Control of Hazardous Energy Sources

**PURPOSE**
Control, or lockout, of energy sources prevents the unexpected energization, start-up, or release of energy or stored energy that could cause injury during maintenance, repair, or servicing of machines, equipment, and electrical circuits.

**Responsibility**

**Supervision**
University department chairs, managers, supervisors, principal investigators (PIs), and lead workers are to comply with and enforce all provisions of this policy and the unit's written lockout program.

Unit supervisors are responsible for:

- Developing and implementing a written lockout program.
- Ensuring that affected personnel receive lockout procedure training (see Training).
- Documenting lockout procedure training for each employee.
- Evaluating (at least annually) personnel adherence to lockout procedures. NOTE: The annual evaluation need not apply to each area employee, but must represent the applied lockout procedures and represent employee performance.

**Employees**
Employees are to comply with all provisions of this policy and the unit's written lockout program.

**Assistance**
Direct questions relating to this policy and the development and implementation of a lockout program to the campus Environmental Health and Safety (EH&S) department:

- WSU Pullman EH&S; telephone 509-335-3041
- WSU Spokane EH&S; telephone 509-358-7621

WSU Spokane EH&S also provides information and assistance to WSU Health Sciences—Yakima (which includes College of Nursing—Yakima and College of Pharmacy and Pharmaceutical Sciences—Yakima).

- WSU Tri-Cities EH&S; telephone 509-372-7163
- WSU Vancouver EH&S; telephone 360-546-9706

Personnel at WSU locations not listed above may contact WSU Pullman EH&S for assistance.
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REQUIREMENTS

Lockout Program and Procedures
Administrative units develop and implement written lockout programs if employees perform one or more of the following:

- Maintain machines, equipment, or electrical circuits.
- Repair machines, equipment, or electrical circuits.
- Service machines, equipment, or electrical circuits.

Written Program
An administrative unit maintains the written lockout program as part of the unit’s overall accident prevention program.

Include the following information in the written lockout program.

Hazardous Energy Sources
Describe the machines, equipment, and service and maintenance activities that include hazardous energy sources. See the definition of hazardous energy sources.

Employee Locks
Direct each employee to apply and remove their own energy-controlling device (i.e., lock, for which the employee applying the lock maintains sole access to the keys) when performing service and maintenance requiring the control of hazardous energy.

Lockout Procedures

Single Energy Source or Lockout Point
Describe a general lockout procedure for machines and equipment that contain a single energy source that can be isolated and locked-out with a single lock.

Multiple Energy Sources or Lockout Points
Describe specific lockout procedures for each machine and piece of equipment having multiple lockout points, multiple energy sources, and/or stored energy.

Templates
Environmental Health and Safety designs lockout program and procedure templates to simplify the development and implementation of lockout programs. Contact EH&S for templates; telephone 509-335-3041.

Exception (WSU Spokane)
WSU Spokane departments and employees are to contact WSU Spokane EH&S for templates; telephone 509-358-7621.

Control of Hazards

Hazardous Energy Sources
Hazardous energy sources include, but are not limited to:

- Electrical
- Mechanical
- Hydraulic
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| Hazardous Energy Sources (cont.) | • Pneumatic
|                              | • Chemical
|                              | • Thermal
|                              | • Gravitational
|                              | • Pressure-containing

| Service and Maintenance Activities | An administrative unit must control hazardous energy sources if an employee performs service or maintenance activities during which the employee:
|                                 | • Removes or bypasses guards or other safety devices; or
|                                 | • Places any body part into an area on a machine or piece of equipment where work is actually performed, i.e., the point of operation.

| Service and maintenance activities include, but are not limited to: |
| • Installation
| • Set-up
| • Adjustments
| • Lubrication
| • Cleaning
| • Unjamming
| • Repairs
| • Inspection
| • Modifying
| • Maintaining

Cord and Plug Powered Devices

| Disconnect any machine or piece of equipment powered by a cord and plug inserted into an electrical outlet receptacle during: |
| • Service and maintenance activities; or
| • Any other activity that:
| ◦ Requires removal or bypass of guards or safety devices; or
| ◦ Places any body part into, on, or near the point of operation.

The person performing the maintenance or service is responsible for control of the plug.

The unit's written lockout program does not have to include plug-and cord-connected equipment if:

| • Exposure hazards can be controlled by unplugging the equipment; and
| • Maintenance or service activities are conducted by a single employee who has exclusive control of the plug.
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Moving Parts

Departments must use machine safeguards on all machines and equipment that expose employees to moving parts during operation (see SPPM 2.71).

Lockout Devices

An administrative unit assigns personal locks to each employee required to routinely lockout machinery or equipment.

Persons required to lockout machines and equipment on a nonroutine basis can checkout locks and tags from the unit.

Lock Requirements

Each lock must be:

• Operated by a single key,
• Equipped with a label or tag identifying the person applying the lock,
• Used only for locking out during maintenance and service activities, and
• Standardized within a unit (locks can be standardized by color, size or shape).

Training

Supervisors are responsible for ensuring that affected individuals receive training about the unit lockout program and specific procedures for lockout of equipment within the unit. Employees whose work operations include areas where hazardous energy sources may be present must receive this training.

Individuals may register for general lockout/tagout safety training classes through the Human Resource Services Employee Training and Development website at:

hrs.wsu.edu/training/

Supervisors and employees may contact the applicable campus EH&S department for assistance with training on department/unit-specific lockout/tagout safety and facility/equipment-specific procedures (see Assistance).

Documentation

Supervisors must document the training by recording the following information:

• Training subject
• Employee name
• Date(s) of training

Submit a copy of the training documentation to Human Resource Services.

NOTE: Training registered and documented through the HRS Employee Training and Development system, e.g., WSU instructor-led training sessions, are automatically added to the employee's Learning Transcript.