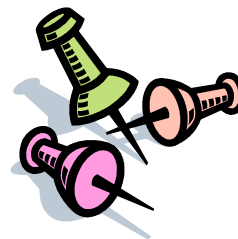




Safety Note

UNIVERSITY OF CALIFORNIA
AGRICULTURE AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #55

BASIC LOCKOUT and TAGOUT REQUIREMENTS



Information available from the Occupational Safety & Health Administration (OSHA) indicates compliance with the Lockout and Tagout Standard annually prevents an estimated 120 fatalities and 50,000 injuries by properly controlling hazardous energy.

California Code of Regulations (CCR) Title 8, Sections 2320.4, 2320.5, 2320.6, 2530.43, 2530.86, 3203, 3314, and 3341 address lockout and tagout requirements.

Types of Hazardous Energy

Hazardous energy may occur in several forms and combinations while installing, maintaining, servicing, or repairing equipment and machinery. Forms of hazardous energy include:

- Kinetic energy present in the moving parts of equipment and machinery.
- Potential energy stored in pressure vessels, fluid/grain storage tanks, flammable fluids, hydraulic or pneumatic components, and springs.
- Electrical energy from commercial electrical power, static sources, and batteries.
- Thermal energy from mechanical work, radiation, chemical reactions, and electrical resistance.

Basic Hazardous Energy Control Procedures

Employees shall implement the following when performing machinery or equipment installation, maintenance, or repair tasks:

- Receive training in all hazardous energy control procedures applicable to the task.
- Follow all standard written hazardous energy control procedures for the task.
- Wear task appropriate personal protective equipment such as gloves, eye and head protection, or chemical-resistant clothing.
- Notify any affected personnel, including the supervisor, that a lockout and tagout is necessary.
- Completely de-energize, isolate, block, and/or dissipate hazardous energy sources.
- Lockout and tagout all operating controls and isolation mechanisms after hazardous energy sources have been de-energized.
- Assure the tagout card has been properly filled out and attached to all energy isolating mechanisms and operating controls.
- Verify that hazardous energy sources have been de-energized before beginning work.
- Release the lockout and tagout condition by notifying affected personnel, including the supervisor, that all locks and tags have been removed.
- Inspect the work area to assure all personnel are clear of any hazards before placing new, maintained, or repaired equipment or machinery into service.

This safety note is to be used in conjunction with the lockout and tagout safety video available from the ANR Environmental Health & Safety Library at (530) 752-3933.