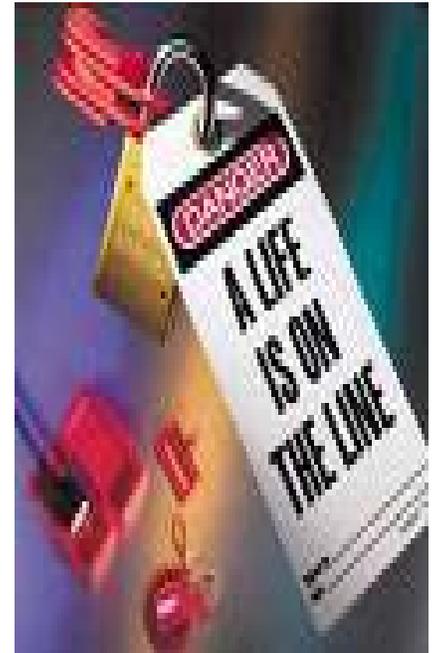


## MODULE 1-08 LOCKOUT/TAGOUT

### ALL EMPLOYEES ARE TO BE TRAINED PROIR TO USING ANY EQUIPMENT

**I. Purpose** - "Lockout/Tagout (LO/TO)" refers to specific practices and procedures to safeguard employees from the unexpected energization or startup of machinery and equipment, or the release of hazardous, stored energy during service or maintenance activities. Each employee and youth offender must take every precaution to ensure the safety of any individual working on equipment which has been shut down for repairs, alterations or cleaning. OYA expects all power, mechanical and energy-producing equipment to be completely isolated from all power sources during servicing and maintenance. This is accomplished by affixing appropriate lockout and tagout devices to equipment. Machines and equipment must be disabled to prevent unexpected energization, start-up or release of energy.



**II. General** - When an individual is working on power actuated equipment or pipe systems, all electrical control switches, valves on pipe lines, latches, etc., affecting the equipment must be locked and tagged prior to commencing the work. This applies even when the switch/valve is close by or the machine/equipment will only be down for a short time.

### III. Procedures for Routine or Scheduled Maintenance Lock Out/ Tag Out (LO/TO)

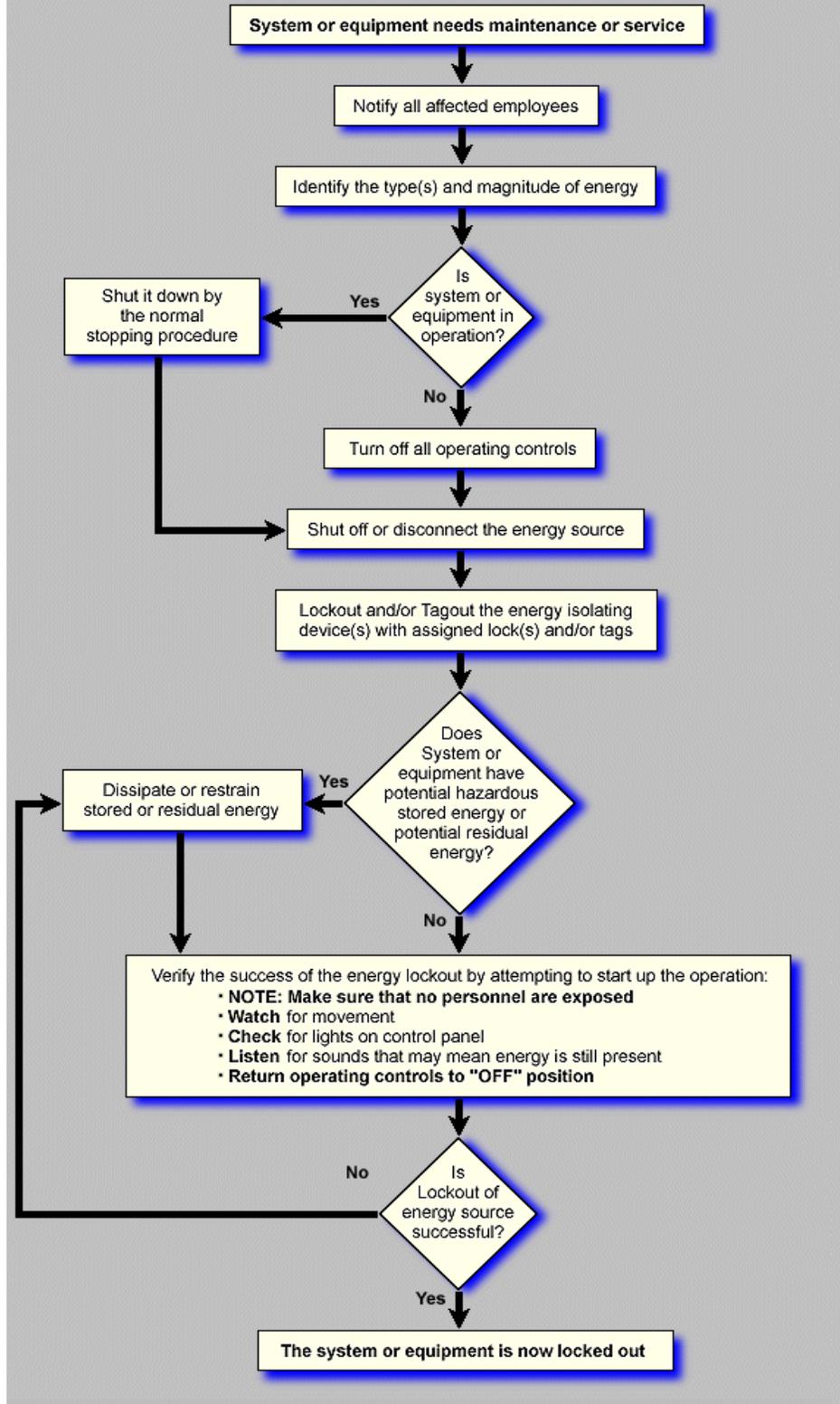
(Note: If a piece of equipment breaks, starts making strange noises, etc., during operation, shut it down immediately, remove the key or switch/valve. Only then can you ask someone to watch the equipment while you leave to get a lock and LO/TO tag.)

- **Notify Affected Employees/Visitors/Hosts** that a LO/TO procedure is to be started.
- **Shut Equipment Down** - If equipment is running, shut it down by normal stopping procedures.
- **Disconnect** the main switch, valve or other energy isolating device(s) to isolate equipment from the energy source.
- **Place a lock and tag** on the energy isolation device.
- **Release or restrain** any residual energy which may be stored within the equipment, such as hydraulic or air pressure, turning fly wheels, or spring tensions. Block or otherwise restrain elevated objects or any other objects that can move on their own.
- **Engage** the normal starting and operating procedure as a check to ensure the equipment will not operate and that all residual energy has been controlled.



# Lockout/Tagout

## System or Equipment Energy Isolation Procedure



**IV. Procedure Involving More Than One Person** - If more than one person is required to work on equipment, each person working on the equipment shall place his/her lock and tag on the energy isolating device.



**V. Restoring Machinery to Normal Operations** - After servicing or maintenance has been complete, the equipment is ready for normal operations. Only the person who has placed a lockout/tagout device or tag is empowered to remove it. If you did not place the lockout / tagout device, you cannot remove it. You must find the person whose name is on the tag to remove the tag.

- **Remove all tools**, reinstall guards where applicable and notify Employees/youth offenders/volunteers and any other persons present you are preparing to restart the piece of equipment. Make sure all personnel are clear.
- **Remove Locks and Tags** from switches, valves, etc. Operate the switch, valve, etc. to restore energy to the equipment.
- **Remove restraints** and blocks before operating the equipment.



**VI. When Responsibility Is Transferred** - If a piece of equipment needs to remain locked/tagged out at the end of the shift, the responsible person must notify his/her supervisor. If the supervisor is unavailable, the responsible person shall leave a message of explanation for both the supervisor and the following shift workers. If a person leaves the premises and his/her lock remains on a piece of equipment without proper notification, **that person will be called back to the work site to remove the lock.**

# OYA OFFENDER JOB TRAINING MODULES

## IF YOU --

- DO NOT KNOW ABOUT LOCKOUT AND TAGOUT OF ENERGY SOURCES,
- DO NOT KNOW HOW TO LOCK AND TAG A PIECE OF EQUIPMENT,
- DO NOT KNOW ABOUT REMOVING LOCKOUT DEVICES AND TAGS,  
**ASK YOUR SUPERVISOR.**

YOUR LIFE AND THE LIVES OF YOUR COWORKERS DEPEND ON YOUR KNOWLEDGE, YOUR KNOW HOW, AND YOUR ADHERENCE TO THIS POLICY.



**LOCKOUT/TAGOUT IS SERIOUS BUSINESS.** Fatalities have occurred because well meaning people did not use a lock out tag procedure, or removed the lock out devices when a co-worker was repairing or even in the equipment. Oregonians have been killed or maimed when the equipment started, or stored up energy was released.



## VII. Typical Accidents Due to Improper LOTO Procedures

- Employee was replacing panels on an electric garage door, while door was chocked up in raised position with a 4 x 4. When door panel was removed the chock slipped and spring tension on door slammed door down and nearly broke employee's collar bone.
- Employee was working at a county sand distribution point, fixing a jam in the hopper that fills trucks with sand. As he was getting out of the hopper, a co-worker drove up with a scoop full of sand and cut his legs off. Employee died before medical attention could arrive. Scoop operator said he had no way of knowing his friend was working on the hopper, and lived with the tragic accident the rest of his life.
- Employee was working on tractor bucket in raised position. When hydraulic hose was disconnected bucket dropped abruptly nearly injuring ranger.

**VIII. Demonstration and Proficiency** - All persons trained in lockout/tagout procedures are required to demonstrate their proficiency prior to signing the training ledger. Employee is required to show an understanding of the energy isolation device, tag, and lock.

**PROFICIENCY TEST**

**MODULE 1-08 LOCKOUT TAGOUT**

**Multiple Choice**

1. Lockout/Tagout procedures are important because they:
  - a) Safeguard employees from the unexpected energization or start up of machinery or equipment.
  - b) Safeguard employees from the release of hazardous stored energy during service or maintenance activities.
  - c) Ensure machines and equipment are disabled and co-workers can't use them.
  - d) Ensure appropriate procedures are followed to return machines and equipment to service.
  - e) All of the above.
  
2. Steps you should take for a Routine Maintenance LO/TO are:
  - a) Notify affected personnel/visitors/hosts and shut down the machinery or equipment.
  - b) Disconnect the main switch, valve or other energy isolating device(s).
  - c) Place a lock and tag on the energy source.
  - d) Release or restrain any residual energy which may be stored within the equipment.
  - e) Engage the normal starting and operating procedure as a check to ensure the equipment will not operate
  - f) All of the above.
  
3. When restoring energy to a locked out tagged out piece of equipment, the last thing you need to do is:
  - a) Remove all tools and reinstall guards.
  - b) Notify employees/ visitors/ hosts in the area you are preparing to restart the equipment.
  - c) Remove any blocks or restraints.
  - d) Remove locks and tags from the switch and restart or restore energy to the machinery or equipment.
  
4. At the end of your work shift, if the equipment is still LO/TO, you need to:
  - a) Not worry about leaving a note for your supervisor and the following shift members.
  - b) Notify your supervisor, or leave a note for the supervisor and the following shift workers.
  - c) Just leave the equipment where it is with your lock and tag on it.
  - d) None of the above.

**II. True/False**

5. \_\_\_\_\_ One of the purposes of LockOut/TagOut is to ensure that all energy is released from a piece of equipment prior to any set up or maintenance work being performed.
6. \_\_\_\_\_ When locking/tagging out a piece of equipment, you don't need to notify anyone you are performing the procedure because they will see the lock and tag.
7. \_\_\_\_\_ When working on equipment with hydraulics or air pressure systems, it is important to release

## OYA OFFENDER JOB TRAINING MODULES

this pressure and, if necessary, block the equipment.

8. \_\_\_\_\_ Lockout/tagout is a needless Oregon-OSHA regulatory requirement.
9. \_\_\_\_\_ Due to staff limitations, when two or more people are working on a piece of equipment, only one person needs to lock and tag it out.
10. \_\_\_\_\_ If you leave work and leave your LO/O on a piece of equipment w/o proper notification, you may be required to come back to work to remove your lock and tag.
11. \_\_\_\_\_ Only the person who placed a LO/TO is empowered to remove it.
12. \_\_\_\_\_ Before repairing LO/TO equipment, one should always attempt the normal starting or operating procedures, to see if it is really disabled, disconnected from power sources and stored up energy is controlled or released.

### Discussion Questions

1. If a front deck mower starts overheating, what process would you use to lock and tag it out?
2. After tagging out a broken piece of equipment, whom should you notify?

Employee Name: \_\_\_\_\_ Pass \_\_\_\_\_ No Pass \_\_\_\_\_ Date: \_\_\_\_\_

**Take this test to your supervisor or trainer for sign off.**