

138-08HV

LOCKOUT / TAGOUT PROGRAM

VA Hudson Valley Health Care System

Issue Date: December 31, 2012

Update: December 31, 2015

1. **PURPOSE:** To establish a Lockout Tag-out Policy that identifies the minimum requirements for the lockout and/or tag-out of energy isolating devices.

2. **POLICY:** This Health Care System has established minimum requirements for lockout and/or tag-out of energy isolation devices to ensure that machinery and/or equipment are isolated from all potentially hazardous energy and locked out and tagged out before employees perform any servicing or maintenance activities where the unexpected energization, start-up, or release of stored energy could cause injury.

3. **RESPONSIBILITIES:**

a. **Chief, Engineering Service** is responsible for:

- 1) Reviewing all lockout/tag-out procedures.
- 2) Reviewing annual inspection/audit and to take corrective action as appropriate.
- 3) Retaining lockout/tag-out procedures and audits. Audits to be retained for 3 years on file in the Engineering office.

b. **Service Chiefs and Care-Line Managers** are responsible to:

- 1) Identify and train all affected employees.

c. **Project Engineers** are responsible for:

- 1) Obtaining copies of lockout/tag-out procedures from contractors where implementation of such practice may affect Medical Center operations.
- 2) Informing all affected Medical Center employees of contractor lockout/tag-out operations.
- 3) Informing outside contractors of this Medical Center's lockout/tag-out policy where such practice may affect contractor or Medical Center operations.

d. **Supervisors** are responsible for:

- 1) Identifying all equipment/machines by an inventoried listing into the lockout/tag-out Program as required to protect his/her employees from injury during service and maintenance activities. (Refer to Attachments, Lockout/Tag-out Procedure located in the Engineering Service office)
- 2) Developing specific SOP's for equipment/machine and/or energy type-specific energy control procedures.
- 3) Forwarding a copy of lockout/tag-out procedures to the Engineering Service office.
- 4) Documented training of authorized employees. The training program will include:
 - (a) Annual Review of facility lockout/tag-out policy purpose and function.
 - (b) Review of service procedures developed for equipment/machine and/or energy type-specific energy control procedures.
 - (c) Location and identification of designated equipment used in the lockout/tag-out

procedure.

(d) Documentation of training, to include attendance, date, training content, and signature of trainer.

5) Conducting training of authorized employees as follows:

(a) Upon initial assignment.

(b) Whenever there is a change in the employee's job assignment.

(c) Whenever a new hazard is introduced due to a change in equipment, machines, or process.

(d) Whenever there is a change in the energy control procedure.

(e) Whenever a periodic inspection reveals inadequacies in the facility/service line procedure or in the knowledge of the employee.

6) Notifying affected employees:

(a) On the purpose and use of energy control procedures and about prohibiting any attempt to restart or re-energize equipment/machine which is locked out or tagged out.

(b) When lockout/tag-out devices are removed.

7) Assigning locks to authorized employees.

8) Conducting an Annual Audit (Refer to Attachment #1) of their employees for each piece of equipment in the LOTO Program(Periodic Inspection of Energy Control Procedures).

(a) Select an auditor. The inspections are to be performed by an authorized person who has been trained in lockout/tag-out procedures and is not involved with the process under audit. The auditor will be accompanied by an employee using the LOTO Equipment Procedures.

(b) Perform inspections annually.

(c) Document inspection that includes identification of equipment/machine, date of inspection, employees included in inspection, and signature of inspection.

(d) Forward a copy of audit to Engineering Service that is retained for 3 years.

(e) Each Service or Care-Line will retain their own audits for 3 years.

9) Initiate and follow up on corrective actions taken on deficiencies noted during periodic inspections.

e. Authorized Employees are responsible for:

1) Familiarizing themselves with the facility lockout/tag-out procedures and with specific lockout/tag-out procedures for the equipment they service and/or maintain.

2) Utilizing issued locks and tags designated for the lockout/tag-out program.

f. Contractors working on-site

1) Contractors hired to install, repair or perform servicing activities for plant machinery and equipment shall be notified of and be given a copy of the facility's lockout procedure by the representative coordinating the project.

2) The Engineering representative will give the contractor a copy of this policy. Contractors will verify in writing receiving this policy.

3) Contractors are required to have a LOTO Permit. This permit supplements their own policies.

4) Contractors are responsible to provide their own LOTO specific locks and tags.

4. PROCEDURES:

a. General Processes:

- 1) This policy applies to all equipment having more than one energy source, defined as any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy in accordance with 29 CFR 1910.147 (OSHA)
- 2) Energy control procedures, as outlined in this text, will be instituted to ensure that machines and/or equipment are isolated from potential hazardous energy, and locked out and/or tagged out before employees perform any servicing or maintenance activities where the unexpected energization, start-up, or release of stored energy could cause injury.
- 3) Lockout and tag-out devices are standardized and singularly identified by Engineering Service and will be the only devices used for controlling energy and not for other purposes.
- 4) Locking devices are identifiable to M&R Sections of Engineering by color coding, and tracked by an inventoried padlock serial number and employee initials or name.
 - Black = Boiler Plant Activities
 - Blue = A/C Shop Activities
 - Brown = Plumbing Shop Activities
 - Green = Carpenter Shop Activities
 - Orange = Bio Med / SMI Activities
 - Purple = Electric Shop Activities
 - Red = Fire Department Activities
 - Teal = P.M. / Zone Mechanic Activities
 - Yellow = Machine Shop Activities
- 5) Lockout devices will be utilized over tag-out devices whenever practical or when energy-isolating devices are not capable of being locked out.

b. Definitions:

- 1) **Affected Employee:** An employee that cannot perform a lockout/tag-out, but is exposed to lockout/tag-out when the employee's surrounding machinery/equipment is under lockout/tag-out condition.
- 2) **Annual Audit:** At least annually by a person knowledgeable in the process, evaluate and verify compliance that the practices are adequate and are being followed. Findings must be documented including corrections to deficiencies found.
- 3) **Authorized Employee:** An Employee trained and has been determined competent to effectively de-energize and lockout/tag-out machinery/equipment. An authorized employee and an affected employee may be the same person when the affected employee's duties also include performing maintenance or service on a machine or equipment, which must be locked, or a tag-out system implemented.
- 4) **Energy Isolating Device:** A mechanical device that physically prevents the transmission or release of energy. Such devices include, but are not limited to: a manually-operated electrical circuit breaker, electrical disconnects, double block-and-bleed valves, and line valves.

Note: Push buttons, selector switches, and other control circuit type devices are not energy isolating devices.

5) **Lockout:** The placement of a lockout device on an energy-isolating device in a manner to positively ensure that the energy isolating device and the equipment/machine being controlled cannot be operated until the lockout device is removed.

6) **Lockout Device:** A positive means to hold an energy isolating device in a safe position that utilizes a positive means such as a lock to hold an energy isolating device and prevent the energization of equipment/machine.

7) **Periodic Inspection:** A separate review of each written energy control procedure that is conducted at least annually to review of the energy control procedure and also the knowledge of the authorized employee's responsibilities under the energy control procedure being inspected. Conducted by an authorized employee other than the one(s) utilizing the energy control procedure being inspected. The intent of this inspection is to correct any deviations or inadequacies identified including employee's responsibilities under the energy control procedure being inspected.

8) **Tag-out Device:** A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device to indicate that the energy isolating device and the equipment/machine being controlled may not be operated until the tag-out device is removed.

9) **Zero Energy Level:** All energy sources are absolutely eliminated (i.e., press brake arm completely down, disconnected, shut off and locked, etc.) or controlled (i.e., press brake in up position, but secured from falling with a block, etc.

c. **Specific Processes:**

Authorized employees will accomplish lockout/tag-out as follows:

1) **Preparation for Lockout and/or Tag-out:** Make a survey to locate and identify all isolating devices to be certain which switch(es), valve(s), or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, or others) may be involved. Note: Reference the equipment/machine specific energy control procedure SOP.

2) **Sequence of Lockout and/or Tag-out System Procedure:**

(a) Notification. The employee applying the lockout device must notify all affected employees (Service Lines) that a machine or equipment that they may use is going to be brought to a zero energy level and that a lockout or tag-out system is going to be utilized and the reason why. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards.

(b) **Prepare for shutdown.** Identify all energy sources and isolation points. More than one source of energy, i.e., electrical, hydraulic or pneumatic may be involved.

(c) Shutdown If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).

(d) Isolate. Operate the switch, valve, or other energy-isolating device so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by method such as repositioning, blocking, bleeding down, etc.

(e) Apply Lockout Devices, Locks and Tags. Lockout and/or tag-out the energy isolating devices with the designated individual lock(s) and/or tag(s). Multiple lockout/tag-out devices shall be used when more than one shop is performing service/maintenance on equipment/machine, such as:

(1) Lockout devices will be affixed in a manner to ensure the energy-isolating device is in a "safe" or "off" position.

(2) Tag-out devices will be affixed in a manner to clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.

(3) Tag-out devices will be located as close as safely possible to the energy isolating device, in a position that will be immediately obvious to anyone attempting to operate the device.

(f) Release/ Restrain. Stored energy (such as that in springs, elevated arms, rotating flywheels, hydraulic or air systems or air, gas, steam or water pressure, etc.), which presents a potential hazard to employees working on the machine or equipment, must be dissipated or restrained by methods, such as repositioning, blocking, bleeding down, etc. Bring all other energy sourced down to zero energy level.

(e) Re-Check. After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating control(s) to "neutral" or "off" position after this test.

(f) The equipment/machine is now locked out or tagged out.

3) Procedure Involving More than one Authorized Employee:

(a) Follow steps in section 4c. specific processes as listed above.

(b) In the event an energy-isolating device cannot accept multiple locks or tags:

(1) A multiple lockout or tag-out device (hasp) may be used, or

(2) A single lock may be used to lockout the equipment/machine with the key being placed in a lockout box or cabinet, which allows the use of multiple locks to secure it. Each employee will then use his or her own lock to secure the box or cabinet.

(c) As each authorized employee no longer needs to maintain his or her lockout protection, that employee will remove his or her lock from the box or cabinet.

4) Basic Rule for Using Lockout or Tag-out System Procedures:

(a) All identified equipment/machines capable of causing personal injury upon the unexpected energizing, start-up, or release of stored energy shall be locked out or tagged out.

(b) Do not attempt to operate any switch, valve, or other energy isolation device where it is locked out or tagged out.

5) Restoring Equipment/Machines to Normal Production Operations:

(a) After the servicing and/or maintenance are complete and equipment/machine is ready for normal production operations, check the area around the equipment/machine to ensure that no one is exposed to a potential hazard.

(b) Remove all tools from the equipment/machine and install guards.

(c) Notify employees that all lockout and/or tag-out devices have been removed.

(d) Operate the energy isolating devices per manufacturer instructions to restore energy to the equipment/machine.

(e) In the event an authorized employee is not available (i.e. absent) to remove his/her lock/tag in a multiple lockout/tag-out:

- (1) Contact will be made with absent employee's supervisor. Upon notification, this supervisor becomes the authorized employee, capable of removing the lock/tag.
- (2) Before removal of the lock/tag, the absent employee's supervisor will attempt to secure the location of the absent employee.
- (3) Supervisor will notify the absent employee as soon as practical that their lock/tag has been removed.
- 6) **Notify affected employees** (Service and Care- Lines) that the lockout/tag-out has been removed and equipment/machine is returned to service.

d. Training

1). Affected Employees

(a) All affected employees must be trained annually on lock-out/tag-out awareness. This training will be conducted by the employee's supervisor.

2) Authorized employees:

(a) All employees that perform lockout/tag-out must go through the Lockout/Tag-out Authorization Training and will then be authorized to lockout/tag-out any equipment, providing the equipment/machine specific lockout/tag-out procedure SOP is followed.

(b) After the initial Lockout/tag-out Authorization Training, all authorized employees must be annually assessed according to the following process:

(c) Authorized employees will be assessed while performing a lockout/tag-out (LOTO) per the machine-specific LOTO procedures. Refer to Attachment #1

(d) If an employee's job responsibilities require the employee to perform tag-outs, the authorized employee will also be assessed while performing a tag-out. In this assessment, the authorized employee must discuss the limitation of a tag-out system.

(e) This assessment can be documented on the same form as the annual lockout/tag-out assessment.

(f) The assessment must be performed by an authorized employee other than the one who is being inspected. Authorized area managers/ supervisors will assess each other.

(g) Area managers/supervisors will assess their group leaders and their section employees.

(h) All employees will go through the annual assessment regardless of when they received the initial training. This will help to place all authorized employees on the same assessment schedule and ensure that no one is missed each year.

(i) Additional refresher training may be needed if deemed necessary by the Safety Manager due to:

i. Deficiencies found in LOTO competencies.

ii. Changed in the work environment and or changes in machines/equipment/processes that may pose new hazards. *Note: for an assessment, authorized employees will perform the lockout/tag-out procedures and or tag-out on equipment that they are normally exposed to as a part of their job function.*

e. Recordkeeping

1) Training records will be maintained electronically for each employee for:

(a) Awareness Training

(b) Initial Authorizations Training

(c) Annual Authorized Employee assessment.

- 2) Records will be located in the Engineering Service Office.
- (a) Energy Control Equipment Procedures
 - (b) Periodic Inspection of Energy control Procedures
 - (c) Contractor's Equipment Lockout / Tag-out Permit

5. REFERENCES:

29 CFR 1910.147

General Safety Guidebook, Dept. of Veterans Affairs

- 6. RESCISSION:** 138-08HV Lockout/Tag-out Program dated June 17, 2009.

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Energy Control
Equipment Procedure



Periodic Inspection
of Annual Control Pro



Contractor's
Equipment Lockout -

