

## SECTION X

### **Santa Barbara County Education Office-SIPE Wildfire Smoke Protection Program**

(Title 8, California Code of Regulations, Section 5141.1)

9/17/2020

#### **1.0 Purpose**

In an effort to protect workers from hazards associated with wildfire smoke, the Cal/OSHA Standards Board recently approved an emergency regulation establishing new protection requirements. The emergency regulation, [Title 8, Section 5141.1, Protection from Wildfire Smoke](#), took effect July 29, 2019. Under the new regulation, employers must take the following steps to protect workers who may be exposed to wildfire smoke:

- 1.1 Identify potential exposures to unhealthy levels of wildfire smoke before each shift and periodically thereafter. Exposures to wildfire smoke are considered unhealthy when the current [Air Quality Index \(AQI\)](#) for particulate matter smaller than 2.5 micrometers (PM2.5) exceeds 150.
- 1.2 Communicate wildfire smoke hazards in a form readily understandable by all affected employees, including provisions designed to encourage employees to inform the employer of wildfire smoke hazards at the worksite without fear of reprisal.
- 1.3 Provide documented training to employees who may be exposed to unhealthy levels of wildfire smoke per [Title 8, CCR Section 5141.1 Appendix B](#).
- 1.4 Control/reduce unhealthy exposure to wildfire smoke through the implementation of engineering and administrative controls. If individuals will be exposed to unhealthy levels of wildfire smoke (PM2.5 AQI >150) for greater than one hour per shift, they must be provided NIOSH-approved filtering facepiece respirators (N95 or greater) for voluntary use. If individuals will be exposed to hazardous levels of wildfire smoke (PM2.5 AQI >500) for greater than one hour per shift, they must be Trained in respiratory protection and fit-tested per California Code of Regulations, Title 8, Section 5144

#### **2.0 Exemptions**

1. Enclosed buildings or structures where the air is filtered by a mechanical ventilation system and windows, doors, bays, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
2. Enclosed vehicles with a cabin air filter and windows, doors, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.

3. Where employees are exposed to a current AQI for PM2.5 of 151 or greater for a total of one hour or less per shift.
4. Firefighters engaged in wildland firefighting.

### **3.0 Responsibilities**

Departments and their supervisors have the primary responsibility of ensuring the health and safety of their employees. When it can be reasonably anticipated that wildfire smoke may affect employees covered under the Wildfire Smoke Protection Standard, supervisors must ensure the following:

#### **3.1 Smoke Hazard Identification**

Monitor current and forecasted AQI for PM2.5 before and during each work shift. Be sure to consider any offsite/field locations that an employee may visit during their shift. It is recommended that one or more of the following resources be used for monitoring worksite PM2.5 AQI:

- U.S. EPA AirNow website: <https://www.airnow.gov/> (enter local zip code at the top of page)
- California Air Resources Board website: <https://mobile.arb.ca.gov/breathewell/CityList.aspx> (select closest city)
- Santa Barbara County Air Pollution Control District <https://www.ourair.org/todays-air-quality/>
- Find other local Air Pollution Control Districts by map <https://ww3.arb.ca.gov/capcoa/dismap.htm> or zip/city/county (<https://www.arb.ca.gov/app/dislookup/dislookup.php>)
- U.S. EPA (<http://www.enviroflash.info/>) can transmit daily and forecasted AQIs by text or email for particular cities or zip codes.
- U.S. Forest Service Wildland Air Quality Response Program website: <https://wildlandfiresmoke.net>
- Contacting any of the above by telephone, email, text, or other effective method.

#### **3.2 Smoke Hazard Communication**

Maintain consistent communication with employees during wildfire smoke events. Ensure employees are informed of the current AQI and steps they should take to reduce their exposure. Employees must also be encouraged to provide feedback and report worsening air quality or adverse symptoms of smoke exposure without fear of reprisal.

### 3.3 Smoke Hazard Training

When it can be reasonably anticipated that employees covered under the [Cal/OSHA Wildfire Smoke Protection Standard](#) may be exposed to a PM2.5 Air Quality Index (AQI) of 151 or greater for more than one hour during their shift, supervisors must ensure that affected employees receive documented smoke protection training that covers the minimum requirements of CAL/OSHA Standards [appendix B](#). Additional training resources:

[Wildfire Smoke Employee Handout](#)

[Cal/OSHA Disposable Respirator Posters](#)

[UC Santa Cruz N95 Training Video](#)

### 3.4 Smoke Hazard Exposure Reduction and Controls

When wildfire smoke is causing unhealthy air quality (AQI 151 or higher for PM2.5), supervisors must take measures to protect employees from exposure to smoke. Protective measures may include engineering controls, administrative controls, or, if the first two measures are ineffective or not available, the use of respiratory protection.

1. Engineering Controls – Whenever possible, reduce exposure by providing filtered air, such as a building or vehicle. Examples of other engineering controls that may be implemented include: (1) installation of filtered mechanical ventilation systems, (2) installation of higher efficiency filters, (3) installation of air purifiers or air scrubbers, (4) reducing the amount of outside air administered by the ventilation system, and (5) ensuring building pressure is positive relative to the outside.
2. Administrative Controls – If engineering controls are not feasible or effective, use administrative controls to reduce the exposure, if practicable. Administrative controls may include relocating the work to another location, changing work schedules, postponing outdoor work, and/or reducing the intensity of physical work.
3. Provide Respirators – When the AQI for PM2.5 is 151 or higher, respirators must be provided to employees for voluntary use. If the AQI for PM2.5 exceeds 500, respirator use is mandatory, and individuals must receive OSHA required training, medical surveillance and fit-testing per [Title 8 5144 CCR](#).

References: Cal/OSHA title 8, CCR 5141.1 (Appendix B)