

## **LOCKOUT/TAGOUT PROCEDURE**

This is a zero tolerance procedure. All requirements shall be followed. Failure to follow requirements shall result in disciplinary action. No employee or contract employee shall enter or access any machinery or equipment without it being locked out and in safe mode.

### **PURPOSE**

This procedure establishes a lockout/tagout practice for securing machinery and equipment during periods of construction, servicing, and/or alteration, which could cause injury to personnel. All affected employees/contractors shall comply with this procedure. This procedure is a minimum requirement and site/plant requirements may supersede these requirements when and where applicable.

### **RESPONSIBILITY**

All personnel involved in an operation, which requires a lockout/tagout, are responsible to see that this procedure is followed.

### **IMPLEMENTATION**

1. Management/Contractors shall instruct all affected employees in the purpose, use, and safety significance of the lockout/tagout procedure.
2. All shutdowns must be coordinated with the Owner or the Owners Representative, a minimum of 24 hours in advance.
3. Only trained and authorized personnel shall initiate lockout.
4. Each person working under a lockout shall apply his/her personal lockout lock and tag.
5. Locks designated for use as a lockout lock shall not be used for any other purpose. Lockout locks and hasps shall be provided by the client or the Construction Site Safety Administrator.
6. Locks used for lockout shall have only one key. Each lock shall be individually keyed. The key shall remain under the exclusive control of the employee installing the lock. The body of the lock shall be identified for lockout use only.
7. Tags shall be completely filled out prior to installation. Only approved tags shall be used.
8. Multi-lock hasps shall be used to ensure others can apply additional locks. Never fill the last available slot in an isolation point with your lockout lock and tag. Use additional multi-lock hasps, if necessary.

## SEQUENCE OF LOCKOUT PROCEDURE

1. All affected personnel in the area shall be notified that a lockout is being performed.
2. When necessary, a qualified contractor shall shut down the equipment by the normal stopping procedure (depress stop button, open toggle switch, valve, etc.)
3. Open disconnect switch, operate valve, or other energy-isolating device so that the energy source(s) are disconnected or isolated from the equipment.
  - Electrical
  - Mechanical
  - Hydraulic
  - Pneumatic
  - Chemical
  - Water
  - Steam
  - Radiation – including Thermal
  - Springs
  - Gravity
  - Other energy sources as required
4. Stored energy, such as that in capacitors, hydraulic, air, gas, water pressure, etc., must also be dissipated.
5. Lockout/Tagout the energy source(s) with the assigned individual lockout device(s) and tag with your name, the name of the company, and contact phone number
6. In situations involving more than one person, all affected employees are required to place their assigned individual lockout devices and tags with their company name and the individual's name on the energy isolated device.
7. Confirm **ZERO ENERGY STATE**. After assuring no personnel are exposed, as a check on having disconnected the energy sources, operate push button or other normal operating controls to make certain the equipment will not operate. CAUTION: Return controls to neutral or off position after the test.
8. Where lockout/tagout is not feasible in the case of required repetitive adjustment these shall be accomplished under the protection of one designated individual.
9. Personnel shall verify with the Site Safety Manager, Owner, or Owners Representative if an Energy Control Permit is required before any work is performed.
10. If work on a piece of equipment has not been completed by the end of the shift, the supervisor in charge shall lock and tag the equipment to allow the removal of all locks. If there is more than one shift; all off-going personal locks must be removed. The supervisor's lock remains in place. The oncoming shift will then attach their lock(s) at which time the supervisor's lock shall be removed by the oncoming supervisor and replaced with his/her own lock.

11. Testing or repositioning machine or equipment.

- Check around the area to ensure completeness of work.
- All nonessential items shall be removed from the area.
- Replace all safety guards.
- Notify all affected personnel that the machine is being tested/repositioned.
- Remove the necessary lockout locks and devices to test/reposition the machine.
- Follow steps as listed to reestablish the lockout of the machine.

**RESTORING EQUIPMENT TO SERVICE**

1. Upon completion of the lockout an authorized employee must check the area for completeness of work. If the employee(s) who initiated the lockout is available, he/she should conduct this inspection.
2. Remove all tools and nonessential items from the area.
3. Replace all guards.
4. Ensure all personnel are clear of the machine.
5. Notify all affected personnel in the area that the lockout device(s) are being removed.
6. Remove lockout device(s).
7. Restart the machine to ensure proper operation.

**GROUP LOCKOUT**

1. When multiple isolation points must be controlled, during a lockout, or when multiple crafts persons are involved, a group lockout shall be used.
2. Follow the steps for a lockout as documented in steps 1-8 in "Sequence of Lockout Procedure". A group lockout system master tag shall be used with a single job control lock on each isolation point.
3. Each key for the locks used shall be placed in a group lockout box. The group lockbox shall be kept in view of the work being performed when practical.
4. Each contractor involved in the lockout shall install a job control lock on the group lockbox. This lock shall remain in place until the lockout has been completed.
5. Each employee covered by the lockout shall apply his/her personal lockout lock and tag on the group lockout box.
6. Each employee shall remove their own lock when their portion of the work is completed or at the end of each shift.
7. Upon completion of the work, the entire work area shall be inspected for completeness.
8. Field verification that down stream devices are ready to accept energy must be conducted.
9. When all of the conditions of the lockout termination procedures have been satisfied, the job control lock(s) shall be removed from the group lockbox.

## **EMERGENCY REMOVAL LOCKOUT/TAGOUT**

1. If an employee leaves the facility without removing his/her lockout tag lock and tag, an effort shall be made to notify the employee that the supervisor in charge will authorize the removal of their lock. It must be deemed necessary that the removal of the lock is required by at least two supervisory personnel, but only after confirming beyond any doubt it is safe to do so.
2. Verify the employee has left the site by checking with co-workers, calling the contact phone number, and calling the employee's home.
3. Visually confirm the completeness of the work.
4. The contractor supervisor under the direct supervision of the Site Safety Representative shall remove the lock with bolt cutters.
5. Upon return to the site, prior to returning to work, the employee involved will be notified their lock has been removed and the reason for it's removal.

## **DEVICE SPECIFICATIONS**

The lockout /tagout devices used for compliance with this procedure shall be as follows:

1. Locks - Shall be of suitable manufacture, color-coded or otherwise identified for lockout use only.
2. Tags - Standard tags shall be used.
3. Multi-lock Hasps - multi-lock hasps shall be provided by the client.

## **TRAINING**

Affected employees should be thoroughly familiar with the procedures stated here and those specific to the work location. Do not participate in a lockout until you are absolutely confident about the procedure.

## **DEFINITIONS**

1. Lockout/Tagout - The placement of a lock/tag on the energy isolating device in accordance with an established procedure, indicating the energy isolating device shall not be operated until removal of the lock/tag in accordance with an established procedure.
2. Designated Individual - An individual to whom the authority and responsibility to perform the specific assignment has been given by the employer.
3. Energy Source - Any electrical, mechanical, hydraulic, pneumatic, chemical, nuclear, thermal, or other energy source that could cause injury to personnel.
4. Energy Isolating Device - A physical device which prevents the transmission or release of energy. For example, but not limited to the following: a manually operated switch, a slide gate, a slip blind, line valve, blocks or similar devices with visible indication of the position of the device.