Table of contentS

[1.0 OBJECTIVE 2](#_Toc456710923)

[2.0 PROGRAM ELEMENTS 2](#_Toc456710924)

[2.1 IDENTIFICATION OF ASBESTOS-CONTAINING MATERIAL (ACM) 2](#_Toc456710925)

[2.2 NOTIFICATION 2](#_Toc456710926)

[2.3 INSPECTION 2](#_Toc456710927)

[2.4 WORKING WITH ASBESTO-CONTAINING MATERIALS 2](#_Toc456710928)

[2.5 HEALTH EFFECTS 3](#_Toc456710929)

[2.6 MEDICAL SURVEILLANCE 3](#_Toc456710930)

[2.7 ASBESTOS CONCERNS 4](#_Toc456710931)

[2.8 MULTIPLE EMPLOYER WORKSITES 4](#_Toc456710932)

[3.0 ADMINISTRATION / COMPLIANCE / RESPONSIBILITIES 4](#_Toc456710933)

[3.1 HSE DEPARTMENT 4](#_Toc456710934)

[3.2 FACILITY MANAGEMENT 4](#_Toc456710935)

[3.3 SUPERVISORS 4](#_Toc456710936)

[3.4 EMPLOYEES 4](#_Toc456710937)

[4.0 REQUIRED TRAINING AND RECORDKEEPING 5](#_Toc456710938)

[4.1 TRAINING 5](#_Toc456710939)

[4.2 RECORDKEEPING 5](#_Toc456710940)

[4.3 MEDICAL EXAMINATION RECORDS 6](#_Toc456710941)

[5.0 DEFINITIONS 6](#_Toc456710942)

# OBJECTIVE

The purpose of **COMPANY NAME’s** Asbestos Safety Awareness Program is to state clearly that only **COMPANY NAME** certified employees are allowed to work with or handle asbestos-containing materials (ACM) or presumed asbestos containing material (PACM). This document sets procedures that will ensure workers safety in recognizing asbestos containing materials, provide the process for non-certified employees to report suspected asbestos containing materials, provide the prcess for non-certified employees to request support for dealing with asbestos containing materials, and to comply with OSHA and other state and federal agency regulations and guidelines.

This procedure is designed to provide the minimum safety requirements in accordance with the Occupational Safety and Health Administration’s (OSHA) Asbestos Standard, 1926.1101 and 1910.1001

# PROGRAM ELEMENTS

## IDENTIFICATION OF ASBESTOS-CONTAINING MATERIAL (ACM)

**COMPANY NAME** will have site surveys conducted whenever ACM or PACM is suspected to exist in order to identify and evaluate the condition of ACM or PACM present at the site.

Survey results will be maintained by HSE and will be available for review during normal working hours.

## NOTIFICATION

**COMPANY NAME** employees, visitors, and contractors working on site must be notified of the presence of friable asbestos if they could reasonably be expected to come into direct contact with the asbestos. Warning signs and labels shall be attached to structures containing asbestos. Warning signs indicate that non-certified or licensed personnel shall not disturb the structure, but must contact HSE for support in handling the material.

## INSPECTION

Inspections will be conducted periodically whenever ACM or PACM is suspected to exists and will be maintained by HSE for review during normal working hours.

## WORKING WITH ASBESTO-CONTAINING MATERIALS

Certain groups of employees may come in contact with *non- friable* ACM as part of their routine duties. For example, asbestos-containing floor tiles are not considered friable, and are cleaned regularly by custodians. Specific procedures shall be written for all such jobs. The procedures will be reviewed and approved by HSE. All affected employees are required to adhere to approved written procedures.

In other cases, crafts workers may encounter ACM in the process of cutting small openings for plumbing, electrical wiring, etc. These workers shall have been educated and trained in asbestos awareness, including personal protective equipment (PPE) that must be used when performing these jobs. Written procedures shall exist for all predictable situations. These procedures will be reviewed and approved by HSE and affected employees will strictly adhere to these procedures.

Asbestos material may be found in the manufacture of heat-resistant clothing, automotive brakes and clutch linings, and building materials such as insulation, floor tiles, roofing felts, ceiling tiles, asbestos-cement pipe and sheet, and fire retardant drywall. It may also be present in pipe and boiler insulation materials, pipeline wrap, sprayed on materials located on beams and in crawl spaces or between walls.

Only **COMPANY NAME** licensed employees are authorized to perform work on structures labeled as asbestos-containing.

**COMPANY NAME** has not identified any asbestos containing material located on its own worksite.

## HEALTH EFFECTS

[Asbestos](http://www.webmd.com/lung/asbestos-exposure) is a group of minerals with thin microscopic fibers. Because these fibers are resistant to heat, fire, and chemicals and do not conduct electricity, asbestos has been mined and used widely in the construction, automotive, and other industries.

If products containing asbestos are disturbed, the tiny fibers are released into the air. When they are breathed in, they can become trapped in the [lungs](http://www.webmd.com/lung/picture-of-the-lungs) and stay there for many years. Over time these fibers can accumulate and lead to serious health problems, including:

* Asbestosis, an inflammatory condition of lungs that can cause shortness of breath, [coughing](http://www.webmd.com/first-aid/coughs), and eventually scarring of the lungs that makes it hard to breathe.
* [Mesothelioma](http://www.webmd.com/lung/mesothelioma-causes-and-symptoms), a rare [cancer](http://www.webmd.com/cancer/default.htm) that affects the lining of the lungs, chest cavity, or [abdomen](http://www.webmd.com/digestive-disorders/picture-of-the-abdomen).
* [Lung cancer](http://www.webmd.com/lung-cancer/default.htm).
* Other lung problems, including pleural plaques (changes in the membranes surrounding the lungs), thickening of the membranes that surround the lungs, and pleural effusions (abnormal collections of fluid between the lungs and the inside wall of the chest.

Studies have also suggested an association between asbestos exposure and other cancers, including cancers of the gastrointestinal tract, throat, [kidney](http://www.webmd.com/urinary-incontinence-oab/picture-of-the-kidneys), [brain](http://www.webmd.com/brain/picture-of-the-brain), [bladder](http://www.webmd.com/urinary-incontinence-oab/picture-of-the-bladder), voice box, [gallbladder](http://www.webmd.com/digestive-disorders/picture-of-the-gallbladder), and others. However, the evidence is inconclusive.

## MEDICAL SURVEILLANCE

The OSHA Permissible Exposure Level (PEL) for asbestos is 0.1 fibers per cubic centimeter for 30 minutes during an eight-hour time period. If concentrations of airborne asbestos are not established by air sampling, then any worker performing any kind of asbestos work for any length of time for more than 30 days would require medical surveillance. For any individual exposed during accidental asbestos release, the need for medical surveillance would be determined on a case-by-case basis.

## ASBESTOS CONCERNS

Any individual having concerns about the presence of asbestos-containing materials in the work place, or questions about procedures used with ACM should contact the Company’s HSE Department.

## MULTIPLE EMPLOYER WORKSITES

If employees are working with multiple contractors adjacent to a Class 1 asbestos job and are exposed to asbestos due to improper or inadequate controls they shall be removed until the enclosure and containment breach is repaired or until an initial expsosure assessment has been performed and communicated.

# ADMINISTRATION / COMPLIANCE / RESPONSIBILITIES

## HSE DEPARTMENT

The HSE Department is responsible for administration of the Asbestos Safety Awareness and Asbestos Abatement Programs. The HSE asbestos program administrator is responsible for maintenance of the written Asbestos Awareness Program, for reviewing and approving all standard operating procedures used for asbestos work. He/she also works closely with Facility Management personnel in oversight of the medical surveillance program.

## FACILITY MANAGEMENT

The Facility Management is directly responsible for the Asbestos Abatement Program and any work with asbestos-containing materials.

## SUPERVISORS

Supervisors are required to work within the constraints of this program and cannot task any employee to do asbestos work for which he/she is not appropriately trained and/or licensed. Doing so may result in disciplinary action.

## EMPLOYEES

Each employee has the responsibility for understanding all signs relating to the presence of asbestos and unless trained, performing no work that would breach the asbestos. Trained employees must work with ACM only as trained to do so, following the approved standard operating procedures. Failure to follow appropriate procedures may lead to disciplinary action.

# REQUIRED TRAINING AND RECORDKEEPING

## TRAINING

All employees whose work activities cause them to contact asbestos-containing material (ACM) or presumed asbestos-containing material (PACM) but, do not disturb the ACM or PACM during their work activities will be given asbestos awareness training upon hire, and periodically thereafter. The training will include:

* Known health effects of asbestos exposure
* Recognize various asbestos-containing materials
* Location of known asbestos-containing materials
* Procedure for reporting suspected asbestos and receiving appropriately trained and/or licensed support for work to be done with ACM
* Overview of the medical surveillance program
* Dealing with non-anticipated exposures

For the non-licensed workers who infrequently work with non-friable asbestos only, job and task-specific training will be provided by the supervisor with approval and oversight of the HSE Asbestos Program Administrator.

All workers who are to be licensed as asbestos workers, supervisors, and/or inspectors, will receive training and certification from a third party provider as determined by **COMPANY NAME**. They will also receive respiratory protection training from the HSE Department or **COMPANY NAME**. This training will be conducted annually.

Training records will be maintained for at least one year beyond the last date of employment for each employee.

## RECORDKEEPING

Accurate records of all measurements taken to monitor employee exposure shall be kept. These records are maintained at HSE and/or HR for at least 30 years, and will include at least:

* Date measurement was taken
* Operation (task) being performed
* Sampling and analytical methods used and evidence of their accuracy
* Number, duration and results of samples taken
* Type of respiratory protective devices worn
* Names, social security numbers and exposure of the employees
* Medical Surveillance Records
* Medical surveillance shall be provided for all employees who are or are expected to be exposed to airborne concentrations of asbestos fibers at or above the Time-Weighted Average (TWA) and/or excursion limit. Medical surveillance will include:
* Initial examination by a physician, including respiratory, cardiovascular and digestive systems
* Medical and work history
* Respiratory disease standard questionnaire
* Chest x-ray
* Pulmonary function tests

The medical examination, with the exception of the chest x-ray and questionnaire, will be offered annually. Chest x-rays will be given per the requirements stated in OSHA 29 CFR 1910.1001(l)(3)(ii).

## MEDICAL EXAMINATION RECORDS

For any worker in the medical surveillance program, a medical examination will be provided within 30 calendar days of the date of termination of employment.

Medical surveillance records will include:

* Name and social security number of the employee
* Physician’s written opinions
* Any medical complaints related to exposure to asbestos
* A copy of all information provided to the physician

Medical surveillance records will be kept for the duration of each employee’s employment plus 30 years.

# DEFINITIONS

* **Asbestos:** Hydrated magnesium silicate in fibrous forms such as chrysolite, amosite, crocidolite, tremolyte asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.
* **Asbestosis:** A disease of the lungs caused by inhalation of fine airborne fibers of asbestos.
* **Asbestos Containing Material (ACM):** Any material containing more than 1% asbestos.
* **Authorized Person:** Any person authorized by the employer and required by work duties to be present in regulated areas.
* **Employee Exposure:** Exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.
* **Engineering Controls:** Physical controls such as fume hoods, ventilation systems, and encapsulating tents that reduce employee exposure.
* **Excursion Limit:** An airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of air averaged over a sampling period of 30 minutes.
* **Fiber:** A particulate form of asbestos five micrometers or longer, with a length-to-diameter ratio of at least three to one.
* **Friable Asbestos:** Asbestos in a form that can easily be damaged, releasing asbestos particles.
* **Homogeneous Area:** An area of surfacing material or thermal system insulation that is uniform in color and texture.
* **Non-friable Asbestos:** Asbestos in a form that is not easily damaged; normal use does not release asbestos fibers.
* **Permissible Exposure Limit:** (PEL): An exposure limit that is published and enforced by IOSHA as a legal standard. For asbestos, the PEL is 0.1fiber per cubic centimeter of air as an eight-hour time-weighted average (TWA).
* **PACM**: Presumed Asbestos-Containing Material.
* **Regulated Area**: An area established to demarcate areas where airborne concentrations of asbestos exceed (or there is a reasonable possibility they may exceed) the permissible exposure limits.
* **Respirator**: For ACM, respirators must be equipped with High-Efficiency Particulate Air (HEPA) filters.
* **Respiratory Protection Program**: A program requiring employees working with friable asbestos to wear appropriate respirators and to undergo appropriate physical examinations.
* **Surfacing ACM**: Surfacing materials that contains more than 1% asbestos.
* **Thermal System Insulation** (TSI): ACM applied to pipes, fittings, boilers, breeching, tanks, or other structural components to prevent heat loss or gain.
* **Thermal System Insulation ACM**: TSI which contains more than 1% asbestos.
* **Time-Weighted Average** (TWA): An exposure based on an eight-hour time weighted average.
* **Wet Removal Methods**: Working with ACM which has been wetted to minimize airborne fibers.