# LOCKOUTS/TAGGING

**1. Task**

Preventing injury from mechanical, electrical, and all other energy sources while working on or near equipment.

**2. Hazards**

Pinched by/crushed by injuries, electrocution, chemical exposure, burns and scalding.

**3. Controls**

Pre-Job Safety Assessment (PSA). Worker training, lockout procedures, tags, locks, engineered drawings, manufacturer's specifications and requirements.

- Work that may endanger a worker or require lockout/tagging procedures must be performed by competent workers.
- Ensure original lockout/tagging procedure is followed and not altered without consent from all parties.
- If manufacturer's specifications require that work be done on operative machinery or if it is not reasonable or practicable to shut down equipment that requires service, repair, testing, adjustment or inspection, then procedures must be developed and implemented to ensure the work is carried out safely.
- If more than one worker is working at each location requiring hazardous energy to be controlled, each worker must attach a personal lock to each energy isolating device.
- If a group lockout procedure is used, it must be reviewed with all workers involved in the work and a worker designated by the employer will secure all lockout devices, secure all keys to these devices, complete and sign a checklist identifying all affected equipment or machinery, and verify and document that all sources of hazardous energy are effectively isolated.
- Identify all potential energy sources connected with the work. Identify all locations of isolation points, including blank and blind installation points. Notify all affected employees.
- Disable, redirect, or stop all energy from doing what it normally does.
- Confirm that you've reached a zero-energy state.
- Apply restraint devices to keep the system from starting up while you work on it.
- Gravity may cause a mechanical device to drop – even though all energy sources have been disconnected, physically blocking the equipment may be necessary to prevent injury.
- Energy may be stored in pistons and springs; blocking may be required to prevent their sudden release.
- Do not push mechanical piping out of the way to perform your work. Consult with supervisors and have piping purged, locked out, and removed by competent workers.
- Check with staff at industrial sites regarding the necessity of obtaining lock out permits and follow the plant procedure.
- When moving into an area to perform demolition, check with mechanical and electrical supervisors to ensure that energy sources have been made safe and locked out.
- Restraint devices, (chains, locks, scissors, blocking), on mechanical, electrical, and physical energy sources must be tagged.
- Tags indicate who you are, who you work for, what equipment is locked out and when it was locked out, as well as who to contact in case of emergency. No lock can be removed other than by the person who installed it except in an emergency or with the consent of the person who installed it.
- Construction sites must have formal lockout procedures and permits to identify all energy sources – trace wiring, piping, and all lines in and out of the equipment or area.
- Refer to drawings, specifications operating manuals etc.
- Once each energy source has been identified and de-energized, testing must be performed to verify a zero-energy state.
- Lockout can be simple – blocking under the arm of a backhoe while it is worked on or locking out an electrical panel box while installing a stringer of temporary lighting.

- ❖ Subcontractors must submit a Safe Work Procedure for any work that requires a Lockout/Tagout, in advance of performing the work.

## Restoring Equipment to Service

When the servicing or maintenance is completed, and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken:

(1) Check the machine or equipment and the immediate area around the machine to ensure that non-essential items have been removed and that the machine or equipment components are operationally intact.
(2) Check the work area to ensure that all employees have been safely positioned or removed from the area.
(3) Verify that the controls are in neutral.
(4) Remove the lockout devices and re-energize the machine or equipment.

***Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.***

(5) Notify affected employees that the servicing or maintenance is completed, and the machine or equipment is ready for use.

## LOCKOUTS MUST HAVE THE FOLLOWING INFORMATION:

1. **PERSON'S AND EPLOYER'S NAME COMPLETING THE LOCKOUT AND PHONE NUMBER - WORK AND OFF HOURS;**
2. **DATE LOCKOUT WAS PUT ON; and**
3. **INSTRUCTIONS DIRECTING PERSONS NOT TO START OR OPERATE THE MACHINE.**