

**University of Delaware**  
**Environmental Health and Safety Protocol**

**Section:** Construction/Facilities Safety

**Protocol Name:** Lockout/Tagout and the Control of Energy Sources

**Origination Date:** 8/2004

**Revisions:** 3/12/2019

**Protocol Number:** C-05

**I. SCOPE OF PROTOCOL**

This protocol addresses safely isolating energy sources and applies to all university departments, faculty, staff and students.

**II. DEFINITIONS**

A. Energized

1. Connected to an energy source or containing residual or stored energy.

B. Energy isolating device

1. A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: a manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.

C. Energy source

1. Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

D. Lockout

1. The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

E. Tagout

1. The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

**III. PROTOCOL STATEMENT**

A. The University shall develop and maintain a written lockout/tagout (LOTO) program to ensure the safe and orderly isolation of energy sources prior to repair or maintenance of equipment and the installation of new equipment

B. Training

1. The University shall provide training to ensure that the function of the energy

control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees.

2. Maintenance managers, project managers and other managers who employ contractors shall inform contractors of the University's LO/TO program.

C. Retraining

1. Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures.

- D. Lockout devices and tagout devices shall be singularly identified; shall be the only device(s) used for controlling energy; shall not be used for other purposes.

- E. Lockout devices and tagout devices shall indicate the identity of the employee applying the device(s).

1. Lockout or tagout devices removal. Each lockout or tagout device shall only be removed by the person who applied the device, except when the authorized person who applied the lockout or tagout device is not available to remove it, in which case that device may be removed under the direction of the employer.

2. The University's lockout/tagout program shall include specific procedures for the removal of a lockout or tagout device by a person other than the applicator, provided that specific procedures and training for such removal have been developed, documented and incorporated into the employer's energy control program. The employer shall demonstrate that this specific procedure provides equivalent safety to the removal of the device by the authorized person who applied it.

- F. Tagout devices cannot be substituted for a lockout device unless there is prior written approval by both the Director of Facilities, Real Estate and Auxiliary Service and the Director of Environmental Health and Safety.

#### **IV. PROTOCOL STANDARDS AND PROCEDURES**

- A. OSHA Standard 1910.147 "The control of hazardous energy (lockout/tagout)"
- B. OSHA Standard 1910.306 "Specific purpose equipment and installations"
- C. OSHA Standard 1926.417 "Lockout and tagging of circuits"
- D. OSHA Standard 1926.702 "Requirements for equipment and tools"
- E. ANSI Standard Z244.1-2016 "Control of Hazardous Energy - Lockout/Tagout and Alternative Methods"
- F. UD-FREAS-MO-ADMIN-003 - Lockout/Tagout"
- G. Department of Environmental Health and Safety Procedure "Lockout Tagout: The Control of Hazardous Energy"

For more information regarding this policy, contact the Department of Environmental Health and Safety 302-831-8475.

