

<b>Northern Kentucky University</b>	<b>Policy Link:</b> Occupational Safety Policy
<b>Issue Date:</b> 11/02/2018	<b>Title:</b> LOCKOUT/TAGOUT PROCEDURE
<b>Revised Date:</b>	

## OBJECTIVE AND PURPOSE

The Lockout/Tagout procedure covers the servicing and maintenance of machines and equipment in which the unexpected energization or startup of the machines or equipment could cause injury to NKU employees. Also considered is unexpected startup due to release of stored energy from the machines or equipment. This procedure is administered under the authority of University Occupational Safety Policy.

## DEFINITIONS

**Affected Employee**-An employee who is required to use machines or equipment on which servicing is performed under the Lockout/Tagout standard or who performs other job responsibilities in an area where such servicing is performed.

**Authorized Employee**-An employee who locks or tags machines or equipment in order to perform servicing or maintenance.

**Lockout**-The placement of a lockout device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy-isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

**Lockout device**-Any device that uses positive means, such as a lock, blank flanges and bolted slip blinds, to hold an energy-isolating device in a safe position, thereby preventing the energizing of machinery or equipment.

**Other employees**-All employees who are or may be in an area where energy control procedures may be utilized.

**Tagout**-The placement of a tagout device on an energy-isolating device, in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed.

**Tagout device**-Any prominent warning device, such as a tag and a means of attachment that can be securely fastened to an energy-isolating device to indicate that the machine or equipment to which it is attached may not be operated until the tagout device is removed.

## RULES AND PROCEDURES

The location and type of isolating devices will be determined before beginning work on any equipment which has energy supplied to it. Energy can include mechanical, hydraulic, pneumatic, chemical, thermal, and stored energy. More than one energy source may be available to a piece of equipment.

Equipment capable of being locked out will have an energy-isolating device. The device can be locked out with a hasp, chain, or other attachment through which a lock can be attached.

## General Rules

The following rules shall be followed when locking out or tagging out equipment:

- Equipment should be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel.
- Do not attempt to operate any switch, valve, or other energy isolating device where it is locked-out or tagged out.
- Never use another employee's lock and never lend yours. This protects you and fellow employees.
- If a piece of equipment is locked out at shift change, the person on the next shift must apply his/her own lock before the employee who is leaving can remove their personal lock.
- In very rare cases, when a power source cannot be physically locked out, no work will be performed on the equipment until a supervisor is notified. The supervisor will determine the procedure to be used for the equipment in question.

### **Procedure for Lockout or Tagout**

Lockout or Tagout is to be done by authorized employees only. The following procedure will be followed:

- Notify all affected employees that the lockout or tagout system is going to be used and the reason that the energy sources for the equipment or process must be isolated.
- Determine the magnitude of energy the equipment uses and identify the hazards associated with those energy sources.
- If the machine or equipment is operating, a normal shut down procedure must be followed (depressing the stop button, opening of toggle switches, unplugging of the cord, etc.).
- Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy sources(s). Stored energy (such as that in springs, elevated machine parts, rotating flywheels, hydraulic systems, and air, gas, steam or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
- Lock out the energy isolating devices with the assigned individual lock or apply tags as appropriate.
- Ensure no person is exposed to danger, and as a check on having disconnected the energy sources, operate the start button (or other normal means of operating the machine) to make certain that the equipment will not operate. Return operating control(s) to the "off" or "neutral" position after this test.
- The equipment is now locked out or tagged out and may be serviced.

### **Procedure for Restoring Machines or Equipment to Normal Operation**

After servicing and/or maintenance is complete and equipment is ready for normal operations, check the area around the machine or equipment to ensure that no person is exposed should an accident occur on start-up.

All tools must be removed from the machine or equipment, all guards reinstalled, and all persons in the clear before the lockout and/or tagout devices are removed. Restore energy to the machine or equipment by operating the energy isolating devices (open the switch, reset the circuit breaker, open the valves, etc.). Then test the equipment through the normal start up procedures.

### **Procedures Involving More Than One Person**

If more than one Maintenance Employee is required to lock out or tag out equipment, the following procedure will be followed:

- Each employee shall place his or her own personal lockout device or tagout device on the energy isolating device(s).
- When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used.
- A single lock may be used to lockout the machine or equipment. In this case, the key to that lock will be placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his or her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his or her lock from the box or cabinet.

### **Outside Contractors**

Outside contractors will be notified of any locked out or tagged out equipment in the area work is being completed and the lockout/tagout procedures used at NKU.

In addition, the contractor will notify the NKU supervisor coordinating their work of the type of lockout/tagout procedures they intend to use. NKU personnel in the contractor's work area must observe these procedures.

### **RESPONSIBILITY**

#### **Safety and Emergency Management Responsibilities**

Safety and Emergency Management is responsible for procedure development, review, and compliance with all applicable federal and state regulations. Safety and Emergency Management will coordinate training as needed. Safety and Emergency Management staff are authorized to halt any unsafe work practice that is not in accordance with this or any other NKU safety policy or procedure.

#### **Chair/Director Responsibilities**

It is the responsibility of the chair/director to comply with applicable environmental, health and safety laws and regulations, University policies and procedures, and accepted safe work practices. Chairs/directors shall ensure that their employees receive required training prior to beginning work and annual/refresher training as needed. The chair/director is also responsible for maintaining their employee training records.

Chairs and Directors may delegate the details of program implementation to appropriate personnel within their authority. The ultimate responsibility, however, for ensuring implementation of these programs at the academic department/administrative unit level remains with the chairs/directors.

#### **Supervisor Responsibilities**

The Supervisor is responsible for maintaining lockout/tagout devices, for providing personal locks for all authorized employees, for ensuring that all authorized employees have attended training sessions, and for monitoring compliance with the provisions of this program.

The Supervisor will maintain a master list indicating which equipment has been locked-out or tagged-out. The supervisor shall also record the name of the employee who is responsible for the lockout or tagout, the expected time when repairs will be completed, and the actual time when the lockout or tagout were removed.

In the rare case when a piece of equipment cannot be locked-out or tagged-out, the Supervisor will determine the method to be used to service the equipment in question.

**Employee Responsibilities**

Every employee using lockout/tagout procedures must be properly trained before performing any tags requiring lockout/tagout. The employee shall have approval before starting lockout/tagout procedures, shall cease lockout/tagout operations if unsafe conditions develop and shall notify their supervisor for reassessment of the situation, and wear proper personal protection equipment.

**TRAINING**

Departments shall ensure adequate training for each employee prior to performing work related to this procedure. Documentation shall be maintained for each employee. Additional information on training and documentation requirements can be found in corresponding regulations. For additional assistance contact Safety and Emergency Management.

***For additional information, forms, training, and other resources visit [nku.edu/safety](http://nku.edu/safety).***