



The University of Montana - Helena
COLLEGE OF TECHNOLOGY

Policy Number: 600.4

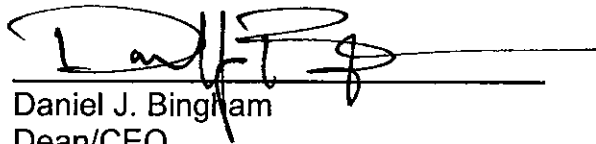
Policy Title: Lockout/Tagout Program: Control of Hazardous Energy

Subject: Section 600. Physical Plant

Date Adopted: May 7, 2009

Date(s) Revised:

Approved by:



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POLICY STATEMENT:

The purpose of the Lockout/Tagout program is to protect UM-Helena COT employees from injury or death from the release of hazardous energy. This program establishes the minimum requirements for isolation of electrical, chemical, thermal, hydraulic, pneumatic, and gravitational energy prior to equipment repair, adjustment or removal. Reference: OSHA Standard 29 CFR 1910.147, the control of hazardous energy.

All UM-Helena college policies shall adhere to and be consistent with relevant federal and state laws, rules, and regulations; with Board of Regents' policies and procedures; and with The University of Montana's policies and procedures.

PROCEDURES:

1. GENERAL LOCKOUT/TAGOUT PROCEDURES

Before working on, repairing, adjusting or replacing equipment and machinery, all appropriate safety procedures, including lockout/tagout, must be utilized to place the machinery or equipment in a neutral or zero mechanical state. See Appendix A for standard operating procedures.

When the energy-isolating device is not lockable, a tagout system may be used, provided the level of safety is equivalent to the level of safety using a lockout system. See Appendix B for procedures.

UM-Helena COT must supply the lockout and tagout devices required.

2. MANAGEMENT'S REMOVAL OF LOCK AND TAG

Only the employee who applied the lock and tag may remove his/her lock and tag. However, should the employee leave the facility before removing the lock and tag, the lock may be removed by using bolt cutters or other equivalent means under the direction of the Assistant Dean, Fiscal and Plant or designee as required in 29 CFR 1910.147(e)(3). The Director must be assured that the employee who applied the lock and tag is not at the facility and is notified that the lockout/tagout devices have been removed, that all tools have been removed from the area, all guards have been replaced, and all employees are clear of the area before the lock and tag are removed and the equipment is returned to service.

3. CONTRACTORS

Contractors working on the UM-Helena COT campus must use this lockout/tagout procedure while servicing or maintaining equipment, machinery or processes.

4. INSPECTION

UM-Helena COT will conduct an inspection at least annually of the energy control procedures to ensure that the procedure and the requirements of this standard are being followed.

5. TRAINING

All UM-Helena COT employees who are required to utilize lockout/tagout procedures will be trained in the procedures within six months of initially hire, as

required by changes in equipment or technology, and once every three years. All training will be documented.

Training will include:

- Recognition of applicable hazardous energy sources
- The type and magnitude of energy available in the workplace
- Methods and means necessary for energy isolation and control
- The limitations of using tagout system only

APPENDIX A

LOCKOUT/TAGOUT STANDARD OPERATING PROCEDURES

All authorized employees who perform lockout/tagout must follow this sequence:

1. Prepare for shutdown. Know what type of energy the machine uses. Identify potential hazards. Find the switches, valves or other devices that control energy and need to be locked out.
2. Let affected employees know you'll be locking or tagging out the equipment and why.
3. Turn off the machine or equipment.
4. Locate and isolate **all** energy sources. Get rid of any stored energy, as in springs, hydraulic systems, or air pressure. You may have to block, bleed, vent, etc. to be sure there's nothing left to move a machine part.
5. Lock out the switches or other energy controls. Attach your lock to hold the switches in an "off" or "safe" position. Also apply tag to identify who is working on the equipment and to warn others that the switch is locked out.
6. Test the operating controls. Be sure no one is close enough to get hurt. Put all controls in the "on" position. Make sure the power **doesn't** go on and that the equipment **won't** operate.
7. Put operating controls back in the "off" or "safe" position.
8. Test the circuits and electrical parts of the equipment to be sure they are de-energized.
9. Perform necessary service or maintenance.

CAUTION: If you need energy to test or position the equipment during maintenance or repair, follow all the lockout removal steps before you turn energy on. And follow all lockout steps to turn off the power and protect yourself before you begin work again.

Restore the equipment back to service using the following steps.

1. Check the machine or equipment and the immediate area around the equipment to ensure that all tools and other items have been removed and that the equipment components are operationally intact.
2. Check the work area to be sure that all employees have been safely positioned or removed from the area.

3. Verify that the controls are still in the “off” or “safe” position.
4. Remove the lockout and tagout devices and re-energize the equipment.
 - The lockout and tagout devices must be removed only by the person who put them on.
 - If servicing lasts more than one work shift, the outgoing and incoming workers will together remove the outgoing worker’s lock and install the new worker’s lock.
5. Notify the affected employees that the servicing or maintenance is completed and the equipment is ready for use.

APPENDIX B

TAGOUT PROCEDURES

Tagout devices warn against hazardous conditions if the machine or equipment is energized, and must contain a legend such as *Do Not Start, Do Not Open, Do Not Close, Do Not Energize, Do Not Operate*.

If an energy-isolating device is not capable of being locked out, UM-Helena COT, in using a tagout system, must still provide the same level of protection as when using lockout procedures.

The following are limitations and guidelines for using only a tagout system:

- Tags are essentially warning devices and do not provide the physical restraint that is provided by a lock.
- Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.
- Tags cannot be removed except by the person who applied it, and it is never to be bypassed, ignored or otherwise defeated.
- Tags must be legible and understandable by all authorized employees, affected employees and all other employees whose work operations are or may be in the area.
- Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

Where tagout is used for energy control, the periodic inspection must include a review between the inspector and each authorized and affected employee of that employee's responsibilities under the energy control procedure being inspected.