

# **HSE Management System**

## **Asbestos Safety Program**

#### **REGULATORY STANDARD:**

OSHA - 29 CFR 1910.1001

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#### **Important Notice:**

- 1. This procedure is a Controlled Document and shall not be amended without the authority of the Safety Specialist North America.
- 2. Any queries or feedback concerning the contents of this Procedure should be addressed to the Safety Specialist North America.
- 3. This document is rendered null and void upon print.



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#### 1.0 PURPOSE

This safety guideline is intended to provide safety information to all Airswift employees regarding asbestos and how adequate measures can be taken to limit exposures through controls in the workplace. NOTE: If Airswift employees are to work in areas where the Client has identified asbestos, these areas will be disclosed to Airswift and rendered safe before work will begin. Airswift does not knowingly allow employees to work in areas where they will have exposure to asbestos. Any employee who knowingly enters a restricted asbestos area will be disciplined to their unsafe behavior.

#### 2.0 GENERAL

Asbestos that may exist in refineries includes certain gaskets, brake linings, valve packing and old insulation.

Since non-asbestos insulation is being used in most refineries on new work installations, the highest probability for exposure will come during demolition or old insulation removal. However, Asbestos-containing material may be encountered in the following forms:

- Valves, vessels
- Piping insulation
- Insulation cement
- Mastic
- Floor and roof tiling
- Transit wall siding
- Caulking
- Automobile brake linings

All asbestos removal within a refinery must be done by certified people who are licensed to remove asbestos. No Airswift employee is to work on any piping or vessel that contains "asbestos containing materials" unless properly protected and/or the material is encapsulated and will not fragmentize or peel off when working on it.

Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Depending of the chemical composition, fibers may range in texture from coarse to silky. The properties which make asbestos fibers so valuable to industry are its high tensile strength, flexibility, heat and chemical resistance, and good frictional properties.

#### 3.0 PERSONAL PROTECTIVE MEASURES

Airswift employees are not to work on asbestos containing equipment or materials. If employees become aware of any potential exposure to asbestos, they are to immediately stop work and notify their supervisor/foreman. The supervisor/foreman is then responsible to inform the office for further information, but in no case allow work to proceed until the exposure to asbestos has been abated. The client must provide workers in a restricted area with protective clothing that protects other clothing worn by the worker from asbestos contamination.



#### 4.0 HEALTH HAZARDS

Asbestos fibers are carried into the body as airborne particles. These fibers can become embedded in the tissues of the lung and digestive system. Once the fibers become trapped in the lung's alveoli (air sacs), they cannot be removed.

Years of exposure to asbestos can cause a number of disabling and fatal diseases. Among these is asbestosis, an emphysema-like condition, lung cancer; mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs; and gastrointestinal cancer which is caused by ingesting asbestos-contaminated food.

Recognizing the danger of asbestos levels in the workplace, the Occupational Safety and Health Administration developed a more protective regulation that reduces the permissible exposure limit and prescribes a separate standard for general industry and for construction. The client must ensure that a worker's exposure to asbestos is kept as low as reasonably achievable. Employees must not be exposed to airborne concentrations of asbestos in excess of 0.1 fibers per cubic centimeter of air (0.1 f/cc) over an 8-hour time period.

#### 4.1 Short term affects (acute)

May cause irritation and itching to the skin, coughing may occur.

#### 4.2 Long term effects

Over exposure can result in lung cancer. Common symptoms include difficulty in breathing (if you climb a flight of steps and are out of breath), cough, chest pains, clubbing of the fingers (this is common in advanced stages), risk for lung cancer, which is multiplied if the worker exposed to asbestos also smokes.

Airswift and/or the client must ensure that a worker undergoes a health assessment: (a) not more than 30 calendar days after the worker becomes an exposed worker, and (b) every two years after the first health assessment. Exposed workers may refuse to undergo part or all of a health assessment by giving the employer a written statement refusing it. Airswift and/or the client must pay the cost of the health assessment. Airswift and/or the client must ensure that, if it is reasonably practicable, a health assessment is performed during normal work hours.

#### 5.0 SAFE WORK PRACTICES

Airswift employees should be aware of the following safe work practices:

To help reduce worker exposure to airborne fibers, asbestos must be handled, mixed, applied, removed, cut, scored or otherwise worked in a wet state. This "wet" method must also be sued when products containing asbestos are removed from bags, cartons, or containers. If this is not possible, removal must be done in an enclosed or well-ventilated area. If a building is being altered or renovated, the employer must ensure that materials in the area of the alterations or renovations that could release asbestos fibers are encapsulated, enclosed or removed.



Asbestos containing materials must not be applied by spray methods. Compressed air can be used to remove asbestos containing materials only if the compressed air is used in conjunction with an enclosed ventilated system designed to capture the dust cloud created by the compressed air.

The client must ensure that asbestos waste is stored, transported, and disposed of in sealed containers that are impervious to asbestos and asbestos waste. The client must ensure that a container of an asbestos product and asbestos waste is clearly labeled: (a) to identify the contents as an asbestos product and carcinogenic, and (b) to warn handlers that dust from the contents should not be inhaled.

#### 6.0 HOUSEKEEPING

All surfaces must be maintained as free as practicable of accumulations of asbestos containing dust and waste. Floors and other surfaces contaminated with asbestos should only be cleaned by vacuuming and/or wet cleaning methods. Where vacuuming and/or wet cleaning is not feasible, shoveling, dry sweeping and dry clean-up of asbestos may be used. The use of compressed air for cleaning purposes is prohibited. Asbestos waste, scrap, debris, bags, containers, and equipment must be disposed of in sealed impermeable bags or containers.

#### 7.0 TRAINING

All employees who have the possibility to be exposed to asbestos will be provided awareness training in this program in order to be familiar with the potential hazards and proper safe work procedures to follow. The client must ensure that a worker who may be exposed to asbestos at a work site: (a) is informed of the health hazards associated with exposure to asbestos, (b) is informed of measurements made of airborne concentrations of asbestos at the work site, and (c) is trained in procedures developed by the employer to minimize the worker's exposure. Any required awareness training will be documented.