



## CALPINE CORPORATION

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*Via Email*

May 10, 2019

Eric Berg  
Deputy Chief of Health  
California Department of Industrial Relations  
Division of Occupational Safety and Health (Cal/OSHA)  
1515 Clay Street, Suite 1901  
Oakland, CA 94612  
eberg@dir.ca.gov

Subject: Emergency Regulation to Protect Workers from Wildfire Smoke

Dear Mr. Berg:

Calpine Corporation (hereinafter, “Calpine”) appreciates the opportunity to provide these comments on the draft regulatory text for discussion addressing worker exposure to wildfire smoke proposed by the Division of Occupational Safety and Health (Cal/OSHA) and presented at its May 8, 2019 workshop.<sup>1</sup>

Calpine is one of California’s largest energy providers and a leader in renewable energy and combined heat and power production within the state. Calpine has facilities across California, including The Geysers facilities spanning throughout rural Lake and Sonoma Counties, the largest complex of geothermal power plants in the world. Our facilities and employees have been seriously impacted by the wildfires that have swept through California in recent years, with our infrastructure at The Geysers sustaining direct damage in the 2015 Valley Fire and many of our employees losing their homes. For these reasons, we are acutely aware of the need for, and in strong support of, regulations to protect worker health and safety from wildfire smoke. To date, we have been implementing similar techniques to protect our employees from smoke inhalation as those proposed by staff in the discussion draft.

While last November’s Camp Fire demonstrated how broadly a localized wildfire event can impact public health throughout the state, air quality is still a highly localized phenomenon, influenced by topography, seasonal wind patterns and other complex physical and chemical dynamics. For many locations throughout the state—particularly those in remote areas that are not out of attainment with the relevant state or national ambient air quality standards—the reference State/Local Air

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<sup>1</sup> Cal/OSHA, Upcoming Advisory Meeting for Proposing an Emergency Regulation to Protect Workers from Wildfire Smoke, <https://www.dir.ca.gov/dosh/doshreg/Protection-from-Wildfire-Smoke/>.

Monitoring Station (SLAMs) used to establish the Air Quality Index (AQI) may be located at a significant distance, such that the AQI is unrepresentative of the air quality at any particular workplace to which it is assumed to apply. This is the case for Calpine's The Geysers facility, which is located in an area of mountainous, rugged terrain, far removed from the physical location of the nearest SLAMs monitor that would determine the AQI and applicability of the requirements in the draft emergency regulation.

Undoubtedly, the AQI is a useful tool for employers in densely populated areas, where the network of SLAMs used to establish the AQI is more robust. The AQI is also a useful, easily understandable tool for communicating complex risks to a public who may not be familiar with the dynamics influencing regional and local air quality. In Calpine's case, however, its facilities throughout California all conduct emissions monitoring and it operates and maintains air quality monitoring facilities in the vicinity of The Geysers. In situations where an employer has more representative data for a particular workplace, the employer should be allowed to use that data to determine when and whether engineering and administrative controls or personal protection equipment are warranted.

As presently drafted, however, it is unclear whether and how employers with more representative, location-specific air quality data may use that data to determine whether air quality thresholds have been exceeded and regulatory controls are warranted. Section 5141.1(a)(2)(C) provides that workplaces and operations are exempt from the proposed standard if, *inter alia*, "[t]he employer demonstrates that the concentration of PM<sub>2.5</sub> in the air does not exceed a concentration that corresponds to an AQI of 150."

Calpine believes that this exemption should be clarified to allow employers, to the extent they possess monitoring capabilities, to rely on their own more accurate air quality data to determine workplace exposure levels in lieu of the AQI.

For example, if an employer deploys handheld PM<sub>10</sub> monitors and assumes that all concentrations of PM<sub>10</sub> detected by a single reading constitute PM<sub>2.5</sub>, such data should be acceptable to demonstrate that "the concentration of PM<sub>2.5</sub> in the air does not exceed a concentration that corresponds to an AQI of 150," per the language of the proposed exemption at section 5141.1(a)(2)(C). This would be more protective in circumstances where the nearest SLAMs monitor used to establish the AQI is geographically remote, but wildfire conditions nevertheless create a risk from smoke inhalation. It also would avoid the need to implement controls in instance where the AQI measured at a geographically remote monitor is unrepresentative of actual workplace exposures. Calpine would appreciate clarification from staff in the emergency regulation that reliance on such data is authorized as the basis for determining whether regulatory controls are warranted.

Calpine appreciates the opportunity to comment on this emergency regulation. Please contact me if you have any questions at 925-570-0849 or [barbara.mcbride@calpine.com](mailto:barbara.mcbride@calpine.com).

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Sincerely,

A handwritten signature in black ink, consisting of a stylized, cursive 'B' followed by a horizontal line extending to the right.

Barbara McBride  
Director—Environmental Services  
Calpine Corporation