

## Lockout - Tagout

Nearly every type of work permit has a section on “TAGGING AND LOCKING.” The following steps are generally involved in locking/tagging out equipment:

1. Operations personnel usually shut down the equipment and secure the main energy supply in the “OFF” or “de-energized” position.
2. Locks and/or tags are affixed to the main energy source by operations personnel and all local and remote start/stop switches are checked to assure that the equipment cannot be started.
3. All locks and tags should remain in place until the work is completed.
4. The person performing the work should remove his lock and tag first.

## HEARING PROTECTION

Exposure to high noise levels can permanently damage your hearing. Wearing the proper type of hearing protection can prevent hearing loss.

There are two types of hearing protection:

1. Earplugs - earplugs must fit tightly in the ear canal. Earplugs must be checked and adjusted as the ear canal expands throughout the day.
2. Earmuffs - earmuffs must form a proper seal around the ear: insuring a proper fit, for them to protect you from hearing loss. Hair and earrings should be pushed aside to insure this proper seal.

## Personal Protective Equipment

1. Head protection will be worn on all job sites at all times.
2. Eye protection (with side shields) will be worn where there is danger from flying objects or particles. It is recommended that safety glasses be worn on the job site at all times.
3. Hearing protection will be worn as per the safety requirements necessary for the job.
4. Protective footwear will be worn to protect from falling objects, chemicals or stepping on sharp objects. Shoes or boots should give ankle support and have a heavy sole. Athletic or canvas-type shoes are not allowed.
5. Protective gloves or clothing will be worn as required to protect against a hazard.
6. Eye and skin protection must be worn when working with caustic cleaning solutions.
7. Dress properly; a shirt and pants are required clothing on all job sites. Do not wear loose fitting clothing.
8. Always wear an approved helmet and gloves when welding, torching or cutting.
9. Safety harnesses and lanyards will be worn for fall protection as required in MIOSHA Construction Safety Standards.

## Electrical Tools and Extension Cords

1. Do not use power tools and equipment until you have been properly instructed in the safe work methods and become authorized to use them.
2. All tools are to be kept in good working condition. Do not use frayed, broken, or ungrounded lead wires on electrical tools. Do not allow tools to be used with cracked or loose handles, or other defects. Damaged tools and extension cords must be brought to the attention of the foreman.
3. Use only extension cords of the 3-prong type, in good condition. Use ground fault circuit interrupters at all times and when using tools in wet atmosphere (e.g., outdoors) or with any temporary power supply. Check the electrical grounding system daily.
4. Be sure that all guards are in place. Do not remove, displace, damage, or destroy any safety devices or safeguards furnished or provided for use on the job, nor interfere with their use. Safety devices and/or guards may be removed only for the purpose of repair and must be replaced before the machine or motor is returned to service.
5. Before doing work, where there is danger of coming in contact with electrical wires or other public utilities, take appropriate precautions to protect both the employees and the equipment. Before you dig or drill, call Miss Dig or another appropriate agency.

Ladders must meet MIOSHA and OSHA requirements; the following are notes of importance:

1. Ladders with faults and defects like any of the following will be withdrawn from service and marked "Dangerous - Do not Use"
  - a) Broken, worn or missing rungs, cleats or steps.
  - b) Broken or split side rails.
  - c) Broken or bent guides or iron spraders.
2. The side rails of a portable ladder must extend 3-feet above a landing or roof. Portable ladders must be equipped with safety feet unless it is tied, blocked or otherwise secured. Step ladders must not be used as a straight ladder.
3. Place ladders on a good, firm foundation.
4. Use the "four and one" rule when using a ladders. One foot out for the base for every four feet of height.
5. Keep ladder bases free of debris, hoses, wires, materials, etc.

## RESPIRATORY PROTECTION

Some jobs will require respiratory protection. Before you put on a respirator there are several important issues to consider:

1. Are you physically able to wear a respirator? You should be given a medical evaluation to be sure you can safely wear a respirator.
1. Have you been trained in the care, use, and limitations of the respirator? You should be.
2. Have you been fit tested to be sure you can maintain a good seal with the respirator you are to use?
3. Do you have the correct type of respiratory protection?
4. It is very important to wear the proper type of respirator for the hazard.

There are two major classes of respiratory protection:

- A) Air purifying respirators
- B) self-contained breathing equipment

5. Air purifying respirators filter out the contaminants; they do not supply air nor oxygen. They cannot be used in atmospheres that are oxygen deficient.
6. When selecting an air purifying respirator, you must select the proper type respirator for the hazard.
7. Always read the care, use, and limitation information supplied with the respirator and cartridges. If you have any questions, check with your supervisor.
8. Air supplied respirators supply fresh breathing air to the user's face mask.
9. Self Contained Breathing Equipment only protects the respiratory system. If the atmosphere contains contaminants which can be absorbed through the skin, other appropriate personal protective equipment will have to be worn along with the Self Contained Breathing Apparatus.

## Job Site Equipment

1. No one but the operator is allowed to ride on equipment unless proper seating is provided. There will be NO hanging on the forklifts for a ride. "Operator Only"
2. When riding in trucks, sit down. Do not ride on fenders, tailgates, or stand up in the bed.
3. Do not jump off any vehicle while it is in motion.
4. Cleaning, lubricating, greasing, fueling, and/or adjusting of machinery must be done with the machinery turned off, and by a qualified employee.
5. Only authorized personnel will be allowed to operate equipment. Equipment must be inspected before using to insure equipment is in proper operating condition.
6. If you are required to work around back hoes, trucks, and/or bull dozers, make sure operators can always see you.
7. Barricades are required for cranes.
8. Do not enter an area which has been barricaded.

## FIRE PREVENTION

Fire prevention is an essential part of any safety and loss prevention effort. Good fire prevention practices by all workers can greatly reduce the possibility of fires at any job site. Some basic fire prevention practices include:

1. Using the proper types of electrical wiring, tools and equipment
2. Keeping all electrical equipment in good repair and free of defects.
3. Practicing good housekeeping.
4. Properly storing all flammable liquids and materials in safety cans and cabinets, following procedures in Hot Work Permits.
5. Smoking only in approved areas.
6. Using “bonding” wires when transferring flammable liquids.
7. If you are uncertain of any fire prevention practices, ask your supervisor to explain them.

## TOOLS AND EQUIPMENT

Some basic tool safety rules are:

1. Keep all tools in good condition.
2. Use the right tool for the job.
3. Inspect each tool before using it and do not use if it is damaged or in poor condition. Return it for repair.
4. Operate all tools according to the manufacturer's instruction.
5. Use the right personal protective equipment for the job.

## FALL PROTECTION

When working at unprotected elevations, workers should wear a safety harness and lanyard. The lanyard should be secured to a point overhead. The anchor point should be able to support at least 5400 pounds. The lanyard should be attached to the back of the harness.

If a lifeline is used, it should be capable of supporting at least 5400 pounds. Lanyards should be attached to the lifeline so that the worker cannot fall more than 6 feet. Lanyards and lifelines should be protected from chemicals, heat, and sharp edges.

Check your fall protection equipment before each use. If there is any question about its condition, return it immediately to your supervisor.