



Lock-out/Tag-out Requirements—Basic

West Virginia University
Environmental Health and Safety



Types of Hazardous Energy

- Kinetic energy present in the moving parts of equipment and machinery.
- 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 (PPE) such as gloves, eye and head protection, or chemical-resistant clothing.
- Notify affected personnel, including the supervisor, that a lockout and tagout is necessary.
- De-energize, isolate, block, and/or dissipate hazardous energy sources completely.
- Lock-out/tag-out all operating controls and isolation mechanisms after hazardous energy sources have been de-energized.
- Assure the lockout/tag-out 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.
- Inspect the work area to assure all personnel are clear of any hazards before placing new, maintained, or repaired equipment or machinery into service.
- Release the lock-out/tag-out condition by notifying affected personnel, including the supervisor, that all locks and tags have been removed.