



1.0 Scope and Application

This policy covers the servicing and maintenance of machines and equipment in which the unexpected energization or start up of the machines or equipment, or release of stored energy could cause injury to employees. It applies to all equipment and sources of hazardous energy, including electrical, pneumatic, hydraulic, gaseous and stored energy. Authorized employees who are required to service equipment are covered by this policy. Additionally, affected employees have limited responsibilities under this policy as well. See definitions section.

This policy complies with Chapter 32 (Public Employee Safety and Health) of the Wisconsin Administrative code as promulgated by the Wisconsin Department of Commerce and 29 CFR Part 1910.147 (Control of Hazardous Energy) as promulgated by the U.S. Occupational Safety and Health Administration. The Control of Hazardous Energy Standard is commonly referred to as Lockout / Tagout or LOTO.

2.0 Responsibilities

Risk Manager:	Support and management of this policy.
Department Heads:	Implementation of policy. Perform annual review LOTO policy. Assigns authorized employees.
Supervisors:	Ensure policy is adhered to by all employees by locking out equipment before it is serviced. Manage the issuance of locks. Performs annual audit of LOTO Program and annual verification that LOTO procedures are accurate.
Employees:	Follow requirements contained in this policy.

All employees are responsible for complying with the requirements contained in this policy. Failure to abide by these requirements may subject the employee to disciplinary action, up to and including discharge.

3.0 Departmental Polices and Requirements

This policy represents minimum lockout / tagout requirements that must be followed when servicing equipment. Department Heads will develop specific lockout / tagout procedures to be followed for each piece of covered equipment.

4.0 Definitions



LOTO Lockout / Tagout in which a lock or tag is affixed to a piece of equipment to secure there is no unexpected startup of the equipment or release of energy.

Energy Control Procedure Equipment specific procedures that detail the exact steps authorized employees are to perform to isolate all sources of energy before servicing the piece of equipment.

Authorized Employees: Employees who have been specifically authorized by Department Heads to perform maintenance and lockout / tagout of equipment.

Affected Employees: Employees who may be affected by the lockout of equipment, such as the operator of the equipment that is being worked upon.

5.0 Training

Affected employees will be instructed at their time of assignment of the requirements of the LOTO program and the prohibition on attempting to energize or startup any equipment that has been locked / tagged out.

Authorized employees will receive training, as scheduled by the Personnel Department, in the hazards and magnitudes of energy sources and the specific procedures to be followed when servicing equipment.

Retraining shall be provided for all authorized and affected employees whenever there is a change in job assignments, a change in machines, a piece of new equipment or process that presents a new hazards, or when there is a change in the energy control procedure.

6.0 Documentation Requirements

Review Lockout Procedures: Supervisors are required to review their specific department's LOTO procedures at least once a year to ensure that they provide adequate worker protection. As part of the review, the Supervisor will ensure that any deviations and inadequacies identified in the energy-control procedure or its application are corrected.

Periodic Inspections: Periodic inspections are intended to assure that employees are familiar with their responsibilities under the procedure and continue to implement energy-control procedures properly. The inspector, who must be an authorized person not involved in using the particular control procedure being inspected (typically a Supervisor), must be able to determine the following:



- Employees are following steps in the energy-control procedure;
- Employees involved know their responsibilities under the procedure; and
- The procedure is adequate to provide the necessary protection, and what changes, if any, are needed.

For a lockout procedure, the periodic inspection must include a review of each authorized employee's responsibilities under the energy-control procedure being inspected. Where tagout is used, the inspector's review also extends to affected employees because of the increased importance of their role in avoiding accidental or inadvertent activation of the machinery. Inspections shall be completed at least annually, be maintained on file within the department, and be completed on forms provided by the County.

7.0 Exceptions

The policy does not apply to servicing and maintenance activities in the following situations, when:

1. Exposure to hazardous energy is controlled completely by unplugging the equipment from an electric outlet and where the employee doing the service or maintenance has exclusive control of the plug. This applies only if electricity is the only form of hazardous energy to which employees may be exposed. This exception encompasses many portable hand tools and some cord and plug connected machinery and equipment.
2. An employee performs hot-tap operations on pressurized pipelines that distribute gas, steam, water, or petroleum products, for which the following can be shown:
 - Continuity of service is essential;
 - Shutdown of the system is impractical; and
 - The employee follows documented procedures and uses special equipment that provides proven, effective employee protection.
3. The employee is performing minor tool changes or other minor servicing activities that are routine, repetitive, and integral to production, and that occur during normal production operations. In these cases, employees must have effective, alternative protection.



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8.0 Methods of Energy Control

Lockout (the physical affixing of a padlock) is the primary method employees will use control hazardous energy. For older equipment that does not have a physical location to affix a lock, tagout may be authorized. All new equipment purchases (except single cord and plug) are required to be capable of being locked out.

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9.0 Lockout / Tagout Equipment

Supervisors shall ensure that appropriate equipment is provided to employees to use for energy control. The lockout and tagout devices should be standardized in color, shape, and size and in the case of tagout devices, print and format. Tagout devices must include a “Do Not Operate” warning statement and identify the employee who applied the device and the date. All lockout and tagout devices are not to be used for any other purpose than for energy control and must durable to withstand the environment to which they are exposed.

10.0 Lockout Procedures

Lockout Procedures are required to be developed and documented for each machine or major piece of equipment for which energy sources are present. It is the responsibility of the Department Heads to ensure Lockout Procedures are created for all new and existing machines or equipment and that these procedures be kept current. Energy sources include any source of electrical, mechanical, hydraulic, pneumatic, chemical, or thermal energy. All procedures sheets are required to be developed using a standardized form contained in the appendix to the safety manual. In the absence of a specific energy control procedure, authorized employees shall follow the following basic steps:

Notification of Employees

Affected employees shall be notified by the authorized employee of the application of lockout devices. Notification shall be given prior to the controls being applied.

Preparation for Shutdown

Before an authorized employees turns off a machine or piece of equipment, the authorized employee shall have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy. The authorized employee shall obtain and review the Lockout Procedure for the specific machine or equipment prior to performing any lockout procedures.

Machine or Equipment Shutdown

The machine or equipment shall be turned off or shutdown using the normal operating controls for the specific machine or piece of equipment.

Machine or Equipment Isolation

All energy isolating devices that are necessary to control the energy to the machine or equipment shall be physically located in such a manner as to isolate the machine or equipment from the energy source.



Lockout Device Application

Lockout devices shall be affixed to each energy isolating device by the authorized employee. A tag (not to be confused with tagout) shall also be affixed to the lock with a nylon tie that indicates the name of the authorized person serving the equipment and the date. Lockout devices shall be affixed in a manner for which it will hold the energy isolating devices in a “safe” or “off” position.

Stored Energy

Following the application of lockout devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained or otherwise rendered safe. If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed or until the possibility of such accumulation no longer exists.

Verification of Isolation

Prior to starting work on machines or equipment that have been locked out, the authorized employee shall verify that isolation and deenergization of the machine or equipment has been accomplished by testing the normal starting mechanism for the piece of equipment.

Performing Servicing and Maintenance

The servicing or maintenance on the machine or equipment can now be safely performed.

Release from Lockout

Before lockout devices are removed and energy is restored to the machine or equipment the work area shall be inspected to ensure that nonessential items have been removed, the equipment and components are operationally intact, and employees have been safely positioned. Lockout devices shall be removed from each energy isolating device by the employee who applied the device. When the authorized employee who applied the lockout device is not available to remove it, procedures for removal of authorized employee lock and tag must be followed. Affected employees shall be notified by the authorized employee of the removal of the lockout device. Notification shall be given after they are removed.

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11.0 Tagout Procedures

If no physical location exists to affix a lock, tagout may be used. Tagout procedures are identical to the lockout procedures above except that:

1. A tag is used instead of a lock and is affixed where a lock would normally be applied.
2. At least one energy isolating device (fuse, breaker) must be removed from the energy circuit.

12.0 Lockout And Tagout Procedures During Testing

The following procedure must be followed by each authorized employee when it is necessary to temporarily remove the energy isolating devices and reenergize the machine or equipment to test or position the machine, equipment, or component.

1. The work area shall be inspected to ensure that nonessential items have been removed and to ensure that machine or equipment components are operationally intact.
2. The work area shall be checked to ensure that all employees have been safely positioned or removed. After lockout and tagout devices have been removed and before a machine or equipment is started, affected employees shall be notified that the lockout and tagout devices have been removed.
3. The employee who applied the device shall remove each lockout and tagout device from each energy isolating device.
4. Energize and proceed with testing and positioning.
5. Deenergize all systems and reapply energy control measures in accordance with the Lockout/Tagout Procedure to continue the servicing and/or maintenance.

13.0 Group Lockout And Tagout

If more than one individual is required to lockout and tagout a machine or piece of equipment, each authorized employee shall place a lock and tag on the energy isolation device to ensure the employees a level of protection equivalent to that provided by the implementation of a personal lockout and tagout device. The Supervisor is designated as the lockout/tagout leader and is responsible for coordinating all lockout activities. If an energy-isolating device cannot accept multiple locks or tags, a multiple lock and tagout device shall be used.



The Group Lockout and Tagout will also be utilized when outside contractors are performing lockout/tagout procedures on County owned equipment. Group lockout and tagout will include a lock and tag from the outside contractor performing the work, as well as a County authorized employee if performing work on the equipment.

14.0 Removal Of Lockout And Tagout Devices

Only the employee who applied the device shall remove each lockout and tagout device from each energy isolating device. When the authorized employee who applied the lockout and tagout device is not available, that device may be removed by a designated authorized employee Supervisor only. Prior to the removal of a lock and tag by the Supervisor, the following must be adhered to:

Verification must be made by the Supervisor that the authorized employee who applied the lockout and tagout device is not on the premises.

A reasonable effort must be made to contact the authorized employee who applied the device to inform them that their lockout and tagout device has been removed.

The Supervisor who has removed an authorized employee's lock and tag should discard the lock and return the tagout device to the Lockout/Tagout Hardware Station and ensure that the authorized employee has knowledge that their lockout or tagout device has been removed prior to returning to work.

15.0 Outside Contractors

The Supervisor is responsible for obtaining the written Lockout/Tagout Program and training certifications for all outside contractors who engage in activities requiring lockout/tagout. Additionally, the Supervisor will coordinate the lockout programs of both the County and the contractor with all affected and authorized employees to ensure that contractor lockouts are performed safely and made known.

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End Policy