Millersville University Finance and Administration Division Management Directive

By Direction of: Roger V. Bruszewski Vice President for Finance and Administration

Department(s)	Maintenance Operations Capital Construction Contracting and Design
Subject:	Lockout-Tagout Procedure
Date:	January 12, 2010
cc:	Associate Vice President for Human Resources Director of Safety and Environmental Health

SCOPE

This guideline applies to all facilities in which employees interact with energized equipment.

OVERVIEW

Lockout – Tag out is the OSHA compliant method of isolating equipment from energy sources, and to otherwise disable equipment or machinery, in order to prevent personal injury.

PURPOSE

To provide a method for reducing the potential for injury to employee(s) or damage to equipment during installation, maintenance or repair. Lockout – Tagouts are required when performing any of these operations on energized equipment or machinery, or equipment and machinery that stores and can unexpectedly release energy.

APPLICATION

OSHA standard 29 CFR 1910.147 requires the use of Lockout – Tagout control procedures on equipment when an employee is required to place any part of their body into an equipment zone during installation, maintenance or repair.

DEFINITIONS

Affected Employee – The individual who has their equipment or machinery rendered inoperative by the Lockout-Tagout procedure.

Authorized Employee – The individual who implements the Lockout-Tagout procedure, or who removes the Lockout-Tagout equipment.

Lockout - The placement of a locking device on an energy isolating-device, which assures that the equipment being controlled cannot be operated until the locking device has been removed. A lockout device must be capable of ensuring the equipment cannot be restarted or energy supplied to the machine.

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Tagout - The placement of a tagging device on an energy-isolating device, which indicates that the energy-isolating device and the equipment being controlled must not be operated until the tagging device has been removed. Tags shall be attached at the same location as the lockout device. Only standard tags will be used. Tags will be used for no other purpose than lockout, and shall be substantial enough to prevent removal without the use of excessive force or unusual techniques. Tagout devices shall be attached using cable tie or other device with a minimum unlocking strength of no less than 50 pounds. Try to ensure tags are easily visible to anyone entering the area. Ensure that all tags are completely and correctly filled out.

AUTHORIZATION

Only Authorized Employees may initiate or remove Lockout-Tagout procedures. Authorized employees are trained and equipped in Lockout-Tagout procedures.

Employees whose work assignment includes activities such as installation, maintenance or repair to equipment are required to Lockout-Tagout equipment. Authorization to implement and release a Lockout-Tagout can only be performed by a trained employee or contractor following University established guidelines.

A Lockout or Tag may only be removed by the individual who installed that Lockout or Tag. When either is found on equipment, that equipment may not be used until the Lockout or Tag has been removed by that individual who installed that Lockout or Tag.

Each unit or department utilizing the Millersville University program for the control of hazardous energy shall establish site-specific procedures for energy isolation. Specialized lockout devices shall be obtained and kept within the department for its use.

If such work is performed by a contractor, he/she must provide all required equipment and personnel to complete the work. Operations contracting such work will inform contractors of University procedures and confirm that contractor's procedures are compatible with University procedures.

LOCKOUT-TAGOUT RULES

The Lockout-Tagout technique must be used for any work that requires the removal or disabling of guards or interlocks from equipment.

Tagout only procedures can be used only if lockout procedure is not possible and tagout is at least equally effective at protecting worker safety. When using tagout only procedures, take additional steps to prevent unexpected energization (e.g., remove valve hand wheels, locking control switches, etc).

LOCKOUT-TAGOUT TECHNIQUE

Workers assigned a task requiring Lockout-Tagout must follow this procedure:

Isolating Energy Sources: Shutdown

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- 1. Notify affected employees that the equipment is about to be shut down and locked out.
- 2. Shut down the equipment using normal stopping procedure.
- 3. Locate all of the energy-isolating devices that are needed to control the energy to the machine or equipment.
- 4. Isolate all energy sources by closing switch/disconnects to the "OFF" or "CLOSED" position.
- 5. Apply locks or tags to the energy disconnects for each energy source present.
- 6. Block or dissipate all stored energy in pneumatic or hydraulic systems.
- After assuring no personnel are exposed, attempt activation of all normal operating controls to make certain the locked out equipment does not operate. Return all controls to the "OFF" position after testing.

Restoring Energy Sources: Start Up

- When the assigned repair or servicing task is completed and the equipment is ready for testing or returns to service, check the area surrounding the shut off unit to assure that no one will be exposed to danger when the equipment is started. Make sure all tools and devices have been removed from the machinery or equipment that is about to be restarted.
- 2. Notify all affected employees that locks/tags are going to be removed and the equipment is ready for operation.
- 3. When the area is clear, remove all locks and restore energy to the equipment. The same worker who installed the lockout device must remove them.
- 4. Test the equipment to ensure it is operable.
- 5. Notify management that work is completed and the area has been returned to operational condition.

GROUP LOCKOUT-TAGOUT

When a group of employees or contractors performs a task requiring Lockout-Tagout, group Lockout-Tagout devices will be used. A single person will be designated to coordinate the work force and ensure that each authorized employee affixes his own personal Lockout-Tagout device to the group device. This same worker must also be responsible for insuring that all locks and tags are removed when the task is complete. Verify isolation and shut down before a new employee adds their lock to the group lockout procedure. The primary authorized employee verifies that all other employees have removed their locks, removed their tools and equipment, and are clear of the area, before restarting the machine or equipment.

OUTSIDE CONTRACTORS

It is important that outside contractors or vendors and University personnel are aware of each other's respective Lockout-Tagout programs. If there are any differences in the programs, the University program will prevail. Outside contractor personnel may not tamper with or remove University Lockout-Tagout devices. Outside contractor personnel must not rely on University employee implemented Lockout-Tagout devices and must use their own. Outside contractor personnel must, themselves, ensure the equipment is deenergized and properly Locked and Tagged before working on any University equipment or machinery. Conversely, University employees will not rely on outside

contractor Lockout-Tagout devices and must ensure, themselves, that the equipment they are performing service work, repair, or maintenance on, is properly deenergized, Locked and Tagged.

SHIFT OR PERSONNEL CHANGES OF LOCKOUTS

Some repair and service tasks require more than a single shift to complete. For these, Lockouts/Tagouts must remain in place for the entire task.

To allow a shift change, the relieving shift worker must install their lock to the Lockout device before the original lock is removed. The relieving shift worker(s) must notify the outdoing shift worker(s) that the Lockout-Tagout devices are being changed.

ABSENT EMPLOYEE DEVICE REMOVAL

Locks and tags are only to be removed by the individual who installed them. On occasion an employee may be absent when devices need to be removed. The following conditions must be met before the devices can be removed.

- 1. Verify the employee is not on campus.
- 2. Make every effort to contact the employee to inform him/her that the device has been removed.
- 3. The Director or Assistant Director of Maintenance Operations must authorize the removal of the Lockout in writing. (A special form will be used).
- 4. A minimum of two individuals must be present to remove another employees Lockout-Tagout device. The Lockout-Tagout device may only be removed, by another worker, under the direct supervision of the installer's immediate supervisor and/or the Director or Assistant Director.
- 5. Ensure that the employee who placed the Lockout-Tagout device has knowledge that their lock has been removed before they resume work at the facility.

MATERIALS/HARDWARE

All locks and tags will be supplied by the Facilities Department. Devices are to be singularly identified to the employee. Locks and tags cannot be used for purposes other than Lockout-Tagout. Only one key per lock is allowed. A spare key for device removal will be kept secure and under the control of the Director of Maintenance Operations.

RESPONSIBILITY

Each Millersville University employee who uses Lockout-Tagout procedures is responsible for following the safety procedures outlined in this Management Directive. They are also responsible for maintaining their own locks and tags and other Lockout-Tagout devices.

ENFORCEMENT

Any employee who attempts to circumvent or defeat the proper use of a Lockout-Tagout mechanism or knowingly operates equipment with these mechanisms disabled will be subject to the disciplinary procedure which could include termination.

TRAINING

The heads of departments or their designated representatives are required to provide training to ensure that employees understand the purpose and function of the energy control program and know how to use Lockout-Tagout devices properly and in accordance with this Management Directive. All employees who must perform Lockout-Tagout procedures will be trained.