

Corporate Lockout-Tagout Policy

EXAMPLE ONLY

A program similar to this would need to be edited and further developed to address the specific needs and commitment of any actual organization.

<u>Table of Contents</u>	<u>Pg.</u>
Scope.....	1
Overview.....	1
Purpose.....	1
Application.....	1
Definitions.....	2
Authorization.....	2
Rules.....	3
Shutdown Technique.....	3
Start-Up Technique.....	4
Group Lockout.....	4
Outside Contractors	5
Shift/Personnel Changes.....	5
New Equipment.....	5
Modification of Existing Equipment.....	5
Training	6
Absent Employee Device Removal.....	6
Materials/Hardware.....	6
Inspections.....	6
Enforcement	7
Jams-Alternative Means of Protection.....	7
Isolation/Blocking Methods	8
Lockout Flow Chart.....	9

Corporate Operations Safety Guidelines

Lockout-Tagout Energy Control Procedures

Scope:

This guideline applies to all facilities in which employees interact with energized machines and equipment.

Overview:

Lockout-Tagout is the OSHA compliant method of isolating machines or equipment from energy sources in order to prevent personal injury. This procedure must be used when machines or equipment are supplied with a single or multiple power sources. This procedure will define the Lockout-Tagout program within corporate operations.

Purpose:

To provide a method for reducing the potential for injury to employee(s) or damage to equipment due to the unexpected or unplanned activation of equipment or energy during installation, maintenance, repair, adjusting, unjamming, inspecting, operating, processing or construction.

Even when “shut off,” powered equipment can still suddenly release stored materials (e.g., liquids, gases or powders in pumps, pipes etc.) or energy (e.g., hydraulic pneumatic pressure, steam etc.). If such a release occurs when powered equipment is being serviced, employees can be seriously injured. For this reason, repairs and servicing of powered equipment must be performed after they are shut off, de-energized and locked out of service.

Each operation must regulate the repair and routine servicing of its powered equipment. Lockout-Tagouts are required when performing these operations.

Application:

OSHA Standard 29 CFR 1910.147 requires the use of Lockout-Tagout control procedures on machines and equipment when an employee must remove or by-pass a guard or any safety device or when an employee is required to place any part of their body into an equipment zone during installation, maintenance, repair, unjamming, adjusting, inspection, operating, processing or construction.

The standard allows an exception for minor tool changes, adjustments and other minor servicing activities which take place during normal operating procedures if they are routine, repetitive and integral to the use of the equipment production: *provided* that the work is performed using alternative means of protection (see Jams-Alternative means of protection,pg.7) In short, jams are not automatically excluded.

Section I - Guidelines

Definitions:

Lockout is the placement of a *locking* device on an energy-isolating device, which ASSURES that the equipment being controlled cannot be operated until the locking device has been removed.

Tagout is the placement of a *tagging* device on an energy-isolating device, which indicates that the energy isolating device and the equipment being controlled **must not** be operated until the tagging device has been removed.

Machine Specific Lockout-Tagout Procedures are a set of instructions that indicate the required tasks to achieve a zero energy state for a specific piece of equipment. They are usually encased in laminate and attached to the machine by a ty wrap at the operators' station. These instructions should also be kept with the training information for each piece of equipment.

Authorization:

Employees whose work assignment includes activities such as installing, maintaining, constructing, adjusting, inspecting or operating equipment or processes are required to lockout and tagout equipment. Authorization to implement and release a lockout-tagout can only be performed by a trained employee or contractor following company established guidelines.

A lockout or DANGER TAG may only be removed by the individual who installed that lockout or tag. When either is found on equipment, that equipment may not be used until the lockout or DANGER TAG has been removed by that individual who installed that lockout or tag. (This may require that these individuals return to the plant to do so after they have left for the day.)

If such work is performed by a contractor, he/she must provide all required equipment and personnel to complete the work. Operations contracting such work will inform contractors of facility procedures and confirm that contractor's procedures are compatible with in-plant procedures.

Operations will also review hazards in the area and routinely inspect a contractor's job site(s) to ensure his/her work does not pose a hazard to either our employees or operations. If a hazard exists, all work at that work site must cease until the hazard is eliminated or reduced to the satisfaction of the operation management.

Section I - Guidelines (continued)

Lockout-Tagout Rules:

The Lockout-Tagout Technique must be used for any work that requires the removal or disabling of guards or interlocks from equipment.

The single exception to this rule occurs when minor maintenance or servicing of equipment takes place during normal production. This situation requires use of a DANGER TAG only.

Lockout-Tagout Technique; Shutdown:

Workers assigned a task requiring Lockout-Tagout must follow this procedure:

Isolating Energy Sources: Shutdown

1. The employee affecting the lockout-tagout must have received training as an authorized employee in lockout-tagout procedures and follow the machine specific procedure.
2. Notify affected employees that the machine is about to be shut down and locked out.
Notification can be verbal, by use of sign, barricade, etc.
3. Shut down the machine using normal stopping procedure. (i.e. activate the stop button, etc.) [Note: Shutting a machine off will not automatically de-energize the entire machine; additional actions are required to block or drain energy sources.]
4. Isolate all energy sources by closing, blanking and blinding, or otherwise turning switches/disconnects to the "OFF" or "CLOSED" position.
5. Apply locks, tags, and/or devices to the energy disconnects for each energy source present.

Note: Refer to the machine specific procedure attached to each piece of equipment to identify and locate all energy sources and their associated disconnects. If a machine specific procedure does not exist notify the Operational Safety Coordinator for your business that a machine specific procedure is missing and/or one needs to be developed.

6. Block or dissipate all stored energy in rams, flywheels, springs, pneumatics or hydraulic systems, etc.

Section I - Guidelines (continued)

Note: Switch (es), valve(s), or other energy isolating device(s) must be disconnected so that all energy source(s) (electrical, mechanical, hydraulic etc.) are disconnected or isolated from the equipment. Stored energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems (e.g., air, gas, steam or water pressure etc.), must also be dissipated or restrained by methods such as grounding, re-positioning, locking, blocking, draining or other methods that will effectively secure the release of the energy. (see isolation/blocking methods pg. 8)

7. After assuring no personnel are exposed, attempt activation of all normal operating controls (e.g., push control buttons, etc.) to make certain the locked out equipment does not operate. Return all controls to the "NEUTRAL" or "OFF" position after testing.

Restoring Energy Sources; Start Up:

1. When the assigned repair or servicing task is completed and the machine is ready for testing or return to service, check the area surrounding the shut off unit to assure that no one will be exposed to danger when that machine is started up. Replace all guards and reactivate all interlocks.
2. Notify all affected employees that locks/tags are going to be removed and the machine is ready for operation.
3. When the area is clear, remove all locks and de-activate all the energy isolating devices to restore energy and material to the machine. The same worker who installed the energy isolating devices and installed the locks must de-activate and remove them.
4. Perform any necessary testing of the restored machine to ensure it is in operable condition.
5. Notify the management that work is completed and the area has been returned to operational condition.

Group Lockout-Tagout:

When a group of employees or contractors performs a task requiring lockout-tagout, group lockout-tagout devices will be used. A single person will be designated to coordinate the work force and ensure that each authorized employee affixes his own personal lockout-tagout device to the group device. This same worker must also be responsible for insuring that all locks and tags are removed when the task is completed.

Section I - Guidelines (continued)

Outside Contractors:

It is important that outside service personnel or contractors and company personnel are aware of each others respective Lockout-Tagout programs. If there are any differences in the programs, they are to be communicated during the pre-job meeting. It is expected that the contractors program shall be at least as restrictive as this corporate policy.

Shift or Personnel Changes of Lockouts:

Some repair and servicing tasks require more than a single shift to complete. For these, lockouts/DANGER tags must remain in place for the entire task.

To allow a shift change, the relieving shift worker must install his/her lock to the lockout device before the original lock is removed.

Before the task is transferred, all work must cease until the lockouts have been verified. The individual or group designee must verify that new lockouts are properly installed and tagged, and locked out equipment will not operate.

After all lockouts have been verified, the task may be transferred to the new worker or work crew.

New Equipment:

When new equipment arrives an Energy Source Evaluation form should be filled out to determine what energy sources need to be controlled.

Have a posted procedure completed.

Fill out the machine specific Lockout-Tagout procedure and insert it in the Machine Training Instructions.

Modification of Existing Equipment:

After any significant modification of machinery/equipment a new Energy State Assessment will need to be performed/filled out to determine if any new energy sources will need to be controlled.

Have a new machine specific procedure written up if needed.

Determine if the machine specific procedure needs to be revised. If yes, make the necessary revisions and replace the old procedure. Attach the new procedure at the operators panel and the machine training instructions.

Section I - Guidelines (continued)

Training:

Employees with authority and responsibility for performing maintenance, servicing, or other operations requiring exposure to hazardous energy sources must receive specific training in recognition of these sources and use of adequate methods for their isolation.

Employees whose work assignment includes activities such as installing, maintaining, constructing, adjusting, inspecting or operating equipment or processes that are subject to lockout procedures must be instructed in the purpose and use of this procedure.

All employees must be advised of the existence of this policy.

Absent Employee Device Removal:

Locks and tags are only to be removed by the individual who installed them. On occasion, however, an employee may be absent when devices need to be removed. The following conditions must be met before the devices can be removed:

1. Verify that the employee is not in the facility.
2. Make every effort to contact the employee to inform him/her that the device has been removed.
3. A member of the employees' management team must authorize the removal of the employees lock in writing.
4. Ensure that the employee has knowledge that their lock has been removed before they resume work at the facility.

Materials/Hardware:

All locks and tags for performing Lockout-Tagout must be supplied by the company. Devices are to be singularly identified to the employee applying the device by use of an LOTO tag filled out by the employee, identifying themselves. Locks and tags cannot be used for purposes other than Lockout-Tagout and must be standardized in either color, shape or size. Only one key per lock is allowed, except that a spare key will be allowed for device removal provided that it is kept in a secured location and under the control of the safety coordinator or designated representative for that area.

Inspections:

Each business unit must complete an annual audit of all training, equipment, energy source evaluations, devices and procedures relative to lockout-tagout energy control. Each coordinator/unit will submit the results to corporate management. All deficiencies must be noted and a date for correction affixed. (29 CFR 1910.147 © (6) (ii))

Annually, the safety coordinator for each business group must review the employees understanding of the lockout-tagout procedures. If the coordinator has reason to believe that the employees knowledge is inadequate, retraining must take place. This training must be certified and shall include the name of the employee, name of the trainer, the dates of training, and a test. (29 CFR 1910.147 © (6) (i)), (29CFR 1910.147 © (7) IV)

Section I - Guidelines (continued)

Enforcement:

Any employee who attempts to circumvent or defeat, the proper use of a Lockout-Tagout mechanism or knowingly operates equipment with these mechanisms disabled will be subject to the Positive Discipline procedure which could include termination.

Enforcement of this policy will follow the review process for Positive Discipline as outlined in the Human Resource Guidelines, up to and including termination.

Jams – Alternative Means of Protection:

The intent of the OSHA Standard 29 CFR 1910.147 is to **insure that an employee does not put any part of their body in a position to be injured by a machine.**

When a machine jams, some alternative means that could be used to release the jams are: Wooden Dowels, Metal Hooks, Wooden Blocks, Etc.

<u>Energy Type</u>	<u>Isolation/Blocking Methods</u>
Mechanical Motion Rotation Linear Oscillation	<ol style="list-style-type: none"> 1. Remove segments of operating mechanical linkages such as push-rods, removing belts or removing flywheels. 2. Use blocking devices such as wood or metal blocks. 3. Remove power or energy from the driving mechanism such as: <ol style="list-style-type: none"> a. Disconnect main electrical source. b. Close hydraulic or pneumatic valves, bleed.
Electrical	<ol style="list-style-type: none"> 1. Place the main electrical disconnect switch in the "off" position. 2. Remove segments of electrical circuit, such as printed circuit modules.
Thermal (Steam)	Close valves and maintain an open bleed line.
Potential - Pressure	Close valves and maintain an open vent to relieve pressure.
Potential - Gravity	Block in place by using metal or wood blocks under the mechanism or pin the linkages in a position where gravity will not cause the mechanism to inadvertently fall.
Potential - Springs	Block in a safe position by pinning or clamping the device, so as to eliminate the potential of unrestricted and undesired travel.