

DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY ALASKA  
Fort Richardson, Alaska 99505-5000

United States Army Alaska Circular 385-1

15 January 2000

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Safety

Lockout/Tagout Program

**Applicability.** This circular applies to all aligned or attached United States Army units, organizations, and activities at Army posts in Alaska, including National Guard, Reserve, tenant units and agencies, or contractor personnel using host posts. It applies to all personnel who work with lockout/tagout procedures within the United States Army Alaska.

**Interim changes.** Interim changes to this circular are not official unless the Director of Information Management authenticates them. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

**Suggested improvements.** This circular’s proponent agency is the Installation Safety Office. The Installation Safety Office invites users to send comments and suggested improvements on Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) directly to APVR-RDZ.

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**1. Purpose**

This circular covers the servicing and maintenance of machines and equipment in which the unexpected energization or start up of the machines/equipment or release of stored energy could cause injury to employees. It establishes minimum performance requirements for the control of such hazardous energy. The provisions of this circular do not relieve the user from the requirements set forth in other applicable statues and regulations. This circular requires that organizations/directorates establish a program and utilize procedures for affixing appropriate lockout or tagout devices to energy isolating devices, and to otherwise disable machines or equipment to prevent unexpected energization, start up, or release of stored energy in order to prevent injury to employees.

**2. References**

a. Related publication. (A related publication is merely a source of additional information. The user does not have to read it to understand this circular.) 29 Code of Federal Regulation (CFR) 1910.147 (Control of Hazardous Energy) is a related publication.

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b. Referenced form. DA Form 2028 (Recommended Changes to Publications and Blank Forms) is cited in the suggested improvements statement.

### 3. Explanation of abbreviations and terms

#### a. Abbreviations

(1) CFR ..... Code of Federal Regulation

(2) DA ..... Department of the Army

#### b. Terms.

(1) Affected employees. Personnel whose job requires the operation or use of machinery and/or equipment on which servicing or maintenance will require lockout/tagout. These employees will be instructed in the purpose and use of lockout/tagout procedures during initial job safety training.

(2) Authorized employees. Personnel who actually conduct the lockout/tagout and/or the servicing work on locked- or tagged-out equipment or systems. These employees will be trained and certified in all aspects of the program.

(3) Incidental employees. An employee who, under normal circumstances, would not be in an area where a system is under lockout and tagout but is required to enter or pass through such an area.

(4) Lockout. The preferred method of isolating machines or equipment from energy sources. Lockout is the placement of a padlock on a power source device that physically holds an energy control point, such as a switch, lever, or a valve handle in the off position and makes it impossible to operate.

(5) Tagout. The placement of a tag on an energy-isolating device to indicate the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed. If a lockout device cannot be used, the tagout method will be used. Each activity/shop (electric shop, equipment repair, etc.) will maintain a log of all tags issued. The log will contain the system/equipment being tagged out, the date tagged, the person tagging it out, and the date the system/equipment is returned to service.

### 4. Responsibilities

The following addresses only the minimum requirements. Where appropriate, supervisors will add individual shop-unique requirements or situations.

#### a. Supervisors will—

(1) Survey, locate, and identify all machines/equipment that require lockout procedures. Those machines/equipment whose energy source is connected/disconnected by an electric plug are not covered under this circular. All isolating devices will be located and positively identified to confirm which switch, valve, or other energy-isolating device applies to the machines/equipment to be locked and/or tagged out. More than one energy source; electrical, mechanical, or other; may be involved. List the type and location of each energy-isolating device for each machine or piece of equipment. Specific procedures for accomplishing lockout/tagout on each machine/equipment will be listed. Some common examples of when lockout/tagout procedures should be used are as follow:

(a) When clearing blocked or jammed mechanisms,

(b) When performing maintenance or repair work on equipment with moving parts.

- (c) In certain confined-space entries.
- (d) When making repairs or installation on electrical circuits.
- (2) Develop specific procedures for each machine/equipment requiring lockout/tagout.
- (3) Certify and document all lockout/tagout training and retraining to the Civilian Personnel Advisory Center.

b. Authorized employees will—

- (1) Notify all affected employees that lockout/tagout procedures are going to be initiated. (For example, a Directorate of Public Works electrician should contact the shop foreman before the locking/tagging out or the release of locked-/tagged-out equipment.)
- (2) Ensure that all energy is dissipated.
- (3) Lockout/tagout the source.
- (4) After ensuring that no personnel are exposed, check to make certain the equipment will not operate.
- (5) Return the operating controls to the “neutral” or “off” position after the test.
- (6) After performing service or maintenance, remove all tools, reinstall the guards, and clear personnel before removing the energy-isolating device.
- (7) Inspect the machine/equipment before restoring it to normal operations.

## 5. Procedures

Lockout and tagout procedures are designed to ensure employee safety from the release of energy when working in or around machines/equipment. To assist organizations in developing a lockout/tagout procedure that meets the requirements of Occupational Safety and Health Act standard CFR 1910.147, guidelines have been provided. These procedures may be used when there are limited types of machines/equipment or when there is a single power source. For complex systems, a more comprehensive procedure will need to be developed.

## 6. Organization standing operating procedure for lockout/tagout

This circular applies to the control of energy during the servicing and/or maintenance of machines and equipment. Any organization that is required to perform lockout/tagout procedures will have an organization-specific standing operating procedure for lockout/tagout procedures. The standing operating procedure will outline, in detail, every step of the lockout/tagout program as it applies to that organization. Each organizational standing operating procedure will be reviewed by the appropriate post safety office for applicability and completeness.

## 7. Training

Training shall be provided and documented to ensure that the purpose and function of the hazardous energy control procedures are understood. Supervisors will ensure that employees are trained in the knowledge and skills required for the safe application, usage, and removal of energy controls. Local safety offices will assist in obtaining cost-effective and appropriate training.

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a. Each authorized employee shall receive training in the recognition of hazardous energy sources, the type and magnitude of energy available in the workplace, and the methods and means for energy isolation and control.

b. Each affected employee shall be instructed in the purpose and use of energy-control procedures.

c. All incidental employees shall be informed of the procedures and prohibitions relating to restarting or re-energizing systems that are locked or tagged out.

d. Supervisor training of affected employees will contain—

(1) An explanation of the Energy Control Standard.

(2) Guidelines for when lockout/tagout should be used.

(3) The recognition of hazardous energy sources.

(4) The application of energy controls such as—

(a) The preparation for shutdown.

(b) Equipment shutdown.

(c) Equipment isolation.

(d) Applying lockout/tagout devices.

(e) Control of stored energy.

(f) Verifying isolation of equipment.

(5) The removal of lockout/tagout devices.

(6) The lockout/tagout procedures that involve more than one person, including—

(a) Special situations.

(b) Use of contractors.

(c) Shift changes.

(d) Emergency lock removal.

(7) The lockout and tagout specifications and identification.

(8) Retraining when required. Retraining shall be provided when there is—

(a) A change in an employee's job assignment.

(b) A change in machines, equipment, or process that present a new hazard.

(c) A change in energy-control procedures.

(d) An employee's lack of knowledge or use of energy control measures exists.

## 8. Sequence of lockout/tagout procedures

a. Notify all personnel that a lockout/tagout procedure is being initiated and state the reason. Individuals will know the type and magnitude of energy the machine/equipment uses and will understand the hazard(s) it presents.

b. If the machine/equipment is operating, shut it down by the normal stopping procedure (such as depressing the stop button or opening a switch).

c. Operate the switch, valve, or other energy-isolating device so as to isolate the machine/equipment from its energy source. Stored energy, such as in springs; elevated machine members; rotating flywheels; hydraulic systems; and air-, gas-, steam-, or water-pressure accumulators must be dissipated or restrained by methods such as repositioning, blocking, or bleeding down. List all types of stored energy and methods used to dissipate or restrain them.

d. Lockout/tagout the energy-isolating devices with locks or tags, utilizing the following guidelines:

(1) Any current equipment capable of being locked will use a lockout system instead of a tagout system.

(2) Any new or renovated equipment will be capable of accepting a lockout device.

(3) Locks or tags that are used will be durable enough to withstand the environmental conditions in the area where they will be used.

(4) Locks used will be strong enough so they cannot be removed without tools.

(5) Locks will be standardized by color, shape, or size throughout the facility.

(6) Tags will have a standardized format and print throughout the facility.

(7) When a tag cannot be directly attached to the energy-isolating device, the tag will be located as close as safely possible to the device. It will be positioned so that it is immediately obvious to anyone attempting to operate the device.

(8) Tags will be attached with self-locking, plastic, electrical ties.

(9) Locks and tags will have the name and organization of the individual who installed the device.

(10) After ensuring that no personnel are exposed, disconnect all energy sources. Use the normal operating controls to make certain the equipment will not operate. Caution: return operating controls to the "neutral" or "off" position after the test.

(11) The equipment is now locked out and/or tagged out.

e. Restore machines/equipment to normal production operations according to the following guidelines:

(1) Before you turn on the power to any piece of equipment, make a final inspection to be certain it is safe to operate.

(2) Check the equipment and surrounding area to be sure there are not obstructions or incomplete work.

(3) Remove all tools from the machine/equipment, reinstall the guards, and remove all locks and/or tags. Notify personnel that the locks and tags have been removed and the equipment is in service.

(4) Ensure everyone is physically clear of the equipment before restoring power.

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(5) Operate the energy-isolating device to restore energy to the machine/equipment.

f. If more than one individual is required to lockout and/or tagout equipment, each individual shall place their lock and/or tag on the energy-isolating device. When an energy-isolating device cannot accept multiple locks or tags, it is recommended that a multiple lockout or tagout hasp be used. No person will use another worker's lockout/tagout devices.

FOR THE COMMANDER

OFFICIAL:

KELVIN C. MARSHMENT  
COL, GS  
Chief of Staff

//Original Signed//  
DONNA L. WILLIAMS  
LTC, SC  
Director of Information Management

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