exposure to asbestos to effectively prevent the release of airborne fibers of asbestos in excess of the PEL.
- Contaminated clothing will be transported in sealed, impermeable bags, or other closed, impermeable containers, and labeled in accordance with the labeling requirements of this Plan. See the **Regulated Areas** section for more information.

## Hygiene Facilities and Practices

#### Change rooms

Change rooms are available for employees who work in areas where their airborne exposure to asbestos is above the TWA and/or excursion limit. The change rooms are equipped with two separate storage areas to prevent contamination of the employee's street clothes from protective work clothing and equipment.

#### Showers

Employees who work in areas where their airborne exposure is above the TWA and/or excursion limit will shower at the end of the work shift.

#### **Contaminated Clothing or Equipment**

Employees will not leave the workplace wearing any clothing or equipment worn during the work shift.

#### Lunchrooms

Lunchroom facilities are available for employees who work in areas where their airborne exposure is above the TWA and/or excursion limit. The lunchroom facilities have a positive pressure, filtered air supply, and are readily accessible to employees.

Employees must:

- Wash their hands and faces before eating, drinking, or smoking.
- Remove protective work clothing or equipment unless surface asbestos fibers have been removed from the clothing or equipment by vacuuming or other method that removes dust without causing the asbestos to become airborne.

#### Smoking

Goleta Union School District is a Drug-Free workplace. Smoking is not permitted on any campus or grounds.

## Housekeeping

All employees will implement the following procedures for maintaining all surfaces as free as practicable of ACM waste and debris and accompanying dust:

- All spills and sudden releases of material containing asbestos will be cleaned up as soon as possible.
- Surfaces contaminated with asbestos may not be cleaned by the use of compressed air.
- HEPA-filtered vacuuming equipment will be used for vacuuming asbestos-containing waste and debris; the equipment will be used and emptied in a manner that minimizes the reentry of asbestos into the workplace.
- Shoveling, dry sweeping, and dry cleanup of asbestos may be used only where vacuuming and/or wet cleaning are not feasible.

- Waste, scrap, debris, bags, containers, equipment, and clothing contaminated with asbestos consigned for disposal will be collected, recycled, and disposed of in sealed, impermeable bags or other closed, impermeable containers.
- Sanding of asbestos-containing floor material is prohibited.
- Stripping of finishes will be conducted using low-abrasion pads at speeds lower than 300 revolutions per minute (rpm) and wet methods.
- Burnishing or dry buffing may be performed only on asbestos-containing flooring that has sufficient finish so that the pad cannot contact the ACM.
- Waste, debris, and accompanying dust in an area containing accessible ACM and/or PACM (or visibly deteriorated ACM) will not be dusted, swept dry, or vacuumed without using a HEPA filter.

# Training

All employees exposed or potentially exposed to asbestos or ACM will be trained in asbestos management. The supervisor must review the training curriculum and confirm that it properly prepares the workers for their expected duties. Shawn Dahlen will conduct an annual Asbestos Training session with Maintenance and Operations personnel.

## Personnel Exposed to Asbestos

All employees who are exposed to airborne concentrations of asbestos at or above the PEL and/or excursion limit will receive asbestos management training before or at the time of initial assignment and at least once per year thereafter.

The training program will include information about:

- The health effects associated with asbestos exposure
- The relationship between smoking and exposure to asbestos producing lung cancer
- The quantity, location, manner of use, release, and storage of asbestos, and the specific nature of operations that could result in exposure to asbestos
- The engineering controls and work practices associated with the employee's job assignment
- The specific procedures implemented to protect employees from exposure to asbestos, such as appropriate work practices, emergency and cleanup procedures, and PPE to be used
- The purpose, proper use, and limitations of respirators and protective clothing, if appropriate
- The purpose and description of the medical surveillance program
- The basic requirements of the asbestos regulation
- The names, addresses, and phone numbers of public health organizations that provide information, materials, and/or conduct programs concerning smoking cessation
- The requirements for posting signs and affixing labels and the meaning of the required legends for such signs and labels

## Asbestos Abatement Personnel

Asbestos workers and supervisors that remediate asbestos must be trained according to the following curriculum requirements:

Workers—32 hours with 8 hours of annual refresher training Supervisors—40 hours with 8 hours of annual refresher training The training curriculum will include hands-on training sessions applicable to the type of asbestos abatement activities the worker will be performing on the job. If the worker is to abate only one type of material, the 32-hour worker training may be waived in favor of an 8-hour course. This training must include a 14-hour hands-on session for the specific abatement activity, which the worker will perform. For each additional type of ACM that the worker is expected to abate, individual 8-hour training sessions are required.

## Service, Custodial, and Maintenance Workers

Training will be provided to all service, custodial, and maintenance workers. There are two levels of training for such workers: awareness level, and operation and maintenance level.

#### Awareness Level

All service and custodial personnel (electrician, custodian, plumber, etc.) who work in a building that contains ACM, whether or not they are required to work with ACM, are required to receive 2 hours of awareness training. The awareness training will include:

- Information on asbestos—its form, uses, and health effects associated with exposure
- Locations of ACM and PACM in the facility
- Recognition of damage, deterioration, and delaminating of ACM
- Regulatory requirements relating to housekeeping
- The proper response to fiber release episodes
- Name and telephone number of asbestos designated contact

Each such employee will be trained at least once a year.

#### **Operation and Maintenance Level**

Any service or maintenance worker who conducts any activities resulting in the disturbance of ACM is required to receive 16 hours of training. The 16 hours of training include 2 hours of awareness training and 14 hours of additional instruction on the following:

- Description on proper methods of handling ACM
- Information on use and hands-on training in the use of respiratory protection, other personal protection measures, and good work practices
- Provisions of 40 CFR 763.91 (Operation and Maintenance), its Appendices, and 40 CFR 61 (NESHAP).

One of the main objectives is to clean the facility of the existing asbestos contamination. Therefore, the training program includes background knowledge of the provisions of 40 CFR 763.91 and 763.61, which entail proper training techniques involving the use of wet methods, HEPA vacuuming, protective equipment, and proper waste disposal methods.

#### Recordkeeping

Shawn Dahlen, Director of Maintenance, Operations and Transportation will maintain the following asbestos-related files and records:

Hazard assessments

- Asbestos survey records
- Monitoring data
- Asbestos permits and permit data
- Medical surveillance information

These records will be kept in Maintenance for life.

Goleta Union Safety Committee approved the Asbestos Plan on \_\_\_\_\_\_.