

# FACT SHEET: Lock-Out/Tag-Out (LOTO)

## Safe Use



Tulane University Employees that service or maintain equipment may be exposed to serious injury if hazardous energy is not effectively controlled. Lock-out/Tag-Out (LOTO) prevents the release of hazardous energy sources such as steam, electricity, as well as mechanical hazards, while they undergo repair or service. Employees who operate or work around equipment that may be LOTO and staff who perform LOTO procedures must be properly trained.

### NEED TO KNOW:

1. Only Authorized Employees may perform LOTO.
2. Prior to working on any piece of equipment, all energy sources must be LOTO.
3. **NEVER** tamper with or attempt to remove a lock or tag or energize equipment that is Locked/Tagged-Out.
4. Red locks and red/white tags are used for LOTO.



5. Blue locks and white tags are used for out-of-use.



### MORE INFO:



### IMPORTANCE OF LOCK-OUT/TAG-OUT (LOTO):

LOTO procedures prevent serious injuries and fatalities among employees working on energized equipment. Injuries due to machines not properly locked and tagged out include: amputations, burns, electrical shocks, and crushed fingers and limbs. According to OSHA, compliance with the LOTO standards prevents an estimated 120 fatalities and 50,000 injuries in the US each year. Hazardous energy sources include:

- Electrical
- Steam
- Mechanical
- Hydraulic
- Pneumatic/Vacuum
- Compressed Gas
- Chemical
- Thermal

### AFFECTED/AUTHORIZED EMPLOYEES:

Affected/Authorized Employees are required to take LOTO Training.

- **Affected Employees:** Staff whose job requires them to operate or work around equipment that may be Locked-Out/Tagged-Out. They are not authorized to perform LOTO but must be aware of program requirements.
- **Authorized Employees:** Perform actual LOTO procedures. **ONLY Authorized Employees may perform LOTO procedures** (e.g., Electricians, Plant Operators, Plumbers, and HVAC mechanics.).

### ! HOW IS EQUIPMENT LOCKED AND TAGGED OUT?

- Authorized Employees notify Affected Employees that equipment will be Locked/Tagged-Out.
- Turn off (isolate) and lock and tag out all energy sources (Some equipment may have multiple energy sources; lock and tag will be affixed to each one).
- Verify 'zero' energy by using meter and/or attempting to start equipment.
- Upon completion of work, Authorized Employees will remove locks and tags, ensure the equipment is safe, and notify Affected Employees that work has been completed.
- If multiple employees are using a piece of equipment, all employees must place their personal lock and tags in order to begin work this is referred to as Group Lockout.

### LOCK-OUT/TAG-OUT VS. "OUT OF USE":

- Out-of-Use equipment involves locks and tags. It is **NOT** the same as LOTO.
- Equipment is considered Out-of-Use when it needs to be de-energized and secured but does not meet the OSHA definition of LOTO because no one is actively working on the equipment.
- Energizing Out-of-Use equipment may cause damage to the equipment or surrounding area; **DO NOT** energize without supervisor or manager's instructions!

### ADDITIONAL RESOURCES:

- OSHA-1910.147: [Lockout/Tagout in General Industry](#)
- OSHA: [Control of Hazardous Energy- Lockout/Tagout](#)
- OSHA: [Lockout/Tagout Fact Sheet](#)