

Wappingers Central School District



Lockout/Tagout

LOCKOUT/TAGOUT: Operating Procedure

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WAPPINGERS CENTRAL SCHOOL DISTRICT

LOCKOUT/TAGOUT: OPERATING PROCEDURE

A. PURPOSE

1. This procedure establishes the **minimum requirements** for the lockout or tagout of energy isolating devices.
2. This procedure shall be used to **ensure that the machine or equipment is isolated from all potentially hazardous energy**, and locked out or tagged out before employees perform any servicing or maintenance activities where the unexpected energizing, start-up or release of stored energy could cause injury.
3. **Each employee shall be informed** that the purpose of the lockout/tagout procedure is to provide a system for the lockout and/or tagout of energy isolating devices and thereby protect employees from potentially hazardous energy.

Wherever possible, energy-isolating devices should be locked out. Before employees service, repair or perform maintenance, the machine or equipment must be isolated from all potentially hazardous energy and the isolating energy device(s) for the machine or equipment must be locked out or tagged out.

NO ONE IS TO ATTEMPT TO OPERATE ANY SWITCH, VALVE OR OTHER ENERGY ISOLATING DEVICE WHERE IT IS LOCKED OUT.

B. FACILITIES STAFF RESPONSIBILITIES:

All facilities employees shall be instructed in the safety significance of the lockout/tagout procedure.

1. AFFECTED EMPLOYEES AND EQUIPMENT

EMPLOYEES: Appendix A lists current employees and lockout level. Each new or transferred affected employee and other employees whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout or tagout procedure.

EQUIPMENT: Appendix B lists all equipment under Facilities control and the energy source(s) for that equipment. In some cases more than one piece of equipment may be supplied by the same energy source.

2. SEQUENCE OF LOCKOUT OR TAGOUT SYSTEM PROCEDURE

NOTIFICATION: Notify all affected employees that a lockout or tagout system is going to be utilized and the reason therefore. This can be done by contacting Facilities & Operations office at 845-298-5150.

Notice will be posted in the lockout log. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof.

SHUTDOWN: If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).

ISOLATE: Operate the switch, valve or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, 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. In addition, remove fuses to assure power isolation.

CHECK ENERGY SOURCE: Appendix B lists equipment and energy sources. Check it *before* working on a piece of equipment.

LOCKOUT: Lockout and/or tagout the energy isolating devices with assigned individual lock(s) and chains as needed. If more than one individual is required to lockout, each shall place his/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) must be used.

TEST LOCKOUT: After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate.

CAUTION: RETURN OPERATING CONTROL(S) TO "NEUTRAL" OR "OFF" POSITION AFTER THE TEST.

LOCKOUT COMPLETE: The equipment is now locked out or tagged out.

3. RESTORING MACHINES OR EQUIPMENT TO NORMAL PRODUCTION OPERATION.

SECURE AREA: After the servicing and/or maintenance is complete and equipment is ready for normal operations, check the area around the machines or equipment to ensure that no one is exposed.

ENERGIZE: After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Operate the energy isolating devices to restore energy to the machine or equipment. Call Facilities & Operations at 845-298-5150 and notify affected employees.

C. Training and Retraining of Affected and Authorized Employees

Each employee must be thoroughly trained with respect to lockout/tagout procedure used by Wappingers Central School District. Each employee must know that lockout/tagout is used to protect employees against hazardous energy from inadvertent operation of equipment or machinery. Each employee must understand that he or she is never to attempt to operate an energy-isolating device when it is locked or tagged. Each employee must be *re-trained* if there is: a change in the employee's job assignment, a change in machinery or equipment that presents a new hazard, a change in energy control procedures, or management considers that retraining is necessary.

Training or retraining must include:

- how to recognize hazardous energy sources
- type and magnitude of energy used especially with respect to the machinery or equipment to which the employee will be exposed
- purpose of the lockout/tagout procedure
- steps for shutting down, isolating, blocking and securing equipment to which the employee will be exposed
- steps for placement, removal and transfer of lockout/tagout devices and the division of responsibility for accomplishing those tasks
- requirements for testing to determine and verify effectiveness of lockout/tagout devices
- the proper use and limitations of tags

Employees who will use the lockout/tagout procedure must receive written authorization from supervision.

Training and retraining must be documented for each employee. Documentation must be maintained in the Health & Safety office and must at all times be available to employees.

LOCK OUT/TAG OUT PROCEDURES

Lockout/Tagout is a method for making certain that equipment or a circuit being worked on is de-activated and cannot be mistakenly energized.

NINE POINTS TO REMEMBER:

1. **Make certain** that you cannot accidentally interrupt or re-energize the circuit under load!
 - A. Tag all operator stations in the **OFF** or **STOP** position.
 - B. Deactivate and tag out control circuit at breaker or at a maintain type **OFF-ON** switch.
 - C. Deactivate and tag out control circuit at automatic controls.
2. **Never** rely on the deactivated or tagged out control circuit. The only sure way to lockout a motor circuit is at the motor disconnect.
3. **Check** your voltage tester on a known energized voltage source before testing the circuit.
4. **Test** the circuit on the load side after opening the disconnect.
5. **Check** for electrical interlocks. Tag out or lock out as necessary.
6. **Test** the control circuit in the starter and make certain it is deactivated.
7. After performing voltage tests, **re-check** your tester on a known energized voltage source.
8. **Check** to see that the machine is deactivated!
9. **Discharge** any electrical or mechanical components that can hold potential energy.

1. It takes at least 120 volts to carry enough current to kill you.
 - a. True
 - b. False

2. The two types of mechanical energy hazards are:
 - a. thermo and hydraulic
 - b. kinetic and potential
 - c. hydraulic and kinetic

3. Thermal Energy can start fires and may generate harmful gases or fumes.
 - a. True
 - b. False

4. When working with pneumatic energy:
 - a. Relieve pressure slowly into a proper container.
 - b. Properly vent all systems before starting work.
 - c. Allow equipment to reach a safe temperature before starting work.

5. The first step in lock LOTO is to remove all protective guards.
 - a. True
 - b. False

6. Only those employees who have been trained and authorized by management can lockout equipment.
 - a. True
 - b. False

7. You must notify other workers prior to a shutdown.
 - a. True
 - b. False

8. Locks and or tags must be placed only on block or disconnect lines.
 - a. True
 - b. False

9. Only the employee who places a lock and or tag may remove it.
 - a. True
 - b. False

10. In the event a piece of equipment already has a lock and tag; an additional lock and tag from a second worker is not necessary.

- a. True
- b. False