**Lockout/Tagout Program**

**Purpose**

This program establishes procedures for compliance with OSHA’s Mechanical and Electrical lockout and tagout program requirements, 29 CFR 1910.147 and 29 CFR 1910.333). These procedures are designed to protect our employees from the hazards and subsequent injuries that occur as the result of the unexpected release of a hazardous energy source during the performance of maintenance operations.

**Scope**

A specific procedure has been developed for each separate piece of machine and equipment. The procedure can be found in appendix A, of this document. The following is a listing of all machines and equipment that is included in the lockout/tagout program:

1. Conveyor # 7
2. Forklift # 401
3. Compressor # 21
4. ETC.

**NOTE: List every machine and equipment for which a specific procedure exists.**

**Training**

The training for both the **mechanical and electrical lockout/tagout** is included in this program, and will include several employee classifications including **qualified, authorized, affected and other.** Those falling specifically under the mechanical LOTO (Lockout/Tagout) program will include the following:

1. Authorized
2. Affected
3. Other

For the electrical LOTO program we have only one classification:

1. Qualified

**Definitions**

An **authorized employee** is one who locks or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee can also become an authorized employee if his or her duties include servicing and maintenance along with the operation of the machine or equipment.

An **affected employee** is one whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under the lockout/tagout program or whose job requires him/her to work in an area in which such servicing or maintenance is being performed. **Another employee** is one who under normal conditions is not identified in the qualified, authorized, or affected categories.

A **qualified employee** is one who has been trained in 29 CFR 1910.331 through 335, to avoid the electrical hazards of working on or near exposed energized parts. It is possible for an employee to be considered qualified with regard to certain equipment in the workplace but unqualified as to other equipment. An employee who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified employee is considered qualified for the performance of those duties.

Further, the relevant paragraphs of 1910.333 have been incorporated into the training curriculum outlined herein, for work that is performed on electrical circuitry and equipment.

**Training**

**Training for Authorized employees:**

The training for authorized employees will include all aspects of the LOTO program and all specific procedures for each individual machine or equipment identified in the program.

**Training for Affected Employees:**

The training for affected employees will include the purpose of the program, how to recognize a LOTO operation, and how it will affect them.

**Training for Other Employees:**

The training for other employees will include notification that a LOTO program exists and to stay clear of a LOTO operation in progress.

**Training for Qualified Employees:**

Training for the qualified employees will include the same training as the authorized employee in addition to the following:

1. Skills and techniques necessary to distinguish exposed parts from other parts of electrical equipment.
2. Skills and techniques necessary to determine the nominal voltage of exposed live parts.
3. Capability of working safely on energized circuits.
4. Familiarity with the proper use of precautionary techniques, personal protective equipment and;
5. How to use insulating and shielding materials, and insulated tools.
6. Proper use of test equipment.
7. How to test circuit elements and electrical parts of equipment to which employees may be exposed and;
8. How to verify that circuit elements and equipment are de-energized.
9. How to check if the test equipment is properly working before and after each operation.
10. How to determine if any energized condition exists and if it exists as a result of inadvertently induced voltage or unrelated voltage back feed even though specific parts of the circuit have been de-energized.

**Training Certification**

OSHA requires that completed training be certified and kept up to date. And that the certification contains each employee’s name and the dates of training. Accordingly, the following format will be used to certify the training of employees:

**Employee Name:** **Date of Training:**

**Signature of trainer:** **Date:**

**Methods to Enforce Compliance**

Supervisory personnel will enforce compliance with our LOTO program by disciplining employees who do not follow the policies and procedures set forth in this program. The chain of command will be followed when disciplinary action is required. Each supervisor will be held responsible for the violated actions of his or her employees. In addition to the employee being disciplined, his/her supervisor will also be disciplined when appropriate.

The first action will be to verbally warn an employee of their noncompliance with the program. Immediately thereafter, verbal instruction will be provided as to how to perform the work properly.

For every subsequent violation the following actions will be taken:

1st offense - written warning

2nd offense - indefinite suspension

3rd offense - termination of employment

**NOTE: The program incorporates many significant and critical elements for its success; therefore, a heavy responsibility is placed on each employee to follow these procedures.**

**Periodic Inspections**

To ensure that the LOTO program is being properly implemented, random audits (follow-up inspections) and planned visual observations will be conducted to determine the following:

* if the energy control procedures are followed;
* if employees know their responsibilities;
* if the procedure is adequate and what changes are needed.

An authorized and qualified employee, other than the one implementing the energy control procedure, will conduct the audits. If deviations are identified or if employees do not clearly understand the procedure, retraining will be conducted. Accordingly, the procedure will be re-evaluated and a more appropriate procedure will be implemented.

These inspections will be conducted at least annually, on a one to one basis, and when appropriate, through meetings with entire crews.

**Inspection Certification**

OSHA requires that completed inspections be certified and kept up to date. That the certification contains the name of the employee, date and time, whether retraining is necessary, the machine/equipment on which energy control procedures are being utilized, and the name, date and signature of the inspector. Therefore, the following format will be used to certify the inspection process:

**Employee Name: Date/Time:**

**Machine/Equipment:** **Retrain?** Y N

**Inspector Name:**

**Inspector Signature:**  **Date:**

**General LOTO Process**

**Preparation for shutdown** - Before authorized, qualified, or affected employees turn off a machine or equipment that is to be maintained or serviced, they must have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the means to control that energy.

An assessment will be made to determine all energy sources associated with the specific piece of equipment or machinery. A specific procedure will then be developed to document the methods to be used for isolating the energy (see specific procedures), which will be followed by the authorized or qualified employee performing the servicing or maintenance operation.

**Machine or equipment shutdown** - The machine or equipment will be turned or shut down using the specific procedures. An orderly shutdown will be followed to avoid any additional or increased hazards to employees as the result of equipment de-energization.

**Machine or equipment isolation** - All energy control devices needed to control the energy to the machine or equipment will be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.

**Lockout or tagout application** - Lockout or tagout devices must be affixed to energy isolation devices by authorized or qualified employees. The lockout devices will be affixed in a manner that will hold the energy isolation device in a “safe” or “off” position.

Where tagout devices are used, they must be affixed in a manner that will clearly state that the operation or the movement of energy isolation devices from the “safe” or “off” position is prohibited.

The tagout devices will be attached to the same point a lock would be attached. If the tag cannot be affixed at that point the tag will be located as close as possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.

**Stored energy** - Following the application of the lockout or tagout devices to the energy isolating devices, all residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.

Where the re-accumulation of stored energy to a hazardous energy level is possible, verification of isolation will be continued until the maintenance or servicing is complete.

**Verification of isolation** - Prior to starting work on machines or equipment that have been locked or tagged out, the authorized or qualified employee will verify that isolation or de-energization of the machine or equipment has been accomplished.

**Release from lockout or tagout** - Before lockout or tagout devices are removed and the energy restored to the machine or equipment, the following actions will be taken:

* The work area will be thoroughly inspected to ensure that non-essential items have been removed and that machine or equipment components are operational.
* The work area is checked to ensure that all employees have been safely positioned or removed. Before lockout or tagout devices are removed the affected employees will be notified that the lockout or tagout devices are being removed.
* Each lockout or tagout device will be removed from each energy device by the employee who applied the device.

**Group lockout or tagout** - When servicing or maintenance is to be performed by a crew they will each be provided with a lock or a tag. An authorized or when appropriate, a qualified employee will assume responsibility of the entire crew so as to determine the exposure status of each group member and ensure continuity of protection.

Each employee will affix a personal lockout or tagout device to a group lockout device, group lockbox, or comparable mechanism when he or she begins work, and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

**Shift or personal changes** - In order to maintain continuity of lockout/tagout protection the plant manager will assume responsibility and will assure that:

* Employees affected by the transfer of lockout-tagout devices between the off-going and oncoming employees are apprised of the transfer to coordinate the change.
* Certify that all aspects of the lockout/tagout program are followed to minimize exposure to hazards from the unexpected energization, start-up of machines or release of stored energy.

**Outside Personnel (Multi-Employer Worksites)**

With regards to our mechanical lockout/tagout program, all outside contractors will be informed by the manager of our lockout/tagout procedures and that they will be expected to follow them. No work will performed by outside personnel until the manager has certified the awareness of our procedures.

The electrical contractor will be required to follow our lockout/tagout program. The only exception will be that they (electrical contractor) will be required to develop their own specific procedures for the work they were contracted to perform. The manager will certify the procedure and grant permission for the work to proceed.

Failure to follow this process is a serious breach of our LOTO procedures and will result in disciplinary action up to and including termination of the contract.

**Sample of Specific LOTO Procedure**

**Name of machine/equipment** - Conveyor Belt #10

**Only authorized employee who have been certified may perform service on this conveyor.**

|  |  |  |
| --- | --- | --- |
| **Energy sources**  | **Isolation procedure** | **Location** |
| Electrical  | 1. Turn switch in the electrical panel to the off position.
2. Place lockout device on switch.
3. Test switch to ensure it cannot be turned on.

Notify all affected employees in the area. | West wall, next to column #10 |

**Energy restoration procedure:**

* Ensure all employees, tools etc. are removed
* Remove lockout device
* Test cycle machine to ensure it operates as expected
* If further adjustment is necessary, reinstall lockout
* Remove lockout and notify appropriate personnel the equipment is ready for operation.

**NOTE: A similar SPECIFIC PROCEDURE has to be developed for each and every machine or equipment identified as coming under the LOTO program.**

Auxiliary aids and services are available upon request to individuals with disabilities.

Nebraska TTY callers may dial 1-800-833-7352 (TTY) or hearing callers may dial
1-800-833-0920 (VOICE).