

Location: _____ Instructor: _____ Date/Time: _____

TOPIC C174: ASBESTOS (A)

Introduction: "Asbestos" is a class of minerals that occur in fibrous form. Asbestos is used in manufacturing and is present in pipe and boiler insulation materials, and in sprayed-on materials located on beams, in crawlspaces, and between walls. It is not a hazard unless it is disturbed and becomes airborne.

The potential for asbestos-containing products to release breathable fibers depends on how easily the material can be crumbled by hand; this is called friability. The fibrous or fluffy sprayed-on materials used for fireproofing, insulation, or soundproofing are considered to be friable, and readily release airborne fibers if disturbed. Materials such as vinyl-asbestos floor tile, roofing felts, asbestos-cement pipe or sheet are considered non-friable and generally don't emit airborne fibers unless sanded or sawed. Very few asbestos-containing products have been used since 1970. As a result, most workers are exposed to asbestos during the renovation and maintenance of buildings and structures containing asbestos. Asbestos fibers enter the body by inhalation or ingestion. Exposure to asbestos can cause disabling or fatal diseases such as asbestosis, lung cancer, mesothelioma and gastrointestinal cancer. The symptoms of these diseases may not appear for 20 years or more after exposure.

Work classification: OSHA's standard establishes a classification system for asbestos work that identifies work practices to reduce your exposure. Here's an overview of the four classes asbestos work.

- **Class I** asbestos work, the most hazardous class of asbestos jobs, this involves removing asbestos insulation and sprayed-on or troweled-on surfacing. Thermal insulation includes asbestos-containing materials applied to pipes, boilers, tanks, ducts or other structural components to prevent heat loss or gain
- **Class II** work includes the removal of other types of asbestos-containing materials that are not thermal insulation, such as flooring and roofing materials. Removing roofing materials such as cements, mastics, coatings and flashing is not regulated as Class II. Class II work includes removal of floor or ceiling tiles, siding, roofing, or wall panels
- **Class III** asbestos work includes repair and maintenance operations where asbestos-containing materials are disturbed
- **Class IV** operations include maintenance and custodial activities where you contact but don't disturb asbestos containing materials

The OSHA standard for industry regulates asbestos exposure for the following activities:

- Demolishing or salvaging structures where asbestos is present; removing or encapsulating asbestos-containing materials; Constructing, repairing, maintaining, or renovating asbestos-containing structures or substrates; cleaning up asbestos spills/emergencies; Moving, disposing of, storing, containing, and housekeeping involving asbestos-containing products. OSHA has established strict exposure limits and requirements for exposure assessment and monitoring all asbestos operations for the potential hazards, medical surveillance, recordkeeping, "competent persons," regulated areas, and hazard communication.

Permissible Exposure Limit (PEL): Exposure to airborne asbestos fibers may not exceed 0.1 fibers per cubic centimeter of air averaged over a time weighted 8-hour workday.

Conclusion: It's important to understand how to work near asbestos to prevent disturbing or damaging the material. Review the safe practices for working around asbestos-read the SDS. Always wear the necessary PPE and use the engineering controls available when working around asbestos.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

These guidelines do not supersede local, state or federal regulations, and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.