

Emergency Action Plan for Medical and Fire Emergencies

NOTE: This action plan is intended to provide guidance in preparing for an emergency event. Common sense and coordination amongst farm staff is the best asset in dealing with complexities of a specific emergency event.

Farm Name _____

Agricultural operation physical address:			
Directions (nearest crossroad):			
Owners name (s):			
Owner mailing address (if different than above):			
Landline tel. #:	Mobile tel. #:	Email Address:	
Owners Vehicle License Plate Numbers:			
Staff name (s):			
Landline tel. #:	Mobile tel. #:	Email Address:	
Staff Vehicle License Plate Numbers:			
Lessee name(s):			
Lessee mailing address:			
Landline tel. #:	Mobile tel. #:	Email Address:	
Lessee Vehicle License Plate Numbers:			
Number of individuals on the farm:	Family:	Staff:	Tenants:

_____ (name of person in charge of safety program) is responsible for this emergency plan and will ensure that all employees understand it and follow it. All new employees will be informed about this plan and told where it will be kept. Any questions on this plan should be directed to _____ (name of person in charge of safety program) at _____ (phone #). A current copy of this plan, farm maps, and the phone and address list is kept in the HazCom binder in the _____, along with at _____ (farm entrance etc.)

Emergency Reporting Procedures

- For fire: call 911 and give the location and provide a fire size up
- Notify the farm manager _____ & landowner _____.
- Contact utilities listed below if they will be impacted (Electric, Water, Gas, BPA Transmission Line etc.)
- For medical emergency: call 911 and give the address. There is a list of street addresses for most farm locations in _____. (location(s) of address list)
- The nearest emergency room is at _____.
- If employee is injured contact their emergency contacts and doctor, found on list in _____.

Emergency Numbers – if 911 is not working properly	
Contact Names	Contact Numbers
Fire / Ambulance	
County Emergency Contact	

Oregon Emergency Management	
County Sheriff	
Local Animal Control	
Local Hospital	
Agricultural Chemical Dealer	
Veterinarian	
Electric Company / transmission lines	
Gas company	
Insurance Company / Agent	
Oregon Poison Control	1-800-222-1222
Neighbors who may be impacted	

Rescue and Medical Duties

- There are first aid kits and fire extinguishers in every vehicle and a trauma kit in _____ (location of trauma kit) for more serious injuries.
 - In case of serious injury, call 911 then administer basic first aid until EMS arrives.
 - If location is not located on a main road or at a registered street address; have someone meet the ambulance at the nearest main road and lead them to the site, if possible.
 - If the location is inaccessible by ambulance, let 911 know.
 - If it is safe to move the victim, you may provide transport for the victim either to the hospital or to meet the ambulance on the way to town.
- Employees with current First Aid training: _____
- _____
- _____

Communication During Emergencies

All communication will be done by cell phone or radio. A list of employee phone numbers is also provided in _____ (location(s) of phone list). In case of fire, _____ (name of person coordinating employees) will make contact with each employee. In case of medical emergency, contact _____ (name and phone number) to provide assistance as needed.

Evacuation Plan: Refer to map and directions to farm locations from nearest major road. Escape routes are available from main farm locations below. See map for location of landing zones if helicopter is needed.

Site or Building	Route/ Exit	Special Procedures

Meet up location: Employees will meet at _____ if sheltering in place or will evacuate off the farm and meet at _____.

If a fire safety zone is needed while working in the field employees will use an area that is bare ground, gravel, safe black, or one shall be created with disc. *Safety zones for crop fires should be 1/10 of an acre for one farm truck and a separation distance of at least 40 ft from flames - more people and more equipment will require a larger safety zone, if area is upslope and downwind of the fire the area and distance should be at least doubled. Firefighters should have a separation distance from flames of at least 4 times the flame height.* System for accounting for personnel and visitors includes the following procedures (with a final property sweep if possible): _____

Site Information	
Farm Name	
Farm Physical Address	
Township / Sector / Quadrant	
GPS Coordinates (Latitude / Longitude)	
Chemical Storage Information (if different)	
Chemicals of concern (Diesel, propane etc.)	
Address	
Township / Sector / Quadrant	
GPS Coordinates (Latitude / Longitude)	
Nearest Landing Zone for Air Transport	
Address	
Township / Sector / Quadrant	
GPS Coordinates (Latitude / Longitude)	

Emergency Supply Cache: There is a cache of emergency supplies, food, water, Gatorade, and livestock feed located _____.

On site Emergency Information Box is located _____ where emergency personal can access.

Off site Emergency Information Box is located _____ where emergency personal can access.

Equipment Shut Down: Critical equipment will be shut down safely and placed a safe distance away from the emergency. If floods are a concern equipment will be placed at _____ or high ground where available. If a wildfire is occurring it will be placed at _____ or in an area that has been determined to be a safety zone. Equipment staging and personnel are to stay away from chemical storage areas, which are marked with chemical hazard placards and locked.

Emergency shut off procedures for utilities, equipment, and processes. The following must be shut off prior to evacuating:

Utilities: _____

Equipment: _____

Map or Sketch Suggestion: Maps may be obtained through the local Farm Service Agency or aerial imagery from google. Use maps that will show first responders where fields are located if needed in an emergency. Google Earth Pro also allows for the creation of free maps. Reviewing farm maps with local first responders and locating maps in a clearly labeled, accessible container is advised. A good container can be a PVC tube with caps secured to a fence post or sign on entry to the farm. If your operation is large enough consider a larger master map with additional zoomed in maps of individual fields or zones.

Suggested symbols to write on maps

– be sure to put legend on maps

- (G) - Gas shutoff
- (E) - Electrical shutoff
- (AST) - Above ground fuel storage tank
- (UST) - Underground fuel storage tank
- (LP) - Liquid propane
- (CG) - Compressed gas (oxygen, acetylene)
- (AA) - Animal areas
- (MS) - Manure storages (liquids and solids)
- (S) -Silos
- (OsEPL) - Off-site emergency plan location
- (+) First Aid Kit
- (FEXT) – Fire Extinguisher
- (ESK) – Emergency Spill Kit
- (GB 1) - Grain Bin and Assigned Number

- Wells and/or municipal water supply, hydrants, ponds, streams
- Sprinkler location and fire set up locations
- Septic tanks and wastewater systems
- Drainage ditches, culverts, surface drains
- Identify where chemicals, fertilizers, and the emergency spill kit are stored.
- Note fire concerns
- Location of first aid kits, fire extinguishers, and fire suppression equipment
- Overhead and buried power lines
- Location of key box for locks to gates
- List of silos and grain bins with size and capacity by their individual numbers
- Indicate buildings or fields where livestock are kept
- Show fuel location for refueling fire suppression equipment and as a fire hazard
- Draw evacuation routes to safety zone
- Meet up location and cached supplies

What to put on farm map:

- Buildings/structures location - Indicate locations of doors.
- Barns, houses, shops, outbuildings, grain bins
- Roads, driveways, fences, and gates.

Farm Map

<p>Legend</p> <p>AA: Animal Area</p> <p>AST: Aboveground fuel storage tank</p> <p>B-#: Barn</p> <p>E: Electrical shutoff</p> <p>ER-#: Evacuation route</p> <p>ESK: Emergency spill kit</p> <p>F-#: Feedlot</p> <p>FEXT: Fire extinguisher</p> <p>H-#: House</p> <p>MS: Manure storage</p> <p>P-#: Pasture</p> <p>WS-#: Water Source</p> <p>+ : First Aid kit</p>

EMERGENCY RESPONSE PLAN

Name: John Smith 250-555-1234

Property Number: 5555 t

LEGEND

Access:

Evacuation Routes: →

Primary Residence:

Priority Structures (1 is top priority):

Open Water Sources:

Water Connection Points:

Livestock:

Equipment Storage:

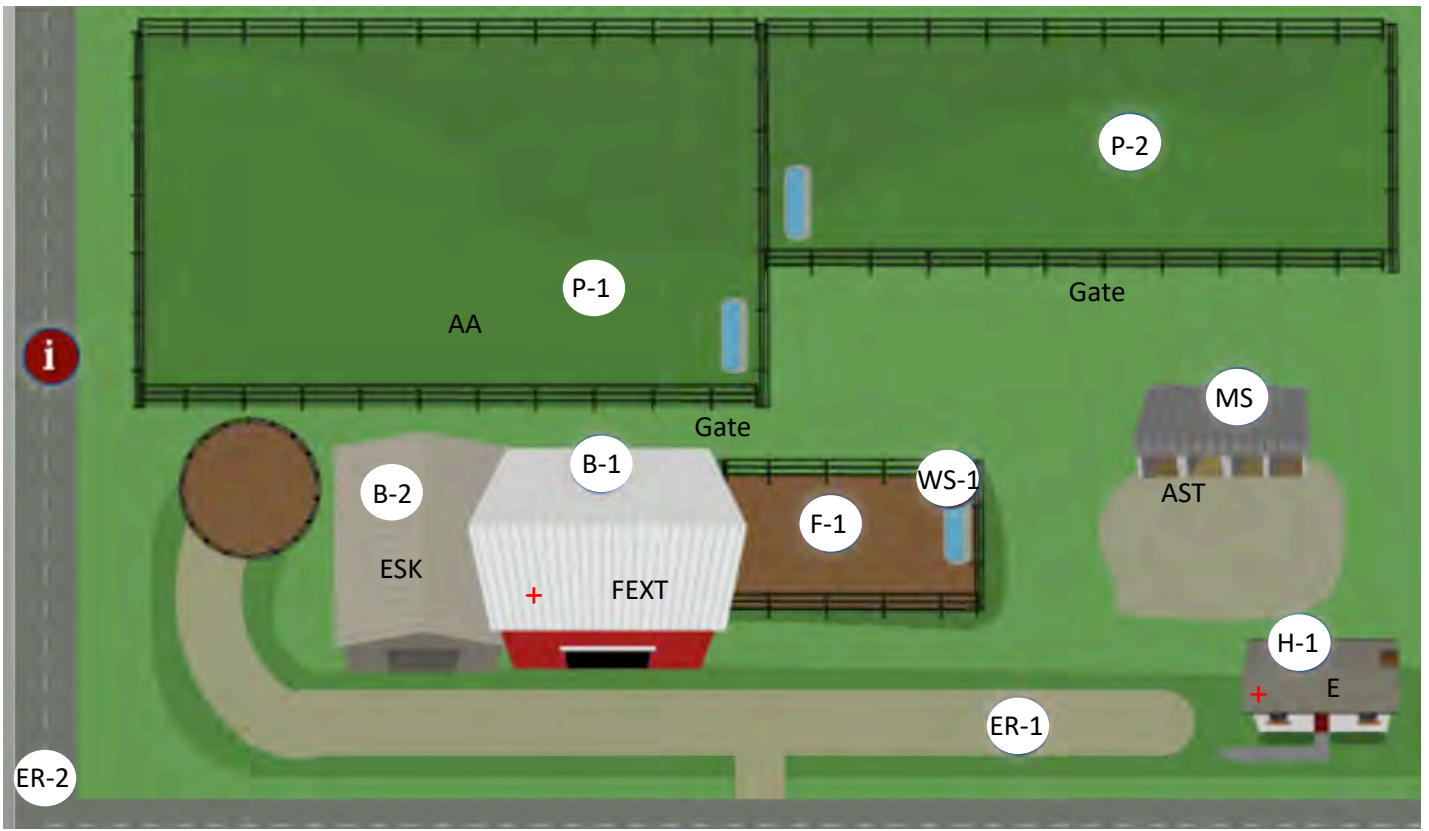
Hydro Lines:

Gas Lines:

Hazardous Materials:

Safe Zones:

NOTES: _____



Place your map on this page, these are examples of hand drawn / computer generated maps and free imagery from Google that has been edited using Google Earth Pro, a free mapping software that can be downloaded.

Firefighting Action Plan (Template)

NOTE: Employees are NOT expected or required to engage in firefighting of any kind as a duty of their employment. Employees who choose to fight fire may disengage from the fire at any time.

All employees will be made generally aware of firefighting suppression plan before engaging the fire. In addition, they will have an understanding of their basic roles and responsibilities.

Any employees who engage in firefighting activities will adhere to the following policies:

I. Age limit

- a. Employees must be 18 or older to fight fire beyond the incipient (initial) stage
- b. Employees younger than 18 must receive:
 - i. Fire extinguisher training annually (Online OSHA Video or live training)
 - ii. Training for an emergency where young employee is the first on the scene of a fire

II. Types of Firefighting

- a. *Structural Fires*: Employees will NOT engage in interior structural firefighting beyond the incipient stage.
- b. *Equipment Fires*: Employees will NOT engage in fighting fire on burning equipment beyond the incipient stage; they may use water on the fire from a safe distance upwind of the fire in an effort to keep it from spreading beyond the equipment. If the fire is knocked back to its incipient stage, a fire extinguisher may be used to completely extinguish the fire.
- c. *Rangeland/Cropland*: Employees who have been trained in a Basic Wildland Fire Training and are wearing the proper PPE may engage in firefighting.

III. Stages of Firefighting and Training Required

- a. *Incipient*: Fire that is in its initial stages of growth and can be extinguished with one to two fire extinguishers. Employees must train on fire extinguisher use annually.
- b. *Freeburning*: Fire that has grown beyond the capabilities of a fire extinguisher. Employees must have participated in a Basic Wildland Fire Training course with an annual refresher each year after the initial training.
- c. *Mop-up*: Fire that has been mostly extinguished but hot spots still exist. Employees must have participated in a Basic Wildland Fire Training course with an annual refresher each year after the initial training.

IV. Employee Tracking and Communication During a Fire Emergency: In the event of a fire

communication will be maintained by calling or texting and employees will be tracked as follows:

- a. Employees who have not been trained in basic wildland firefighting need to immediately leave the scene if the fire is at their current location. After any fire call, _____ (name of person in charge of personnel) will call each employee to provide further instructions for alternative duties or to be sent home.
- b. If a fire is beyond the ability of trained personnel to contain, move all people and, if possible, all equipment to the established safe zone. Shut down all equipment and continue to monitor the situation until you can safely resume firefighting or leave the area.

Fire Prevention Plan

Farm Name _____

Preventing Equipment-Generated Fires

Equipment will be inspected (*monthly etc.*) _____ by (*names*) _____

Extinguishers are mounted on all heat producing equipment, including (*combine etc.*) _____

Debris will be blown off of combine (*daily, hourly, etc.*) _____ by _____

Debris will be blown off of tractors (*daily, every hour, etc.*) _____ by _____

_____ (*names*) have been trained to operate combines at remote worksites

_____ (*names*) can operate tractors and trucks at remote worksites

Maintenance of Fire Extinguishing Equipment

The following people have been trained annually on fire extinguisher use _____

Fire extinguishers have been serviced by a certified inspector (*name*), _____, on (*date*) _____

_____ (*names*) know how to start fire suppression pumps

located _____ and can operate safely during a fire

Pumpers have been inspected on (*date*) _____ by (*name*) _____

Pumpers will be tested (*weekly etc.*) _____ from (*date*) _____ through _____ by _____

Water and fuel levels in all suppression equipment are kept full and checked (*weekly*) _____ by _____

Disk with working tractor is kept on site of farming operations and (*names*) _____

know how to safely operate it and put in a fire line. Additional fire resources are listed later in this plan.

Criteria to Terminate Work with Heat Producing Equipment

Establish criteria that you will use to terminate work with heat producing equipment taking into account relative humidity (RH), temperature, winds, and fuel conditions (*for example* $RH \leq 30\%$, $temp \geq 86^\circ F$, $winds \geq 20\text{ mph}$). One approach is to decide not to harvest under low RH and high temperatures once wind speeds exceed a given threshold (often winds are greatest in the afternoon when RH is at its lowest at 4 pm). Criteria can also take into account producer and harvest crew experience, field topography and surrounding terrain, and availability of on farm fire suppression equipment. Refer to the fire prevention guide for more details.

1. _____

2. _____

3. _____

4. _____

Risk Reduction

Reduce Flammable Materials

Actions that will be taken near critical farm infrastructure:

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Mitigate Ember Traps

Ember traps have been permanently covered at the following locations with screening (0.5 - 0.25 inch or less):

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Ember traps at the following locations will be temporarily covered using tarps or plastic sheeting:

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Sprinkler Protection:

Priority structures for sprinkler protection on the farm are as follows (in order of priority):

Sprinkler equipment can be found _____ and includes:

Back up water / cisterns can be found _____.

Asset Protection

The following farm and rangeland assets are the most critical for day to day operations to keep livestock safe, on the range, and reduce damage to farm infrastructure (*grain bins, augers etc.*):

- 1. _____
- 2. _____
- 3. _____

4. _____

The following actions will be taken to reduce risk at those locations:

1. _____

2. _____

3. _____

4. _____

Maintained fuel breaks in strategic areas (*maintained roads, two tracks, mowed areas, annually disked areas, or vegetative green strips*) on the farm include (*list type of fuel break and location*):

1. _____

2. _____

3. _____

4. _____

Procedures for Reporting Fires

In the event of a fire, 911 will be reached and the address or location of the fire will be given (*street addresses preferred*). A list of addresses for most locations on the farm is located _____ (*location of address list*). However, other descriptors can also be used to help other farmers get to the location quicker (*e.g., the Smith Place, etc.*). In addition, others to be contacted include, in order of priority:

Procedures for Engaging Wildfires

When a fire occurs at the work site it shall be initially controlled with fire extinguishers if in the incipient stage. If it is already beyond the incipient stage or grows into a larger surface fire than those not trained must leave immediately. The following employees have received firefighting training and may engage in suppressing a freeburning fire: _____

Additional procedures or considerations for employees engaging in wildfire: _____

Wildfires in dryland crops produce flame lengths 7 to 16 ft at the head of the fire, making suppression with shovels and other hand tools dangerous and ineffective unless at the heel or flanks of the fire where intensity is often lowered. Tractors and discs are needed to create effective fire breaks. It is encouraged for trucks spraying water to be in the black (assuming the black is clean without unburned patches) rather than in unburned fuels in the path of the fire where a fast moving grass or wheat fire can overtake vehicles.

<p><u>Before entering an area to fight fire, follow LCES procedures.</u></p> <p>Establish a LOOKOUT</p> <p>Set up COMMUNICATION</p> <p>Determine an ESCAPE ROUTE</p> <p>Designate a SAFETY ZONE based on the conditions in the area.</p>

If a fire safety zone is needed while working in the field employees will use an area that is bare ground, gravel, safe black, or one shall be created with disc. Two escape routes will be maintained to the safety zone during wildfire suppression and during harvesting operations. *Safety zones for most crop fires should be 1/10 of an acre for one farm truck and a separation distance of at least 40 ft from flames - more people and more equipment will require a larger safety zone, along with if area is upslope and downwind of the fire (area should be at least doubled if on a 20-40% slope or under heavy winds) - safety zones upwind, on flat ground, and not in front of the main fire front are the safest.*

Identifying Hazardous Conditions

Before a fire:

Potential fire sources on the property include the following (*roads, power lines, wind turbines etc.*):

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Heavy fuel loadings of annual grasses (*medusahead, cheatgrass, etc.*) are at the following locations:

Areas on the farm that should be avoided during a wildfire include (*location and nature of hazard*):

Terrain features on the farm that could create dangerous fire behavior include (*steep slopes, canyons, etc.*):

Considerations that will be taken during a fire:

- a. Fire size and speed of growth - is the fire small or several acres in size? Is it being pushed by winds or burning quickly up steep slopes?
- b. Fuel load of the area you are planning to enter - unharvested crop, harvested crop, rangeland, or rocky scab area? Are annual grasses present? Scotch broom or other volatile plants?
- c. Weather conditions - wind speed and direction, temperature, humidity, atmospheric stability?
- d. Terrain - is the fire burning uphill, downhill, into a steep canyon, or on relatively flat terrain?
- e. Potential communication barriers - does terrain make cell reception unreliable?

Safety Procedures at the Worksite

When there is the potential for a fire to start accidentally due to the nature of the work being done or due to weather conditions, crews will follow these steps:

- a. Establish two escape routes from your work location to a safety zone
- b. Identify safety zones that are permanent (area with rock or gravel with little fuel) or have been created (disked) – a safety zone is an area where you can safely sit and watch the fire go by
- c. During harvest: Each field will have a designated safety zone and all employees will be made aware of its location. If no natural safety zone exists, one will be created by a tractor and disk. All equipment will

be parked at night in the safety zone, similar location devoid of fuels, or at _____

Response Equipment and resources to aid in fire suppression

Equipment Type	Number at (location):	Number at nearby location:
Tractor, HP _____, bucket (y/n) ____		
Dozer, HP _____		
Disc / plow for firebreak construction		
Livestock trailer for _____ # of _____ (type of animals)		
Pumper units with _____ gallons		
Portable water pump		
Utility trailer, large enough to haul _____		
Pickup Trucks		
Passenger Car		
UTV / ATV with pumper		
UTV / ATV no pumper		
Fire hose		
Sprinkler Kits		
Garden hoses		
Generator		
Personnel with wildfire training		

Water sources:

Water Source	Capacity	Electrically powered, gravity feed, or portable gas pump needed	Location

Other additional measures to prevent wildfires on your property or equipment: _____

Fire Size Up

When fire is reported to 911 and others the following fire details should be included:

Fire Location (street address is preferred):

Road Access:

Is the road flagged or will someone meet first responders at a set location?

Size: 100 by 100 ft 1 acre (size of football field) 5 acres 5-10 acres Greater than 10 acres

Fuels Burning: grass, brush, harvested wheat, unharvested wheat, no till residue on fallow, other crop, slash, timber, duff, logs, other?

Fuels adjacent to fire: grass, brush, harvested wheat, unharvested wheat, no till residue on fallow, other crop, slash, timber, duff, logs, other?

Character of Fire: Smoldering Creeping Running Torching Crowning Spotting

Flame Lengths: Under 2 ft 2-4 ft 4-8 ft 8-11 ft over 11ft

Percent Slope: 0-30 30-45 45-60 60+

Position on Slope: Bottom 1/3 Middle 1/3 Top 1/3

Aspect: North South East West

Wind Speed (mph): 0-5 5-10 10-15 Over 15 Over 25 35+

Wind Direction: North South East West Upslope
 Up Canyon Down Slope Down Canyon

Spread Potential: None Low Moderate High Very High

Values at Risk: Residences Infrastructure Cultural / Historical Commercial Power Lines
 Livestock Public Safety / Travel Stored hay Stored grains Farm equipment

Are closures or evacuations needed? Where is the fire anticipated to go given current winds and terrain?

Hazards: Power lines Wind turbines Oil/gas line or tanks on farm Terrain
 Communication Towers Traffic (especially interstates and highways) Hazmat (farm chemicals)

Apparent Cause: Lightning Arson Equipment Roadside start

- *Protect origin area of the fire for fire investigation*

Template created February 2020 by Jacob Powell with OSU Extension Service in collaboration with Oregon wheat producers. Updated January 2021. © 2020 Oregon State University. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Oregon State University Extension Service offers educational programs, activities and materials without discrimination on the basis of race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, familial/parental status, income derived from a public assistance program, political beliefs, genetic information, veteran's status, reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs.) Oregon State University Extension Service is an AA/EOE/ Veterans/Disabled.



PPE hazard assessment and certification

Use this sample form to identify hazards and to certify (document in writing) that you completed the assessment. Keep it on file in your workplace.

Survey your workplace as often as necessary to identify safety and health hazards that require personal protective equipment.

General information

Department:

Location:

Jobs included in the assessment:

Person performing assessment:

Assessment date:

Hazard assessment certification

I certify that I performed this hazard assessment on the date indicated.

Signed: _____ Date: _____
Type name here

PPE From the attached assessment worksheets	Required?	
	Yes	No
Fall protection	<input type="checkbox"/>	<input type="checkbox"/>
Torso protection	<input type="checkbox"/>	<input type="checkbox"/>
Eye and face protection	<input type="checkbox"/>	<input type="checkbox"/>
Head protection	<input type="checkbox"/>	<input type="checkbox"/>
Foot protection	<input type="checkbox"/>	<input type="checkbox"/>
Leg protection	<input type="checkbox"/>	<input type="checkbox"/>
Hand protection	<input type="checkbox"/>	<input type="checkbox"/>
Hearing protection	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory protection	<input type="checkbox"/>	<input type="checkbox"/>

PPE hazard assessment and certification

Fall protection

All employees performing construction work must be protected from fall hazards when working on unguarded surfaces 6 feet or more above a lower level or at any height above dangerous equipment.

Fall protection systems must be provided, installed, and used according to the criteria in 1926.502(d), and 437-003-0502 in Division 3/M, Construction/Fall Protection.

All employees performing general industry work must be protected from fall hazards when working on unguarded surfaces 4 feet or more above a lower level or at any height above dangerous equipment.

Fall protection systems must be provided, installed, and used according to the criteria in 1910.28, and 1910.29 in Division 2/D, General Industry/Walking-Working Surfaces.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Unguarded surfaces more than 6 or 4 feet above a lower level or any height above dangerous equipment

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe - life threatening

PPE required

- Personal fall arrest system
- Personal fall restraint system
- None required

PPE hazard assessment and certification

Torso protection

Clothing that is appropriate to the work performed and conditions encountered must be worn.

Appropriate high temperature protective clothing must be worn by workers who are exposed to molten metals or other substances that can cause burns.

Loose sleeves, ties, lapels, cuffs, or other loose clothing must not be worn near moving machinery.

Clothing saturated or impregnated with flammable liquids, corrosive or toxic substances, irritants, or oxidizing agents must be removed immediately and not worn again until properly cleaned.

Rings, wristwatches, earrings, bracelets, and other jewelry that might contact power driven machinery or electric circuitry must not be worn.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Extreme temperatures
- Hot splashes from molten metal and other hot liquids
- Impacts from tools, machinery, and materials
- Hazardous chemicals
- Ionizing radiation

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe - life threatening

PPE required

- Chemical resistant coveralls
- Cut-resistant sleeves, wristlets
- Flame-resistant jacket/ pants
- High visibility garment
- Insulated jacket, hood
- Lab coat or apron/ sleeves
- Long sleeves/ apron/ coat
- Static control coats/ coveralls
- None required

PPE hazard assessment and certification

Eye and face protection

Employees must use appropriate eye or face protection when exposed to flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

Eye protection must have side protection when there is a hazard from flying objects. Detachable side protectors meeting ANSI Z87.1 requirements are acceptable.

Employees who wear prescription lenses must wear eye protection that fits over the lenses without disturbing the proper position of the prescription lenses, or ANSI-approved prescription lenses with side shields.

Employees who are exposed to potentially injurious light radiation must use filter lenses that have a shade number appropriate for the work being performed.

Employees whose work exposes them to laser beams must wear laser safety goggles that protect for the wavelength of the laser.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Dust, dirt, metal, or wood chips from chipping, grinding, sawing, hammering, and from power tools
- Chemical splashes from corrosive substances, hot liquids, and solvents
- Objects such as tree limbs, chains, tools, and ropes that swing into the eyes or face
- Radiant energy from welding and harmful rays from lasers or other radiant light

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required

- Chemical goggles/face shield
- Chemical splash goggles
- Glasses/goggles w/face shield
- Glasses/goggles w/face shield
- Impact goggles
- Leather welding hood
- Safety glasses w/side shields
- Safety goggles w/face shield
- Welding goggles
- Welding helmet/shield w/safety glasses and side shields
- None required

PPE hazard assessment and certification

Head protection

Employees must wear hardhats when they work where there is a potential for head injuries from falling or flying objects.

Employees must use hard hats designed to reduce electrical shock hazards when they're working near exposed electrical conductors that could contact their heads.

Employees who are exposed to power-driven machinery or to sources of ignition must wear caps or other head covering that completely covers their hair.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Overhead objects that could fall
- Exposed pipes or beams (less than 6.5 feet overhead)
- Energized electrical equipment

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required:

Head protection that meets ANSI Z89.1 requirements:

- Impact Type I
- Impact Type II
- Electrical Class G (general)
- Electrical Class E (electrical)
- Electrical Class C (conductive)
- None required

PPE hazard assessment and certification

Foot protection

Employees must wear protective footwear when they work where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or electrical hazards.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Heavy objects such as barrels or tools that might roll onto or fall on a worker's feet
- Sharp objects such as nails or spikes that could pierce the soles or uppers of ordinary shoes
- Molten metal
- Hot, wet, or slippery surfaces
- Energized electrical equipment

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required

- Steel toe safety shoes
- Leather boots or safety shoes w/metatarsal guards
- Slip resistant soles
- Puncture resistant soles
- Chemical resistant boots/covers
- Rubber boots/closed top shoes
- Insulated boots or shoes
- None required

PPE hazard assessment and certification

Leg protection

Workers exposed to hot substances or dangerous chemical spills must wear leggings or high boots made of leather, rubber, or other suitable material.

Workers who use chain saws must wear chaps or leg protectors that cover the leg from the upper thigh to mid-calf. Leg protectors must be made from material that resists cuts from the chain saw.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Hot substances
- Dangerous chemicals
- Cuts from chain saws

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required

- Leggings or boots – penetration resistant
- Leggings or boots – chemical resistant
- Leggings or boots – molten metal resistant
- Chaps or leg protectors – resists cuts from chain saws
- None required

PPE hazard assessment and certification

Hand protection

Employees must use appropriate hand protection when their hands are exposed to harmful substances, severe cuts or lacerations, abrasions, punctures, chemical burns, thermal burns, and extreme temperatures.

Employers must base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the task, conditions present, duration of use, and the hazards identified.

Employees must not wear gloves when their hands could be caught in moving parts.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Harmful or hazardous temperatures
- Chemicals that can be absorbed into the skin or cause burns
- Energized electrical equipment
- Mechanical equipment that can cause bruises, abrasions, cuts, punctures, fractures, or amputations

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required

- Leather/cut resistant gloves
- General-purpose work gloves
- Chemical resistant gloves
- Insulated gloves
- Heat/flame resistant gloves
- Latex or nitrile gloves
- Electrician's insulated rubber gloves;
- Cotton, leather, or anti-vibration gloves
- None required

PPE hazard assessment and certification

Hearing protection

Hearing protectors (plugs or muffs) must be worn by workers exposed to an 8-hour time-weighted average of 85 decibels or greater and by workers who have experienced a threshold shift.

Department:

Location:

Jobs included in the assessment:

Potential hazards

Noise levels that exceed those shown in the table below are hazardous:

Hours of exposure	Sound level (dBA)
8.0	90
6.0	92
4.0	95
3.0	97
2.0	100
1.5	102
1.0	105
0.5	110
0.25	115

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required

- Ear plugs
- Ear muffs
- None required

PPE hazard assessment and certification

Respiratory protection

Appropriate respirators are required when workers are exposed above permissible exposure limits (PEL) for specific air contaminants, listed in 437-002-0382, Oregon Rules for Air Contaminants; see also 1910.134, Respiratory Protection.

Department:

Location:

Jobs included in the assessment:

Potential hazards

- Nuisance dust/mist
- Welding fumes
- Asbestos
- Pesticides
- Isocyanates
- Paint spray
- Organic vapors
- Acid gases
- Oxygen deficient/ toxic or IDLH atmosphere

Likelihood of injury without PPE

- High
- Medium
- Low

Severity of a potential injury without PPE

- Minor first aid required
- Serious, not life threatening
- Severe – life threatening

PPE required

Air-purifying respirators

- Filtering face piece (dust mask)
- Particulate-removing respirator
- Gas-and-vapor-removing respirator
- Combination aerosol filter/gas or vapor-removing respirator
- Powered air-purifying respirator

Atmosphere-supplying respirators

- Supplied-air respirator
- Self-contained breathing apparatus (SCBA)
- Combination self-contained breathing apparatus and air-line respirator
- Combination air-purifying and atmosphere-supplying respirators
- None required