

# **LOCKOUT/TAGOUT (LOTO)**

## **Introduction**

Employees that services or maintains machines or equipment may be at risk due to the sudden start-up or release of stored energy from this equipment. The Occupational Health and Safety Administration (OSHA) have issued a lockout/tagout standard known as the Control of Hazardous Energy Sources Standard, to protect employees. The basis of this standard is a systemized approach to servicing or maintaining certain equipment. It includes development of a written program, detailing procedures for disabling energy sources, obtaining lockout/tagout devices and training of employees.

## **Applicable Regulation**

29 CFR 1910.147 -The Control of Hazardous Energy (Lockout/Tagout)

## **Summary of Requirements**

- A Lockout/Tagout procedure must be written and include the items listed below for this standard. All affected employees must follow the procedures in the plan.
- EHS provides training for the implementation of this program to all ASU employees authorized to do maintenance work on hazardous machinery.
- Each authorized individual will be issued his/her own padlock and key. Some individuals who work on equipment with multiple sources of energy may require several locks. Multiple lock devices are used when more than one employee is involved in a lockout procedure.
- The following procedures will be followed when working in lockout/tagout situations and included in a written procedure:
  1. Determine the types of stored energy of the equipment to be serviced;
  2. Shut down machine;
  3. Shutoff all energy supplies;
  4. Apply locks and tags;
  5. Release stored energy;
  6. Verify that machine cannot be turned on;
  7. Perform the service;
  8. Inspect the work area for hazards;
  9. Emergency or Removal procedures, authority
  10. Return machine to service.

## **Training**

The standard requires that each affected and authorized employee be trained in the purpose and function of the lockout/tagout program. Training includes recognition of hazardous energy sources and knowledge required for proper usage of energy controls. Retraining is required whenever there is a change in job assignments, machinery, or procedures.

## **Reporting**

All incidents (electrical shocks, etc.) involving electrical energy must be immediately reported to EH&S. Records of LOTO inspection performed must be retained in the employees training files and the user department's safety files.

## **Inspections**

An annual inspection of the energy control procedure is required. The inspection includes a review of the procedures being used and employee knowledge of the program. Supervisors are responsible for evaluating energy control procedures in their unit.

### **Recordkeeping**

Records of training are maintained by EH&S. Inspection records of LOTO conducted are the responsibility of the department.

### **Written Program**

A written program is required by the standard. It must establish the procedures to be followed for control of hazardous energy. The Lockout/Tagout Plan is the official ASU policy on compliance with this standard. Copies of the plan are available from EH&S and are posted on the EH&S web page.

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