

College Procedure: Procedure Reference: Responsible Department: Approval Authority: Procedure Owner: Effective Date:

308.6 – Lockout/Tagout 308 – Use of College Equipment Facilities & Public Safety Cabinet Vice President, Facilities & Public Safety 10/15/2012

Version Number: 3 Legal Counsel Reviewed (yes/no): No Legal Reference(s): Scope: College-wide

#### **Reason for Procedure**

These procedures shall be used to ensure that all potential hazardous energy shall be isolated and locked/tagged out before an employee performs any servicing or maintenance activities where the unexpected powering, start up or release of stored energy could occur and cause injury.

# **The Procedure**

These procedures will not apply to servicing or maintenance activities which take place during normal production operations such as lubricating, cleaning, making minor adjustments, and simple tool changes. Such servicing or maintenance with the machine or equipment energized will be permitted if the measures employed provide effective protection. Such alternative measures must be approved by the Associate Vice President of Facilities before they can be substituted for lockout/tagout.

The Vice President of Facilities will ensure that all energy isolating devices located on the College campus that are used for the control of potentially hazardous energy sources, including valves, shall be marked or labeled to identify the equipment supplied and the type and magnitude of the energy being controlled and that the devices be operated by **authorized employees only** Facilities must label or mark the energy isolating devices in a permanent manner. Facilities may elect to do so in a campus-wide effort for all machines, or mark or label the devices permanently on an individual basis for a specific machine or equipment at the time the lockout/tagout procedures are to be applied and the energy isolating devices are to be secured.

When preparing for lockout/tagout, a survey should be made to locate and identify all energy sources that must be locked/tagged out. More than one energy source/electrical, mechanical or other may be involved. Questionable energy source problems shall be resolved before job authorization is obtained and lockout commences.



The sequence of lockout/tagout procedure involves six steps:

- 1. Notify all affected employees that a lockout/tagout is required and the reason for the outage.
- 2. Shut down operating equipment by the normal stopping procedure.
- 3. Operate the switch, valve, or other energy isolating device so that each energy source is disconnected or isolated from the equipment. Stored energy such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems and air, gas, steam, or water pressure must also be dissipated or restrained by methods such as grounding, repositioning, blocking, or bleeding down.
- 4. Lockout/tagout the energy isolating devices with an assigned individual lock or tag.
- After ensuring that no personnel are exposed, verify that the energy sources have been disconnected by using the normal operating controls to make certain the equipment will not operate. When possible, check with meter at equipment to make certain electrical power is off.
- 6. Return operating controls to off position. The equipment is now locked out. (For plug or cord type electrical equipment, only a tag must be applied to the plug by the employee performing the work.) When the job is complete and equipment is ready for testing or normal service, the equipment area should be checked to see that no one is exposed.
- 7. When the equipment and equipment area are clear remove all locks/tags. The energy isolating devices may then be operated to restore energy to the equipment.

In the preceding steps, if more than one individual is required to lock/tag out equipment, each shall place his or her own personal lock on the energy isolating device(s). If the job has not been completed during one work shift and another work shift will be working on the same equipment that has been locked out, these employees shall place their own personal lock on the energy isolating device(s).

All equipment with the exception of plug and cord type electrical equipment shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Employees are prohibited from attempting to operate any switch, valve, or other energy isolating device bearing a lock or tag; to do so will result in disciplinary action.

Locks used in conjunction with this procedure shall be of such code complexity that removal by any other means than the regular key would require excessive force or unusual techniques, such as metal cutting tools. Locks and tags may be obtained from your supervisor.

The Vice President of Facilities shall schedule periodic inspections to be conducted at least annually to ensure that the energy control procedures are being implemented. The inspection shall be performed by an authorized employee other than the one implementing the energy control procedures and shall correct any deviations or inadequacies observed. The Vice President Facilities shall certify that the inspections have been performed. The certification shall identify the machine or equipment inspected, the date inspected and the name of the person performing the inspection.

All employees shall be instructed on the safety significance of the lockout/tagout procedure by the Continuing Education Training Center staff. Each new or transferred employee shall be instructed by his or her new supervisor in the purpose and use of the lockout/tagout procedure as part of the required Hazard Communication briefing for employees.



Training shall include the following:

- 1. Authorized employees shall receive training in the recognition of applicable hazardous energy sources and in the use of adequate methods and means of energy isolation and control.
- 2. Affected employees shall be instructed in the purpose and use of the energy control procedure.
- 3. All other employees whose work operations are or may be affected by the energy control procedure shall be instructed about the procedure and how it affects their work operations.

Periodic retraining shall be provided for all authorized or affected employees whenever a periodic inspection reveals, or there is reason to believe that there are deviations from or inadequacies in the energy control procedure. The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures as necessary. Training records will be maintained and will contain the employee's name and date of training. Whenever outside servicing personnel are engaged in activities covered by the scope and application of this procedure, they shall be advised of the lockout/tagout procedures used by the College by the Vice President of Facilities or designee.

## References

### **Definitions**

Term	Definition
Energy	Any electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy
Source	source that is capable of causing injury to employees.
Term 2	
Term 3	
Term 4	

### **Revision Log**

Version Number	Date Approved	Approved by	Brief Description of Change
		Troy McQuillen, VP,	
1	10/15/2012	Facilities & Security	
2			New template 6/4/2018
			Procedure template
3		Cabinet	10/22/2019