



TAILGATE SAFETY

DEMOLITION HAZARDS

Demolition can be a common part of constructing or remodeling structures. There are multiple hazards associated with demolition work, and sometimes there are hidden hazards that the contractor, developer, or homeowner is unaware of. These hidden hazards can include exposure to asbestos, lead, and silica. Cal/OSHA requires that all demolition work be done under the supervision of a “qualified person with the authority to secure maximum safety for employees.” The following are some hazards associated with demolition activities:

- **Lead dust** - Removing, grinding, or cutting materials covered with lead based paint, or handling/cutting metallic lead can cause exposure to lead dust. Lead fumes can also be created when a torch is used to cut tanks that have contained leaded gasoline or other lead containing products. Always wear your respirator if lead dust or fumes are present.
- **Silica** – Crystalline silica is a naturally occurring material that can be found in many building materials such as natural stone (including granite), brick and concrete. Breaking, cutting, crushing or grinding these types of materials will generate dust containing crystalline silica. Repeated, excessive exposure to these dusts can cause silicosis, a disease resulting in lung problems. If it is not possible to control dust to an acceptable level by keeping materials wet or damp, wear your assigned respirators.
- **Asbestos dust** - Whenever materials containing asbestos are handled or removed, exposure to asbestos dust is possible. Typical asbestos containing materials include sprayed asbestos coatings on steel columns, insulation materials, fire resistant walls, asbestos cement sheets or tiles, and flooring materials. Breathing this dust can cause asbestosis and lung cancer. Asbestos containing materials must be removed by a certified asbestos removal worker before any demolition is started. Inform your Supervisor if you suspect asbestos containing materials are present on the jobsite.
- **Gases and vapors** - Chemical hazards may be present in buildings previously used for chemical manufacturing or storage. These vapors may be found in pre-existing tanks and pipes, from the burning of waste materials, from welding or cutting, and from natural processes such as rusting of metal. The degree of hazard depends upon the type, toxicity, and concentration of the gas present. Adequate ventilation will be provided and suitable respiratory protective equipment shall be worn when there is potential exposure to toxic chemicals.
- **Confined Spaces** - Basements, tanks, excavations, attic spaces, etc. can all be considered “confined spaces”. Hazards may include oxygen deficiency, and/or the presence of toxic or flammable gases such as carbon monoxide, methane or hydrogen sulfide. Be certain that atmospheres in confined spaces have been tested and levels determined to be safe before entering these areas.
- **Dermatitis or skin irritation** - Contacting with substances such as mineral oil, pitch, disinfectant, solvents, oils, acids, alkalis, and cement can cause skin irritation/rashes/dermatitis. Exposure to epoxy resins, formaldehyde, nickel, cobalt, and chromium, may cause allergic reactions in some people. If contact with any of these substances is likely, protective clothing and gloves shall be worn to prevent skin contact.
- **High noise levels** – During demolition it is likely that you will be exposed to high noise levels from equipment such as compressors and jackhammers, even heavy equipment. These noise levels frequently create noise in excess of maximum permissible levels. Long term exposure to excessive noise may cause permanent hearing loss. To avoid this, always wear hearing protection when noise levels are high.
- **Falling Debris** – Always wear your hardhat when performing demolition work. Falling/flying materials can cause severe injury.

Training Tips: a) Discuss specific hazards associated with the jobsite/project. b) Allow employees to voice concerns and address them. c) Outline protective equipment requirements for the specific jobsite/project.

