

## Introduction

The goal of the information presented in this booklet, and at the Winerywise™ website, is to help keep you and your employees safe in your winery. This booklet focuses on the safety topics most small to mid-sized wineries should consider including in their Accident Prevention Program. The topic outlines have been streamlined from Labor and Industry standards, have been adapted specifically for wineries, and have received rigorous review by the Washington State Department of Labor & Industries.

Sample safety forms and supplemental information are included to help you augment or establish your winery safety program. Safety training videos (bilingual English/Spanish) and all of the forms presented here are available in downloadable and customizable files located at [www.winerywise.org](http://www.winerywise.org).

While every effort has been made to ensure the accuracy of the information contained in this booklet and at the Winerywise™ website, it is nonetheless the responsibility of each winery to ensure that their safety program and safety training are consistent with their specific winery operations.

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Washington State Department of Labor & Industries requires companies to have a written Accident Prevention Program. This is an example Accident Prevention Program based on a template provided by the Washington State Department of Labor and Industries. You may follow this example outline to develop an Accident Prevention Program for your winery; however, ultimately you must tailor your own Accident Prevention Program to your actual business operations and the potential hazards that may be encountered by your employees. Please read through the document, focusing on the highlighted areas, and add and/or delete information as needed to make it job site-specific.

Your final written Accident Prevention Program must be implemented in order to be effective in practice. It also needs to be updated as changes occur in your business (new equipment, new processes, etc.).

## ACCIDENT PREVENTION PROGRAM (APP)

(Place your winery name here)

**Example** – This blank document can be found at [www.winerywise.org](http://www.winerywise.org) under Winery Safety/Forms. Information on plans and forms indicated in this APP are also available at this site.

To create an APP for your winery simply fill in information as it applies to your winery, print and place in a binder, and review with all employees at least once each year and as needed.

**PLEASE CUSTOMIZE THIS APP ACCORDING TO YOUR WORKPLACE. ALSO, YOUR WRITTEN APP CAN ONLY BE EFFECTIVE IF IT IS PUT INTO PRACTICE!**

## Accident Prevention Program

*(Place your winery name here)*

**Element 1 - Safety Orientation:** Each employee will be given a safety orientation by *(Add name or title of person who will provide the initial safety orientation)* when first hired. The orientation will cover the following items:

### 1. A description of the accident prevention program:

- We have a formal written accident prevention program as described in WISHA regulations (WAC 296-800-140).
- It consists of this safety orientation and a safety committee that is described in Part 2 below.
- We also have basic safety rules that all employees must follow. They are:
  - Never do anything that is unsafe in order to get the job done. If a job is unsafe, report it to your supervisor or safety committee representative. We will find a safer way to do that job.
  - Do not remove or disable any safety device! Keep guards in place at all times on operating machinery.
  - Never operate a piece of equipment unless you have been trained and are authorized.
  - Use and care for your personal protective equipment whenever it is required.
  - Obey all safety warning signs.
  - Working under the influence of alcohol or illegal drugs or using them at work is prohibited.
  - Do not bring firearms or explosives onto company property.
  - Smoking is only permitted outside the building away from any entry or ventilation intake.
  - Horseplay, running and fighting are prohibited.
  - Clean up spills immediately. Replace all tools and supplies after use. Do not allow scraps to accumulate where they will become a hazard. Good housekeeping helps prevent accidents.
  - *(Add any other basic safety rules that apply to your winery. Delete any from the above list that do not apply to your business)*

### 2. How and when to report injuries. Where first aid facilities are located.

- If you are injured or become ill on the job, report this to *(Add name or title of person to whom injuries should be reported to)*.
- There is a first aid kit located *(Add where the first aid kits are located in your business.)*
- We require all supervisors to have first-aid/CPR training.<sup>1</sup>
- We have also posted emergency phone numbers *(Add location of emergency phone numbers)*.

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<sup>1</sup> Tailored to specify availability of the first aid provider component of first aid facilities.

### 3. How to report unsafe conditions and practices.

- If you see something that is unsafe or someone working unsafely, immediately report it to *(Add name or title of person to whom unsafe conditions should be reported)*.

### 4. What to do in an emergency including how to exit the workplace.

- An evacuation map for the building is posted *(Add location of evacuation map if you have one or delete this sentence)*. It shows the location of exits, fire extinguishers, first aid kits, and where to assemble outside.

#### Fire Emergency

- You will be trained on how to use a fire extinguisher as part of your orientation if that is part of your employer's fire emergency action plan. *(Customize your plan by adding how fire emergencies and how fire extinguisher training if any, will be handled in your business.)*
- If you discover a fire:<sup>2</sup> Tell another person immediately. Call or have them call 911 and a supervisor. Also:
  - If the fire is small (such as a wastebasket fire) and there is minimal smoke, you may try to put it out with a fire extinguisher (only if you have been trained on how to use fire extinguishers and if you are following your employer's fire emergency action plan)
  - If the fire grows or there is thick smoke, do not continue to fight the fire.
  - Tell other employees in the area to evacuate.
  - Go to the designated assembly point outside the building.

#### Earthquake Emergency

##### During an earthquake, if you are inside a building:

- Drop under a desk or table, cover your head and hold on. Stay away from windows, heavy cabinets, bookcases or glass dividers.
- When the shaking stops, supervisors are to check for damage and available evacuation routes then begin an evacuation of their area to the designated assembly location.
- Evacuation should proceed as quickly as possible since there may be aftershocks.
- Supervisors must account for each employee in their work group as quickly as possible.
- First aid certified employees should check for injuries and help evacuate injured employees. Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.
- If a gas odor is in the building, tell a supervisor to turn off the gas at the main. Open windows. All supervisors are trained in the gas shut off procedure.<sup>3</sup> *(Tailor this section to your business, including the location of emergency shut-off valves and who would have that assignment.)*
- Supervisors and first aid employees must not re-enter the building once evacuation is complete.
- Do not approach or touch downed power lines or objects touched by downed power lines.
- Do not use the phone except for emergency use.
- Turn on a radio and listen for public safety instructions.

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<sup>2</sup> Tailored to specify limits of employee involvement in firefighting and provide specific evacuation instructions.

<sup>3</sup> Tailored to specify emergency procedures (such as location of emergency shut-off) and assign responsibility for this task.

If you are outside: Stand away from buildings, trees, telephone and electric lines.

If you are on the road: Drive away from underpasses/overpasses. Stop in a safe area. Stay in the vehicle.

## 5. Identification of hazardous chemicals used at this location.

Refer to the Washington Winery **Hazard Communication Plan** for more information about hazardous chemicals encountered on the job. The Hazard Communication Plan includes the following:

- Roles and Responsibilities of staff who use chemicals
- Chemical labeling requirements
- Accessing Safety Data Sheets (SDS, formerly MSDS) and Chemical Inventory
- Employee Training requirements
- Follow winery standard operating procedures for safe use of chemicals and emergency actions to take following an accidental exposure.
- Staff will receive a separate orientation as part of the Winery Chemical Hazard Communication Plan on the hazards of chemicals before they work with them or work in an area where they are used.

## 6. Use and care of required personal protective equipment (PPE).<sup>4</sup>

- Some tasks in our company require an employee to wear PPE to protect against injuries and exposure to hazards.
- You will be instructed by *(Add name or title of person who will instruct employees in the use and care of PPE)* using the manufacturer's instructions that are attached to this program about how to use and care for these PPE.
- Refer to the Respiratory Protection Plan (found at <http://depts.washington.edu/wineryhs/RespiratoryProtection.html>) for more information and requirements regarding the use of respirators by affected staff. The Respiratory Protection Plan includes the following:
  - How the proper respirators for the particular hazards are selected and issued (include a list of respirators used)
  - When and how respirators will be used in routine work activities, infrequent activities, and foreseeable emergencies such as spill response, rescue or escape situations
  - How medical evaluations of respirator wearers is provided
  - How respirator fit-testing is done
  - How respirators in use are cleaned, stored, inspected and repaired or discarded
  - How sufficient high purity air is provided for air-supplied respirators (if you use them)
  - How employees are trained about respiratory hazards at your workplace
  - How employees are trained on the proper use of the respirators used at your workplace
  - How you evaluate the effectiveness of your respiratory program

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<sup>4</sup> Tailored to specify what types of PPE are required in this facility and incorporate manufacturer's instructions for use and care into the program.

## 7. On-the-job training about what you need to know to perform the job safely.

- Before you are first assigned a task, *(Add name or title of person who will conduct on-the-job training for new employees)* will show you what to do along with safety instructions and required PPE.
- We have established safety rules and personal protective equipment (PPE) requirements based upon a hazard assessment for each task.
- Do not use equipment or attempt to do any of these tasks until you have received authorization including the required training and PPE.

## Element 2 - Safety Committee **(Required for employers with 11 employees or more)**

- Our committee will consist of *(Add the make-up of your company's safety committee here)*.
- Employees will elect from among themselves a representative to be on the committee.
- The safety committee members will elect a chairperson.
- The regularly scheduled meeting is *(Add the usual meeting time, such as first Thursday of each month)*. This may be changed by vote of the committee.
- A committee member will be designated each month to keep minutes.<sup>5</sup> **OR**

## Employee Safety Meetings **(An option to safety committees for employers with 10 or fewer employees or employers with 11 employees or more who are segregated on different shifts or work in widely dispersed locations in crews of 10 or less)**

- They are typically held *(Add the usual meeting time, such as first Thursday of each month)*
- All employees are required to attend.
- The meeting leader will designate a person to document attendance and the topics discussed.<sup>6</sup>

**While the foregoing are required, the following are additional safety plans often included as a component of your winery APP:**

## 8. Confined Space Entry Plan

- The Winery has a Confined Space Entry plan that includes safety procedures for entering spaces deemed permit-required confined spaces such as, wine tanks and wine presses. The Confined Space Plan includes the following information:
  - Inventory of Confined Spaces
  - Permit entry procedures
  - Documentation used for alternate entry procedures
  - How to reclassify permit-required confined spaces to non-permit spaces
  - Designation of employee roles, such as entrants, attendants, entry supervisors, rescuers, or those who test or monitor the atmosphere in a permit-required space
  - Identification of designated employee duties
  - Training employees on their designated roles
  - How to identify and evaluate hazards

<sup>5</sup> Tailored to assign responsibility for keeping minutes.

<sup>6</sup> Tailored to assign responsibility for keeping attendance

- Use and maintenance of equipment
- How to prevent unauthorized entry
- How to coordinate entry with another employee
- How to rescue entrants

## 9. Hearing Conservation Plan

- The Winery has a Hearing Conservation plan that applies to staff exposed to noisy areas such as the bottling line where noise exposure may exceed regulatory limits. The Hearing Conservation plan includes the following information:
  - Affected employees
  - Use of hearing protection
  - Training requirements
  - Audiometric Testing information

## 10. Forklift Operations Plan

- The Winery has a Forklift Safety plan that applies to staff working with forklifts. The Forklift Safety Plan includes the following information:
  - Affected employees
  - Training requirements, documentation, and periodic evaluation
  - Specific information on battery change-outs and charging

## 11. Control of Hazardous Energy (Lock-out/Tag-out)

- The Winery has a Lock-Out/Tag-Out plan that applies to staff servicing or maintaining equipment who could be injured in the event of unexpected startup of the machinery or equipment or the release of stored energy. The Lock-Out/ Tag-Out Plan includes the following information:
  - Affected employees
  - Energy control procedures
  - Training requirements
  - Periodic review procedures
  - Machine design and construction
  - Energy control devices

***You are at the end of the Sample APP Program. Please be sure you have added all required information to make it specific to your business. If you have any further information to add, please do so.***

## Topic Outline for Compressed Gases

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** There are three major groups of compressed gases stored in cylinders: liquefied, non-liquefied and dissolved gases.

**Examples in a Winery:** Sulfur dioxide, argon, or nitrogen are used within the winery in barrel or cellar operations. Acetylene is used to weld repairs on equipment or tanks.

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

1. While compressed gases specifically are not a common specifically cited hazard in Washington State within wineries, it is important to know that they can be extremely hazardous/dangerous if not properly stored, used, and handled.
2. Division of Occupational Safety and Health (DOSH) provides standards for safe use of compressed gases (WAC 296-24-295).
3. Wineries who use compressed gases within their facility must have a written plan that addresses proper use, handling, and storage. As long as your written plan meets all the requirements under the code, it can be a section or chapter within the written Accident Prevention Program (APP).
4. All compressed gas users must have awareness level training about compressed gases. Training should include:

**Storage** – There are many general storage requirements outlined below. Be aware that your local fire department or other authority having jurisdiction (AHJ) may also have additional requirements depending on the location of your winery and the jurisdiction that your winery resides in. The requirements of storing compressed gas may be derived from a combination of sources, including your local and state jurisdiction, the Compressed Gas Association (CGA), the International Fire Code (IFC), and the NFPA (National Fire Protection Association).

### **General Awareness for Persons Filling & Shipping Cylinders**

- Knowledge of the types of containers gases may be shipped in
- Charging of containers as to the amount of gas and conditions for filling
- Requirements for marking and/or labeling in preparation for transportation
- Conditions under which a container may be transported

## Safe Handling for Compressed Gas Cylinders

- Only cylinders meeting International Commerce Commission (ICC) should be used for the transportation of compressed gases.
- Cylinders must not be charged except by the owner or with the owner's consent, only in accordance with ICC regulations, and specific [documented] procedures must be in place.
- Transferring compressed gas from larger to smaller cylinders by anyone other than the manufacturer is not recommended.
- Compressed gas container must not contain gases capable of combining chemically.
- Do not remove or change labels stamped onto cylinders.

## Leaking Cylinder

- If a cylinder is leaking and cannot be remedied by simply tightening the valve or packing nut:
  - Remove the leaking cylinder to the outdoors.
  - If the gas is toxic or flammable place appropriate signage warning against hazards.
  - Notify gas supplier immediately.

## Labeling

- Each cylinder must be properly labeled.
- Do not deface, remove any markings, labels, decals, tags, etc. attached by the supplier.

## Empty Cylinders – to be returned to supplier

- Close valve, replace protective cap.
- Mark empty.
- Store in a location separate from full cylinders.

## Storage

- Do not store in areas of extreme temperatures (> 125 degrees, or extremely low temps).
- Area should be prominently labeled with the names of the gases stored.
- Separate incompatible gases (example – do not store flammable gases near oxidizing gases) allow a minimum of 20 feet of separation and store away from combustible materials.
- If different types of gases are stored at the same location, cylinders should be grouped by types of gas.
- Store charged and empty cylinders separately; mark empty cylinders as "EMPTY".
- Store in dry, well-ventilated area.
- Do not store cylinders near highly flammable substances such as oil or gasoline.
- Protect the cylinders from damage.
- Keep surrounding objects from falling on or into the cylinders.

- If the ground is damp in the gas cylinder storage area; store cylinders off the ground to prevent rusting; store away from corrosives, fumes and salts.
- Protect cylinders against tampering from unauthorized employees.

### Use

- NO SMOKING around any compressed gases!
- Gases should only be used/handled after being properly trained (documented).
- Never tamper with safety relief valves.
- Never attempt to repair or alter cylinders, valves, or safety relief devices.
- Never use cylinders for anything other than its original purpose.
- Keep valve closed at all times, except when in use.
- Protect cylinders from becoming part of an electrical circuit
- Never apply heat or flame/spark to a compressed gas cylinder (protect from flying sparks/welding/cutting/brazing operations).
- Do not repaint cylinders.
- For questions about handling a gas cylinder or its contents – consult the cylinder manufacturer or the supplier of the gas.
- User should check/verify the contents of the cylinder prior to using (not marked or no label – do not use!).
- Prior to use make sure cylinders are secure to prevent them being tipped over.
- Do not tamper with, modify, or repair pressure regulating device – if damaged contact gas supplier immediately.
- Never force connections that do not fit.
- When a manifold is used – it must be designed and constructed for intended purpose.
- Regulators, gauges, and hoses must be chemically compatible with the intended material.
- Open cylinder valve slowly – away from yourself and other people. Never use tools not approved by the manufacture. If the cylinder is difficult to open contact the supplier.
- Never use gases other than for the intended use.
- Prior to use, verify hoses/connections/cylinder are in good condition.
- If the valve becomes difficult to close or is difficult to open when received from the supplier (cannot be done by hand) do not use; return the cylinder to the supplier. Do not attempt to repair cylinder valves.

### Moving/Transporting Cylinders

- Storage caps shall be used during moving or transporting gas cylinders (shall be in place at all times except when in use).
- Slings, ropes, or chains should not be used to move cylinders unless provisions have been made on the cylinder for appropriate lifting attachments.

- Avoid dragging or sliding gas cylinders.
- Use a suitable hand truck or forklift, with cage and cylinders firmly secured within the cage.
- During handling, never drop or allow cylinders to strike each other; no rough handling, knocks, or drops that could damage cylinders or other safety devices that could result in a leak.

### **Hazard Specific – *Flammable*; example acetylene for welding, butane or propane**

- Do not store cylinders near highly flammable solvents, unprotected electrical connections, gas flames, or other sources of ignition.
- Cylinders containing flammable materials must be stored at least 20 feet apart or in between a fire resistant partition with a rating of at least one half hour and stored away from compressed cylinders that contain oxidizers.

### **Hazard Specific – *Poison*; example Sulfur Dioxide**

- Gas masks specific for hazard must be readily available for immediate use [**note** – there are additional requirements on the use of respirators].
- Poisonous gases must be used in areas of forced ventilation or outside.
- Order/obtain a size of cylinder that will be used within a reasonable amount of time.

### **Hazard Specific – *Pressurized Liquids*; example Oxygen, Nitrogen, Argon (maintained at extremely low temperatures)**

- Transport, use, and store in the upright position.
- Cylinders must be kept upright – cylinder will vent periodically to maintain proper internal pressure.

### **Best Management Practices**

- If you use carbon dioxide to produce dry ice, ensure proper personal protective equipment is utilized. At a minimum this should include cryogenic gloves and ANSI-approved safety glasses.
- Receiving/inspecting gas cylinders - verify cylinders are free from defect (confirm the cylinder is free from dents, and that the cylinder valve, couplings and regulators are not damaged). If any damage is present – do not use! Return to gas supplier.
- When using Tygon tubing as a “hose” on the end of a gas cylinder, make sure the Tygon tubing is drained of any contents and is properly secured prior to turning the gas on or off,. Develop a Job Hazard Assessment for the use of Tygon tubing on a gas cylinder and train all employees.
- When using a Bulldog during barrel work:
  - Read all the manufactures safety precautions and follow them!
  - Inspect the barrel for damage that may result in the barrel exploding when pressurized (look for significant signs of aging, cracks, weaknesses).

- Monitor the process at all times to prevent over pressurization.
- Develop a Job Hazard Assessment and train all employees about the proper use of a Bulldog.
- Proper storage: Commonly, two chains or straps are used to secure the cylinder to a wall or cradle.
- If a special wrench is required to activate flow (specific to that gas cylinder) it must be left in place while in use so the flow of gas can be turned off quickly in the event of an emergency.
- If there is an emergency with a gas cylinder or the contents of a gas cylinder; notify the 911 operator of the nature of the emergency. They will likely dispatch the local hazardous materials team (if one exists).
- Follow Compressed Gas Association document P-1-2008.

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.org](http://www.winerywise.org):

- **Safe Handling of Compressed Gas; Provided by the Compressed Gas Association (L&I approved)**  
[http://archive.org/stream/gov.law.cga.p-1.1965/cga.p-1.1965\\_djvu.txt](http://archive.org/stream/gov.law.cga.p-1.1965/cga.p-1.1965_djvu.txt)
- **Hotwork - Cutting/Brazing/Welding WAC 296-24-680-722**  
<http://www.lni.wa.gov/WISHA/Rules/generalsafety/PDFs/24-Part-i.pdf>
- **Compressed Gas Association P-1-2008 (at local L&I office for review; cannot be removed from L&I office. Can be purchased from the Compressed Gas Association directly)**
- **Compressed Gases – Compressed Gases (General Requirements) WAC 296-24-295**

## Topic Outline for Confined Spaces

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** The space must meet all of the following conditions to be considered a confined space: confined spaces are spaces that are large enough and arranged so an employee can fully enter the space and work, has limited or restricted entry or exit, and is not primarily designed for human occupancy.

**Examples Within a Winery:** Wine tanks, utility vaults, sump pits, tanker trucks, presses, grape crush equipment, sewer or wastewater vaults, crawl spaces, even some excavations.

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

**If it is possible to perform the work needed without entering the space – do that!**

If you have a space that meets the definition of a confined space, you must assume that it is a permit-required confined space.

1. Entering confined spaces is one of the most hazardous tasks done within a winery. A review of confined space violations in Washington State from June 2003 to June 2013 found that there were four confined space entry violations for failure to inform employees and control entry to permit-required confined spaces, and three confined space entry violations for failure to develop a written permit-required confined space program in the wine industry. Each year in the wine industry, there are near misses and fatalities as a result of improper confined space entries. **Take the time to get it right!**

2. Department of Occupational Health and Safety (DOSH) provides standards for Confined Spaces (WAC 296-809).

3. Wineries must have a written, implemented confined space program, and provide documented training including an evaluation of employee proficiency.

4. All confined spaces shall be identified and entry points to confined spaces shall prevent unauthorized entry.

- **WAC 296-809-200 outlines the requirements to identify these spaces, the requirements to control entry, and the requirements to inform employees and contractors of confined spaces in your workplace**
  - **A permit-required confined space** contains or has the potential to contain a hazardous atmosphere (example- high CO<sub>2</sub>, low O<sub>2</sub>), and/or contains a physical hazard (example- electrical components or moving parts). For more characteristics of a permit-required confined space, see 296-809-20002. For permit-required confined spaces, all sections of the standard apply.
  - You must inform employees and control entry to permit-required confined spaces.

- You must provide information and documentation about confined spaces to affected employees.
- You must inform affected employees about the existence, location, and danger of permit-required confined spaces.
  - Posting a sign reading “Danger-Permit-required Confined Space, DO NOT ENTER” or similar wording employees can understand would satisfy the requirement.
- You must take measures to prevent unauthorized employees from entering permit-required confined spaces; examples - lock permit-required confined spaces, and provide employee training.
- If you hire a contractor, the contractor is responsible for following all confined space requirements. Your responsibilities include, but are not limited to: informing the contractor that the space is a permit-required confined space and they may only enter if they meet the requirements of the confined space rules. For specific requirements, see WAC 296-809- 20006.
- **WAC 296-809-300 outlines the requirements to develop a permit-required confined space program**
  - **BEFORE** employees enter any confined space you must develop a written confined space entry program that includes:
    - The means, procedures, and practices to be used for safe entry.
    - Permit entry procedures and alternate procedures.
    - How to reclassify permit-required spaces to nonpermit spaces.
    - Designation of roles – such as entrants, attendants, entry supervisors, and rescuers, those to test or monitor the atmosphere in a permit-required space.
    - Identify the roles or designation of each of the employees involved in the permit-required confined space entry.
    - How you are going to train employees specifically on their designated roles.
    - How you are going to train employees on the use and maintenance of the equipment involved.
    - Outline how you are going to prevent unauthorized entry.
    - Specify your rescue procedures.
  - Make sure to review and update your program as necessary when changes are made to your confined space entry program.
    - Circumstances that require review of your program include but not limited to:
      - Unauthorized entry of a permit space
      - A change in the use or configuration of a permit space
      - Employee complaint about the effectiveness of the program
      - A condition prohibited by the permit occurs

- WAC 296-809-30002, 296-809-50002, and 296-809-50006 provides additional information regarding when your plan requires review and update.
- **WAC 296-809-400 outlines requirements for employee training:**
  - Make sure employees are trained to perform their designated roles safely.
  - Your training program is required to ensure employees involved in the permit-required confined space entry operation have the understanding, skills, and knowledge necessary to perform their assigned duties in a safe manner:
    - Establish a means to demonstrate employee proficiency in their assigned duties (by written exam, observation of a drill, or other method determined effective by the employer).
  - Provide training before the employee's first assigned confined space duties.
  - Provide training when/if there is a new or different hazard present (not covered in previous training).
  - Provide retraining if it becomes evident that employee knowledge or use of procedures is inadequate.
  - Certify proficiency in assigned duties:
    - The certification shall include the employees name, trainer signature or initials, and the date of the training.
    - Make sure the certification is available for inspection by employees and their authorized representative.
  - Establish procedures for the safe permit-required entry of a confined space.
- **WAC 296-809-50002 outlines requirements for implementing safe entry procedures:**
  - The confined space permit process is designed to ensure that you as an employer have done everything you can to ensure safe entry into a permit-required confined space. It guides you to identify, evaluate, and control hazardous conditions of your space prior to entry. This includes, but is not limited to, testing to ensure a safe atmosphere, ensuring a rescue team is available or non-entry rescue system is in place.
    - Identify and evaluate, before employees enter, potential hazards from the permit-required confined space AND from the work being performed.
    - Complete the permit BEFORE entry is authorized and MAKE SURE the following have been completed:
      - Entrants have had the opportunity to observe any testing or monitoring done prior and during entry; or any actions to eliminate or control hazards performed to complete the permit, monitor the space continuously, record on the permit periodically.
      - Entry supervisors must also be identified on the permit as well as signing the permit.

- Make sure everyone involved with the confined space entry signs the permit.
  - Post the permit at the entry location, and
  - Note any problems with the entry on the permit; use this information to revise the program as necessary.
- The entry permit must contain all of the required information, not limited to the following, including WAC 296-809-50004:
    - Identify the space entered, purpose of the entry, date and authorized duration of the entry, hazards of the space, test results (initial & periodic), measures used to control hazards, names of all involved, communication procedures, equipment for safe entry, and the rescue plan and equipment.
    - Keep completed permit for at least one year
  - Provide, maintain, and use proper equipment; covered in WAC 296-809-50010. Examples of required equipment would be a full body harness (same as fall protection harness), a retrieval line, and air monitoring equipment.
  - Evaluate and control hazards for safe entry; in a winery consider O<sub>2</sub>, CO<sub>2</sub>, electrical hazards, mechanical hazards, etc. (To monitor for atmospheric hazards use a calibrated meter with appropriate sensors, document the atmospheric monitoring).
  - Have a plan for both entry and non-entry rescues. The standard requires a non-entry rescue when feasible, or rescue services available. Whether you utilize entry, non-entry rescue or rescue services, it must be effective for the space.
  - Make sure you have adequate rescue and emergency services available to respond in a timely manner during permit-required confined space entry operations (covered in WAC 296-809-50014). If you plan to use local fire department (or 911) services, you must confirm that they have the capabilities to conduct confined space rescue during the days/times you are conducting confined space entries. **DO NOT ASSUME** you will be able to get confined space entry assistance from your local emergency services.
  - Rescuers must be able to proficiently rescue employees from permit-required confined spaces.
  - Practice rescue procedures at least once every 12 months.
  - Have established procedures.
  - At least one employee involved must hold a current certification in first aid and CPR.
  - **USE NON-ENTRY RESCUE SYSTEMS OR METHODS WHENEVER POSSIBLE (COVERED IN WAC 296-809-50016).**
  - Practice, Prepare, Practice and Document, Document, Document!
  - Make sure entry supervisors perform their responsibilities and duties (covered in WAC 296-809-50018), including but not limited to:
    - Overseeing the operation
    - Having knowledge of the hazards
    - Verifying the information on the permit, testing, and procedures

- Terminating or canceling the entry when completed or a condition not covered by the permit is discovered
    - Verifying the rescue plan
    - Keeping unauthorized people out of entry area
    - Signing the permit
  - Outside attendants (covered under WAC 296-809-50020), including but not limited to:
    - Have an understanding of the hazards present
    - Are aware of behavioral effects associated with the hazards present
    - Monitor the entrant(s)
    - Monitor activities inside and outside the space
    - Order entrants to evacuate the confined space if necessary
    - Perform non-entry rescues
  - Make sure entrants know and are aware of the hazards of the entry and their duties (covered in WAC 296-809-50022) including but not limited to:
    - Knowledge of and being aware of hazards
    - Know how to use equipment
    - Communicate with outside attendant(s)
    - Alert outside attendant(s) of any changes/issues
    - Exit the space quickly if instructed to;
    - Recognize warning systems, if a problem is detected;
    - Evacuate the space if the evacuation alarm or device is activated.
  - Implement procedures for ending entry; secure the entrance and cancel the permit; covered in WAC 296-809-50024.
- **WAC 296-809-600 outlines the requirements for alternate entry procedures:**
    - Alternate entry is for a permit-required for confined space that contains an atmospheric hazard with no physical hazards present (electrical, engulfment, etc.). This entry is done using continuous forced air ventilation to control a hazardous atmosphere within a confined space.
    - If you elect to utilize alternate entry as an entry procedure you must meet the criteria for alternate entry; review section 600 of the confined space standard to ensure that you are following the requirements for alternate entry.
    - Make sure, when using alternate entry procedures, instead of permit entry procedures, that you have monitoring and inspection data that support the following:
      - Alternate entry procedures are for spaces where the only hazard is an actual or potential hazardous atmosphere; and
      - Under the alternate entry procedures, you are still required to meet the requirements as outlined in WAC 809-200, 300, and 400.

- **WAC 296-809-700 outlines the requirements for nonpermit-required confined spaces**

**A non-permit-required confined space** meets the definition of a confined space, but does not contain actual or potential hazards causing death or serious physical harm.

**You must eliminate all hazards and document the elimination of the hazards prior to reclassifying your space from a permit-required confined space to a nonpermit required confined space.**

- The process for eliminating the hazards must be developed and included in your confined space program.
- To be eligible for reclassification, there can be no potential for atmospheric hazards like carbon dioxide (inherent in the fermentation process).
- All tanks being used for production or are being cleaned in preparation for or post-production are not eligible for nonpermit-required confined space reclassification.
- Identify your permit-required confined spaces and control employee entry – if your winery only contains nonpermit spaces and employees don't enter any confined spaces you are still required to identify and control access.
- To complete the process of reclassification, you must document your determination that the space is nonpermit as required under WAC 296-809-70002.

### **Best Management Practices:**

- <http://www.statefundca.com/safety/safetymeeting/SafetyMeetingArticle.aspx?ArticleID=383>
- If contractors are going to be working in or around confined spaces, document that you have reviewed site specific hazards and associated precautions with your confined spaces. One way this can be accomplished is to keep a copy of their confined space entry permit on file.
- Do not ever share your confined space equipment with contractors.
- Training should consist of a combination of practical hands-on training, and formal instruction.
- Provide refresher training on an annual basis, just prior to harvest when confined space entries are most common.
- Review your confined space plan on an annual basis, update as necessary, and document the review.

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.org](http://www.winerywise.org):

- **WAC 296-809 Confined Space Rule for General Industry**  
<http://www.lni.wa.gov/wisha/rules/confinedspace/default.htm>
- **WAC 296-301, Part Y-8 Confined Rule for Agriculture**  
<http://www.lni.wa.gov/wisha/rules/agriculture/HTML/part-y-8.htm>
- **Helpful Tools Confined Space**  
<http://www.lni.wa.gov/wisha/rules/confinedspace/helpfultools.htm>
- **A to Z Safety & Health Products** <http://www.lni.wa.gov/Safety/Topics/AtoZ/topic.asp?KWID=65>

### Additional Information provided by Washington State Labor and Industries:

Washington has regulated confined spaces for a very long time – long before Federal OSHA. The reason why it has regulated confined spaces for such a long time is many workers have died entering and working in confined spaces from *perceived* minor trivial problems like:

- not comprehensively evaluating hazards;
- not keeping people out of confined spaces;
- not having a written program, implementing or following the actual entry procedure;
- not completing or following the entry permit;
- not using an appropriate piece of equipment; and
- not proficiently training workers on their roles and responsibilities etc.

Each requirement in the standard represents at least one (usually more) worker fatalities.

Entry rescue has a number of related requirements because when workers enter and die, statistically they take approximately five other usually well-meaning but ill-prepared rescuers with them. There is no flexibility in meeting the entry rescue requirements, i.e., cold-calling 911 is not considered a “rescue plan.” Entry rescue operations are **very dangerous to those involved**. Rescuers have to have time for planning and evaluating, training, determining equipment needs, establishing procedures, etc. to enable a safe rescue someone.

Regarding **nonpermit confined space entry**: Under the confined space rules, there are a number of specific requirements prior to completing the reclassification process. It seems unlikely that wineries and the winemaking process may result in many reclassified nonpermit spaces due to the potential for atmospheric hazards like oxygen deficiency (carbon dioxide and other gases), cleaning compounds, etc., during some parts of the winemaking process.

The reason there are fewer requirements to enter a correctly reclassified nonpermit space is that the hazards have been eliminated; i.e., no hazards are present that may hurt or kill workers. Hazards that may not be an issue outside a confined space can very quickly become life threatening inside a confined space. Unfortunately, small errors in judgment have resulted in fatalities in this state and across the nation. There is no reason to think that the wine making industry is any exception. For example, the potential atmospheric hazards from the fermentation process and cleaning chemicals provide a unique risk profile for wineries. Also to be considered are mechanical hazards, energy related hazards, engulfment hazards, and the like.

**Please note:** Clean, empty, open top tanks (with removable tops, such as those used for Pinot Noir fermentation) are considered confined spaces by definition. Proper documentation is necessary to re-classify any confined spaces to non-permit-required confined spaces.

## Sample Confined Space Entry Permits

Use with Chapter 296-809 WAC, Confined Spaces

The following three fill-in-the-blank confined space entry permits can be modified to fit your particular entry. Make sure you use only the appropriate portions of the forms to create your own entry permit.

You can also design your own entry permit. You are **not** required to use the fill-in-the-blank entry permits provided here.

**CONFINED SPACE ENTRY PERMIT**  
**Sample 1**

Date:					
Site location or description:					
Purpose of entry: _____ _____					
Supervisor(s) in charge of crews:		Type of crew (welding, plumbing, etc)		Phone #:	
Permit duration:					
Communication procedures (including equipment): _____ _____					
Rescue procedures (also see emergency contact phone numbers at end of form): _____ _____					
REQUIREMENTS COMPLETED (Put N/A if item doesn't apply)	DATE	TIME	REQUIREMENTS COMPLETED (Put N/A if item doesn't apply)	DATE	TIME
Lockout/De-energize/Try-out			Supplied Air Respirator (N/A if alternate entry)		
Line(s) Broken-Capped-Blank			Respirator(s) (Air Purifying)		
Purge-Flush and Vent			Protective Clothing		
Ventilation			Full Body Harness w/ "D" ring		
Secure Area (Post and Flag)			Emergency Escape Retrieval Equip		
Lighting (Explosive Proof)			Lifelines		

Hotwork Permit			Standby safety personnel (N/A if alternate entry)		
Fire Extinguishers			Resuscitator—Inhalator (N/A if alternate entry)		
<b>Add other specific information, if needed, or attach additional instructions or requirements. See the following examples in bold print.</b>					
<b>Line(s) to be bled/blanked:</b>					
<b>Ventilation equipment:</b>					
<b>PPE clothing:</b>					
<b>Respirator(s):</b>					
<b>Fire extinguisher(s):</b>					
<b>Emergency retrieval equipment:</b>					

AIR MONITORING									
Substance Monitored		Permissible Levels		Monitoring Results					
Time monitored (put time)		Record the time							
Percent Oxygen		19.5% to 23.5%							
LEL/LFL		Under 10%							
Toxic 1:		_____ PEL	_____ ST EL						
Toxic 2:		_____ PEL	_____ ST EL						
Toxic 3:		_____ PEL	_____ ST EL						
Toxic 4:		_____ PEL	_____ ST EL						
<b>REMARKS:</b>  _____									
<b>REMARKS:</b>  _____									
<b>Air Tester Name</b>	<b>ID#</b>	<b>Instrument(s) Used</b> (For example: oxygen meter, combustible gas indicator, etc.)			<b>Model # or Type</b>		<b>Serial# or Unit</b>		

ATTENDANTS AND ENTRANTS			
Attendant(s) (Required for all confined space work except alternate entry)	ID#	Confined Space Entrant(s)	ID#
<b>REMARKS:</b> _____ _____			
<b>SUPERVISOR AUTHORIZATION - ALL CONDITIONS SATISFIED</b>  Department or phone number: _____			
<b>EMERGENCY CONTACT PHONE NUMBERS:</b>  AMBULANCE:      FIRE:                      SAFETY:                      RESCUE TEAM:      OTHER:  _____			

**CONFINED SPACE ENTRY PERMIT**

**Sample 2**

Date and time issued:			
Job site/space I.D.:			
Equipment to be worked on:			
Standby personnel:			
Date and time expires:			
Job supervisor:			
Work to be performed:			
1. Atmospheric Checks:		Time: _____	
Oxygen	_____ %		
Explosives	_____ %L.F.M.		
Toxic	_____ PPM		
2. Tester's signature: _____			
3. Source isolation (No Entry):		N/A	Yes No
Pumps or lines blinded, disconnected, or blocked:		<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Ventilation modification:		N/A	Yes No
Mechanical:		<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Natural Ventilation only:		<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Atmospheric check after isolation and ventilation:			
Oxygen:	_____ %	>19.5%	
Explosive:	_____ % L.F.M.	<10%	
Toxic:	_____ PPM	<10PPM H <sub>2</sub> S	
Time:		_____	
Tester's signature: _____			

6. Communication procedures:

7. Rescue procedures:

8. Entry standby and backup persons successfully completed required training?	Yes	No		
	<input type="checkbox"/>	<input type="checkbox"/>		
Is it current?	<input type="checkbox"/>	<input type="checkbox"/>		

9. Equipment:	N/A	Yes	No	
Direct reading gas monitor-tested:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety harnesses and lifelines for entry and standby persons:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hoisting equipment:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Powered communications:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SCBA's for entry and standby persons:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Protective clothing:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All electric equipment listed: Class I, Division I, Group D and non-sparking tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

10. Periodic atmospheric tests:			
Oxygen	_____ %	Time _____	Oxygen
Oxygen	_____ %	Time _____	Oxygen
Explosive	_____ %	Time _____	Explosive
Explosive	_____ %	Time _____	Explosive

Toxic _____ % Time _____	Toxic _____ % Time _____
Toxic _____ % Time _____	Toxic _____ % Time _____

We have reviewed the work authorized by this permit and the information contained here. Written instruction and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "No" column. This permit not valid unless all appropriate items are completed.

Permit prepared by: \_\_\_\_\_  
Entry Supervisor

Approved by: \_\_\_\_\_  
Unit Supervisor

Review by: \_\_\_\_\_  
Operations Manager

**This permit is to be kept at the job site. Return this job site copy to the unit supervisor following job completion.**

Entrant's Name	Sign in	Sign out	Sign in	Sign out

**CONFINED SPACE ENTRY PERMIT**

**Sample 3**

**PERMIT VALID FOR 8 HOURS ONLY. ALL PERMIT COPIES MUST REMAIN AT THE SITE UNTIL JOB IS COMPLETED.**

Date:	Site location /description:
-------	-----------------------------

Purpose of entry:

Supervisor (s) in charge of crews	Type of Crew	Telephone #
-----------------------------------	--------------	-------------

Communication procedures:

Rescue procedures (telephone number at bottom):

**BOLD INDICATES MINIMUM REQUIREMENTS TO COMPLETE AND REVIEW PRIOR TO ENTRY**  
**Note: For Items that do not apply, enter N/A in the blank.**

REQUIREMENTS COMPLETED	DATE	TIME	REQUIREMENTS COMPLETED	DATE	TIME
<b>Lockout/De-energize/Tagout</b>			<b>Full Body Harness w/"D" Ring</b>		
<b>Line(s) Broken-Capped-Blank</b>			<b>Emergency Escape Retrieval Equipment</b>		
<b>Purge-Flush and Vent</b>			<b>Lifelines</b>		
<b>Ventilation</b>			Fire Extinguishers		
<b>Secure Area (Post and Flag)</b>			Lighting (Explosive proof)		
<b>Breathing Apparatus</b>			Protective Clothing		
<b>Resuscitator - Inhalator</b>			Respirator(s) (Air Purifying)		
<b>Standby Safety Personnel</b>			Burning and Welding Permit		

Continuous Monitoring:  Yes  No

Periodic Monitoring Frequency: \_\_\_\_\_

Test(s)	Permissible entry level
---------	-------------------------

Percent of oxygen	19.5% TO 23.5%
Lower flammable limit	Under 10%
Carbon monoxide	+35 PPM
Aromatic Hydrocarbon	+1 PPM *5 PPM
Hydrogen Cyanide	(Skin) *4 PPM
Hydrogen Sulfide	+10 PPM *15 PPM
Sulfur Dioxide	+2 PPM *5 PPM
Ammonia	* 35 PPM
<p>* Short-term exposure limit: Employees can work in the area up to 15 minutes.                  + 8 hour Time Weighted Average: Employees can work in the area 8 hours (longer with appropriate respiratory protection).</p> <p><b>REMARKS:</b> _____                  _____</p>	

GAS TESTER NAME & CHECK #: _____
INSTRUCTIONS USED: _____
MODEL &/OR TYPE: _____
SERIAL &/OR UNIT #: _____

**SAFETY STANDBY IS REQUIRED FOR ALL CONFINED SPACE WORK**

SAFETY STANDBY PERSON(S)

CHECK#

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONFINED SPACE ENTRANT(S)

CHECK #

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SUPERVISOR AUTHORIZATION - ALL CONDITIONS SATISFIED:**

Department or phone number: \_\_\_\_\_

**EMERGENCY CONTACT PHONE NUMBERS:**

Ambulance: \_\_\_\_\_

Fire: \_\_\_\_\_

Safety: \_\_\_\_\_

Gas coordinator: \_\_\_\_\_

## Topic Outline for Crush and Harvest Safety

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** Harvest and crushpad safety applies primarily to wineries that receive grapes for processing into wine. Safety practices encompass grape delivery trucks, unloading grapes from trucks (in small bins for unloading by a forklift, or large hoppers which are unloaded by cranes), dumping grapes into a receiving auger, sorting and destemming operations, equipment set up and cleaning, subsequent fermentation and pressing operations. Crushpad safety includes precautions to ensure safety of vehicular and pedestrian traffic from winery employees (temporary or permanent) and visitors to the winery.

**Exemptions:** While some wineries receive juice for processing into wine, many of the safety hazards listed in #3 below still apply.

**Regulatory Summary (with emphasis on application for wineries covered under General Industry):**

Numerous regulations apply to harvest and crush pad safety, and depend on each winery's specific crush/fermentation operations.

1. Receiving grapes and subsequent crush/fermentation operations can present a number of safety challenges for wineries, especially with the possible presence of volunteers and/or temporary workers.
2. Wineries should address their winery-specific crush practices, safety requirements, and crush safety training for all workers in their written Accident Prevention Program (APP, WAC-296-800-11035).
3. Possible safety hazards or challenges may include the following (note that most of these topics are covered in detail, with safety training videos and needed forms, at [www.winerywise.org](http://www.winerywise.org) under the *Winery Safety* tab):

- Forklift operations/heavy traffic
- Crane operations
- Augers or screw receivers
- Ergonomics or Material Handling (i.e., moving heavy must hoses or pumps/crush equipment)
- Noise and associated communication limitations
- Carbon Dioxide exposure
- Heat Stress or working in temperature extremes
- Bees and insect bites
- Slip/trip/and fall hazards
- Lighting or lack thereof when working in the evening
- Use of compressed gasses, including dry ice generation
- Working from heights and fall protection
- LOTO (or Lock-Out Tag-Out) to repair malfunctioning equipment

- Confined Space Entry for digging out fermentation tanks after free-run draining
- Working long hours and associated fatigue
- Working solo
- Working with electrical equipment (permanent or temporary), especially in wet conditions
- Use of Personal Protective Equipment (PPE; determine the need for PPE with a Job Hazard Assessment)
- The unexpected crushpad visitor from your visitor center

5. Most of the safety concerns listed above are presented as a subject specific topic in the safety training videos located at [www.winerywise.org](http://www.winerywise.org) under the *Winery Safety* tab, including needed forms.

Additional information can be found at:

- **Crane/Auger Operations:** <http://depts.washington.edu/wineryhs/ReceivingGrapes.html>
- **Carbon Dioxide Exposure:** <http://depts.washington.edu/wineryhs/Fermentation.html>
- **Solo Work/Fatigue:**  
[http://www.lni.wa.gov/Safety/TrainTools/Online/Courses/courseinfo.asp?P\\_ID=160](http://www.lni.wa.gov/Safety/TrainTools/Online/Courses/courseinfo.asp?P_ID=160)
- **General information on crush safety:**  
<http://depts.washington.edu/wineryhs/Crush.htm>

### Topic Outline for Ergonomics

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** The science and practice of designing jobs or tasks within a workplace to match the capabilities and limitations of the human body.

**Examples Within a Winery:** Multiple tasks on the bottling line, cellar, barrel room, and winery offices.

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

1. Improper ergonomics can result in musculoskeletal injuries. Musculoskeletal injuries are the most numerous and most expensive claims recorded by Washington State Labor and Industries each year.
2. DOSH provides guidance on Ergonomics (see links below).
3. Wineries should have a written plan addressing Ergonomics and provide documented training; this can be covered as a section or chapter within your written Accident Prevention Program (APP).
4. Examples of ergonomics awareness within a winery:
  - Emphasis and training on proper lifting; bringing work to the appropriate level to minimize bending, kneeling, stretching, overhead reaching and so on;
  - Knowing your limitations! Suggest possible alternatives such as job rotation;
  - Utilize help whenever needed; seek help from a co-worker, or use tools such as a hand truck or cart to move heavy or awkward materials;
  - Make suggestions: you know your work area best, and will know when to ask for help from winery co-workers/owners/managers to prevent potential musculoskeletal injuries.

#### **Best Management Practices**

##### **General**

- Workplace layout/design for efficiency;
- Employee training on proper lifting techniques;
- Provision and use of material handling equipment (dollies, handcarts, dumb waiters, hoists, etc.);
- Job rotation (avoid excessive bending, reaching, and twisting);
- Taking recommended breaks; particularly when standing or sitting for long periods of time;
- Stretching prior to beginning work day, particularly in cellar and barrel operations;
- Conduct evaluations of work stations or positions.

## Specific

- Have hot and cold water available on catwalks near tank top openings (so you don't have to carry buckets full of water up a ladder)
- Use rollers or other mechanical devices for turning barrels
- If you stack barrels and don't have a forklift in your winery, consider using a hoist
- Perform chemical additions from the bottom of the tank during pump-overs, racking or mixing rather than at the top of the tank
- Consider job rotation when performing repetitive motion tasks such as racking, cleaning, and filling barrels

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.org](http://www.winerywise.org):

- **Evaluation Tools** <http://www.lni.wa.gov/Safety/Topics/Ergonomics/ServicesResources/Tools/default.asp>
- **About Ergonomics** <http://www.lni.wa.gov/Safety/Topics/Ergonomics/default.asp>

### Topic Outline for Hazard Communication

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** The Chemical Hazard Communication standard was developed to ensure employers and employees are informed about chemical hazards in their workplace. Hazard Communication applies to all winery operations that may expose employees to hazardous substances under normal working conditions or during an emergency situation. Workers, including supervisory, clerical, and maintenance personnel, are covered, even if there is a remote possibility of exposure to hazardous substances. Information regarding the hazards associated with non-routine tasks should also be addressed. Winery owners/managers are also required to inform contractors of the chemical hazards present within their facility.

A Hazard Communication program should inform employees of the requirements of the Hazard Communication Standard, hazardous properties of chemicals used at the winery, safe chemical handling procedures, and the measures employees can employ to protect themselves from chemicals.

*A Hazardous chemical is any chemical which is classified as a physical hazard or a health hazard, including but not limited to a simple asphyxiant, combustible dust, pyrophoric gas, or hazards not otherwise classified.*

*A Health hazard is a chemical which is classified as posing one of the following hazardous effects: Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in WAC 296-901-14022, Appendix A-Health hazard criteria.*

*A Physical hazard is a chemical that is classified as posing one of the following hazardous effects: Explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. WAC 296-901-1424, Appendix B-Physical hazard criteria.*

**Examples in a Winery:** Acids, bases, combustible, and flammable materials. This classification includes products used in the winemaking process, products used to clean the winery and winemaking areas, products used to maintain winery equipment. A quick and easy way to determine if a product is hazardous is when the label contains words like, "caution," "danger," or "warning." Or words like, "flammable," or "corrosive."

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

1. Chemicals are a common hazard found within all sizes of wineries. A review of hazard communication violations in Washington State from June 2003 to June 2013 found that from June 2003 to June 2013, there were several violations noted. Eight violations were issued for failing to develop, implement, and maintain a written Hazard Communication plan (WAC 296-800-17005). Three were issued for not labeling containers holding hazardous chemicals (296-800-17025). And three violations were issued for failing to document the hazard assessment for personal protective equipment (296-800-16010).
2. DOSH provides standards for Hazard Communication (296-901-140 – new standard; effective June 1, 2014). Wineries that have a laboratory on site must also follow the standards for Hazardous Chemical in Laboratories (296-62-400 and 296-800-17035 (as of June 1; 296-901-14016).
3. Wineries are required to develop, implement and maintain a written Hazard Communication Plan which can be a section or chapter within the written Accident Prevention Program (APP).
4. All wineries are required to develop a written plan that includes:
  - A list of the chemicals that are within the winery using with the chemical name or the common name found on the safety data sheet (SDS). The term Safety Data Sheet replaces the term Material Safety Data Sheet effective June 1, 2014. The list can be completed for the entire winery or for a specific area within the winery. (Example – common name sulfuric acid: many times the manufacture will call their products by a name other than the chemical name such as XYZ cleaner).
  - A description of the labeling system, where blank labels are stored, how to fill out labels and a description of when labels are required on secondary container (a non-manufacture supplied containers such as a beaker).
  - All chemicals are required to be labeled. The label needs to include what the chemical is either by chemical name or common name, and the hazard warning (both physical warning – such as “flammable” or health warnings such as irritating to eyes).
  - A description and plan of how you are going to provided documented training to all employees who work around chemicals and how you ensure the training is conducted prior to commencing work in an area where chemicals are used or stored. And a description of how you are going to inform employees of chemicals being used during non-routine tasks (e.g., non-routine work would be passivating a new wine tank) should be included in the plan.
  - A description of hazardous chemicals contained in unlabeled pipes (e.g., ammonia containing pipes for refrigeration in the cellar).
  - How to detect the release of hazardous chemicals – could be continuous monitoring, an odor or visual appearance of a chemical.
  - Appropriate work practices including engineering controls (such as ventilation), emergency procedures, and how to determine what personal protective equipment to use, how to use it and where to obtain the proper personal protection equipment.
  - The program and safety data sheets (SDS, formerly called MSDS) must be available to all employees (commonly a copy is available in an employee break room or area).
  - Keep SDS forever! Or at least 30 years.

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.org](http://www.winerywise.org):

- **Hazardous Chemical Communication**  
<http://www.lni.wa.gov/safety/topics/atoz/hazcom/default.asp>
- **Chemical Hazard Communication – Helpful information for employers** Chemical Hazard Communication: Helpful Resources for Employers (F413-012-000)  
<http://www.lni.wa.gov/ipub/413-012-000.pdf>
- **Hazard Communication Standard (Effective June 2014) Globally Harmonized System of Classification and Labeling of Chemicals (GHS)** <http://www.lni.wa.gov/WISHA/Rules/901>

## Topic Outline for Heat Stress

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** Heat related illness is a well-recognized hazard in the outdoor work environment. Heat stress or heat illness refers to a medical condition resulting from the body's inability to cope with a particular heat load and includes, but is not limited to, heat cramps, heat rash, heat exhaustion, fainting, and heat stroke.

**Examples Within a Winery:** Working outside in high temperatures (i.e., on the crushpad in September) or working while wearing vapor barrier clothing (i.e., wearing rain gear while digging out skins and seeds from a fermentation tank).

### **Regulatory Summary (with emphasis on application for wineries covered under General Industry):**

1. Heat Stress and subsequent heat related illnesses can occur when either working in outside temperature extremes or in combination with specific outdoor temperatures combined with the type of clothing or Personal Protective Equipment (PPE) being worn (see #5 below).
2. DOSH provides standards for all employers whose employees perform outdoor work, or work while wearing vapor barrier clothing, and may be exposed to heat stress (WAC 296-62-095 through WAC 296-62-09560).
3. Wineries whose workers may be exposed to heat stress must have a written Heat Stress Safety Plan and provide documented training. As long as the written Heat Stress Safety Plan meets all of the requirements under the code, it can be a section or chapter within your written Accident Prevention Program (APP).
4. Heat stress can lead to injuries such as falls, or accidents from operation of equipment when experiencing heat stress.
5. The WISHA standards listed in #2 above apply under these conditions:
  - Employees are working outside and temperatures are 89° F or above, or
  - When employees are wearing double layer woven clothes (including overalls) and temperatures are 77° F or above, or
  - When employees are wearing non-breathable or vapor barrier clothing (for PPE) and the temperatures are 52°F or above

6. Heat stress and related illnesses can include, but are not limited to:

- Sunburn
- Heat cramps
- Heat exhaustion
- Heat stroke

7. Symptoms of heat related illness can include, but are not limited to:

- Disorientation/confusion
- Fainting
- Heavy sweating
- Weakness
- Cold, pale, and clammy skin
- Fast, weak pulse
- Nausea or vomiting

8. Appropriate steps to take if an employee shows signs or symptoms of heat related stress:

- Move the employee to a cooler location
- Remove the employee from their work duties
- Have the employee lie down and loosen any tight clothing
- Apply cool, wet cloths to skin surfaces
- Sip water
- If the employee has a high body temperature (above 103°F), has hot, red, dry or moist skin, has vomited and the vomiting continues, has a rapid and strong pulse, or is unconscious, call 911 immediately – this is a medical emergency.

9. It is the responsibility of both employers and employees to monitor factors that can help to avoid heat stress. Most important are:

- Frequent consumption of water or other appropriate beverages to ensure hydration (1 quart per employee per hour, avoiding caffeine and alcohol or large amounts of sugar)
- Access to cool and shaded areas for all breaks
- Encourage employees to wear loose-fitting, long sleeved shirts and long pants, wide brim hats, use sunscreen, and wear UV absorbent sunglasses
- If employees are wearing non-breathable clothing or PPE, said clothing/PPE should be removed during breaks

10. All winery personnel should be trained in responding to the signs of heat stress illnesses. The link to an OSHA fact sheet on 'Working Outdoors in Warm Climates' is listed below.

11. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.org](http://www.winerywise.org):

- **PPE Hazard Assessment:** <http://apps.leg.wa.gov/wac/default.aspx?cite=296-800-160>
- **Safety and Health Core Rules:** <http://apps.leg.wa.gov/wac/default.aspx?cite=296-800>
- **General Safety and Health Standards:** <http://apps.leg.wa.gov/wac/default.aspx?cite=296-24>
- **Link to WAC 296-62-09520:** <http://apps.leg.wa.gov/wac/default.aspx?cite=296-62-09510>
- **LNI Safety Topics, Outdoor Heat Exposure:**  
<http://www.lni.wa.gov/safety/topics/atoz/heatstress/>
- **LNI Outdoor Heat Exposure Enforcement Procedures:**  
<http://www.lni.wa.gov/Safety/Rules/Policies/PDFs/WRD1015.pdf>
- **OSHA Fact Sheet – Working Outdoors in Warm Climates:**  
[https://www.osha.gov/OshDoc/data\\_Hurricane\\_Facts/working\\_outdoors.pdf](https://www.osha.gov/OshDoc/data_Hurricane_Facts/working_outdoors.pdf)

## Topic Outline for Ladder Safety

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** Ladders, both portable and fixed, are often used in wineries. Fixed ladders are permanently attached to a structure, building, or equipment. Portable ladders refer to ladders that can be readily moved or carried.

**Examples Within a Winery:** Ladders (both portable and fixed) are often used for accessing the tops of tanks, stacked barrels, truck tankers, to reach stored materials, and for maintenance work. Hazards resulting in injury can occur when employees have not been trained on the proper use of ladders, including how to safely set a portable ladder.

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

1. DOSH requires employers to be in compliance with the Washington Administrative Codes (WAC) related to ladder use (for agriculture, primarily portable ladders). Specifically, employers are required to meet the requirements in WAC 296-307-055, -05501, -05503, -05505, -05507, -060, and -061.
2. Wineries must have a written ladder safety plan and provide documented training. As long as the written ladder safety plan meets all of the requirements under the code, it can be a section or chapter within your written Accident Prevention Program (APP).
3. Ladders must be cared for and properly maintained at all times. Specifically:
  - Ladders must be checked for defects and thoroughly inspected prior to use and periodically thereafter.
  - A ladder should be immediately inspected if it has tipped over, or if it has been exposed to excessive heat.
  - Defective ladders must be withdrawn from service and marked as 'Dangerous, Do Not Use'.
  - Inspect steps, joints between steps, and ensure that side rails are tight. All hardware and fittings must be securely attached and all movable parts operating correctly.
  - Avoid unnecessary dropping, jarring, or misuse of ladders.
  - Store ladders properly when not in use.
  - Transport ladders properly – do not allow them to sag or be damaged during transportation.
4. Your written ladder safety training plan should include documented training on the following:
  - At the beginning of employment, provide employees with training on the proper use of ladders, including how to set a ladder, attach portable ladders securely, and how to properly mount and dismount a ladder when carrying items
  - Teach employees not to overreach when on a ladder.

- Employees should have clean shoes when climbing ladders, free of substances that could cause the employee to slip.
- Teach employees to face the ladder when climbing or descending. Do not climb up or down a ladder while carrying tools or materials that interfere with the free use of both hands.
- Teach your employees to hold onto the ladder with three points of contact (at minimum two hands and one foot) –both hands are free to hold onto or slide along the ladder.
- Ladders should not be placed on boxes, barrels, or other unstable bases to obtain additional height.
- Ladders should be kept free of oil, grease, or other slippery materials.
- When working from a ladder over 25 feet from the ground or floor, the ladder must be secured at both top and bottom. When work on a ladder over 25 feet from the ground or floor requires the use of both hands, a safety belt must be worn and the safety lanyard secured to the ladder.
- Portable ladders must be placed so that the side rails have a secure footing. The top rest for portable rung and cleat ladders must be reasonably rigid and strong enough to support the applied load. The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment. Such an attachment should be substantial and large enough to support the ladder under load.

### 5. Additional ladder safety requirements:

- Ladders made by fastening cleats across a single rail are prohibited.
- Wooden ladders, when not in use, should be stored where they will not be exposed to the elements, and where there is good ventilation. They must be stored away from radiators, stoves, steam pipes, or other sources of excessive heat or dampness.
- Wooden ladders should be kept coated with a suitable protective material.
- A ladder must have feet that are appropriate for the surface on which it will be used. For example, a ladder used on a slippery surface must have steel points or nonslip material on its feet.
- Ladders must not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.
- Ladder safety devices may be used on tower, water tank and chimney ladders over twenty feet long in place of cage protection. No landing platform is required in these cases. All ladder safety devices such as lifebelts, friction brakes, and a sliding attachment must meet the design requirements of the ladders that they serve.
- Employees should have clean shoes when climbing ladders, free of substances that could cause the employee to slip.
- Do not climb up or down a ladder while carrying tools or materials that interfere with the free use of both hands.
- Ladders should not be placed on boxes, barrels, or other unstable bases to obtain additional height.

- Best Management Practices for Ladders include:
  - Wooden ladders should be phased out (try not to use wooden ladders in a wet winery environment).
  - When inspecting a ladder, use an inspection tag as documentation.
  - Don't share ladders or other winery equipment with contractors; require your contractors to provide their own equipment.
  - Secure ladders when not in use.
  - Do not attempt to repair broken ladders – invest in a new one.

6. While DOSH does not have standards for an agricultural business for fixed ladders, below is a link to the OSHA web site that addresses safe use of fixed ladders.

7. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.org](http://www.winerywise.org):

- PPE Hazard Assessment: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-800-160>
- Safety and Health Core Rules: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-800>
- General Safety and Health Standards: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-24>
- Link to WAC 296-307: <http://www.lni.wa.gov/wisha/rules/agriculture/HTML/part-d.htm>
- OSHA, Fixed Ladder Safety:  
[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=971](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=971)

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## Topic Outline for Lockout Tagout

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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.

The term “Lockout/Tagout” (“LOTO”, WAC 296-803) applies to situations where employees 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 risk of 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 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, and 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 operate Lockout/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 identifies employee by picture or name).

- Energy control procedures specifying steps to take to protect employees 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. Manufacturer specification sheets or instructions are a great place to start when developing energy control procedures.
- Types of LOTO equipment and how to properly choose 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
  - Are 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 devices 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.org](http://www.winerywise.org):

- **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>

## Sample Lockout Procedure

Use with Lockout/Tagout (Control of Hazardous Energy), Chapter 296-803 WAC

- The following sample lockout procedure contains the minimum information necessary to help you develop an energy control procedure that meets the requirements of Lockout/Tagout (Control of Hazardous Energy), Chapter 296-803 WAC.
- Complex systems may require you to develop, document, and use more comprehensive procedures.
- You can use this fill-in-the-blank template, or develop your own form.

**Note:** If you develop your own form, remember to include the necessary information from this template.

**Fill-in-the-Blank Template**

**SCOPE:**

This lockout procedure is for:

*Company Name if you only use a single procedure (one machine or type of machine)*

**or**

*Specific machine or equipment that this procedure applies to, if you use multiple procedures. For additional information, see WAC 296-803-20005, in this chapter)*

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**PURPOSE:**

- This procedure establishes the minimum requirements necessary to protect employees from injury caused by the unexpected energization, start up, or release of stored energy during service or maintenance.
- Use this procedure to make sure the machine or equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before any employee begins work.

**AUTHORIZATION:**

- The following persons are authorized to lock out the machine or equipment using this procedure:

*(List the names of authorized employees you want to use this procedure)*

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**COMPLIANCE WITH THIS PROGRAM:**

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout.
- Authorized employees will perform lockout as described in this procedure.
- No employee will attempt to start, energize or use any machine or equipment that is locked out.
- Failure to comply with this procedure will result in the following action:

*(List the actions that will be taken if employees violate the procedure)*

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**INTENDED USE:**

- This procedure will be used for the following service or maintenance actions:

*(List the service and maintenance activities that require using the procedure)*

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**SPECIFIC PROCEDURAL STEPS:**

**Step 1:** The authorized employee will identify the type and magnitude of the energy that the machine or equipment uses, understand the hazards of the energy, and the methods to control the energy before using this procedure.

*(List the type and magnitude of the energy, its hazards, and the methods to control the energy. For additional information, see WAC 296-803-50010, in this chapter)*

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**Step 2:** Notify all affected employees that the machine or equipment is to be shut down and locked out for service or maintenance.

*(List the names or job titles of affected employees and how to notify them. For additional information, see WAC 296-803-50010, in this chapter)*

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**Step 3:** Shut down the machine or equipment by the normal stopping procedure (such as depressing a stop button, opening switches, or closing valves).

*(List types and locations of machine or equipment operating controls. For additional information, see WAC 296-803-50010, in this chapter)*

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**Step 4:** Completely isolate the machine or equipment from its energy sources by using the appropriate energy-isolating devices.

*(List types and locations of energy isolating devices. For additional information, see WAC 296-803-50010, in this chapter)*

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**SPECIFIC PROCEDURAL STEPS: (continued)**

**Step 5:** Lock out the energy isolating devices with assigned individual locks.

*(List any additional procedural requirements, such as putting on a tag with amplifying information, necessary for the authorized employee to know. For additional information, see WAC 296-803-50010, in this chapter)*

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**Step 6:** Dissipate or restrain stored and residual energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, using methods such as grounding, repositioning, blocking, or bleeding down.

*(List the types of stored and residual energy and the methods to dissipate or restrain them. For additional information, see WAC 296-803-50025, in this chapter)*

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*(List any actions necessary to prevent stored energy from reaccumulating to a hazardous level. For additional information, see WAC 296-803-50025, in this chapter)*

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**Step 7:** Make sure the equipment is disconnected from the energy sources and stored and residual energy has been made safe. Check that no personnel are exposed, and then verify the isolation of the equipment by doing the following:

*(List the method of verifying machine or equipment isolation, such as operating the push button or other normal operating controls or by testing to make certain the equipment will not operate. For additional information, see WAC 296-803-50030 in this chapter)*

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**CAUTION:** Return the operating controls to the **safe, neutral, or off** position, after verifying the equipment is isolated from its energy sources.

### **THE MACHINE OR EQUIPMENT IS NOW LOCKED OUT**

- Restore the machine or equipment to service after the service or maintenance is completed and the machine or equipment is ready to return to its normal operating condition by doing the following steps:

*(For additional information, see WAC 296-803-50035, in this chapter)*

**Step 1:** Check the machine or equipment and the immediate area around it to make sure all nonessential items have been removed and that the machine or equipment is in operating condition and ready to energize.

**Step 2:** Make sure all employees are safely positioned for starting or energizing the machine or equipment.

**Step 3:** Verify that the controls are in neutral.

**Step 4:** Remove the lockout devices and reenergize the machine or equipment.

**Note:**

Some forms of blocking may require re-energization of the machine before they can be safely removed.

**Step 5:** Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready to use.

## Topic Outline for Personal Protective Equipment (PPE)

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** Personal Protective Equipment (PPE) is used for protection from the hazards identified in your workplace and refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury. The purpose of personal protective equipment is to reduce employee exposure to hazards when engineering and/or administrative controls are not feasible or effective to reduce these risks to acceptable levels. Any item of PPE imposes a barrier between the wearer/user and the working environment.

**Examples Within a Winery:** Sulfur applications (to crushed grapes or sulfuring barrels), exposure to carbon dioxide, pesticides, velcorin, ammonia, caustic cleaners, or procedures that use materials with airborne contaminants (i.e., diatomaceous earth).

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

1. It is the responsibility of all employers to identify and reduce workplace hazards and risks. Hazards and risks can be reduced by finding alternate ways to perform a task, apply engineering controls to reduce or eliminate hazards, and by reducing the use of hazardous materials at your winery.
2. Processes that may pose a hazard to your employees must be assessed to determine the required personal protective equipment (PPE). Additionally, SDS sheets (formerly called MSDS) will indicate required PPE. WAC 206-800-160 addresses the requirements of employers to ensure that their employees have, use and care for the appropriate PPE.
3. Wineries must address their winery-specific PPE requirements in their written Accident Prevention Program (APP). Hazard assessments must be documented and should be kept in your APP binder. This project has developed a winery Job Hazard Assessment (JHA) form to help you perform this task (see below for link.)
4. Possible winery processes that may require a job hazard assessment (JHA) and subsequent PPE include but are not limited to:
  - Using diatomaceous earth or other airborne contaminants (i.e., fermentation additives), SO<sub>2</sub> as a gas or liquid, concentrated acids, ammonia, ozone (respiratory protection per WAC 296-842)
  - Bottle line operations or use of power sprayers (hearing loss prevention WAC 296-817-500)
  - Laboratory operations
  - Filling propane tanks or battery charging/changing stations
  - Cleaning tanks and equipment – many cleaning agents, either concentrated or dilute, require PPE. Be sure to select the proper PPE for the specific chemical you are using – your chemical vendors can provide information on selecting appropriate PPE.
  - Maintenance work (i.e., exposure to battery acid)

- Working in temperature extremes, either hot or cold, and PPE required for temperature stress hazards
5. Additional information on hazard assessments and PPE requirements is provided on the following topics, all of which can be found at [www.winerywise.org](http://www.winerywise.org) under the tab for *Winery Safety*:
- **Winery Job Hazard Assessment Form**
  - **WAC 206-800-160, Safety and Health Rules Regarding PPE**  
<http://www.lni.wa.gov/WISHA/Rules/corerules/PDFs/296-800-160.pdf>
  - **WAC 296-842, Respiratory Protection Requirements**  
<http://www.lni.wa.gov/wisha/rules/respirators/default.htm>
  - **WAC 296-817 Hearing Loss Prevention Rules**  
<http://www.lni.wa.gov/wisha/rules/noise/default.htm>
  - **Additional information on winery processes and associated hazards that may require PPE can be found at <http://depts.washington.edu/wineryhs/Process.html>**

### Topic Outline for Powered Industrial Trucks (PIT's, i.e., Forklifts)

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** A Powered industrial truck (PIT) is a mobile, power-driven vehicle used to carry, push, pull, lift, stack, or tier material (WAC 296-863-700).

**Examples Within a Winery:** The most commonly used PIT in a winery is a forklift. A forklift is a small industrial vehicle with a power-operated pronged platform that can be raised and lowered for insertion under a load to be lifted and moved. Forklifts are used for moving barrels, smaller tanks, bottling operations, and loading and unloading supplies and equipment. They are frequently used during crush to unload bins of grapes from a flatbed truck and dump same into a receiving hopper for crushing purposes. Another commonly used PIT in a winery is a powered pallet jack.

#### **Regulatory Summary (with emphasis on application for wineries covered under General Industry):**

1. Forklifts are the most commonly used powered industrial equipment in a winery.
2. DOSH provides standards for safe operation of forklifts (WAC 296-863-400 for general industry, and WAC 296-307-520 for agriculture – for additional information see links below).
3. Wineries who use forklifts or other powered industrial equipment must address industrial equipment training and safety procedures in their written Accident Prevention Program (APP).
4. Prior to operating a forklift, all forklift users must have documented training, including but not limited to formal instruction (lecture or video), practical hands-on training, and an evaluation of the operator's performance. Evaluation of a forklift operator must be repeated every three years (WAC 296-863-60015). Required training topics are in the following table (WAC 296-863-60005):

<u>Topics related to powered industrial truck</u>	<u>Topics related to your winery</u>
Operating instructions	Surface conditions where the PIT will be operated
Warnings and precautions for the types of PIT the operator will be authorized to operate	Composition of loads to be carried and load stability
Differences between the PIT and the automobile	Load manipulation, stacking, and unstacking
PIT controls and instrumentation: Where they are located, what they do, and how they work	Pedestrian traffic in areas where the PIT will be operated
Engine or motor operation	Narrow aisles and other restricted places where the PIT will be operated
Steering and maneuvering	Use of door opening and closing devices
Visibility (including restrictions due to loading)	Hazardous (classified) locations where the PIT will be operated
Fork and attachment adaptation, operation, and use limitations	Ramps and other sloped surfaces that could affect the PITs stability
PIT capacity	Closed environments and other areas where insufficient ventilation or poor PIT maintenance could cause a buildup of carbon monoxide or diesel exhaust
PIT stability	Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation
Any PIT inspection and maintenance that the operator will be required to perform	
Refueling	
Charging and recharging of batteries	
Operating limitations	
Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of PIT that the employee is being trained to operate	

5. Separate downloadable documents and information are provided at the following links and under the Winery Safety tab at [www.winerywise.com](http://www.winerywise.com):

- **WAC 296-863-400** <http://www.lni.wa.gov/wisha/Rules/pits/HTML/296-863-400.htm>
- **WAC 296-307-520** <http://www.lni.wa.gov/wisha/rules/agriculture/HTML/part-w.htm>
- **Guide on preventing carbon monoxide poisoning from forklift operations:** <http://www.lni.wa.gov/Safety/Research/Files/HazardousChem/PreventCOPoisonFmForklifts.pdf>
- **Guide on Safe Forklift Operations:** <http://www.lni.wa.gov/IPUB/417-031-000.pdf>
- **Forklift Safety Training Requirements and Helpful Tips:** <http://www.lni.wa.gov/formpub/Detail.asp?DocID=177>

## Topic Outline for Preparing for Workplace Emergencies

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** Winery owners and/or managers are not only required to maintain a safe work environment, they are also required to prepare for all types of emergencies that could occur within the facility. All sizes of wineries, from small owner/winemaker operations to much larger facilities, should have a plan that addresses workplace emergencies.

**Examples Within a Winery:** A fire, chemical release, medical emergency, or a natural disaster such as an earthquake.

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

1. While winery emergencies are rare, it is important to plan for and practice response procedures. A review of violations in Washington State from June 2003 to June 2013 found that there were eight were issued for not inspecting and testing all portable fire extinguishers (WAC 296-800-30020). Three violations were issued for failing to mark exits adequately (296-800-31050)

2. DOSH provides standards for emergency response in WAC 296-800 safe workplace, WAC 296-800-11005 maintaining a workplace free from hazards, and 296-824 emergency response. WAC 296-800 are the Core Rules, whereas WAC 296-824 is the section of the WAC that has Emergency Response.

3. Wineries must have a written plan on workplace emergencies and provide documented training. As long as your written plan meets all the requirements under the code, it can be a section or chapter within the written Accident Prevention Program (APP). To keep your workplace safe, all winery employees, including temporary employees, should be provided documented training on emergencies that could arise. The documented training should include:

- Recognition or how to identify emergencies that could arise within your winery.
- Immediate emergency response including methods of alerting other employees of the emergency (example – pulling fire alarm pull station, blowing a whistle or air horn). Evacuation or exits route based on the situation and gathering location(s). Create and post evacuation maps. Maps may vary depending on type of emergency (fire/chemical/natural disaster). Evacuation location must be a safe location and distance based on the type of emergency (example – a fire evacuation location should be designated where the responding fire truck can see the group of employees and verify that everyone is out of the building). This is important so that first responders can address the fire rather than looking for people. Additionally an evacuation location should not be designated downwind of an airborne chemical release.
- Procedures for shutting down processes or closing emergency valves or other critical actions to secure operations or prevent incident from increasing in severity if applicable.
- Instruction on how to use, and location of, emergency equipment within the winery (pull stations/air horns/fire extinguishers)

- Details on the maintenance schedule of emergency equipment (inspection/testing of fire extinguishers, emergency lights, fire suppression and enunciation devices, first aid equipment)
- Inspect exit routes and doors (make sure they are always kept clear/not blocked/unlocked from inside) and ensure that emergency evacuation notification devices (pull stations/air horns) are accessible.
- Inform contractors of what to do in the event of an emergency, where to evacuate to and with whom to check in at the evacuation location; cover all types of emergencies that could exist within your winery.
- The plan must be available to all employees, employee representatives and L & I personnel to view/review.

4. WAC 296-824 Emergency Response applies if your employees are, or could become, involved in responding to uncontrolled releases of hazardous substances in your workplace or other location. Use the flow chart in WAC 296-824-100 to determine if this Chapter of the WAC applies. A written Emergency Response plan must be available to all employees, employee or L & I representatives to view/review. Requirements under this under this code are:

- Make sure employees participating in the emergency response are appropriately trained for their assigned roles and duties, including (WAC 296-824-300):
  - Initial training
  - Certification of the employee training (documented with demonstrated competency)
  - Retraining annually (documented with demonstrated competency)
  - Trainers must be qualified
- To provide and document medical surveillance (WAC 296-824-400)
- Conduct and manage emergency response operations so employees are protected from hazardous substances and conditions (WAC 296-824-500); responders must be able to:
  - Recognize emergencies and initiate response (WAC 296-824-50005)
  - Implement and maintain an incident command system (ICS) (WAC 296-824-50020)
  - Make sure the incident commander oversees activities during the response (WAC 296-824-50020)
  - Use the buddy system in danger areas (WAC 296-824-50025)
  - Provide rescue and medical assistance (WAC 296-824-50030)
- Provide personal protective equipment and make sure it is used properly (WAC 296-824-60005).
- To protect employees during post emergency response activities following appropriate work practices, timing, and other requirements (WAC 296-824-700); in other words take the time to complete the response, decontaminate people and equipment, and complete a review of the response. Discuss what went well and what could be improved.

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.com](http://www.winerywise.com):

- Developing Emergency Response Plans  
<http://www.lni.wa.gov/DOSH/rules/emergencyresponse/Helpfultools/DevelopingEmergencyResponsePlans.htm>
- Core Rules WAC 296-800
  - **Requirements for portable fire extinguishers** [WAC 296-800-30020](#)
  - **Requirements for emergency exits** [WAC 296-800-31050](#)
  - **Requirements for maintaining a workplace free from hazards** [WAC 296-800-11005](#)
- **Emergency Response; hazardous or uncontrolled release** [WAC 296-824](#)

## Topic Outline for Protecting Employees from Falls

***For the wine industry, two main sections of the Washington Administrative Code (WAC) apply: 296-307 for Agriculture and 296-800 for General Industry. While most wineries fall under General Industry, both General Industry and Agriculture standards are used in this outline as some components of each apply to winery work. Best management practices are also provided.***

**Definition:** Fall hazards are often an overlooked safety issue in wineries. Fall protection standards enforced by DOSH vary depending on heights and tasks being performed. Unless an area is under construction, all open-sided floors, walkways, and platforms 4' in height or more and/or above or adjacent to dangerous equipment regardless of height, require a standard guardrail system, a system of fall arrest, or fall restraint.

**Examples Within a Winery:** Fall hazards can be encountered when accessing the top of wine tanks, tanker trucks, high-stacked barrels, or working over auger pits during crush. Some wineries have grape sorting equipment with work platforms of 4' or more. Older wineries or buildings converted to a winery may have hatchways, manholes, or floor openings of 4' or deeper that also require fall protection.

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

1. DOSH requires employers to be in compliance with the Washington Administrative Codes (WAC) related to fall protection. Specifically, employers are required to conduct a personal protective equipment (PPE) hazard assessment in accordance with WAC 296-800-160, as well as meet other specific requirements in WAC 296-800 and WAC 296-24 (see below for links).
2. Wineries who use powered platforms are required to use personal fall arrest systems per WAC 296-24-88050. Part I of Appendix C sets out the mandatory criteria for personal fall arrest systems for all employees using powered platforms (see below for link).
3. Wineries who use walkways or platforms of 4' or more in height (for example, to access wine tank tops or storage areas) must provide a standard railing (or equivalent) on all open sides, except where there is an entrance to a ramp, stairway, or fixed ladder (according to WAC 296-307-25015). The railing must have a toe board wherever, beneath the open sides:
  - A person can pass; or
  - There is moving machinery (such as an auger); or
  - Materials falling onto equipment would create a hazard
4. Wineries who use walkways or platforms above dangerous machinery (i.e., grape receiving augers), regardless of height, must guard this space with a standard railing and toe-board (see link to WAC 296-307-25015 below).
5. Tools or loose machinery/tank parts must not be left on overhead platforms or scaffolds.

### Best Management Practices

1. If guard railings must be temporarily removed to perform a specific task, the area should be constantly attended by a monitor until the guardrail is replaced. The only duty the monitor shall perform is to warn persons entering the area of the fall hazard.
2. Personal fall arrest systems (PFAS) may also be used as a means of fall protection (i.e., when accessing tops of tanks, presses or tanker cars). A PFAS is a type of fall protection that includes an approved body harness, lanyard, deceleration device, drop-line, horizontal and/or vertical lifelines, and anchorages. These components are often interconnected and rigged so they arrest a worker in the event of a free fall. The fall arrest system must be designed so that the worker cannot free fall more than six feet and cannot hit the floor below if they fall. Most importantly, a fall arrest system only works when the worker puts it on and uses it properly.
3. Other forms of fall protection systems include:
  - A safety net system
  - A catch platform
  - A warning line
4. Wineries should have a written fall protection safety plan and provide documented training. As long as the written fall protection safety plan meets all of the requirements under the code, it can be a section or chapter within your written Accident Prevention Program (APP).

**Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.com](http://www.winerywise.com):**

- PPE Hazard Assessment: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-800-160>
- Safety and Health Core Rules: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-800>
- General Safety and Health Standards: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-24>
- Link to WAC 296-307-25015: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-307-25015>
- Link to WAC 296-24-88050: <http://apps.leg.wa.gov/wac/default.aspx?cite=296-24-88050>
- Winery specific fall protection: [Winerywise web site/winery safety/Fall Protection](http://www.winerywise.com/winery-safety/Fall-Protection)

## Topic Outline for Safety Committee Meetings

***For the wine industry, two main sections of the Washington Administrative Code (WAC) 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:** This rule requires a method of communicating and evaluating safety and health issues to employees in your workplace. Larger wineries **must** establish a safety committee. Smaller wineries have the choice of either establishing a safety committee or holding safety meetings with a management representative present.

There is a difference between a safety committee and a safety meeting.

- A safety committee is a team of employees with at least one representative from each department; a committee is required if you have more than 11 employees.
- A safety meeting includes all employees (including Visitor Center employees), including a management representative. Regular safety meetings are effective for all sized wineries, even the smaller ones.

**Examples Within a Winery:** The size of your winery will determine whether you are required to have a safety committee or safety meetings.

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

1. A review of safety committee meeting violations in Washington State from June 2003 to June 2013 found that there were three violations in Washington State for wineries not establishing and conducting safety committee meetings (WAC 296-800-13020-1).
2. DOSH provides standards for safety committees (WAC 296-800-130).
3. Wineries are required to have either a safety committee or safety meetings. Wineries are required to have a Safety Committee or Safety Meeting Plan which can be included as either a section or chapter within their written Accident Prevention Program (APP).
4. Safety Committee Meetings or Safety Meetings must be held at least monthly. The meetings must:
  - Have every attendee sign to record attendance
  - Record meeting minutes; maintain the meeting minutes for at least one year
  - Last one hour or less
  - Review safety and health observations to help correct safety hazards. Go around the group and have each attendee report if they have observed any safety issues within your winery; track issues discussed until they are closed. Some issues may take time as they could be part of a larger capital project or require outside assistance.
  - Discuss any accidents or incidents since the last meeting. Present investigation findings including the cause of the incident, make sure cause has been corrected
  - Present a safety topic to increase awareness of a topic specific to your winery.

- Post safety committee meeting minutes and topic(s) presented in your safety area where other safety information is posted in your winery

5. Separate downloadable documents are provided at the following links and under the Winery Safety tab at [www.winerywise.com](http://www.winerywise.com):

- **Safety committee/safety meetings – Summary WAC 296-800-130**  
<http://apps.leg.wa.gov/WAC/default.aspx?cite=296-800&full=true#296-800-130>
- **Establish and conduct safety committees WAC 296-800-13020**  
<http://apps.leg.wa.gov/WAC/default.aspx?cite=296-800&full=true#296-800-13020>
- **Follow these rules to conduct safety meetings WAC 296-800-13025**  
<http://apps.leg.wa.gov/WAC/default.aspx?cite=296-800&full=true#296-800-13025>

Sample - Accident Report Form - Employees

<ul style="list-style-type: none"> <li>Employee Full Name:</li> <li>Name of Temporary Employee Agency (if applicable):</li> </ul>		Employee Date of Birth:	
Job Position/Title:		Supervisor:	
Date of Incident:	Time of Incident: AM/PM	Workday began: AM/PM	Location/Jobsite:
To Whom Reported:	Date Reported:	Time Reported: AM/PM	
Employee Address:	City/State/Zip:	Phone number:	

Describe how the accident happened: (What you were doing when your accident occurred?)

\_\_\_\_\_

\_\_\_\_\_

Name(s) of all witness(es): \_\_\_\_\_

What Personal Protective Equipment were you wearing? \_\_\_\_\_

Were safety policies and procedures being followed?  YES  NO Explain: \_\_\_\_\_

What part(s) of your body did you injure? \_\_\_\_\_

Was First Aid administered?  YES By whom? \_\_\_\_\_

NO Why? \_\_\_\_\_

Did you notify your manager?  YES Date: \_\_\_\_\_ Time: \_\_\_\_\_

NO Why? \_\_\_\_\_

Was additional medical attention required?  YES List the attending physician, location, and name of treatment facility: \_\_\_\_\_

NO Why? \_\_\_\_\_

In your opinion, what should be done to prevent injuries of this type from occurring again?

\_\_\_\_\_

EMPLOYEE STATEMENT: The facts as I have stated them are true to the best of my knowledge.

\_\_\_\_\_

Signature of Employee

\_\_\_\_\_

Date

# Accident Report Form - Supervisors

Employee Full Name:		Job Title/Position:	
Date of Incident:	Time of Incident: AM/PM	Workday began: AM/PM	Location/Jobsite:

Describe how the accident happened:

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Describe why the accident happened: \_\_\_\_\_

---



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<input type="checkbox"/> Housekeeping failure	<input type="checkbox"/> Poor preventative maintenance	<input type="checkbox"/> Low level job skill
<input type="checkbox"/> Caused by other employee	<input type="checkbox"/> Caused by Employee	<input type="checkbox"/> Tried to avoid effort
<input type="checkbox"/> Unaware of hazard	<input type="checkbox"/> Did not know safe procedure	<input type="checkbox"/> Communication Failure
<input type="checkbox"/> Ignored known hazard	<input type="checkbox"/> Tried to save time	<input type="checkbox"/> Disciplinary action needed
<input type="checkbox"/> Tried to avoid discomfort	<input type="checkbox"/> Caused by other than above	<input type="checkbox"/> Other:

Check all that apply:

Were safety policies and procedures being followed?  YES  NO Explain: \_\_\_\_\_

---

Has a Job Hazard Assessment (JHA) for established for this task?  YES  NO  N/A

What can be done to prevent this from happening again?

---



---

Person responsible for corrective action: \_\_\_\_\_

Date of planned corrective action: \_\_\_\_\_

---

Investigated by (print)

Investigated by (sign)

Date

**Section 1: Job/Task Description**

Job/Task Being Evaluated: \_\_\_\_\_

Location/Area/Department: \_\_\_\_\_

JHA Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

JHA Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

**Section 2: Hazard Assessment – For Known or Potential Hazards**

Place an X where a hazard exists. Place an X for all hazards that exist for the job being evaluated.

Hazard Type	Yes	No	Control Measures
High Noise (>85db)			
Temperature Extremes			
Poor Lighting			
Insects/Animals			
Excessive Dust			
Use of Flammable Materials			
Wet/Slippery Floors			
Use of Power Tools			
Potential for Falling Objects			
Sharp Objects			
Ergonomic or Awkward Position			
Remote Work Area			
Uneven work surfaces			
Slip/Trip/Fall Hazard			
Electrical Hazard			
Requires work on/from a ladder			
Manual Lifting			
<b>Hazards that Require Formal Training</b>			
Confined Space			
Fall Hazards (working from >4')			
Respiratory Hazards/Exposures			
Lockout/Tagout (LOTO)			
Use of Chemicals			

**Section 3: Safety Precautions/Personal Protective Equipment Selection** (Check all that apply)

- Safety Glasses/Face Shield (Z781 approved w/ side shields)
- Hearing Protection (Type \_\_\_\_\_) Example: Plugs or Muffs with appropriate Noise Reduction Rating (NRR)
- Foot Protection
- Gloves (type \_\_\_\_\_) Example: Chemical Resistant, Cut Proof
- Body Protection (type \_\_\_\_\_) Example: Full Pants, Long Sleeves
- Fall Protection
- Respiratory Protection (type \_\_\_\_\_) Example: Full Face, Half Face and Type of Filter Cartridge
- Lock out/Tag Out Example: To lock out electrical, hydraulic, or pneumatic sources (de-energizing)
- Energized Work Example: Working on a piece of equipment; typically while troubleshooting while energized
- Hot Work Example: Welding (Requires use of Hot Work Permit)
- Confined Space (Requires specific training, and specific equipment)
- Spill Containment
- Standby person/Observer
- Fire Extinguisher
- Gas Detection Equipment Example: Carbon Dioxide, Oxygen
- Other (Describe \_\_\_\_\_)
- Other (Describe \_\_\_\_\_)
- Other (Describe \_\_\_\_\_)

**Step 4: Job Hazard Analysis**

<b>1</b>	
<b>2</b>	
<b>3</b>	

**Job Hazard Analysis Review Process**

Job hazard analysis shall be reviewed whenever there is a change in the process, and can be used to train employees on workplace processes. It is suggested that Job hazard analysis be reviewed annually.

**Suggested Agenda for Monthly Safety Committee Meetings:**

1. Have all meetings attendees sign a sign in sheet; on the sign-in sheet include the date/time/topic discussed.
2. Discuss the previous month's incidents and/or near-misses.
2. Ask employees/members of the safety committee team if they have observed any safety related issues within the facility that need to be addressed.
3. Discuss safety related items or observations that were brought up in previous meetings; update their status of completion .
4. Discuss the safety topic of the month.

**January** – Outline the purpose, goals, expectations, routine schedule of the of monthly safety meetings. Vote in new members. View Accident Prevention Plan presentation.

**February** – Lockout/Tagout

**March** – Compressed gasses/cylinders

**April** – Ladder Safety

**May** – Heat Stress

**June** – Ergonomics

**July** – Hazard Communications

**August** – Harvest/Crushpad Safety

**September** – Confined Space

**October** – Personal Protective Equipment

**November** – Being Prepared for Workplace Emergencies

**December** – Protecting Employees from Falls & Safety Program Year in Review; how does this year stand up to previous years in terms on Safety (less/more incidents, severity of incidents, etc.

# Powered Industrial Truck (Forklift) Operator's Check List

Operator's Daily Checklist: Gas or LPG Forklift		Operator's Daily Checklist: Electric Forklift	
Check each item before the shift starts. Put a check in the box if the item is OK.		Check each item before the shift starts. Put a check in the box if the item is OK.	
Explain any unchecked items at the bottom and report them to a supervisor.		Explain any unchecked items at the bottom and report them to a supervisor.	
Do not use an unsafe forklift! Your safety is at risk.		Do not use an unsafe forklift! Your safety is at risk.	
Forklift Serial Number:		Forklift Serial Number:	
Operator:		Operator:	
Hour Meter Reading:	Date:	Hour Meter Reading:	Date:
<input checked="" type="checkbox"/> Visual Check		<input checked="" type="checkbox"/> Visual Check	
Tires are inflated and free of excessive wear or damage. Nuts are tight.		Tires are inflated and free of excessive wear or damage. Nuts are tight.	
Forks and mast are not bent, worn, or cracked.		Forks and mast are not bent, worn, or cracked.	
Load back rest extension is in place and not bent, cracked, or loose.		Load back rest extension is in place and not bent, cracked, or loose.	
Overhead guard is in place and not bent, cracked, or loose.		Overhead guard is in place and not bent, cracked, or loose.	
Attachments (if equipped) operate OK and are not damaged.		Attachments (if equipped) operate OK and are not damaged.	
Forklift Body is free of excessive lint, grease, or oil.		Forklift Body is free of excessive lint, grease, or oil.	
Engine oil is full and free of leaks.		Hydraulic oil is full and free of leaks.	
Hydraulic oil is full and free of leaks.		Battery connections are tight.	
Radiator is full and free of leaks.		Covers over battery and other hazardous parts are in place and secure.	
Fuel level is OK and free of leaks.		Load rating plate is present and readable.	
Battery connections are tight.		Warning decals and operators manual are present and readable.	
Covers over battery and other hazardous parts are in place and secure.		Seat belt or restraint is accessible and not damaged, oily, or dirty.	
Load rating plate is present and readable.		Motor runs smooth without sudden acceleration.	
Warning decals and operators manual are present and readable.		Horn works.	
Seat belt or restraint is accessible and not damaged, oily, or dirty.		Turn signal (if equipped) operates smoothly.	
Engine runs smooth and quiet without leaks or sparks from the exhaust.		Lights (head, tail and warning) work and are aimed correctly.	
Horn works.		Gauges and instruments are working.	
Turn signal (if equipped) operates smoothly.		Lift and lower operates smoothly without excess drift.	
Lights (head, tail and warning) work and are aimed correctly.		Tilt operates smoothly without excessive drift or "chatter".	
Gauges and instruments are working.		Control levers are labeled, not loose or binding and freely return to neutral.	
Lift and lower operates smoothly without excess drift.		Battery charge level is OK while holding full forward tilt.	
Tilt operates smoothly without excessive drift or "chatter".		Steering is smooth and responsive, free of excessive play.	
Control levers are labeled, not loose or binding and freely return to neutral.		Brakes work and function smoothly without grabbing. No fluid leaks.	
Steering is smooth and responsive, free of excessive play.		Parking brake will hold the forklift on an incline.	
Brakes work and function smoothly without grabbing. No fluid leaks.		Backup alarm (if equipped) works.	
Parking brake will hold the forklift on an incline.			
Backup alarm (if equipped) works.			

# Safety Committee/Meeting Attendance Roster

Date:

Topic:

Time:

Lead:

**Print Name**

**Signature**

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

4. \_\_\_\_\_

\_\_\_\_\_

5. \_\_\_\_\_

\_\_\_\_\_

6. \_\_\_\_\_

\_\_\_\_\_

7. \_\_\_\_\_

\_\_\_\_\_

8. \_\_\_\_\_

\_\_\_\_\_

9. \_\_\_\_\_

\_\_\_\_\_

10. \_\_\_\_\_

\_\_\_\_\_

11. \_\_\_\_\_

\_\_\_\_\_

12. \_\_\_\_\_

\_\_\_\_\_

13. \_\_\_\_\_

\_\_\_\_\_

# Training Attendance Roster

Date:

Topic:

Time:

Instructor:

**Print Name**

**Signature**

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

4. \_\_\_\_\_

\_\_\_\_\_

5. \_\_\_\_\_

\_\_\_\_\_

6. \_\_\_\_\_

\_\_\_\_\_

7. \_\_\_\_\_

\_\_\_\_\_

8. \_\_\_\_\_

\_\_\_\_\_

9. \_\_\_\_\_

\_\_\_\_\_

10. \_\_\_\_\_

\_\_\_\_\_

11. \_\_\_\_\_

\_\_\_\_\_

12. \_\_\_\_\_

\_\_\_\_\_

13. \_\_\_\_\_

\_\_\_\_\_

**WINERY SAFETY CHECKLIST**

- Yes  No **Aisles** - *Clear and free of obstructions*
- Yes  No **Exits** - *Clearly marked; not blocked inside or out*
- Yes  No **Fire Extinguishers** - *Location is marked; accessible & charged*
- Yes  No **First Aid Kit (s)** - *Accessible and well stocked*
- Yes  No **Evacuation Signage** - *Posted and not blocked*
- Yes  No **Material Safety Data Sheets** - *Accessible and current*
- Yes  No **Electrical Panels** - *Accessible; 3' clearance; not blocked*
- Yes  No **Walking/Driving Surfaces** - *Clean, clear of debris, oil, etc.*
- Yes  No **Electrical Cords & Plugs** - *In good condition; insulation in-tact, grounded*
- Yes  No **Electrical Outlets** - *In good condition, GFCI and splash covers*
- Yes  No **Personal Protective Equipment** - *In use; cleaned/replaced as needed*
- Yes  No **Compressed Gas Cylinders** - *Properly secured; stored in proper location*
- Yes  No **Flammables/Combustibles** - *Flammables in stored in flammable cabinet*
- Yes  No **Acids/Bases** - *Stored separately; on secondary containment*
- Yes  No **Container/Product Labeling** - *Containers are labeled*
- Yes  No **Portable Power Tools** - *In good working order; not damaged; grounded*
- Yes  No **Emergency Lighting** - *In good working order*
- Yes  No **Ladders** - *Inspected before use, used correctly (secured)*
- Yes  No **Air Hoses** - *Proper tips being used; hoses in good condition*
- Yes  No **Housekeeping** - *All work and walk areas are free of debris*
- Yes  No **Emergency Eyewash/Shower** - *Accessible and functioning*
- Yes  No **Wood Pallets** - *Stacked no more than 6' high (fire hazard)*
- Yes  No **Stairways** - *Good condition and kept clear*
- Yes  No **Forklifts** - *Inspected daily and in good condition*
- Yes  No **Equipment Guards** - *In place when machine is running*
- Yes  No **Safety Postings** - *Updated and accessible*
- Yes  No **Spill Kit** - *Adequate for materials present and stocked*
- Yes  No **Lights** - *In working order*
- Yes  No **Racks and Storage Areas** - *Load rating is marked*

Corrective Actions Taken: \_\_\_\_\_

Inspection Completed By: \_\_\_\_\_

Date: \_\_\_\_\_



- a) Badging
- b) Access
- c) Parking


Print Name

Employee Signature

Signature of Winery Representative

Date