Oregon Heat Illness Prevention & Wildfire Smoke Plan

LITHIA & driveway
NYSE:LAD

Heat Illness Prevention Plan

for Oregon

Section 1: Purpose

This plan's purpose is to protect Lithia & Driveway employees from the hazards of hot working environments in indoor and outdoor environments and to comply with Oregon OSHA's Heat Illness Prevention rules.

This plan will be reviewed annually and, if necessary, updated.

The plan shall be made available to all employees, who may request a copy by contacting their General Manager or Service Manager. Employees also may review a copy of the plan at:

These procedures describe the minimum essential heat illness prevention steps applicable to most work settings. In work environments where there is a higher risk for heat illness—such as during a heat wave or other severe working or environmental conditions—greater caution and measures must be employed to protect our employees.

Section 2: Scope

This plan implements efficient and safe work practices that will prevent indoor-and-outdoor, heat-related illnesses among employees in all workplace settings. It will be used for new employee training and for the annual refresher employee training. All employees potentially exposed to hot working environments are subject to this plan.

Factors to consider for customizing this plan to specific worksite(s) include:

- The size of the crew and length of the work shift
- The anticipated/predicted heat index for the day/week
- The use of personal protective equipment (PPE) that may increase the body's heat burden

Work activities that could potentially expose employees to heat-related hazards include work conducted outdoors or in non-air-conditioned spaces, which includes:

Section 3: Background

Every year, people die in occupational settings from exposure to excessive heat and many more suffer a heat-related illness; fortunately, most of these outcomes are preventable. Heat-related illnesses can happen if workplace activities in a hot environment overwhelm the body's ability to cool itself. This becomes more likely if any of the risk factors listed in Section 4 (below) are present.

Section 4: Risk Factors

The following are **Environmental Risk Factors** for heat illness:

- Air temperature above 90 degrees Fahrenheit (F), or 32.2 degrees Celsius (C)
- Relative humidity above 40 percent
- Radiant heat from the sun and other sources
- Conductive heat sources, such as dark-colored work surfaces
- Lack of air movement
- Physical effort needed for the work
- Use of nonbreathable protective clothing and other PPE

The following are **Personal Risk Factors** for heat illness:

- Lack of acclimation to warmer temperatures
- Poor general health
- Dehydration
- Alcohol consumption
- Caffeine consumption
- Previous heat-related illness
- Use of prescription medications that affect the body's water retention or other physiological responses to heat, such as beta blockers, diuretics, antihistamines, tranquilizers, and antipsychotics

Employees are responsible for knowing and educating themselves about their own personal risk factors that may increase their chance of suffering heat-related illnesses.

Section 5: NIOSH Heat Stress App

Oregon OSHA suggests that employers have their supervisory and management employees download the National Institute for Occupational Safety and Health (NIOSH) Heat Stress app.[1]

Federal OSHA has provided training on how to use the app. It is required that all supervisory and management employees watch the video and all other employees that download the Heat Stress app should watch a short video located on the Oregon OSHA website: https://osha.oregon.gov/media/videos-online/Pages/heat-safety-app-tutorial.aspx.

[1] "OSHA-NIOSH Heat Safety Tool App," Centers for Disease Control and Prevention, Aug 2022, https://www.cdc.gov/niosh/topics/heatstress/heatapp.html.

Lithia & Driveway will not be using the app to determine the heat index in buildings that do not have mechanical ventilation and a cooling system. Our management will directly measure the temperature and humidity at the same time and location when the space is, or will be, occupied by employees and determine the indoor heat index.

Section 6: Heat-Related Illnesses

Heat Rash

Heat rash is the most common health problem in hot work environments. It is caused by sweating and looks like a red cluster of pimples or small blisters. Heat rash usually appears on parts of the body that overlap or rub other parts of the body, such as in the groin area, under the arms or breasts, and in knee or elbow creases. If an employee has symptoms of heat rash, please do the following:

- Provide a cooler, less humid work environment, if possible.
- Advise the employee to keep the affected skin area dry and not to use ointments and creams that make the skin warm or moist (this can make the rash worse).

Heat Exhaustion

Heat exhaustion can best be prevented by being aware of one's physical limits in hazardous environments on hot, humid days. The most important factor is to drink enough clear fluids—especially water, and not alcohol or caffeine—to replace those lost to perspiration.

Signs and symptoms of heat exhaustion typically include:

- Profuse sweating
- Weakness and fatigue
- Nausea and vomiting
- Muscle cramps (associated with dehydration)
- Headache
- Light-headedness or fainting (Fainting or loss of consciousness is potentially serious and should be treated as a medical emergency.)

When you recognize heat exhaustion symptoms in an employee, you must intervene, stop the activity, and move the employee to a cooler environment. Cooling off and rehydrating with water (or electrolyte-replacing sports drinks) is the cornerstone of treatment for heat exhaustion. If the employee resumes work before their core temperature returns to normal levels, symptoms may quickly return.

If there is no intervention and the body's temperature regulation fails, heat exhaustion can rapidly progress to heat stroke, which is a life-threatening condition.

Heat Stroke

Heat stroke requires immediate medical attention to prevent permanent damage to the brain and other vital organs that can result in death. The affected person may stop sweating, become confused or lethargic, and may even have a seizure.

The internal body temperature may exceed 106 degrees Fahrenheit. Signs and symptoms of heat stroke typically include:

- Absence of sweating
- Dry skin
- Agitation or strange behavior
- Dizziness, disorientation, or lethargy
- Seizures or signs that mimic those of a heart attack

If heat stroke is suspected, ensure that emergency responders are summoned immediately! While waiting for emergency responders to arrive, it is critical that you do the following:

- Cool the employee.
- Move the employee to an air-conditioned environment or a cool, shady area.
- Help the employee remove any unnecessary clothing.
- Do not leave the employee unattended.

Heat Cramps

Heat cramps usually affect workers who sweat profusely during strenuous activity. Sweating depletes the body's salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Rhabdomyolysis

Rhabdomyolysis is a medical condition associated with heat stress and prolonged physical exertion, resulting in the rapid breakdown, rupture, and death of muscle. When muscle tissue dies, electrolytes and large proteins are released into the bloodstream that can cause irregular heart rhythms and seizures and damage the kidneys.

Symptoms of rhabdomyolysis include:

- Muscle cramps/pain
- Abnormally dark (tea or cola colored) urine
- Weakness
- Exercise intolerance
- Asymptomatic

Heat Syncope

Heat syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Symptoms of heat syncope include:

- Fainting (short duration)

- Dizziness
- Light-headedness during prolonged standing or suddenly rising from a sitting or lying position

For more information about these heat-related illnesses, visit the Centers for Disease Control and Prevention.

Heat-Related Illness Temperatures Chart

The chart below provides information about the risk, at certain temperatures, of suffering a heat-related illness:
Note: Heat-related illnesses can occur at a heat index of less than 91 degrees Fahrenheit.

Heat Index	Risk Level	Protective Measures
Less than 91°F (33°C)	Lower (caution)	Basic health and safety planning
91°F to 104°F (33°C to 39°C)	Moderate	Implement precautions and heighten awareness
103°F to 115°F (39°C to 46°C)	High	Additional precautions to protect workers
Greater than 115°F (46°C)	Very high to extreme	Even more aggressive protective measures

Adapted from Criteria for a Recommended Standard Occupational Exposure to Heat and Hot Environments Revised Criteria 2016 DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention National Institute for Occupational Safety and Health

Section 7: Best Practices for Prevention

Below is a list of best practices to prevent heat-related illnesses:

- Gradually increase workloads and allow more frequent breaks during the first week of work so that employees become acclimatized to higher temperatures—especially those who are new to working in the heat or who have been away from that work for a week or more.
- Encourage employees to frequently drink small amounts of water before they become thirsty to stay hydrated. During moderate activity, in moderately hot conditions, employees should drink about 8 ounces of liquid every 15 to 20 minutes.
- Employees can monitor their hydration levels with a urine chart. Urine should be clear or slightly colored; dark urine is a warning sign! Please refer to Section 8 to view the Urine Color Chart.
- Encourage employees to eat regular meals and snacks as they provide enough salt and electrolytes to replace those lost through sweating, as long as enough water is consumed.
- Provide a buddy system where employees encourage each other to drink water, use shade to stay cool, and to watch each other for symptoms of heat-related illness.
- Educate employees that drinking extreme amounts of water can also be harmful—for example, more than 12 quarts in a 24-hour period.
- Schedule frequent rest periods with water breaks in shaded or air-conditioned recovery areas. Note that air conditioning does not result in loss of heat tolerance.
- Ensure employees are educated on the signs of heat-related illnesses, and encourage them to report immediately should they or their coworkers show symptoms.

- Monitor weather reports daily and reschedule jobs with high-heat exposure to cooler times of the day, if possible. Be extra vigilant when air temperatures rise quickly. When possible, schedule routine maintenance and repair projects for the cooler times of the year.
- Provide the following:
  - Shade or cool/air-conditioned areas for breaks.
  - Containers that hold ice or otherwise keep drinking water and beverages cold.
  - Chilled beverages, such as electrolyte type sports drinks (discourage caffeine consumption).
  - Heat-reflective work clothing, such as light-colored, breathable uniforms.
  - Evaporative accessories (cooling neck wraps, head bands).
  - Cooling vests designed to safely use ice packs.
  - Ventilated PPE (high-visibility garments or powered air-purifying respirators, if appropriate).
  - Cellphone text orders from supervisors reminding employees to stop and rest in shade and drink.

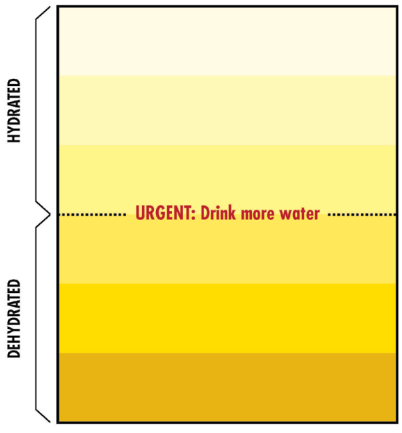
For employees who work in buildings or structures that do not have a mechanical cooling system, **we will measure the relative humidity and temperatures inside these structures** and inform employees of the heat index and the risk of experiencing a heat-related illnesses based on the Heat-Related Illness Temperatures Chart in Section 6 of this plan.

Section 8: Water

We will furnish cool water for our employees. Cool or cold water is located throughout the work area(s).

Water Locations

Locations include:



Urine Color Chart

Refer employees to the Urine Color Chart at left to ensure that they are adequately hydrated.[2]

Remember: Although this chart is a good indicator of hydration status, urine color can also be affected by diet, medications, illnesses, or disorders.

[2] Jacklitsch, Brenda, et al. "Occupational Exposure to Heat and Hot Environments," Centers for Disease Control and Prevention and the National Institute for Occupational Safety and Health, Feb 2016, p. 154, https://www.cdc.gov/niosh/docs/2016-106/pdfs/2016-106.pdf.

Section 9: Shade

For employees working outdoors, an employer must furnish shade when the heat index is equal to or exceeds 80 degrees Fahrenheit and the amount of shade must be enough to accommodate the number of employees who are on a heat illness prevention rest break.

We will fulfill this requirement by:

Section 10: Mandatory Employee Training Requirements

Under Oregon OSHA's Heat Illness Prevention rules, the following are the topics that Lithia & Driveway employees are required to be trained before working in hot environments:

- The environmental and personal risk factors (see previous sections for examples)
- Our procedures for complying with the requirements of this standard, include, but are not limited to:
  - Our responsibility to provide water, heat index information (including the risks to experiencing a heat-related illness), shade, preventative rest breaks
  - Access to first aid
  - How employees can exercise their rights under this standard without fear of retaliation.
- The importance of frequent consumption of small quantities of water, up to 32 ounces per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties
- The concept, importance, and methods of the acclimatization plan pursuant to the employer's procedures
- The different types of heat illness, the common signs and symptoms of heat illness, and the appropriate first aid and emergency response to the different types of heat illness, including how heat illness may progress quickly from mild signs and symptoms to a serious and life-threatening condition (see above)
- The importance for employees to immediately report to the employer, directly or through the employee's supervisor, signs and symptoms of heat illness in themselves or in others
- The effects of nonoccupational factors (drugs, alcohol, obesity, etc.) on tolerance to occupational heat stress

Acknowledgment: I have been trained in the required elements listed in this section.

Employee Printed Name:

Employee Signature: _____ Date:

Section 11: Acclimatization

According to the Centers for Disease Control and Prevention (CDC), acclimatization is the beneficial physiological adaptations that occur during repeated exposure to a hot environment. These physiological adaptations include:

- Increased sweating efficiency (earlier onset of sweating, greater sweat production, and reduced electrolyte loss in sweat)
- Stabilization of the circulation
- The ability to perform work with lower core temperature and heart rate
- Increased skin blood flow at a given core temperature

We will adopt site-specific and individualized acclimatization plans for workers who are not already acclimatized to working in a high heat index environment. New employees shall have a written acclimatization plan if they are not already acclimatized and if they will be working in an area with a heat index over 90 degrees Fahrenheit.

For new workers who are not already acclimatized to higher temperatures, the schedule should be no more than a 50% exposure on Day 1 and an increase of no more than 20% on each additional day if the employee is doing light or moderate work in a heat index of 90 degrees Fahrenheit. New workers doing more physical labor in these conditions should have more acclimatization. In developing an individualized plan, management must consider the following:

- Whether the new worker is acclimatized to the heat
- The effects of clothing and PPE
- The personal and environmental risk factors that put workers at a higher risk of heat-related illness—noting that acclimatization takes longer for unfit individuals
- Re-acclimatizing workers who have been away from the job and the high heat index
- The ability to provide auxiliary cooling

Maintaining Acclimatization

Workers can maintain their acclimatization, even if they are away from the job for a few days, such as when they go home for the weekend. If, however, they are absent for a week or more, then there may be a significant loss in the beneficial adaptations leading to an increased likelihood of heat-related illness and a need to gradually reacclimate to the hot environment.

The CDC offers some additional information on maintaining acclimatization:

- It can often be regained in two to three days upon returning to a hot job.
- It appears to be better maintained by those who are physically fit.
- Seasonal shifts in temperatures may result in difficulties.
- Working in hot, humid environments provides adaptive benefits, which also apply in hot, desert environments, and vice versa.
- Air conditioning will not affect acclimatization.

Section 12: Heat Illness Prevention Rest Breaks

Adopted Oregon Administrative Rules, which became effective on June 15, 2022, require heat relief for workers, including three specific rest break schedule options. This applies whenever an employee performs work activities, whether in indoor or outdoor environments, where the heat index (apparent temperature) equals or exceeds 90 degrees Fahrenheit.

The purpose of heat illness prevention rest breaks is to allow the body to cool down and recover from working when the heat index equals or is greater than 90 Fahrenheit. Oregon OSHA has provided employers with three options for developing heat illness prevention rest break schedule.

Of the three options listed in the OR OSHA Rest Break Schedule, we have chosen Option C.[3]

Implementation of Rest Breaks

What follows is when employees' heat illness prevention rest breaks will be implemented:

Heat Index (°F)	Rest Break Durations & Intervals
90° or greater	10 minutes every two hours
95° or greater	20 minutes every hour
100° or greater	30 minutes every hour
105° or greater	40 minutes every hour

These rest breaks can be provided concurrently with any other meal or rest period required by policy, rule, or law, if the timing of the preventive rest break coincides with the otherwise required meal or rest period.

Section 13: Emergency Medical Plan

We have updated and/or developed an emergency medical plan that addresses employees' exposure to excessive heat. Below is what we are required to have in our plan.

1. An emergency medical plan to ensure the rapid provision of medical services to employees with major illnesses and injuries shall be developed. In such cases, the employer shall determine that the service will be available in an emergency.
2. If a physician or an ambulance with Emergency Medical Technicians is readily accessible to the place of employment, then the minimum emergency medical plan must contain the emergency telephone number of the ambulance service. The emergency telephone number shall be posted conspicuously at the place of employment.
3. Employers in areas with a designated 911 telephone number may utilize the 911 service in lieu of posting the specific ambulance telephone number.

[3] "Rest Break Schedule Options for Heat Illness Prevention," Department of Consumer and Business Services/Oregon OSHA, May 2022, https://osha.oregon.gov/OSHAPubs/factsheets/fs90.pdf.

4. If the place of employment is not in proximity to emergency medical services, then the employer shall have—in addition to the information required in Oregon Administrative Rules (OAR) 437-002-0161(4)(a)—a definite plan of action to be followed in the event of serious injury to an employee. The plan of action shall consist of the arrangements for:
   - Communication—
     - Two-way radio, telephone, or provision for emergency communication to contact the emergency medical services.
   - Transportation—
     - Availability of transportation to a point where an ambulance can be met or to the nearest suitable medical facility.
     - Vehicles provided for this purpose shall be available at all times, shall have right-of-way over all vehicles or equipment under the control of the employer, and shall be equipped so that due consideration can be given to the proper care and comfort of the injured employee.
   - Qualified medical personnel at destination.
   - All employees shall be knowledgeable concerning the qualified first aid person(s), the first aid requirements, and emergency medical plan.

Section 14: Responsibilities

All employees are responsible for protecting themselves from heat illnesses by following these guidelines for prevention and immediately reporting any signs or symptoms to their supervisor.

Management is responsible for conducting initial training and for conducting the annual refresher training, as well as administering the provisions of this plan.

Wildfire Smoke Plan
for Oregon

Wildfire Smoke Plan

With large-scale wildfire events across the western United States becoming more frequent, wildfire smoke is an increasing danger to Oregon workers. Effective July 1, 2022, Oregon OSHA's adopted permanent rules—OAR 437-002-1081 and OAR 437- 004-9791, Protection from Wildfire Smoke—will apply to employers whose employees are or will be exposed to unhealthy or hazardous levels of wildfire smoke. (You can read OAR 437-002-1081 in Appendix C.)

The harmful chemicals and tiny particles suspended in wildfire smoke can make anyone sick. The tiny particles of most concern, and addressed in the OAR standards, is the particulate matter with a diameter in micrometers of 2.5 or less, commonly referred to as PM2.5.

Mild symptoms of wildfire smoke exposure include coughing, runny nose, and eye irritation and inflammation, while more serious and sometimes fatal health effects include trouble breathing, asthma attacks, reduced lung function, chest pain, and heart attacks. Oregon OSHA's Wildfire Smoke rules apply when employees may be exposed to wildfire smoke where the ambient air concentration for fine particulate matter (PM2.5) is at or above 35.5 ug/m3 (Air Quality Index [AQI] value of 101 for PM2.5).

Employee Exemptions

The following Oregon employees are exempt from the above wildfire smoke standard:

- Employees working in enclosed buildings, structures. and vehicles in which air is filtered by a mechanical ventilation system, and when exterior openings are kept closed, except when it is necessary to briefly open doors to enter or exit a building.
- Employees whose supervisors have suspended operations to prevent employee exposure to wildfire smoke levels at or above AQI 101.
- Employees working at home.
- **Employees with intermittent exposure to wildfire smoke are partially exempt.** This includes those working in activities with less than 15 minutes exposure in an hour to wildfire smoke levels at AQI 101, for a total exposure of less than one hour in a single 24-hour period. **Intermittent employee exposure requires employees be provided information and training listed below and for employers to provide NIOSH-approved filtering facepiece respirators for voluntary use**.

AQI Value	Wildfire Smoke Standards' Key Requirements for Exposure Level
101– 250	**1.** Assess and monitor air quality at each work location where employees are exposed 2. **2.** Provide and document employee training **3.** Implement two-way communication system **4.** Implement engineering and administrative controls **5.** Provide NIOSH-approved filtering facepiece respirators for voluntary use
251– 500	Follow requirements 1-4 for AQI 101-250 **and** Provide NIOSH-approved filtering facepiece respirators for mandatory use by implementing a Wildfire Smoke Respiratory Protection Program in accordance with the Protection from Wildfire Smoke standards (see Appendix C)
501 and Above	Follow requirements 1-4 for AQI 101-250 **and** Provide NIOSH-approved respirators for mandatory use by implementing a Respiratory Protection Program in accordance with 29 CFR 1910.134 or OAR 437-004-1041

Seven Key Requirements of Wildfire Smoke Plan

Next, we list the seven key requirements for Oregon OSHA's permanent rules for protection from wildfire smoke noted in the above AQI Value Chart.[4]

1. Assess & Monitor Air Quality at Each Location Where Employees Are Exposed

The level of wildfire smoke at work locations that triggers these standards is when the PM2.5 ambient air concentration equals or exceeds 35.5 micrograms per cubic meter (µg/m3), which is equivalent to an Air Quality Index (AQI) for PM2.5 of 101 or greater. The AQI was developed by the U.S. Environmental Protection Agency (EPA) as an indicator of overall air quality for the general population, and is largely and easily accessible by the public. When work locations are affected by wildfire smoke, employers and employees with internet access can determine air quality conditions by checking the current average AQI value for PM2.5 for their geographical area by using the following websites or apps:

- Oregon DEQ website: https://oraqi.deq.state.or.us/home/map
- U.S. EPA AirNow Fire and Smoke Map website: https://fire.airnow.gov/
- OregonAir (DEQ) app: Search for the free "OregonAir" app in your app store
- U.S. EPA AirNow app: Search for the free "EPA AIRNow" app in your app store

Employers can choose to directly measure workplace ambient air concentration for PM2.5 by purchasing and using a testing device for PM2.5 and following the manufacturer's instructions. This method will likely provide the most accurate level of PM2.5, especially for indoor workplaces where the air is not filtered by mechanical ventilation.

2. Provide and Document Employee Training

Training must be provided to employees in a manner and a language they readily understand and must include the following:

- The symptoms of wildfire smoke exposure, including:
  - Eyes: burning sensations, redness, and tearing of the eyes caused by irritation and inflammation that can temporarily impair vision
  - Respiratory system: runny nose, sore throat, cough, difficulty breathing, sinus irritation, wheezing, and shortness of breath
  - Fatigue, headache, irregular heartbeat, and chest pain
- The potential acute and chronic health effects from wildfire smoke exposure, including increased health risks to sensitive groups, and how chronic exposures can increase the risk of cardiovascular disease and can exacerbate asthma.
- Each employee's right to report health issues related to wildfire smoke exposure and obtain medical treatment for such workplace exposures without fear of retaliation.
- How employees can obtain the current average and forecasted ambient air concentration for PM2.5 and equivalent AQI value for their work location.

[4] "Key Requirements: Oregon OSHA's permanent rules for protection from wildfire smoke," Department of Consumer and Business Services/Oregon OSHA, June 2022, pp 1-6, https://osha.oregon.gov/OSHAPubs/factsheets/fs92.pdf.

- The importance, limitations, and benefits of using a filtering facepiece respirator, which is provided by the employer at no cost to the employee to reduce exposure to wildfire smoke, and how to use and maintain their filtering facepiece respirator.
- The employer's methods to protect employees from wildfire smoke, including how filtering facepiece respirators are required to be made readily accessible to employees for voluntary use, and how employees can obtain such respirators before exposure and replace them when needed.
- Review of any job tasks performed by employees in which the use of a filtering facepiece respirator would expose the wearer to a hazard associated with a substantially more serious injury or illness than the potential acute health effects of wildfire smoke exposure.
- The procedures supervisors must follow when an employee reports or exhibits health symptoms that necessitate immediate medical attention, including, but not limited to, asthma attacks, difficulty breathing, and chest pain.
- How to operate and interpret exposure results based on any PM2.5 monitoring device used by the employer in compliance with the standard.
- An explanation of the employer's two-way communication system for wildfire smoke exposure control information.

The above training elements are included in Oregon OSHA's wildfire smoke training course that is available to all employers and employees in both English and Spanish.

Employers that are not partially exempt from the standard must verify supervisor and employee training by preparing a written or electronic record that includes at least the name or identification number of each employee trained, the dates of the trainings, and the name of the people who conducted the training. The most recent annual training record for each employee must be maintained for one year.

3. Implement Two-Way Communication System.

A two-way communication system must be used to communicate wildfire smoke information between supervisors and employees. Such information includes any changes in the air quality at the work location that would necessitate an increase or decrease in the level of exposure controls. The two-way communication must also allow employees to report issues concerning their access to exposure controls and any health symptoms from wildfire smoke exposure that could necessitate medical attention. The means to communicate information may include, but are not limited to, in-person, cell phone, and two-way radio.

4. Implement Engineering and Administrative Controls to Employees Exposed to PM2.5 Levels at/or Above 35.5 µg/m3 (AQI 101)

Engineering and administrative controls must be used to reduce employee exposure to wildfire smoke if the control is functionally possible and does not prevent the completion of work. Such controls include relocating outdoor workers to enclosed buildings or to outdoor locations where the air quality is better, and making work schedule changes to reduce employee exposures. The use of engineering and administrative controls may be used in combination with NIOSH-approved filtering facepiece respirators.

5. Provide NIOSH-Approved Filtering Facepiece Respirators for Voluntary Use to Employees Exposed to PM2.5 Levels at/or Above 35.5 µg/m3 (AQI 101)

Employer-provided respirators for voluntary protection from wildfire smoke must either be distributed directly to employees or be made readily accessible to any exposed employee at each work location.

Respirator supplies must be in a location that does not restrict or hinder employee access nor discourage the replacement of a respirator when needed.

NIOSH-approved filtering facepiece respirators do not include any "KN" designations, such as KN95s. Such "KN" respirators are not appropriate to reduce employee exposure to wildfire smoke.

NIOSH-approved filtering facepiece respirators appropriate for wildfire smoke protection include: N95, N99, N100, R95, R99, R100, P95, P99, and P100

6. Provide NIOSH-Approved Filtering Facepiece Respirators for Mandatory Use to Employees Exposed To PM2.5 Levels At Or Above 200.9 µg/m3 (AQI 251) And Implement A Wildfire Smoke Respiratory Protection Program In Accordance with the Protection From Wildfire Smoke Standards (See Appendix C).

Employer-provided NIOSH-approved filtering facepiece respirators used strictly for mandatory protection from wildfire smoke must either follow the Wildfire Smoke Respiratory Protection Program as described in Appendix C, which do not require medical evaluations and fit testing, or be in accordance with the applicable Respiratory Protection standard, 29 CFR 1910.134 or OAR 437-004-1041.

7. Provide NIOSH-approved respirators for mandatory use to employees exposed to PM2.5 levels at or above 500.4 µg/m3 (AQI 501) by implementing a Respiratory Protection Program in accordance with 29 CFR 1910.134 or OAR 437-004-1041

Due to the high hazard level of air quality conditions at or above 500.4 µg/m3 (AQI 501), employers must ensure that employees wear appropriate NIOSH-approved respirators in accordance with the OSHA Respiratory Protection Standard, 29 CFR 1910.134 or OAR 437-004-1041.

Appendix A
for Oregon

Heat Illness Prevention Training Record

Our employees shall all be trained on:

- The environmental and personal risk factors (see Section 4).
- Our procedures for complying with the requirements of this standard, including, but not limited to, our responsibility to provide water, heat index information (including the risks to experiencing a heat-related illness), shade, preventative rest breaks, and access to first aid, as well as how employees can exercise their rights under this standard without fear of retaliation;
- The importance of frequent consumption of small quantities of water, up to 32 ounces per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;
- The concept, importance, and methods of the acclimatization plan pursuant to the employer's procedures;
- The different types of heat illness, the common signs and symptoms of heat illness, and the appropriate first aid and emergency response to the different types of heat illness, including how heat illness may progress quickly from mild signs and symptoms to a serious and life-threatening condition (see Section 6);
- The importance for employees to immediately report to the employer, directly or through the employee's supervisor, signs and symptoms of heat illness in themselves or in others; and
- The effects of nonoccupational factors (drugs, alcohol, obesity, etc.) on tolerance to occupational heat stress.

Acknowledgment: I have been trained in the required elements listed above.

Employee Printed Name:

Employee Signature: _____ Date:

Appendix B
for Oregon

Metabolic Heat and Workload (Physical Activity Level)

Level of Workload/ Physical Activity*	Examples	Metabolic Rate in Watts, "typical" recognizing that different ways of doing the same task may lead to dramatically different wattage
Rest	▪ Sitting ▪ Thinking	115
Light	▪ Sitting with minimal hand and arm work ▪ Sewing ▪ Writing or drawing ▪ Driving a car ▪ Occasional or slow walking ▪ Stooping, crouching, or kneeling ▪ Standing watch	180

**The above table assumes a 70-kg (154-pound) worker; workers who weigh more might produce more metabolic heat than other workers who perform the same tasks.*

Minimum employer-specific rest break durations and intervals

Heat index temperature (o F)	Rest break durations
90 or greater	10 minutes every two hours
100 or greater	15 minutes every hour

This schedule is only required during the specified heat index temperatures.

Appendix C
for Oregon

OAR 437-002-1081: Protection from Wildfire Smoke

Mandatory Workplace Guidance for the Use of Filtering Facepiece Respirators to Address Wildfire Smoke:
This appendix applies only to employers covered by this standard that require NIOSH-approved filtering facepiece respirators, including N95, P95, R95, N99, P99, N100 and P100, to be used by their employees strictly for wildfire smoke exposures when the work location ambient air concentrations of PM2.5 is at or above 200.9 µg/m3 (AQI 251) and below 500.4 µg/m3 (AQI 501).

Note: Employer supplies of NIOSH-approved filtering facepiece respirators for required use under this standard should include an adequate size selection for exposed employees.

Filtering facepiece respirators are disposable, negative-pressure, air purifying respirators where an integral part of the facepiece or the entire facepiece is made of air contaminant filtering material. This appendix does not apply to other types of respirators, including but not limited to elastomeric tight-fitting respirators, nor does it apply to situations where workers use filtering facepiece respirators for protection against air contaminants other than PM2.5 from wildfire smoke.

Employers whose workers are required to wear filtering facepiece respirators to protect against wildfire smoke exposures when workplace ambient air concentrations of PM2.5 is at or above 200.9 µg/m3 (AQI 251) must either develop and implement a respiratory protection program in accordance with the Respiratory Protection Standard (29 CFR 1910.134), or a Wildfire Smoke Respiratory Protection Program in accordance with the following requirements when workplace ambient air concentration of PM2.5 is under 500.4 µg/m3 (AQI 501):

A. Employee training. Employers must ensure that employees wearing filtering facepiece respirators are trained in the proper use of the respirators, including putting them on and removing them, any limitations on their use, how to care for the respirator, and the ability to demonstrate a seal check as described in section (B) of this appendix.

B. Filtering facepiece respirator user seal check. Each employee who uses a filtering facepiece respirator must perform a user seal check to ensure a sufficient face fit to maximize effectiveness each time the respirator is put on. Either the positive or negative pressure checks listed in this appendix, or the respirator manufacturer's recommended user seal check method must be used.

1. Instructions for positive pressure user seal check. Once you have properly donned the respirator, place your hands over the facepiece, covering as much surface area as possible. Exhale gently into the facepiece. The face fit is considered sufficient if a slight positive pressure is being built up inside the facepiece without feeling air passing between your face and the facepiece. If the particulate respirator has an exhalation valve, then performing a positive pressure check may not be possible. In such cases, a negative pressure check must be performed.
2. Instructions for negative pressure user seal check. Negative pressure seal checks are typically conducted on particulate respirators that have exhalation valves. Once you have properly donned the respirator, cover the filter surface with your hands as much as possible and then inhale gently. The face fit is considered sufficient if the facepiece slightly collapses towards your face without feeling air passing between your face and the facepiece.

3. Correcting problems discovered during the seal check. In the case of either type of seal check (positive or negative), if air leaks around the nose, use both hands to readjust the nosepiece by placing your fingertips at the top of the metal nose clip. Slide your fingertips down both sides of the metal strip to more efficiently mold the nose area to the shape of your nose. Readjust the straps along the sides of your head until a proper seal is achieved.

C. Filtering facepiece respirator storage and replacement. Store, maintain, and replace so that they do not present a health hazard to the user.