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RE: Comments on the August 13, 2019 *Proposed Revision to Emergency Regulation Section 5141.1 Protection from Wildfire Smoke*

To Whom It May Concern,

On behalf of the San Francisco Department of Public Health, Occupational Safety and Health Division (SFDPH-OSH) I am providing the following comments with regards to the August 13, 2019 *Proposed Revision to Emergency Regulation Section 5141.1 Protection from Wildfire Smoke*. SFDPH-OSH appreciates that Cal/OSHA is taking the emerging issue of wildfire smoke seriously with regards to the protection of California's workforce, and is using the narrow window of time available to improve the emergency temporary standard. At the same time, SFDPH-OSH wishes to caution against forging ahead without carefully considering the implications of the proposed changes. In particular:

1. The basis for the draft standard's reducing the AQI for initial actions from 151 to 100 was not provided as either a supporting document to the draft standard, nor at the August 27th, 2019 Advisory Committee meeting. Reducing the AQI from 151 to 100 creates several problems:
 - 1.1. Although Cal/OSHA has a different target audience, by using a different and lower messaging and action threshold than public health authorities, Cal/OSHA is going to create confusion within both the general population of the State of California and employers and labor groups within the State. Public Health authorities have focused on an AQI of 151 or greater as the point where concerted messaging and initial response actions takes place. If Cal/OSHA uses the lower AQI 100 threshold for responses, they're setting employers up for failure since mass messaging won't have started yet. Even worse, if Cal/OSHA establishes an equally robust messaging system for the AQI 100 threshold they'll create confusion for the general public.
 - 1.2. Respiratory protection, including N95 respirators, is recognized to put both physiological and psychological stress on users. The US Environmental Protection Agency (US EPA) and other air quality authorities have established an AQI 100 as the threshold for when protective measures need to be initiated for sensitive individuals. If the workforce covered

by the proposed permanent *Protection from Wildfire Smoke* standard is considered to be composed of sensitive individuals as is implied by the use of the AQI 100 threshold, respirator use would not be advisable without medical screening of employees being issued respirators. As respirator use under the draft standard is classified as “voluntary” until the AQI exceeds 300, this medical screening would not occur, placing workers at risk from the respirators they are being offered, in addition to the smoke itself.

- 1.3. The appropriateness and value of using voluntary use (unfitted) N95 respirators to provide protection at AQIs of 100 is unknown. The only time that N95 respirators are known to provide protection is when the wearer has been trained, does not have facial hair intruding into the sealing surfaces of the respirator, and has passed fit-testing using a recognized testing protocol.
- 1.4. Requiring respirators to be made available for use when AQIs are 100 or more will greatly impact the availability of N95 respirators, possibly reducing available stocks needed for aerosol transmissible disease outbreaks which could be fostered by the exposure of the population to elevated quantities of airborne particulates. Additionally, confusion of the general public by Cal/OSHA’s AQI 100 threshold for messaging and actions could result in greater non-occupational use of N95 respirators exacerbating supply problems.

SFDPH-OSH believes that the logic for reducing the AQI threshold from 151 to 100 in the permanent standard needs to be clearly presented to the regulated public as does the risk/benefit analysis of the use of respirators by workers without medical screening. If the goal of the standard is to force employers of outdoor workers into better protecting their employees by providing respirators as was suggested at the August 27th Advisory Committee meeting, SFDPH-OSH believes that improved and increased outreach, training, and ultimately enforcement actions in targeted industry segments would be far more effective than lowering the Standard’s threshold AQI to 100.

2. The draft standard, as presented, is incomplete, with a critical section missing. Paragraph (a) between subparagraphs (2)(B) and (2)(C) has a block stating “Discuss what minimum MERV filtration should be required for buildings and vehicles.”
 - 2.1. Without knowing what MERV filtration level will be required, it is not possible to determine the feasibility and cost of meeting the standard.
 - 2.2. You cannot “upgrade” a HVAC system by simply installing higher MERV rated filters. Higher MERV rated filters have greater pressure drops associated with them requiring fans and fan operation to be sized accordingly and filter retainers designed to hold the filters in place against a greater pressure differential. Additionally, even without wildfire smoke present, higher MERV rated filters will require more frequent filter changes, increasing ventilation system operating costs.
 - 2.3. Vehicle filters do not, to our knowledge, generally have MERV ratings.

SFDPH-OSH believes that the presentation of incomplete draft standards does not comply with the intent or spirit of California administrative review requirements.

SFDPH-OSH believes that if incorporated into the full draft of the standard, any MERV filtration rating requirements need to be (a) reserved for new construction and substantial building renovations and (b) exclude motor vehicles.

3. Subparagraph (g)(4)(A) states in part "...the employer shall provide a sufficient number of respirators to all employees for voluntary use in accordance with section 5144 and encourage employees to use respirators". Employers "encouraging" employees to use respirators is not consistent with the concept of voluntary respirator use, which is typically for when an employee opts to wear a respirator on their own free will. It creates liability for employers encouraging employees to voluntarily use respirators in the absence of medical screening and other means to verify that it is safe for the employee to wear a respirator. **SFDPH-OSH believes that the statement should be modified to read "...and educate employees on the proper use, change intervals, and limitations."**
4. Appendix A paragraph (e) states in part "A qualified person shall conduct and evaluate workplace monitoring for PM 2.5....". **SFDPH-OSH believes that a definition of a qualified individual is needed in the standard.**
5. Appendix B paragraphs (g) and (h) address voluntary respirator use. By virtue of it being voluntary employers cannot require employees to be clean shaven, i.e. remove facial hair which intrudes into the sealing surfaces of the respirator. The second subparagraph within paragraph (h) states, however "...A respirator will provide much less protection if facial hair interferes with the seal. Loose-fitting powered air purifying respirators may be worn by people with facial hair since they often do not have seals that are affected by facial hair". What is the function of this statement? Is Cal/OSHA suggesting that employers consider purchasing Powered Air Purifying Respirators for voluntary respirator use? **SFDPH-OSH believes that the paragraph should end with the statement "...A respirator will provide much less protection if facial hair interferes with the seal."** Assessment for and selection of specific forms of respiratory protection should be left in the hands of qualified health and safety professionals.

Thank you again for the opportunity to provide comments on the draft standard. If you have any questions or would like additional information please do not hesitate to contact me by phone at (415) 554-2797, email at ed.ochi@sfdph.org, or US mail at the address listed below.

Sincerely,



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