

## (Enter name of facility.)



Hazardous Energy Control Procedure [Enter Date Updated]

#### **PURPOSE**

This procedure follows the requirements set by OSHA 1910.147, The Control of Hazardous Energy (Lockout and Tagout). It is to be used to ensure that all equipment is isolated from all potentially hazardous energy sources, and locked out or tagged out before employees do any servicing or maintenance activities where the unexpected energization, start up or release of stored energy could cause injury. All employees of [company name] and outside personnel, who are performing work at (name of facility) are required to follow this procedure.

## **DEFINITIONS**

**AUTHORIZED PERSON** - A person that is required to perform service or maintenance work on a machine or piece of equipment and is required to implement the Hazardous Energy Control Procedure (HECP).

**AFFECTED PERSON** - A person who operates or uses equipment that may be locked out or works in an area in which the HECP may be used.

**SERVICING AND/OR MAINTENANCE**: Workplace activity such as constructing, installing, setting up, adjusting, inspecting, modifying and maintaining and/or servicing machines or equipment. This also includes lubrication, cleaning or unjamming and making adjustments or tool changes outside of the time frame of routine and normal production operations.

#### RESPONSIBILITIES

Management is responsible to:

- Ensure that all employees and contractors are trained as detailed in the training section of this procedure.
- Ensure that there is an adequate supply of equipment necessary to execute the HECP.
- Ensure that the HECP is properly implemented.

Employees and contractors are responsible to:

- Be aware of the HECP requirements.
- Execute the program.
- Respect Locks and/or TAGS which are already applied and only remove them with supervisory control and to the procedures in this program.

(Position Title) is responsible to annually review and if necessary to update this program.

#### TRAINING

Affected employees will be trained in:

- Purposes and use of energy control procedures.
- Prohibition relating to attempts to restart equipment which is locked out or tagged out.





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#### Authorized employees will be trained in:

- Recognition of hazardous energy sources.
- Type and magnitude of energy in the work place.
- Methods and means necessary for energy isolation and control.

#### Tagout training will include that they:

- Are never to be bypassed, ignored, defeated or removed without authorization.
- Are warning devices.
- Do not provide the physical restraint of a lock.
- Must be legible and understandable when applied, they are still to be considered a tag if damaged in place.
- May evoke a false sense of security.
- Must be securely attached.

#### Retraining will be conducted annually and when there is:

- a change in job assignments
- a change in equipment or process
- a change in the HECP
- or when the inspection reveals deficiencies in the HECP because of a lack of knowledge.

All training will be documented and include employee's name and date of training.

#### PREPARATION FOR LOCKOUT

Before a piece of equipment is turned off, the authorized person must be properly trained. The authorized person will review the specific procedure for that piece of equipment if they are unclear as to the proper procedure.

Each piece of equipment must have a detailed lockout procedure. This procedure will list:

- name of equipment
- location
- listing of power sources and their magnitude
- location of controls for normal operations
- location of main power supplies
- steps needed to turn off and lockout power sources
- equipment needed to lockout the power sources
- steps needed to test that the equipment is locked out
- steps needed to restore the equipment to service





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#### SEQUENCE FOR LOCKOUT PROCEDURE

- 1. If unfamiliar with the equipment, obtain and review the lockout procedure for the equipment that is to be serviced.
- 2. Notify all affected employees in the area that a procedure using the HECP is being performed.
- 3. Shut off all equipment involved. Equipment should be shut down by normal stopping procedures (stop button, toggle switch, etc.).
- 4. Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy, such as springs, air, steam, water, rotating machine parts, elevated machine parts, etc., must be dissipated or restrained by methods such as repositioning, restraining, blocking, bleeding, etc.
- 5. Lockout and tag the energy isolating device with an individual lock and tag. The tag must clearly indicate the person that applied the lock. tMain controls should also be tagged out.
- 6. After all energy sources have been secured, attempt to start the equipment. Ensure that all safety systems are restarted accordingly.
- 7. If equipment does not start, proceed with the required work.
- 8. If the equipment starts, contact the department supervisor or the maintenance supervisor for assistance.

#### **NORMAL PRODUCTION OPERATIONS:**

Minor tool changes, adjustments and other minor servicing activities which take place during normal production operations are not covered by the lockout and tagout program. If the above are routine, repetitive and integral to the use of the equipment for production, provided the work is performed using alternative measures which provide effective protection; i.e. barrier guarding, two handed tripping devices, electronic safety devices, etc. Scheduled and unscheduled downtimes for sanitation, changeovers, or breakdowns are not considered normal production and require the use of this program for affected employees performing non-production work activities.

## **GROUP LOCKOUT AND TAGOUT**

When a crew or department is performing servicing, a group lockout procedure may be used as long as it provides the same level of protection as the individual lockout procedure.

The group leader is responsible to insure that each energy source is locked out. All keys for the lockout devices will be deposited into a box or cabinet that will accept a multiple lock out device. All members of the crew will apply their own lock to this box or cabinet. Each person will remove their lock from the box when their work is completed.

#### RELEASE FROM LOCKOUT

Before removing lockout or tagout devices, inspect the work area to ensure that all non-essential items have been removed and that all equipment is operationally intact. Ensure all safety systems are returned to normal operation during restart. Ensure all employees have been notified that the lockout devices are being removed and that they are "clear" of the equipment. Then remove the lockout and tags from the equipment.





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#### **TESTING OR POSITIONING OF MACHINES, EQUIPMENT OR COMPONENTS**

In situations in which lockout or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:

- Clear the machine or equipment of tools and materials
- Ensure all employees are clear from the machine or equipment area
- Remove the lockout or tagout devices
- Energize and proceed with testing or positioning;

De-energize all systems and reapply energy control measures in accordance with this program to continue the servicing and/or maintenance.

#### CORD AND PLUG-CONNECTED ELECTRICAL EQUIPMENT AND QUICK DISCONNECT AIR HOSES:

The employee must have complete control over the plug when work on cord or plug-connected electrical equipment is conducted. With quick disconnect air hoses, the employee must have complete control over the hose so that it cannot be reconnected without their knowledge.

#### REMOVAL OF LOCKOUT AND TAGOUT BY OTHERS

If the employee who placed a lock or tag is not available to remove it, the lock may be removed at the direction of the employee's supervisor provided:

- The above list procedure for Release from Lockout is followed.
- It has been verified by supervision that the employee is no longer at the facility.
- All reasonable attempts have been made to contact the employee that the lock will be removed.
- The employee has knowledge that the lock was removed before their next scheduled shift.

#### LOCKOUT AND TAGOUT EQUIPMENT

Management will provide all supplies necessary for locking out all equipment at the facility. This may include locks, tags, chains, wedges, key blocks, adaptor pins, fasteners, etc.

All lockout devices will be singularly identified as lockout devices and will not be used for any other purpose.

All lockout devices will be standardized throughout the facility.

Locks will be uniquely identified as to the owner.

Lockout and tagout devices will be durable enough to withstand the work environment. Tags will be constructed and printed so that exposure to the environment will not cause the tag to deteriorate or the message to become illegible.

Lockout devices will be of substantial construction to prevent removal without the use of excessive force.





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Tagout devices will be of substantial enough construction to prevent inadvertent or accidental removal. The attaching device will be non-reusable, attachable by hand, self-locking, and have an unlocking strength of at least 50 pounds.

Tagout devices will identify who applied the device and will harm against the hazardous conditions if the equipment is energized.

## SHIFT OR PERSONNEL CHANGES

When servicing activities carry over to the next shift or the individual that originally applied the lockout device must be relieved, the oncoming employee will complete the lockout procedure and apply their lock before the original lockout can be removed.

#### **DISCIPLINARY PROCEDURE**

(Name of Facility)'s disciplinary procedure will apply to violations of the HECP.

#### **OUTSIDE PERSONNEL**

All outside personnel must follow the (name of facility)'s HECP. All outside personnel that would be involved in work that would require the use of lockouts will be provided a copy of the HECP prior to performing any work.

#### PERIODIC INSPECTION

Management will conduct an inspection of the HECP at least annually. (Position Title) is responsible for the completion of the inspection. The inspection is designed to ensure that the program is functioning properly and to ensure the knowledge and skill of the employees involved.

The inspector will compare the written procedure for the piece of equipment that is being serviced with the observed behavior. The inspector will also verify that the equipment is in a zero energy state.

Documentation of the inspection will identify:

- equipment being locked out
- employee(s) included in the inspection
- date of inspection
- person conducting the inspection





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# (DEPARTMENT NAME) LOCKOUT PROCEDURES

| EQUIPMENT OR AREA:                                  |          |  |  |  |
|---|----------|--|--|--|
| POWER SOURCES AND MAGNITUDE:                        |          |  |  |  |
|   |          |  |  |  |
| ELECTRIC  | VOLTAGE  |  |  |  |
| AIR   | PSI      |  |  |  |
| HYDRAULIC   |          |  |  |  |
| FLUIDS AND GASES                                    | SPECIFY: |  |  |  |
| MECHANICAL  | SPECIFY: |  |  |  |
| LOCATION OF CONTROLS FOR NORMAL OPERATION:          |          |  |  |  |
|   |          |  |  |  |
| LOCATION OF MAIN DISCONNECTS FOR EACH POWER SOURCE: |          |  |  |  |
|   |          |  |  |  |
| EQUIPMENT NEEDED TO LOCKOUT:                        |          |  |  |  |
| CTERS TO TURN OFF AND LOCKOUT FOURDMENT             |          |  |  |  |
| STEPS TO TURN OFF AND LOCKOUT EQUIPMENT:            |          |  |  |  |
| HOW TO TEST EQUIPMENT:                              |          |  |  |  |
| TIOW TO TEST EQUITIVELYT.                           |          |  |  |  |
| STEPS NEEDED TO RETURN EQUIPMENT TO SERVICE:        |          |  |  |  |
| STEP STREETE TO REPORT EQUILIBRIUM TO SERVICE.      |          |  |  |  |
| ADDITIONAL INFORMATION:                             |          |  |  |  |
|   |          |  |  |  |
|   |          |  |  |  |





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# LOCKOUT INSPECTION FORM DATE: EQUIPMENT AND LOCATION: INITIALS \_\_\_\_\_ EMPLOYEE(S) INVOLVED: INITIALS \_\_\_\_\_ IS THERE A WRITTEN PROCEDURE FOR THIS EQUIPMENT? ☐ YES ☐ NO IF NO, EXPLAIN:\_\_\_\_\_ IS THE EQUIPMENT LOCKED OUT PER THIS PROCEDURE? ☐ YES ☐ NO IF NO, EXPLAIN:\_\_\_\_\_





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| IS THE EQUIPMENT AT ZERO ENERGY ST | ГАТЕ? | ☐ YES   | □NO |   |  |
|------------------------------------|-------|---------|-----|---|--|
| IF NO, EXPLAIN:                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
| ADDITIONAL INFORMATION:            |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
| CORRECTIVE ACTION TAKEN IF REQUIRE | ED:   |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
|                                    |       |         |     |   |  |
| PERSON CONDUCTING INSPECTION:      |       |         |     | _ |  |
|                                    |       | (PRINT) |     |   |  |
|                                    |       |         |     |   |  |
| _                                  |       |         |     |   |  |
|                                    | (S    | IGNATUI | RE) |   |  |