

Asbestos Awareness Procedure

January 2023

1.0 Introduction

Asbestos is a naturally occurring fibrous silicate mineral known for its strength and durability and for its fireproof and insulation properties. It was used widely in construction and other products until 1978. Buildings constructed before 1980 are presumed to contain asbestos materials. During the twentieth century, some 30-million tons of asbestos have been used in industrial sites, homes, schools, shipyards, and commercial buildings in the United States.

Some of the more common asbestos-containing products are:

Pipe-covering

Insulating cement

Insulating block

Cloth

Gaskets

Packing materials

Thermal seals

Refractory & boiler insulation

Transite board

Doors

Cement pipe

Fireproofing spray

Joint compound

Floor tile

Ceiling tile

Mastics

Adhesives

Coatings

Acoustical textures

Roofing products

Duct insulation for heating, ventilation, and air conditioning (HVAC) systems

Insulated electrical wire and panels

Brake and clutch assemblies

Fire-resistant drywall

2.0 Health Effects

Asbestos is primarily hazardous when it becomes “friable” or easily crumbled by hand pressure. Friable fibers may be released into the air. Once in the air, fibers may be inhaled into the lungs causing asbestosis, mesothelioma, lung cancer, or other lung diseases. Ingestion of asbestos may cause stomach and/or colon cancer. In addition, handling asbestos materials may cause irritation to the skin and eyes.

Asbestosis is caused when fibers become lodged in the lung tissue. The body responds by producing an acid, which scars the lung tissue and limits lung function. Though the acid damages the lung tissue, little damage is done to the corrosive-resistant asbestos fiber. The latency period, or the time it takes for the disease to develop, is often 25-40 years.

Mesothelioma and *lung cancer* are both malignant and cancerous illnesses. Mesothelioma is cancer of the outer lining of the lung and/or the abdominal wall. It is unique since asbestos is the only known cause of this disease. The latency (time it takes for the disease to become active) period for mesothelioma is 15-30 years. The latency period for lung cancer is also 15-30 years. Asbestos-related cancers tend to result from substantial long-term exposure. However, the likelihood of lung cancer is increased up to 50 percent by smoking.

3.0 Asbestos Regulations

OSHA regulates employee exposure to asbestos. This regulation establishes permissible exposure limits (PEL), safe work practices, communication of hazards to employees, and record-keeping requirements.

The Environmental Protection Agency (EPA) regulates asbestos hazards in schools and more recently in public and commercial buildings under Title 40 CFR 763. The EPA Model Accreditation Plan clarifies the level of training and expertise required of persons who are accredited to inspect and recommend management options for asbestos materials in school, public, and commercial buildings.

3.1 Permissible Exposure Limit (PEL)

No employee may be exposed to an airborne concentration of asbestos in excess of 0.1 fibers per cubic centimeter (f/cc) of air as an eight-hour time weighted average (TWA) or 1.0 fiber per cubic centimeter averaged over a 30-minute time period. An industrial hygienist will conduct sampling and TWA calculations according to regulatory guidance when PLU requires this information.

3.2 Warning Signs and Labels



IPS★ITCS Employees must abide by all asbestos warning signs and labels and shall not disturb the asbestos containing material, or any material that could contain asbestos.

4.0 Asbestos Awareness Training

Asbestos awareness training is required for IPS★ITCS Employees who work in areas that contain or may contain asbestos. This training must be given to the employee prior to work in and or around the area where asbestos may be found. This training must be documented.

4.1 Understand The Hazard

Asbestos is a unique product with sharp fibers much smaller than average dust particles. They can cause disabling and life shortening health problems many years after exposure to asbestos. Each individual may be affected to a different degree depending on one's unique body, and the time and concentration of exposure.

All types of asbestos containing material can be dangerous when handled improperly. However, all types can be properly managed. Exposure can be prevented by containment, regular inspections, and proper precautions when

working around or with the material. The majority of asbestos products effectively immobilize the asbestos fibers by mixing them into a strong binding material such as cement or epoxy (e.g. vinyl floor tile, transite board).

These so called “hard” asbestos materials do not generally create exposure problems unless machined, sawed or sanded.

4.2 Recognize Asbestos Hazards

Soft, loosely bound, “friable” asbestos containing materials are the most hazardous type. These can cause contamination of the air and exposure problems. Some asbestos products are applied in this manner, but most hazards are a result of old asbestos containing material becoming worn, damaged, vandalized, or loose, thereby releasing asbestos fibers into the environment.

4.3 Know Where To Find Asbestos

Asbestos has been used in over 3000 different products in industry. Hazardous asbestos should be expected whenever you see torn, damaged, or deteriorated “friable” materials on walls, ceilings, pipe and tank insulation, and fire doors.

4.4 Do Not Handle Or Disturb Friable Asbestos

If asbestos damage is suspected, notify the Environmental Health & Safety Coordinator of the location and nature of the problem. Vacate the area and wait for an inspection and determination to be made.

4.5 Ask For Sampling Or Protective Equipment

If you see loose friable materials or are planning a renovation or messy cleanup job which may disturb some suspicious looking material, ask your supervisor to check it, and submit an asbestos sample request to the Environmental Health and Safety Office.

4.6 Use Proper Protection When Handling Asbestos Hazards

Minimal exposure will be encountered if you wear the proper protective equipment when handling asbestos. When taking a sample, always wear a respirator, and if the substance is touched with your hands, wash them thoroughly.

4.7 Multi-contractor Worksites

When IPS★ITCS Employees are working on multi-contractor worksites, IPS★ITCS Employees shall be protected from asbestos exposure.

Competency Assessment

No.	Questionnaire	C/NYC
Q1		
A1		
Q2		
A2		
Q3		
A3		
Q4		
A4		
Q5		
A5		

Enclosed Attachments	
Risk Assessment	<input checked="" type="checkbox"/>
Environmental Aspect and Impact	<input checked="" type="checkbox"/>
Training and Competency	<input checked="" type="checkbox"/>
Measure and Evaluation Tools	<input checked="" type="checkbox"/>

Competency Checklist

To be filled out by Trainer and signed by Employee, Assessor and Supervisor before being returned to the HSEQT Manager for recording purposes.

Procedure	Competency	Date	Competent YES / NO	Employee Signature

(Please tick appropriate box)

This employee is competent in performing the job.

This employee has not attained the competency level.

*

* *If the employee has not attained all competency levels, the General Manager must assess the action to be taken, provide an extension of training or alternative action as listed below.*

Alternate action to be taken: _____

Signed By	Employee:	_____	Date:	_____
	Trainer:	_____	Date:	_____
	Assessor:	_____	Date:	_____
	Regional Manager:	_____	Date:	_____

Environmental Aspects and Impacts

Identified Environmental Aspects and Impacts

The following table is a summary of the likely environmental aspects and impacts that may be identified during site inspections. The significance of each impact needs to be assessed using the Risk Assessment Model.

Activity	Aspect	Impact
Purchasing & Administrative Work	Consumption of goods	Conservation of natural resources
	Consumption of energy (eg. Electrical equipment and facilities)	Release of greenhouse gases and atmospheric pollution; Consumption of natural resources; Habitat loss
	Generation of waste (eg. Paper)	Consumption of space for waste disposal; Habitat loss
Climate Control	Consumption of energy	Release of greenhouse gases and atmospheric pollution; Consumption of natural resources; Habitat loss
	Generation of noise	Disturbance to community; Habitat loss
Cleaning of – offices / vehicles	Storage, use and release of chemicals	Contamination of air, water or soil; Risk to human health
Transport (Fleet vehicles / staff travel)	Consumption of energy	Release of greenhouse gases and atmospheric pollution; Consumption of natural resources; Loss of habitat at all stages of generation; Light pollution
	Consumption of goods (eg. Oil)	Consumption of natural resources; Generation of waste; Habitat loss; Biodiversity impacts
	Generation of waste (eg. Oil)	Consumption of space for waste disposal; Potential contamination of water or soil; Habitat loss
	Exhaust emission	Release of greenhouse gases and atmospheric pollution
	Use of dangerous goods (eg. Batteries)	Potential contamination of air, water or soil; Risk to human health
	Generation of noise	Disturbance to community; Habitat degradation
Operations		

Sample only.
To be filled in

Risk Assessment



Risk Assessment // insert name here

<p>Step No: Logical sequence</p>	<p>Sequence of Basic Job Steps documented in the Procedure, Work Instruction and project plans. Break down Job into steps.</p> <p>Each step should be logical and accomplish a major task.</p>	<p>Potential Safety & Environmental Hazards/Impacts at the site of the Job</p> <p>Identify the actual and potential health and safety hazards and the environmental impacts associated with each step of the job.</p>	<p>Risk Rating</p> <p>Refer to the risk matrix or HSEQT.PRO. Risk Mgt</p>	<p>Recommended Corrective Action or Procedure</p> <p><i>Determine the corrective actions necessary to reduce the risk to as low as reasonably practical (ALARP) refer to HSEQ.PRO.Risk Mgt. The risk must be reduced or controlled to ALARP before work commences.</i></p> <p>Document who is responsible for implementing the controls to manage each hazard identified.</p>	<p>Risk Rating refer to the risk matrix or HSEQT.PRO.Risk Mgt</p>
1.					
2.					
3.					
4.					
5.					

Audit



Process: insert// Procedure: Insert //		Date:	Audited by:	
		Location of Audit:	Area Mgr/Supervisor:	
Item	Question	Evidence Sited	Comments	Conformance Score 0,3,5
1.				
2.				
3.				
4.				
5.				
6.				
7.				
AUDITOR'S SIGNATURE:		CONFORMANCE SCORE: / 25		0 – Non-Conformance 3 – Continuous Improvement Opportunity 5 – Total Conformance
SAFETY REP'S SIGNATURE:		CONFORMANCE %:		