

Topic Outline for Lockout Tagout

For the wine industry there are two main sections of the Washington Administrative Code (WAC) that apply. 296-307 for Agriculture and 296-800 for General Industry. Most wineries fall under General Industry so that is the focus of this outline.

Definition: WAC 296-803 applies to the service and maintenance of machines and equipment, including piping systems, if employees could be injured by the:

- Unexpected energization or startup of the machine or equipment;
- OR**
- Release of stored energy. Energy sources include mechanical, hydraulic, pneumatic, chemical, thermal, or other energy, including gravity.

Lockout/Tagout (WAC 296-803) applies to employees who may be exposed to the potential release of hazardous energy from machines or equipment during activities that require bypassing safeguards to service or maintain equipment. Service and maintenance activities include constructing, installing, setting-up, adjusting, inspecting, modifying, maintaining, and servicing machines or equipment. It also includes lubricating, cleaning, unjamming, and making tool changes.

Lockout/tagout devices render machines and equipment inoperative, to enable employees to set-up, service and maintain them without exposure to the hazards associated with the unexpected, inadvertent, or accidental operation of the equipment.

In wineries Lockout/Tagout procedures are often implemented when an employee, during set-up and maintenance activities, must bypass a machine guard or other safety device or must place a part of their body into the point of operation of the equipment.

A Lockout device uses a positive means, such as a key or combination lock, to hold an energy-isolating device in the "safe" or "off" position. A Tagout device is a prominent warning device, such as a tag and a means of attachment. It can be securely fastened to a lockout device to indicate warnings and who is working on affected equipment.

Make sure **locks and tags** meet **all** of the following:

- Create no additional hazards
- Have distinctive design or appearance
- Are the only devices used for controlling energy
- Are **not** used for any other purpose
- Are durable to withstand the environment they are used in for the maximum time they are expected to be used
- Are standard within the facility by color, shape, and size
- Identify the person applying the device

Make sure **lockout** devices meet these additional requirements:

- Make sure the devices are strong enough so that removing them by other than the normal method requires: excessive force or unusual techniques, such as bolt cutters or metal cutting tools

Make sure **tagout** devices meet these additional requirements:

Make sure all tags:

- Use the same print and format within a facility
- Are constructed so they won't deteriorate and the message remains legible when:
 - Exposed to excessive weather
 - Used in wet or damp locations
 - Used in a corrosive environment such as where acid or alkali chemicals are handled or stored
- Have a warning about **not** energizing the machine or equipment

Exemptions: Lockout/Tagout is not required when equipment has a single energy electrical source that can be controlled by the authorized employee (e.g. unplugging equipment and draining any stored energy before any maintenance or cleaning is done). Unplugging the equipment eliminates the possibility of unexpected energization, unexpected start up, or the release of stored energy; and the plug is kept under the exclusive control of the employee doing the service or maintenance. Exemption does not apply to any other energy source such as mechanical, hydraulic, pneumatic, chemical, thermal, or other energy, including gravity.

Examples of where LOTO applies in a Winery: Bottling line equipment, crush equipment, cellar equipment, and powered industrial trucks.

Regulatory Summary (with emphasis on application for wineries covered under general industry):

1. While Lockout Tagout (LOTO) has not been noted as a top cited violation; a review of confined space violations in Washington State from June 2003 to June 2013 found that three violations were issued for not maintaining electrical fittings, boxes, cabinets in good condition (WAC 296-800-28025-1 rev date 9/1/2012).
2. DOSH provides standards for safe lockout tagout practices and procedures (WAC 296-803 for general industry and WAC 296-307-320 for agriculture – for additional information see links below).
3. Wineries must have a written lockout tagout plan also known as an energy control plan and provide documented training. As long as your written lockout tagout plan meets all the requirements under the code, it can be a section or chapter within the written Accident Prevention Program (APP). Please note that it will likely be one of the larger chapters in your APP.
4. All employees who lockout and or tagout equipment must have documented training and a visual evaluation of the operator performing a LOTO must be conducted periodically. The purpose of the visual inspection is to verify that the operator knows and follows energy control procedures. Training must be repeated when new equipment is added, or when existing equipment is changed or modified or as necessary. The written program and employee training must address:

- A log to document when LOTO is being performed (not required if lock ID's employee by picture or name)
- Energy control procedures (manufacture spec sheets or instruction are a great place to start when developing energy control procedures) – steps to take to protect employee from potentially hazardous energy, steps for releasing stored energy, steps to verify the machine is isolated, steps for temporary energization for troubleshooting, what to do if there is a shift or personnel change or when multiple people are involved, and contractors
- Types of LOTO equipment and how to properly chose and use – LOTO devices provide the means necessary to isolate, secure or block machines or equipment from energy sources. Examples include locks (padlock), tags, chains, wedges, pins, etc.
 - LOTO devices must meet several requirements:
 - Create no additional hazards
 - Have a distinctive design or appearance
 - Are devices only used for controlling energy
 - Not used for anything else (i.e. locking gates, etc)
 - Must be able to withstand the environment they are being used in
 - Identify the person applying the device
 - Supply companies such as Grainger supply LOTO specific equipment; locks that identify the person applying the device typically have a place to add a name or photo of the employee the lock belongs to.
- How to verify that new or modified devices can accept LOTO devices
- Documented review of lockout and tagout programs on an annual basis

Best Management Practices (While not required by the WAC; would be considered to be strongly encouraged by L & I)

Outline what training consists of such as formal instruction (lecture or video) or practical hands-on training. Keep a copy of the training program on-site and readily available for review in the event of an L & I inspection or audit.

A log to document when LOTO is being performed, must ID which piece of equipment and the person performing the LOTO

Inspect LOTO devices annually

Maintain a list of equipment that requires lockout tagout procedures (note whether the devises are serviced or maintained by winery personnel or contractors). Providing training on equipment that is maintained by contractors is not required.

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at www.winerywise.com:

- **Lockout/Tagout (Control of Hazardous Energy) WAC 296-803**
<http://www.lni.wa.gov/wisha/rules/locktagout/>

- **Safety Standards for Agriculture WAC 296-307-320, Part Q**
<http://www.lni.wa.gov/wisha/rules/agriculture/>
- **Safety Standards for Construction Work WAC 296-155-429**
<http://www.lni.wa.gov/wisha/rules/construction/>
- **Lockout/Tagout (LOTO) (Control of Hazardous Energy, Interlock Devices)**
<http://www.lni.wa.gov/Safety/Topics/AtoZ/topic.asp?KWID=179>