

SAFETY AND HEALTH TRAINING PLAN

LESSON PLAN: LOCKOUT/TAGOUT (OSHA)

Purpose – To provide employees with the requirements and procedures needed to prevent the unintended release of energy – electrical, potential, gravity, hydraulic, pneumatic, etc. – which may energize an electrical circuit or a machine or cause a machine or machine part to unexpectedly move or fall, causing injury to any employee.

Course Length: from _____ to _____

Competent Instructor(s): _____

Training Materials: NPCA Plant Safety Guide (Manufacturing)

- Lockout/Tagout
 - Lockout/Tagout Reference Guide
- _____
- _____

INSTRUCTION:

Review the following definitions:

- | | |
|----------------------------|---------------------------------|
| • Affected Employee. | • Servicing and/or Maintenance. |
| • Authorized Employee. | • Tagout. |
| • Energy Isolation Device. | • Tagout Device. |
| • Lockout. | |
| • Lockout Device. | |

Introduce and explain the types/sources of energy that should be controlled by workers before they repair or service machinery and/or equipment. Provide site-specific examples of each type of energy.

Discuss the guidelines for locks and tags used in the lockout/tagout procedures.

Introduce and discuss the General Requirements associated with lockout/tagout procedures used to control or prevent the unintended release of energy, including:

- Authorized and affected employee designations.
- Authorized employee's responsibilities.
- Affected employee's responsibilities.
- Contractor's responsibilities.
- Affected employee/contractor notification procedures.
- Energy identification procedures.
- Shutdown procedures.

- De-energization procedures.
- Lockout/tagout procedures.
- Testing procedures to determine the effectiveness of de-energization.
- Removal procedures for locks and tags, including those when the employee assigned to the lock and tag is not available.
- Re-energization procedures.

Introduce and discuss the energy control procedure format used at the site. Identify the location where documented energy control procedures are kept on file at the site and explain the procedure for obtaining and reviewing specific energy control procedures. Demonstrate each step of the lockout/tagout procedure for each type of equipment/machinery specific to the location.

EVALUATION:

Oral Examination:

- Kinetic or mechanical energy is the energy associated with the moving parts of machinery and/or mechanical systems.
- Two examples of potential energy are the stored energy of a compressed spring and the pressure associated with a pressurized hydraulic or pneumatic system.
- Only authorized employees shall lock and tag machines or equipment in order to perform servicing or maintenance on that machine or piece of equipment.
- If a person fails to remove his/her lock and tag and are then unavailable, who can remove the lock and what is the procedure? Upon determining that all persons are removed from the affected area of the machinery or piece of equipment and that the maintenance/repair work has been completed, the **plant manager** can remove the lock and tag. If the plant manager is not present or available at the site, the supervisor that is in charge shall contact the plant manager and obtain verbal approval to remove the lock. Upon receipt of verbal approval, the lock and tag shall only be removed after determining that all persons are removed from the affected area of the machinery or piece of equipment and that all maintenance/repair work has been completed.
- Three types of locks that are prohibited for use in the lockout/tagout procedure are combination locks, master-keyed locks and match-keyed locks.

Demonstration:

- Have employee demonstrate proper lockout/tagout procedure for a specific piece of equipment/machinery found at the location.
- Correct any errors and repeat the process until satisfactory performance is achieved.