POLICY

It is the policy of the Johns Hopkins Institutions that all employees comply with the restrictions and limitations of the lockout/tagout policy. This policy establishes the minimum requirements for the lockout/tagout of energy isolating devices whenever maintenance or servicing is done on machines or equipment.

Lockout shall be used to ensure that the energized 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 or stored energy could cause injury. 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.

Tagout is essentially a warning device, or tag, affixed to an energy isolating device, and does not provide the physical restraint on these devices that is provided by a lock. Tagout is to be in conjunction with lockout. If it is deemed that locking out a piece of equipment is not feasible, tagout can be used alone. Tags are required to be used on every project and are to contain the following information:

- Employee's Name
- Phone Number
- Time and Date
- Duration of lockout/tagout
- Supervisor name and phone number

DEFINITIONS

Affected employee--An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

Authorized employee-- A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

Capable of being locked out-- An energy isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

Energized--Connected to an energy source or containing residual or stored energy.

Energy isolating device-- A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.

Energy source--Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

Lockout-- The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout device-- A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

Servicing and/or maintenance-- Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the

employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

Setting up-- Any work performed to prepare a machine or equipment to perform its normal production operation.

Tagout-- The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Tagout device-- A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

REFERENCES

29 CFR 1910.147

PROCEDURES

A. 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 energy control procedures to identify the type and magnitude of the energy that the machine or equipment utilizes, to understand the hazards of the energy, and to 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, standardized individual lock(s).
6. Stored or residual energy (such as 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.

B. 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 should 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 device(s), by the employee who applied the device(s), 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 all affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

C. Tagout Systems:

1. A tagout system can be utilized when the energy isolating device is not capable of being locked out and are to be used for every project.
2. When a tag is attached as an energy isolating method, it is not to be removed without the authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
3. In order to be effective, tags must be legible and understandable by all authorized employees, all affected employees, and all other employees whose work operations are or may be in the area.
4. Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.
5. Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

D. Periodic Inspection:

1. The employer shall conduct a periodic inspection of the energy control procedures at least annually to ensure that the procedures and the requirements of this standard are being followed.
2. The periodic inspection shall be conducted to correct any deviations or identify inadequacies.

RESPONSIBILITIES

Staff	Comply with Lockout/Tagout policy.
Departmental Management	Enforce this policy.
	Establish an energy control program for the servicing and maintenance of machines and/or equipment, which have more than one energy source.
	Assure that the affected and authorized employees understand the purpose and function of the energy control program.
	Conduct periodic inspections of the energy control procedures.
	Institute corrective measures.
Health, Safety and Environment	Provide Lockout/Tagout training for all applicable employees.

REVIEW CYCLE

Annually