



County of Henrico
Department of Emergency Management & Workplace Safety

Verification	Originator	Revised	Issued
Initials	EMWS	EMWS	EMWS
Date	05/01/2017	07/28/2022	08/01/2023

Safety Manual
Chapter 10 Lock Out Tag Out

Area of Application:	County of Henrico General Government & Schools	
Document Location:	http://employees.henrico.us/info/safety-manual/	
Revisions:		
Rev. No.	Date	Description
001	04/17/2017	Written Lock Out Tag Out Program template added.
002	07/28/2022	Aligned EMWS titles and terminology. Non-substantive changes.

Purpose:

This chapter provides an overview of the Occupational Safety and Health Administration and Virginia Occupational Safety and Health program (OSHA /VOSH) Standards to protect employees from the unexpected energizing, start-up, or release of stored energy as they service or repair machines or equipment owned and/or used by the County of Henrico. The written Lock Out Tag Out Program template is available on the County of Henrico web page on the Employee Portal under “safety”. To avoid duplication, this chapter provides an overview of the Control of Hazardous Energy standard for employees covered by it, as well as awareness for county employees not covered by the standard.

Note: The template may be modified to meet the needs of each department. If assistance is needed, contact the Department of Emergency Management & Workplace Safety (EMWS) at 804-501-5162. Implementation of a Lock Out Tag Out Program, when required, will aid with compliance with OSHA / VOSH Standard 29 CFR 1910.147.

Scope:

This chapter overview and program will apply to all employees and/or contractors working at any County of Henrico property that is covered by the standard, and includes the following:

- A. Performing service and/or maintenance on machines and equipment.
- B. Repairs and/or maintenance scheduled during normal operation are covered only if:
 1. An employee is required to remove or by-pass a guard or other safety device.
 2. An employee is required to place any body part inside or on a machine or piece of equipment in such a way that the worker or body part could be exposed to injury, amputation, or more severe injury should the machine engage while repairs are made.

NOTE: Minor tool changes, adjustments and other minor servicing activities which take place during normal operations are not covered if the tasks are routine, repetitive, and integral to the use of the equipment for production purposes, and the task(s) is under the control of one worker. In such a case, management must approve the procedure.

 3. If permission is granted, the procedure(s) must be in writing, kept on file, and all affected employees shall be trained.



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C. Lock Out Tag Out does not apply in the following situations:

1. Whenever service or work on a tool or machine can be de-energized when the only employee who operates the equipment can unplug it, or disconnect the energy source.
2. Hot tap operations (defined below) performed on pressurized pipelines of distribution systems for natural gas, steam, water, or petroleum products may be done provided that:
 - a. Continuity of service is essential.
 - b. Shut down of the system is impractical, and
 - c. Proper procedures are in place, and if necessary, special devices are used to protect all affected personnel from the accidental energization of any machines or equipment.

Program Administration:

With guidance from EMWS, each affected department will establish a written Lock Out Tag Out Program to address energy-isolating procedures specific to its operation and outline how the requirements of this chapter will be met.

Definitions:

Authorized Employee -- a person who locks out or tags out machines or equipment for service or maintenance.

Energized – machines or equipment connected to an energy source, or machines or equipment that may contain residual or stored energy.

Energy Isolation Device – a device that prevents the transmission or release of energy, including but not limited to, the following:

- A. A manually operated electrical circuit breaker
- B. A disconnect switch
- C. Manually operated switches by which the conductors of a circuit can be disconnected from all ungrounded supply conductors and, in addition, no pole can be operated independently.
- D. A slip blind
- E. A line valve
- F. A block
- G. A similar device used to block or isolate energy. The term does not include a push button, selector switch, and other circuit control device

Energy Source – an energy source: electrical, mechanical, hydraulic, pneumatic, chemical, radiation, thermal or gravitational, etc.

Hot Tapping (or Pressure Tapping) – the method of making a connection to existing piping or pressure vessel without the interrupting or emptying that section of pipe or vessel. This means that a pipe or tank can remain in operation while maintenance or modifications are being done.

Lock Out – the placement of a lock out device on an energy isolating device in accordance with established procedures ensuring that the energy isolating devices and the equipment being controlled cannot be operated until the lock out device is removed.

Lock Out Device – a device that utilizes a positive means such as a lock to hold an energy-isolating device in the safe position and prevent the energizing of a machine or equipment

Normal Production Operations – a machine or equipment as it performs its intended function.



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Service and/or Maintenance – a workplace activity such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or un-jamming of machines or equipment and adjusting tools or changing tools, or where the employee may be exposed to the unexpected energization or startup of the equipment, or a release of hazardous energy.

Tag Out Device – a prominent warning device, such as a red tag, that can be secured to an energy-isolating device such as the electrical plug at the end of a power cord. This will indicate that the machine or tool being controlled shall not be operated until the tag is removed.

Assignment of Locks and Tags:

- A. Only authorized employees will be issued, or have access to, lock out and tag out devices.
- B. Each lock or tag will be identified with the name or job position of the person assigned to use it.
- C. Individual departments will determine whether a spare key will be cut; who had access to it, and where the spare key will be stored. (No other duplicates will be made.)
- D. All locks and tags will be those designed to be used as lock out and tag out devices.
- E. Locks will be designed to prevent unauthorized removal
- F. Tags used for tag out should have a plastic self-locking cable tie capable of withstanding fifty (50) pounds of pull.
- G. Locks assigned to employees for energy control will be used only for lock out procedures.
- H. No personal locks will be used for any lock out procedure. Locks meant for lock out procedures shall not be used for personal items (i.e. personal lockers, securing bikes, etc.).

Limitations and Uses of Tags:

For situations where a tag, and not a lock must be used, the authorized employee must understand the following limitations:

- A. Tags are warning devices only and do not provide physical restraint, or control.
- B. A tag shall be removed only by the authorized employee who installed the tag.
- C. Tag warnings must be legible and easily understood by all employees.
- D. Damaged tags will be replaced immediately and destroyed.
- E. Tags must be made of materials that will withstand how they are used, including how the tag is attached.
- F. All employees need to understand the tag is a warning device, and is part of the overall energy control program.
- G. Tags must be attached securely so that they cannot be accidentally detached before servicing or repairs are completed.

Removal of Lock Out Tag Out Devices:

- A. Only the authorized employee will remove a lock or tag from the machine or equipment.
- B. Exceptions to Authorized Employee Removal:
 - 1. Supervisors can retrieve the spare key and remove the lock, provided the employee who controls the lock is not present. **Note:** This applies only if the original authorized employee left the premises and forgot to remove the lock.



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2. Should lock removal by another employee or supervisor be necessary, the following procedure shall be followed before removing the lock:
 - a. Contact the authorized employee and have him/her return to the site to remove the lock(s).
 - b. If the employee cannot be reached, verify the employee is not on site, or nearby.
 - c. The person who did not have original control of the lock shall be identified in writing, and the new authorized person will remove the lock.
 - d. The original authorized employee will be informed that his/her lock was removed before he/she returns to the site.
 - e. Whenever a supervisor, or employee who did not originally affix a lock, removes it because the authorized employee did not, or could not, remove the lock him/herself, documentation will be made in writing with the reason why an exception to procedures was necessary.

This chapter intends to give County of Henrico employees an overview of the Lock Out Tag Out procedures that will meet the Virginia Occupational Health & Safety Standard for the control of energized machines and equipment.

For departments that need to implement a Lock Out Tag Out program, or update an existing one, use the link on the Safety Manual Page of the Employee Portal to download the Lock Out Tag Out Program template.

Disclaimer:

Although every effort has been made to ensure this Chapter addresses all applicable regulations, it is the responsibility of each department to maintain compliance.