**Office: Environmental Safety, Health and Risk**

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**Related Policy or Policies: Wildfire Smoke**

**Revision History**

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| **Revision Number:** | **Change:** | **Date:** |
| IR | Initial Release | 11/10/2016 |
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1. **Purpose**

To give guidance for dealing with wildfire smoke.

1. **Definitions**

Wildfires produce smoke that can impact health of personnel in and around campus. Southern Oregon University is committed to protecting the safety of employees, students, and visitors. Wildfire can be a significant source of air pollution in the area and can pose a major health risk. With the foliage that is present in our region wildfires can occur and create an air quality hazard. The smoke from a wildfire compounding with the topographic nature of the area that creates a bowl effect with the surrounding hills that prevents effective air movement. Smoke is made up of primarily small particles, gases and water vapor, with trace amounts of hazardous air pollutants. The most harmful are the small particles, or particulate matter smaller than 2.5 micrometers in diameter (100 micrometers is the diameter of a human hair). These particles can be inhaled deeply into the lungs, damaging lung tissue and causing respiratory and cardiovascular problems. Symptoms from short-term smoke exposure can range from scratchy throat, cough, irritated sinuses, headaches, runny nose and stinging eyes. Persons with asthma, emphysema, congestive heart disease and other existing medical conditions can have more serious reactions.

**C. Procedures**

* 1. Air Quality Ratings >301 PM2.5 (Hazardous) 1-hour Average Concentration micrograms per cubic meter the university will postpone all non-emergency activity that involves strenuous activity. The university will review the building filtration and make up air systems to make changes as needed. The university may encourage the use of N95 filtration masks for personnel outdoors.
	2. Air Quality Ratings 201-300 PM2.5 (Very Unhealthy) 1-hour Average Concentration micrograms per cubic meter the university will limit activity outside for students and employees to less than 3 hours no activity will be performed that involves strenuous activity for a prolong period. The university will review the building filtration and make up air systems to make changes as needed. The university may encourage the use of N95 filtration masks for personnel outdoors.
	3. Air Quality Ratings 151-200 PM2.5 (Unhealthy) 1-hour Average Concentration micrograms per cubic meter the university will limit activity outside for students and employees to less than 4 hours no activity will be performed that involves strenuous activity for a prolong period. Increases in rest periods as needed for personnel.
	4. Air Quality Ratings 101-150 PM2.5 (Unhealthy for Sensitive Groups) 1-hour Average Concentration micrograms per cubic meter the university will postpone activities for personnel with respiratory illness, asthma, lung or heart disease should reduce/cease activity if symptoms arise. Increase rest periods as needed for personnel with these conditions.
	5. Building that have visible or other signs of hazardous smoke will be evaluated by EHS Manager and may require additional filtration in the form of a portable HEPA filter unit or by other means.
	6. Buildings will be air sampled at specific locations when the outside air is at the Unhealthy range to ensure that the building HVAC system does not draw in more smoke.
	7. Buildings that have air that is at the Unhealthy range will recommend to have personnel move to cleaner buildings until the air system can be corrected.