

Policy Title: Lockout/Tagout			
Policy #:	FA-CPS-007		
Responsible Office:	Campus Public Safety		
Responsible Administrator:	Vice President for Finance and Administration		
Date Reviewed:	August 2014		Revisions Made? Yes ___ No <u>X</u>
Date of Next Review:	August 2017		

PURPOSE

The purpose is intended to prevent fatal or serious injuries through established requirements for the lockout of energy isolation devices. It will be used to ensure machinery or equipment is isolated from all hazardous energy and locked out prior to employees performing any servicing or maintenance function where unexpected energizing, start-up or release of stored energy could cause injury.

AUDIENCE

WOU employees who are authorized to perform lockouts.

DEFINITIONS

Electrical Energy: is present in power lines, transformers, circuit breakers, motors and other sources that contain electrical energy.

Hydraulic Energy: is liquid pressure that may include forklifts, cylinders, tractors, etc.

Kinetic Energy: is the actual movement of force behind a moving object. Examples include blades, belts and flywheels.

Lockout: is a method of keeping equipment from being set in motion and endangering workers. Examples may include a disconnect switch, circuit breaker, valve or other energy isolating mechanism that is placed in an off position with a locking device so that the equipment cannot be energized.

Pneumatic Energy: is air under pressure. Pneumatic systems include air tools, lifts, etc. Pneumatic processes normally require faster cycles of operation than hydraulics.

Potential Energy: is stored gravitational energy, including springs, actuators, counterweights and raised loads.

Pressurized Liquids and Gases: may include steam and chemicals normally present in pipes, supply lines and tanks.

Tagout: When a lockout is placed on a piece of equipment it is to have a tag attached to the lockout with a written warning from the person who attached the tagout. The tag is to be durable and substantial to prevent it from being easily removed. If the energy source cannot be locked out because of engineering controls, the tagout is to clearly state that no lockout is on the equipment.

POLICY STATEMENT

It is the policy of Western Oregon University to be in compliance with OR-OSHA rules 1910.147. All equipment shall be locked out and tagged out to a zero energy state when maintenance or servicing is done on machines or equipment to protect against accidental or inadvertent operation when such operation could cause injury to persons.

PROCEDURES

1. **Preparation for Shutdown (Lockout)** - Employees authorized to perform lockouts are to make certain which switches and valves or other energy isolating devices apply to the equipment to be locked out. This can be determined by:
 - knowing the types and amounts of energy that power the piece of equipment that you are shutting down;
 - knowing if there is more than one type of energy source, i.e. electrical, hydraulic, etc.;
 - knowing how to control the hazardous energy.
2. **Equipment Shutdown**
 - Notify affected employees of the equipment or machinery that is being locked out.
 - Shut the equipment down by using its normal operating controls.
3. **Equipment Isolation**
 - Isolate the piece of equipment from every energy source.
 - Make sure all secondary power is isolated from the piece of equipment.
 - All hardwired equipment must be labeled of the location of power source / breaker.
4. **Application of Lockout Tagout Devices**
 - Lockout the energy isolating devices with the employee's assigned individual lock or locks with the attached identification tag. (Only employee assigned locks issued for

lockouts will be used for locking out equipment. General purpose locks may not be used.)

- More than one employee can lockout a single energy source by using a multiple lock hasp. (This is required if more than one person is working on a piece of equipment.)
- Tagout the lock with the person's tag who locked out the equipment and the purpose for locking it out. (If no lock can be placed at the energy source, the tagout is to clearly state that no person is to turn the equipment on or activate the energy source.)

5. **Control of Stored Energy**

- Make sure all parts are not moving.
- Release stored energy from the piece of equipment (spring pressure, elevated machine parts, rotating flywheels, hydraulic systems, air, gas, steam and water must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.)

6. **Equipment Isolation and Verification**

- Make sure no personnel are exposed to the equipment.
- Operate the energy sources (controls) to make sure equipment will not operate, then return them to the "off" position. Electrical testing equipment is to be used to verify electrical isolation.
- **The equipment is now locked out.**

7. **Restoring Machines and Equipment to Normal Production Operations**

- Upon completion of maintenance and service, make sure equipment is safe to operate.
- Remove all tools from the work area.
- Be sure the system is fully assembled.
- Be sure everyone is clear of the equipment.
- Advise everyone impacted by the piece of equipment that the lockout tagout is being removed.
- Remove lockout tagout devices. (All devices are to be removed by the person who put the lockout on, unless an emergency exists.)
- **The equipment may now be re-energized.**

8. **More Than One Person Locking Out Equipment** - If more than one person is locking out or tagging out equipment, the following steps are to be completed:

- each is to place their own individual lock on the lockout device along with their own individual tagout;
- when an energy isolating device cannot accept multiple locks, a multiple lockout device (hasp) is to be used which will allow multiple locks;
- when work is completed, each person will remove their own lock from the multiple

lockout device.

9. **Changing Lockouts During Shift Change** - If a machine or piece of equipment must be locked out beyond the end of a shift with another person coming on, the following is to occur:

- the person going off shift is to leave their lock on the lockout until the oncoming person has placed their lock on the lockout;
the off going person may then take their lock off the lockout;
- if a machine or piece of equipment is to be locked out for several shifts, with no work to be done, the lockout is to remain on the equipment. It is very important that the tagout explain the purpose for the lockout.

10. **Removal of Lockout Device by Management**

- Only the director of the department or their designee may be authorized to remove a lockout device placed on a machine or piece of equipment by another employee. This will be accomplished by either a master key or bolt cutters.
- The director is to attempt to locate the employee who originally placed the lockout on the machine.
- Attempt to ascertain the purpose of the lockout.
- Check the machine to ascertain the purpose of the lockout.
- If no information can be found to determine the status of the machine or equipment and the director is satisfied that the piece of equipment is safe to operate, he or she may remove the lockout device. (The department director assumes full responsibility for the removal.)

11. **Outside Personnel (Contractors, etc.)**

- When contractors or service personnel fall under activities covered by this procedure, the director of a department or his/her designee(s) is to inform the outside personnel member and the personnel member is to inform the department director of their respective lockout procedures.
- The department director or his/her designee(s) is to ensure that the employee(s) understand and comply with restrictions and prohibitions of the outside contractor's lockout procedures.

ACCOUNTABILITY

Employee - Authorized employees, as directed by the department director and or supervisor, are required to lock out machinery and equipment. Compliance with this procedure is considered a condition of employment. Failure to follow this procedure will result in disciplinary action up to, and including, termination. Each employee is to be trained on:

- preparation for shutdown;

- equipment shutdown;
- equipment isolation;
- application of lockout tagout devices;
- control of stored energy;
- equipment isolation and verification;
- removal of the lockout.

Supervisor - Supervisors are required to train employees and have written documentation on this procedure up to, and including:

- recognition of hazardous energy sources;
- type and magnitude of energy control procedure;
- methods for energy isolation and control;
- accountability of failure to follow procedures;
- annually inspect the procedures used by each authorized employee relating to energy control;
- retrain employees if their knowledge of procedures is inadequate;
- train employees when there is a change in job assignment, machines, equipment, processes or a change in the energy control procedures.

Physical Plant - The University Physical Plant Department will be responsible to assist supervisors in technical clarity of lockout tagout compliance including:

- energy control procedures;
- recognition of energy sources;
- training of supervisors upon request.

FORMS

N/A

AUTHORITY

Name & URL of authority:

OR-OSHA rules 1910.147

(https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9804)

RESPONSIBILITY

Campus Public Safety is responsible for this policy and may be contacted at 503-838-8481 or

safety@wou.edu.

The Lockout Tagout program, services and oversight for compliance to statutes and rules is the responsibility of the Vice President of Business and Finance through Campus Public Safety / Occupational Environmental Safety division. In addition, all supervisors and managers are responsible for the health, safety, welfare and training of those employees under their supervision.

Alternate formats of this policy may be requested from the Office of Human Resources.