Protecting Outdoor Workers from Wildfire Smoke

On July 18, 2019, the Department of Industrial Relations’ (DIR) Occupational Safety and Standards Board adopted an emergency regulation to protect outdoor workers from wildfire smoke.

This regulation applies to workplaces where the current Air Quality Index (AQI) for airborne particulate matter (PM) is 151 or higher, and where employers should reasonably anticipate that employees could be exposed to wildfire smoke.

The following are the steps that employers must take to protect workers:

- Development and implementation of an emergency action plan, which has been communicated to your employees with the inclusion of evacuation routes.
- Identify harmful PM from wildfire smoke before each shift and periodically thereafter by checking the AQI for PM 2.5 (the pollutant of concern).
  - Monitor air quality by checking these resources
    - U.S. EPA AirNow
    - U.S. Forest Service Wildland Air Quality Response Program
    - California Air Resources Board
    - Local air pollution control district
    - Local air quality management district
- Reduce the exposure by relocating workers to an enclosed building with filtered air or move workers to another outdoor location where the AQI for PM 2.5 is less than 150.
- If you cannot move workers out of the area with the AQI reading in excess of 151, then you must provide:
  - Respirators, such at N95 masks, for voluntary use.
  - Training on the regulation, including:
    - The health effects of wildfire smoke.
    - The right to obtain medical treatment without fear of reprisal.
    - How employees can obtain the current Air Quality Index (AQI) – give them the above website.
    - Share your two-way communication system with workers on how you will keep them updated on changing conditions.
    - Provide N95 masks, show them how to use and maintain them, and encourage them to use them (they can refuse to wear one and if someone does, there needs to be a waiver where they sign off that they were offered a respirator and declined to use it) *The employer must require employees to use respirators when the AQI for PM2.5 is greater than 500.
    - The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke.
    - What you will do to protect them from smoke – when you will stop work, when you will move them to another location, etc.

There are some exemptions to the rule:

- Those working in indoor workplaces and enclosed vehicles with filtered air
- Firefighters engaged in wildfire fighting activities
- Workers exposed to short term foul air – no more than 1 hour
The full text of the regulation, including requirements, exemptions and exceptions, appears in Title 8, Section 5141.1 of the California Code of Regulations.


N95 Respirator Mask Examples