

Tools for Life – Weekly Health & Safety Meeting

The logo for Apollo Mechanical Contractors, featuring the word "Apollo" in a white, stylized script font inside a dark blue oval.

— MECHANICAL CONTRACTORS —
Building People Who Build Great Things

Home Healthy - Home Safe

Date: May 2023

Wildfire Smoke and Outdoor Air Pollution AISH 43

Wildfire smoke is a mix of gases and fine particles from burning vegetation, building materials, and other materials. Heavy pollution and wildfire smoke can make anyone sick and put those with pre-existing conditions at a greater health risk. Wildfire smoke particulate matter (PM) presents a serious health risk to all workers especially those who work in outdoor industries such as construction. Breathing smoke/pollution can have immediate health effects, including:

- Coughing
- Trouble Breathing Normally
- Stinging eyes
- A scratchy throat
- Runny nose
- Irritated sinuses
- Wheezing and shortness of breath
- Chest pain
- Headaches
- An asthma attack
- Tiredness
- Fast heartbeat

AISH 43 is obligatory for Washington and Oregon state workers and is a guidance document for all other Apollo locations. The procedure applies to all workers working outdoors for more than 1 hour per shift in industries such as construction when employees may be exposed to an Air Quality Index (AQI) of 69 or higher (PM_{2.5} of 20.5 ug/m³) due to wildfire smoke or general pollution.

How do we manage wildfire smoke exposures?

- Identify potential harmful exposure by checking the current Air Quality Index using your phone's weather App
- Check www.airnow.gov or
- <https://enviwa.ecology.wa.gov/home/map>

HEALTHY OR SAFETY REMINDER: The Air Quality Index is available year round from your phone's weather app, or on the www.airnow.gov web and the <https://enviwa.ecology.wa.gov/home.map>. The AQI can change during the day and from day to day and can be affected by wildfires at great distance from your work location.

Action Limits what actions do we take, when?

- If AQI is reasonably expected to exceed 69 or higher then have Safety conduct Wildfire Hazard Communication training.
- If AQI is 101 or higher supply filtering facepiece respirators (N-95 or better) for voluntary usage for worker outdoors and evaluate engineering and administrative controls such as:
 - Provide areas where the air is adequately filtered
 - Provide portable HEPA filters in enclosed areas
 - Alternate work locations
 - Reduce work intensity and
 - Provide additional rest periods.
- If AQI is 555 or higher then employees must be enrolled in a respiratory protection program. The employer must provide and require at a minimum full face negative pressure respirators equipped with HEPA filters.

Conclusion. Wildfire smoke and general air pollution can be a serious health risk to construction workers and those with pre-existing health conditions. Apollo Management, Supervision and Safety Manager will monitor the AQI and act when the AQI exceeds specified action limits. Employees shall follow safe work practices, follow good hygiene practices, and shall report any signs or symptoms of exposure to elevated AQI.

Discussion Points/Quiz Questions:

1. What is AQI?
2. Where can you find the current AQI?
3. What should you do if you are not feeling well because of an elevated AQI?