Baylor University utilizes outside contractors to perform set-up, maintenance, service, and repair to equipment utilized on campus. University staff perform minimal duties on a limited basis, are trained, and anything being worked on is de-energized per all standard requirement.
Baylor University Lockout / Tagout Program

Purpose

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury.

Compliance with this Program

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

The procedures utilized implementing this program specifically outline the scope, purpose, authorization, rules, and techniques that are utilized for the control of the hazardous energy. Due to the limited scope of work being conducted by university employees involving this standard the procedures are minimal in scope.

Lockout / Tagout Equipment

The university will supply the following:

Standardized equipment to carry out this program campus wide.

Singularly identified locking devices that will only be used for controlling energy.

Lockout devices substantial enough to prevent removal without the excessive use of force or unusual techniques.

Equipment that can withstand the environment to which it is exposed.

Tagout devices constructed and printed to withstand weather conditions so that the message on the tag continues to be legible.

Tagout devices that are non-reusable, attached by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds, and they are fastened by an all environment-tolerant nylon cable tie.
Lockout Procedure

Sequence of Lockout

(1) Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

(2) The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.

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

(4) De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).

(5) Lock out the energy isolating device(s) with assigned individual lock(s).

(6) Stored or residual energy (such as that in capacitors, 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 grounding, repositioning, blocking, bleeding down, etc.

(7) Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

(8) The machine or equipment is now locked out.

Restoring Equipment to Service

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

(1) Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

(2) Check the work area to ensure that all employees have been safely positioned or removed from the area.
(3) Verify that the controls are in neutral.

(4) Remove the lockout devices and reenergize the machine or equipment.

Note: The removal of some forms of blocking may require reenergization of the machine before safe removal.

(5) Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

**Tagout Procedure**

*Sequence of Tagout*

Demonstrate that the tag will provide a level of safety equivalent to that obtained using the lockout program.

When a tagout device is used on an energy isolating device which is capable of being locked out, the tagout device shall be attached at the same location that the lockout device is attached.

Tags will warn against hazardous conditions that will include a legend such as the following: Do Not Start; Do Not Open; Do Not Energize; Do Not Operate.
**Periodic Inspection**

At least annually the university will conduct a periodic inspection of the energy control procedures and ensure that the standard is being followed.

The inspection will be conducted by an authorized university employee other than the one(s) using the program.

The periodic inspection will include an interview with employees carrying out the program.

The equipment being utilized at the university for the program will be inspected for condition and consistency in type. Any LO/TO devices/tags found in disrepair will be taken out of service at the time of the inspection.

The periodic annual inspection will be documented when performed.
Training and Communication

The university will provide training to ensure that the purpose and function of the energy control program is understood and that the required knowledge and skills for safe application, usage, and removal of the energy controls are fully understood.