



# PASMA

PUBLIC AGENCY SAFETY MANAGEMENT ASSOCIATION

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May 13, 2019

To: Maryrose Chan, Safety Engineer  
Division of Occupational Safety and Health, Research and Standards Unit

Subject: Economic Impact Analysis: Emergency Regulation for Wildfire Smoke

On May 8, 2019, I attended the Cal/OSHA Advisory meeting where a draft of the emergency regulation of wildfire smoke was discussed. The Public Agency Safety Management Association (PASMA), represents over 140 public agencies in California. Our members include municipal and county government agencies, water districts, and other special districts. After the meeting you asked me to provide you with an economic impact statement for the public sector. The current draft of 5141.1-Protection from Wildfire Smoke will have a significant economic impact on a number of municipal, county, water district, and special district employees.

### Economic Impact Analysis

Within the public sector there are numerous employees who may be working outdoors during a wildfire event. The list of potentially affected employees is provided in the table below. (Note: Job titles may vary somewhat from agency to agency, and it is important to keep in mind that some of the positions below are seasonal or part-time. Also, the list below excludes all Fire Department personnel and Police Officers. The only Police department staff included below are the Traffic Control Assistants.)

### Affected Employees

Recreation Leaders	Security Guards	Surveyors
Park Maintenance Workers	Building Inspectors	Street Maintenance Workers
Park Rangers	Code Enforcement Officers	Traffic Signal Technicians
Electricians	Electric Utility Inspectors	Sewer Operators
HVAC Mechanics	Line Mechanics	Construction Inspectors
Skilled Craft Workers	Troubleshooters	Traffic Control Assistants
Parking Lot Attendants	Meter Readers	

Below is an estimate of the total public sector costs for each of the requirements imposed by Section 5141.1:

<b>Safety and Health Requirement</b>	<b>Affected Employees</b>	<b>Total Employees</b>	<b>Cost per Employee</b>	<b>Total Costs</b>
Respirator Medical Clearance	See Table	760,000	\$43	\$32,680,000
N-95 Respirators (Note 1)	See Table	760,000	\$7.50	\$5,700,000
Annual Fit-Testing	See Table	760,000	\$25	\$19,000,000
Annual Respirator Training	See Table	760,000	\$5	\$3,800,000
Wildfire Smoke Training	See Table	760,000	\$5	\$3,800,000
PM 2.5 Monitors (Note 2)	See Table	760,000	\$13.33	\$10,133,200
<b>Total Costs</b>				<b>\$75,113,200</b>

The total number of employees is an estimate based on data from the California State Controller's office.

Note 1: It is assumed that 10 disposable N-95 respirators would need to be purchased and available for every affected employee. The cost per respirator is estimated to be \$.75, and if 10 respirators were purchased the cost would be \$7.50 per employee.

Note 2: It is assumed that one PM 2.5 monitor will need to be purchased for every 15 employees. This means that 50,666 PM 2.5 monitors at \$200 each will need to be purchased. This is also assumes that the Division would accept the monitoring results from some of the lower cost (\$200) PM 2.5 monitors. There are several other monitors that range in price from \$1,000 to \$8,000 per monitor. Depending on what standards were developed for air monitoring by the division, or the more likely scenario is that the lower cost monitors may not be available on the market, employers may be forced to pay significantly more per monitor in order determine the correct AQI at their respective worksites. This could increase the total statewide costs for the purchase of PM 2.5 monitors.

### **Assumptions**

Included in our assumptions is the fact that all affected employees will need to be included in a respiratory protection program in order for the proposed standard to be at least as effective as Section 1910.134 of Title 29 of the Code of Federal Regulations. Even if the exemptions for respirator fit-testing and medical evaluation were granted, at an AQI of 301, employees would still be required to have completed a respirator medical clearance and be fit-tested prior to working outdoors during a wildfire event. Given the fact that most employers would not be able to predict the AQI during a wildfire event, they would likely be required to include all of their outdoor workers in the respiratory protection program prior to any wildfire event in order to avoid a serious citation for non-compliance with the new standard.

The total estimated costs to be borne by the public sector for the proposed wildfire standard is \$75,113,200. Annual recurring costs of \$28,500,000 would need to be funded by the public sector in order to comply with this standard. It is important to note that this economic impact statement only includes the public sector. If the private sector were also included, it is believed that the total cost of this regulation could exceed \$300,000,000.

## Conclusion

We appreciate the opportunity to provide this economic impact statement on the current draft of 5141.1-Protection from Wildfire Smoke Standard that was presented at the advisory committee meeting. We are confident that the proposed standard will result in significant additional costs to public agencies. If you have further questions please contact me at (714) 765-4399.

Sincerely,



Bill Taylor, CSP  
PASMA- Legislative and Regulatory Representative

cc: Ana Levina, PASMA-South Chapter, President  
Gina Eicher, PASMA-North Chapter, President