LOCKOUT TAGOUT PROCEDURE-POLICY

Lockout procedure for University of South Alabama.

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

1. The supervisor will establish a program of energy control procedures and also train his employees in the prevention of the release of energy which could cause injury.

2. If an energy isolating device cannot be locked out, a tag out system must be used. If a supervisor can demonstrate a tag out system can be used and provide the same protection as a lockout system, it can be used in lieu of the lockout system.

Sequence of Lockout

1. Special Note: In the following steps, when more than one individual is involved with the project and required to lock out the equipment and/or circuits, each employee will place their own personal lock on the energy isolating devices. A lock for each involved is the preferred method for locking out energy sources. If this is not feasible, the designated individual of the work crew (e.g. the project Supervisor or Foreman) with complete knowledge of who is on the crew may be designated by the work crew as the individual responsible for carrying out all steps of the lockout procedure. That individual will inform the work crew when it is safe to work on the equipment and/or circuits. Additionally, the designated individual will not remove a crew lock until it has been verified that ALL individuals are clear.

2. 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.
3. 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.

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

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

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

7. 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.

8. 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.

9. 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 safety positioned or removed from the area.

3. Verify that the controls are in neutral.

4. Remove the lockout devices and re-energize 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.
**Key Points**

1. Lockout and tagout devices shall be capable of withstanding environmental factors to which they are exposed for the maximum amount of exposure time.

2. Tagout devices shall be constructed and printed to withstand environmental factors to which they are exposed for the maximum amount of exposure time.

3. Tags shall not deteriorate when used in corrosive environments.

4. All lockout or tagout devices should be standardized within the facility either by color, shape or size with standardized format and print. Tagout devices shall state legibly “Do Not Start. Do Not Open. Do Not Close. Do Not Energize. Do Not Operate” along with a hazardous warning if the machine or equipment is energized.

5. Lockout devices should be substantial enough to prevent removal of such devices without using excessive force. Pad locks may be used but they must be made by a reputable lock company and should only have one key (master keys may not by used and duplicate keys must be kept under supervisory control at all times.

6. Tagout devices should be substantial enough to prevent accidental or inadvertent removal.

7. Tagout devices should be attached by hand and use a non-reusable, self-locking single device (such as an all-environment tolerant, nylon cable tie).

8. Any lockout or tagout device shall indicate the identity of the employee applying the device.

9. Any employee expected to participate in the Lockout Tagout Procedure must understand and be trained in the purpose, skills, recognition of hazardous energy sources and actions required to effectively follow the procedure.

10. Retraining is required whenever there is a change in job assignment or a change in some part of the machine or equipment that may present a new hazard or change in procedure. Retraining may also be used to reestablish proficiency or introduce new procedures.

11. If lockout or tagout devices must temporarily be removed to test or position the machine or equipment the following procedure should be followed:

   Alert the users of the system that it will be re-energized prior to removing an control.
   Prepare for the startup by reviewing the equipment, hazards of the energy and methods for releasing control of this energy.
   Clear machine or equipment of tools and materials, assuring that all nonessential items have been removed, essential items and parts are in place and
all affected employees are notified and safely positioned or removed from the equipment.

Remove lockout tagout device.
Re-energize equipment or machine.
Follow procedures for proper start-up or turning of equipment for testing or positioning.

De-energize all systems and reapply energy control measures by following the acceptable lockout procedure outlined in this document after repositioning or testing the machine or equipment if additional work must be performed.