

4 - LO/TO Shutdowns: Safety Training

EH&S – MGA

Goals: This safety session should teach you to:

- A. Know the basic lockout/tagout shutdown procedures.
- B. Understand the need for lockout/tagout.

OSHA Regulations: 29 CFR 1910.147

1. Lockout/Tagout Prevents Injuries from Unexpected Equipment Energization

- A. Equipment that starts, moves, or releases stored energy unexpectedly during service or repair can cause serious injuries.
 - 1. OSHA's lockout/tagout procedures prevent these accidents.

2. OSHA Defines Lockout/Tagout Roles and Responsibilities

- A. Only specially trained authorized employees must perform lockout/tagout.
- B. Affected employees and other employees must:
 - 1. Understand the value and basics of lockout/tagout
 - 2. Never try to remove locks or tags or try to start locked/tagged out equipment

3. Authorized Employees Follow a Series of Specific Lockout/Tagout Steps

- A. The authorized employee knows the equipment's energy sources and energy quantity, and means of control. He or she must:
 - 1. Notify affected employees that the equipment will be shut down and locked out
 - 2. Turn off the machine or equipment
 - 3. Deactivate the energy control switch, circuit breaker, etc. and lock/tag it "off" or "safe," using special lockout/tagout locks and tags, to prevent accidental start-up
 - 4. Use tags only when the equipment can't be locked out

4. The Authorized Employee Next Releases or Blocks Any Stored Energy

- A. If energy is stored in springs, capacitors, hydraulic systems, etc., he or she must:
 - 1. Reposition or block spring tension or block spring-driven parts
 - 2. Relieve trapped pressure by venting, draining, or bleeding lines or blocking parts
 - 3. Block or brace gravity-driven moving parts

5. The Authorized Employee Tests Operating Controls to Assure That Power Is Locked/Tagged Out

- A. He or she makes sure all employees are a safe distance away and then:
 - 1. Puts all controls in the "on" position
 - 2. Turns on all controls and tests that the equipment isn't receiving power
 - 3. Returns controls to the "off" position once assured the equipment can't operate.

6. Locked/Tagged Out Equipment Receives Necessary Service or Maintenance

- A. If energy is needed to test or position equipment, the authorized employee:
 - 1. Follows all lockout removal steps
 - 2. Tests or positions the equipment
 - 3. Performs the full sequence of lockout steps again and completes the job

7. The Authorized Employee Who Installed the Lock/Tag Removes It

- A. Once work on the equipment is complete, the authorized employee must:
 - 1. Remove all tools, etc., from the work area, replace machine guards, and check that equipment is ready to operate
 - 2. Notify employees of lockout removal and keep them a safe distance away
 - 3. Remove the locks/tags
 - 4. Turn on equipment and energy and test for proper operation
 - 5. Tell affected employees that locks/tags are off and the equipment can be used
- B. If the authorized employee who placed the lock or tag isn't available, another authorized employee removes the lock/tag and notifies the original employee.

Summation: Be Sure Equipment Is Locked/Tagged Out Properly Before Repair or Maintenance

If you're an authorized employee, follow all the steps. If you're not, protect yourself and others by not trying to restart equipment that's locked or tagged out. Remember, knowing and following the college's policies for lockout/tagout can save you or your co-worker's life. If you see anyone taking chances by cutting corners on safety, turn them in. It is better to have a friend mad at you for a while than to have a friend who is dead and gone forever.