

Lockout

Toolbox Talks

Discuss with crews on _____

Lockout requirements come into effect when there is a potential hazard to life and property due to the release of any energy source. All personnel including subcontractors must conform to lockout guidelines and procedures. The following guidelines outline the steps required to lockout energy sources so maintenance or other work can proceed safely.

Definitions:

- Personal Lock:* A key type of padlock issued to a worker to be used only for locking energy sources in an inoperative or safe position. The company owns all personal locks, and they are unique to the lockout system.
- Scissors:* A multi-hole clamp device that is connected to a lockout point to allow more than one worker to lockout on a single system.
- Tag:* A tag used to convey information about the individual, equipment or process involved in locked out. Tags without locks do not constitute lockout.
- Zero Energy State:* State in which a machine, system or process has been rendered incapable of start-up or movement. Zero energy state means the elimination or control of:

- Electrical power
- Hydraulic fluids under pressure
- Energy stored in springs
- Potential energy from suspended parts
- Steam
- Capacitors
- Equipment balance).
- Static electricity
- Unstable ground
- Any other sources that might cause unexpected mechanical movement (e.g. freezing or thawing)

Responsibilities

Supervisors:

- Educate all workers in the use of lockout procedures.
- Identify all sources of energy that require control and lockout.
- Control and administer the lockout locks.
- Ensure the lockout procedure is followed.

Workers:

- Follow the lockout procedure.

- Only remove one's own locks from the system.
- Report any irregularities or non-conformance situations to their supervisor.

Guidelines

- Personnel will not work on any equipment that represents a safety hazard unless that equipment is properly locked out.
- All personnel who will be working on the equipment are required to place their personal lock on the isolating devices or lockout box. This includes supervisors.
- The isolating device shall be secured in the inoperative position using scissors and locks. Locks shall be identified with a tag indicating the name of the person applying them.
- Locks issued to an individual worker shall be operable only by that worker's key and by a master key for emergency use, which shall be securely kept by the company.
- Locking a lock through another lock does not meet lockout requirements.
- When inserting locks into scissors, do not insert a lock into the last scissor hole, instead attach another scissor and insert your lock on the second scissor.
- Personnel must always keep the key to their lockout locks on their person.
- Only locks owned by the company and designated for lockout are to be used for lockout.
- Combination locks shall not be used at any time.
- If a worker has left work (quit, terminated, or injured) their personal locks must be removed from service until the keys are recovered.
- Personnel must remove their locks when they leave the worksite or are no longer working on the equipment.
- No personnel shall remove any personnel lock other than their own unless the proper procedure with documentation is followed.
- Shutting down the power generator without locking out the main disconnect does not fulfill the lockout requirements.
- Switches must not be opened under load due to the risk of arcing and explosion.
- Components that feed into or out of or are interlocked with the component to be repaired or serviced must be isolated and locked out

LOCKOUT PROCEDURE – STOP IT, LOCK IT, TEST IT!

1. **Identify** all energy sources connected with your work.
2. **Disable, redirect, or stop all energy** from becoming active during the repair or replacement.
3. **Apply restraint devices** to prevent the system from starting up while you work on it.
4. **Confirm** that you have reached a zero-energy state by doing a restart or bump test.

LOCK REMOVAL AT COMPLETION OF THE WORK

When the work is complete or a worker is no longer required to work on the device, they must remove their own personal lock and return it to the lockout station. The worker with the last lock on the system must notify the supervisor that the work is complete and that he is ready to remove his lock.

1. The supervisor must verify,
 - a. All workers are clear,
 - b. All equipment and tools are removed,
 - c. The machinery or process is clear to reactivate.
2. The worker must remove the last lock from the isolation points.