

**AIRPORT COMMISSION
SAN FRANCISCO INTERNATIONAL AIRPORT
CITY AND COUNTY OF SAN FRANCISCO**

MEMORANDUM

TO: Airport Commission Employees **DATE:** September 11, 2020

THROUGH: Jeff Littlefield 
Chief Operating Officer

FROM: Audrey Lawrence
Director of Safety and Health

SUBJECT: Employee Wildfire Smoke Notice

The Air Quality Index (AQI) has reached the Unhealthy (red/purple) range in the San Francisco area. Attached is a Wildfire Smoke Notice required by Cal/OSHA that describes the City's response to protect employee health and safety.

The Notice outlines regulations specific to outdoor workers who must be provided with N95 respirators for voluntary use when working outdoors for more than one hour. In addition, please postpone any non-essential strenuous outdoor work while the Air Quality remains at Unhealthy levels.

The City has adopted similar standards for indoor workers and requires departments to offer N95 respirators for voluntary use when required to go outdoors. Work may safely continue inside buildings with filtration systems even when the smell of smoke is detectable.

Please make this notice available to all employees. For additional information, contact the Safety and Health office main number at (650) 821-5907.

Attachment: DHR-CCSF Wildfire Smoke Notice



CCSF Wildfire Smoke Notice

Cal-OSHA regulations require this notice to be provided to all employees to protect outdoor workers from the effects of Wildfire Smoke.

NOTE: The Cal-OSHA regulations apply to *outdoor* workers. The City's guidance for *indoor* workers are included in Attachment A of this document.¹

The following workplaces and operations are exempt from these requirements:

- a. Enclosed buildings or structures in which the air is filtered by a mechanical ventilation system and the employer ensures that windows, doors, bays, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
- b. Enclosed vehicles in which the air is filtered by a cabin air filter and the employer ensures that windows doors and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
- c. The employer demonstrates that the concentration of PM2.5 (particulate matter that is 2.5 micrometers or less in diameter) in the air does not exceed a concentration that corresponds to a current Air Quality Index (AQI) of 151 or greater by measuring PM2.5 levels at the worksite in accordance with Appendix A of the regulations.
- d. Employees exposed to a current AQI for PM2.5 of 151 or greater for a total of one hour or less during a shift.
- e. Firefighters engaged in wildland firefighting.

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¹ The California Occupational Safety & Health Division requires employers to provide this information to all employees. To read the text of the regulations, go to: <https://www.dir.ca.gov/OSHSB/documents/Protection-from-Wildfire-Smoke-Emergency-txtbrdconsider.pdf>

1. The health effects of wildfire smoke.

Although there are many hazardous chemicals in wildfire smoke, the main harmful pollutant for people who are not very close to the fire is “particulate matter,” the tiny particles suspended in the air.

Particulate matter can irritate the lungs and cause persistent coughing, phlegm, wheezing, or difficulty breathing. Particulate matter can also cause more serious problems, such as reduced lung function, bronchitis, worsening of asthma, heart failure, and early death.

People over 65 and people who already have heart and lung problems are the most likely to suffer from serious health effects.

The smallest—and usually the most harmful—particulate matter is called PM2.5 because it has a diameter of 2.5 micrometers or smaller.

2. The right to obtain medical treatment without fear of reprisal.

Employers shall allow employees who show signs of injury or illness due to wildfire smoke exposure to seek medical treatment, and may not punish affected employees for seeking such treatment. Employers shall also have effective provisions made in advance for prompt medical treatment of employees in the event of serious injury or illness caused by wildfire smoke exposure.

Please see Instructions for CCSF Employees on How to Obtain Medical Treatment on the following page.

Instructions for CCSF Employees on How to Obtain Medical Treatment

CCSF employees may contact the Nurse Triage/Injury Hotline that is available 24/7. Call **1-855-850-2249** to get immediate medical advice, report a workplace injury, and obtain a workers' compensation claim form.

Immediate medical care is available at any of the following designated treatment facilities:

<p>St. Francis Treatment Room 1199 Bush Street, Suite 160, San Francisco (415) 353-6305 Monday - Friday: 9:00 a.m. to 5:00 p.m.</p>	<p>Kaiser Occupational Health Services (Opera Plaza) 601 Van Ness Avenue, Suite 2008, San Francisco (between Turk & Golden Gate, inside Opera Plaza Bldg., Mezzanine Level) (415) 833-9600 Monday - Friday: 8:30 a.m. to 5:00 p.m.</p>
<p>AT&T Clinic- St. Francis Health Center (at the Ballpark) 24 Willie Mays Plaza, San Francisco (415) 972-2249 Monday - Friday: 7:30 a.m. to 5:00 p.m.</p>	<p>Kaiser Occupational Health Services Mission Bay Medical Office - 1600 Owens Street, San Francisco (415) 883-2000 Monday - Friday: 8:00 a.m. to 5:30 p.m.</p>
<p>California Pacific Medical Center - Davies Campus Castro & Duboce Streets, San Francisco (415) 600-6600 option 2 Monday - Friday: 8:00 a.m. to 5:00 p.m.</p>	<p>San Francisco International Airport Medical Clinic International Terminal Main Hall, Level 3, "A" Side (Departures Level, Pre-Security) (650) 821-5600 Monday - Friday: 7:00 a.m. to 7:00 p.m.; Saturday: 8:00 a.m. to 4:00 p.m.</p>
<p>Valley Care Occupational Health Services 4000 Dublin Blvd, Suite 150, Dublin, CA 94568 (925) 416-3562 Monday - Friday: 8:00 a.m. to 5:00 p.m.</p>	<p>Sonora Regional Medical Clinic 1000 Greeley Rd Sonora, CA 95370 (209) 532-3161</p>

After Normal Business Hours:

<p>Saint Francis Memorial Hospital Emergency Department 1150 Bush Street (between Hyde and Leavenworth Streets) (415) 353-6300</p>	<p>Kaiser Permanente Medical Center Urgent Care 2238 Geary Blvd., 3rd Floor, San Francisco (415) 833-2200 Monday - Friday: 5:30 p.m. to 7:30 p.m. Saturday - Sunday: 9:00 a.m. to 5:00 p.m.</p>
<p>California Pacific Medical Center Davies Campus, Emergency Department Castro & Duboce Streets, San Francisco (415) 600-0600</p>	<p>Kaiser Permanente Emergency Department 2200 O'Farrell Street at Baker, San Francisco (415) 833-3300</p>
<p>Sonora Regional Medical Hospital 1000 Greeley Rd, Sonora, CA 95370 (209) 532-3161</p>	

3. How employees can obtain the current Air Quality Index (AQI) for PM2.5.

Various government agencies monitor the air at locations throughout California and report the current AQI for those places. The AQI is a measurement of how polluted the air is. An AQI over 100 is unhealthy for sensitive people and an AQI over 150 is unhealthy for everyone. Although there are AQIs for several pollutants, Title 8, section 5141.1 about wildfire smoke only uses the AQI for PM2.5.

The easiest way to find the current and forecasted AQI for PM2.5 is to go to www.AirNow.gov and enter the zip code of the location where you will be working. The current AQI is also available from the U.S. Forest Service at <https://tools.airfire.org/> or a local air district, which can be located at www.arb.ca.gov/capcoa/dismap.htm.

Employees who do not have access to the internet can contact their employer for the current AQI. The EPA website www.enviroflash.info can transmit daily and forecasted AQIs by text or email for particular cities or zip codes.

Additional Information for CCSF Employees

City departments monitor air quality and provide guidance to its employees during significant weather events through the Mayor's office, the Department of Public Health, Department of Emergency Management, and the Department of Human Resources.

Employees may also contact their management or departmental personnel office to express any concerns about the air quality.

Employees sensitive to pollutants may request to use available leave time during extreme weather events, including exposure to wildfire smoke.

See Attachment A for the Air Quality Index Chart listing of the level of health concerns when air quality becomes poorer, and the guidance for employees and departments.

4. The requirements in Title 8, section 5141.1 about wildfire smoke.

If employees may be exposed to wildfire smoke, then the employer is required to find out the current AQI applicable to the worksite. If the current AQI for PM2.5 is 151 or more, the employer is required to:

- (1) Check the current AQI before and periodically during each shift.
- (2) Provide training to employees.
- (3) Lower employee exposures.
- (4) Provide respirators and encourage their use.

Additional Information for CCSF Employees

The Department of Public Health monitors outdoor Air Quality level and issues health advisories during significant Air Quality events in coordination with the Department of Human Resources and the Department of Emergency Management.

Departments will notify employees either by email or by the means generally used to communicate to their staff, such as safety meetings, of where and how to obtain N95 respirators for voluntary use when air quality levels reach 151 or more, and how to properly use them. Generally, employees who are outside for less than one hour will not need a N95 respirator.

Departments with staff who work outdoors will consider postponing non-essential strenuous work where air quality levels reach 201 on the Air Quality Index to lower employee exposures.

5. The employer's two-way communication system.

Employers shall alert employees when the air quality is harmful and what protective measures are available to employees.

Employers shall encourage employees to inform their employers if they notice the air quality is getting worse, or if they are suffering from any symptoms due to the air quality, without fear of reprisal.

The CCSF Communications System

Health advisories on air quality and available protective resources will be issued jointly through the Department of Human Resources, the Department of Public Health, and the Department of Emergency Management to all Department Heads and Departmental Personnel Officers, by email as well as posted on the San Francisco Employee Gateway Portal and the Department of Human Resources website. You can find information at: (insert link)

Employees with respiratory or other symptoms during air quality events may request to use available leave time, consistent with the City's leave policies.

The City may communicate with employees through the Human Resource Alert systems developed for disaster notification. This includes notifications via office email, personal email, texts or calls to employee's personal mobile devices.

Employees are responsible for keeping their personal contact information updated in the SF Employee Portal: <https://sfgov.org/sfc/employee-gateway>

Log in to the SF Employee Portal using your Disaster Service Worker ID number, and click on My Information to update your contact information.

6. The employer's methods to protect employees from wildfire smoke.

Employers shall take action to protect employees from PM2.5 when the current AQI for PM2.5 is 151 or greater. Examples of protective methods include:

- (1) Locating work in enclosed structures or vehicles where the air is filtered.
- (2) Changing procedures such as moving workers to a place with a lower current AQI for PM2.5.
- (3) Reducing work time in areas with unfiltered air.
- (4) Increasing rest time and frequency, and providing a rest area with filtered air.
- (5) Reducing the physical intensity of the work to help lower the breathing and heart rates.

CCSF's methods to protect employees from wildfire smoke

Departments employing outdoor workers will determine the work critical to their operations and communicate directly with staff on work assignments with the goal of reducing the employee's exposure to wildfire smoke. (For guidance that includes indoor workers, please refer to Attachment A.)

In situations where the Air Quality Index reaches a "Hazardous" level where the AQI is 301 or greater), the Departments will:

- Provide N95 respirators for voluntary use
- Identify non-essential employees for temporary reassignment to perform tasks in buildings with filtered air

If the Air Quality Index reaches 501 or more, which would occur only in the immediate vicinity of a fire, emergency personnel will be required to wear appropriate respirators and will be "Fit tested" to make sure that the employee is protected. Non-essential staff may be sent home.

7. The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke.

Respirators can be an effective way to protect employee health by reducing exposure to wildfire smoke, when they are properly selected and worn. Respirator use can be beneficial even when the AQI for PM2.5 is less than 151, to provide additional protection.

When the current AQI for PM2.5 is 151 or greater, employers shall provide their workers with proper respirators for voluntary use. If the current AQI is greater than 500, respirator use is required.

A respirator should be used properly and kept clean.

The following precautions shall be taken:

1. Employers shall select respirators certified for protection against the specific air contaminants at the workplace. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Center for Disease Control and Prevention certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will list what the respirator is designed for (particulates, for example). Surgical masks or items worn over the nose and mouth such as scarves, T-shirts, and bandannas will not provide protection against wildfire smoke. An N95 filtering facepiece respirator, shown in the image below, is the minimum level of protection for wildfire smoke.
2. Read and follow the manufacturer's instructions on the respirator's use, maintenance, cleaning and care, along with any warnings regarding the respirator's limitations. The manufacturer's instructions for medical evaluations, fit testing, and shaving should also be followed, although doing so is not required by Title 8, section 5141.1 for voluntary use of filtering facepiece respirators.
3. Do not wear respirators in areas where the air contains contaminants for which the respirator is not designed. A respirator designed to filter particles will not protect employees against gases or vapors, and it will not supply oxygen.
4. Employees should keep track of their respirator so that they do not mistakenly use someone else's respirator.
5. Employees who have a heart or lung problem should ask their doctor before using a respirator.

Respirator recommendations apply to employees working outdoors or in buildings without air filtration systems. The City takes action when the Air Quality Index reaches 151 PM2.5, see Attachment A for guidance.

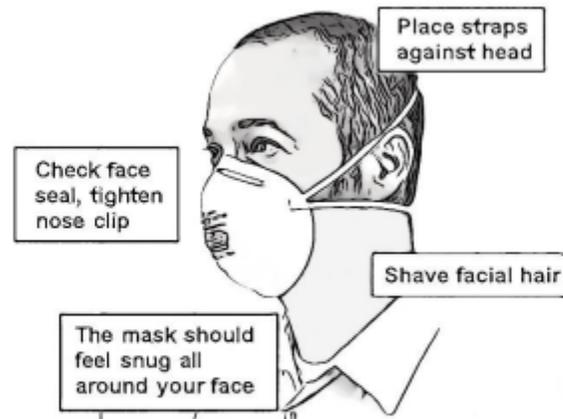
"Surgical" and similar masks, "vogmasks", disposable dust masks, or similar devices are not a substitute for N95 respirators and will not be provided as an alternative to N95 respirators.

N95 respirators place strain on the wearer's cardiovascular system. Employees with heart or lung problems or conditions, asthma, high blood pressure, or other health conditions should consult with their personal healthcare providers prior to wearing N95 respirators.

8. How to properly put on, use, and maintain the respirators provided by the employer.

To get the most protection from a respirator, there must be a tight seal around the face. 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 do not have seals that are affected by facial hair. The proper way to put on a respirator depends on the type and model of the respirator.

For those who use an N95 or other filtering facepiece respirator mask that is made of filter material: (1) Place the mask over the nose and under the chin, with one strap placed below the ears and one strap above. (2) Pinch the metal part (if there is one) of the respirator over the top of the nose so it fits securely.



*Drawing Showing Proper Fitting of a Filtering Facepiece Respirator
(shaving is not required for voluntary respirator use)*

For a respirator that relies on a tight seal to the face, check how well it seals to the face by following the manufacturer's instructions for user seal checks. Adjust the respirator if air leaks between the seal and the face. The more air leaks under the seal, the less protection the user receives.

Respirator filters should be replaced if they get damaged, deformed, dirty, or difficult to breathe through. Filtering facepiece respirators are disposable respirators that cannot be cleaned or disinfected. A best practice is to replace filtering facepiece respirators at the beginning of each shift.

Facial hair (beards, sideburns, mustaches) which come between the edges (sealing surfaces) of the respirator and the wearer's face will substantially diminish, if not completely nullify the effectiveness of the respirator. Voluntary wearers of respirators are strongly advised to shave during the period when respirators are worn; shaving is mandatory when respirator use is required.

Loose-fitting powered air purifying respirators are highly specialized devices and are generally not available except for specialized work as determined by individual departments.

If you have symptoms such as difficulty breathing, dizziness, or nausea, go to an area with cleaner air, take off the respirator, and get medical help.

Attachment A: Guidance on Protecting CCSF Workers from Exposure to Wildfire Smoke

Air Quality Index	Level of Health Concern	Expected Frequency	Potentially Affected Employees	Indoors with Filtered Air (HVAC)	Outdoors or in Buildings Without Filtration
0-50	Good	Normal condition during most of the year.	None	No action necessary.	No action necessary.
51-100	Moderate	This level is commonly reached in SF due to traffic pollution. 60+ days a year is typical.	Employees extremely sensitive to particulates	No action necessary.	No action necessary.
101-150	Unhealthy for Sensitive Groups	Typically occurs 2+ days per year, even without a fire.	Employees with cardiovascular or respiratory conditions	No action is required by CalOSHA. However, employees with cardiovascular or respiratory conditions or those who show signs of injury or illness from exposure to wildfire smoke may seek medical attention and access available leave consistent with City policies at this and higher levels.	No action is required by CalOSHA. However, employees with cardiovascular or respiratory conditions or those who show signs of injury or illness from exposure to wildfire smoke may seek medical attention and access available leave consistent with City policies at this and higher levels.
151-200	Unhealthy	Rare event. Unhealthy level was reached for 8 days in 2018. The most recent Unhealthy AQI before that occurred in 2002.	All employees	<ul style="list-style-type: none"> Voluntary use respirators can be offered to employees Note: There is no evidence that respirators provide supplemental protection inside of a building with filtered air. 	<ul style="list-style-type: none"> Voluntary use respirators must be offered to employees Postpone non-essential strenuous work Follow departmental instructions
201-300	Very Unhealthy	Extremely rare event. From 2000-2019, there has only been one day in which SF reached the Very Unhealthy level.	All employees	<ul style="list-style-type: none"> Voluntary use respirators can be offered to employees Follow emergency instructions from City notification system 	<ul style="list-style-type: none"> Voluntary use respirators must be offered to employees Postpone non-essential work Redirect employees to indoor work if possible Follow departmental instructions
301-500	Hazardous	This level has not been reached during the period we have records for (2000-2019). While unlikely, this level could occur if were a large fire near SF.	All employees	<ul style="list-style-type: none"> Voluntary use respirators can be offered to employees. Follow emergency instructions from City notification system 	<ul style="list-style-type: none"> Voluntary use respirators must be offered to employees Send home non-essential employees Redirect employees to indoor work if possible Postpone non-essential work Follow emergency instructions from City notification system
501+	Extremely Hazardous	An AQI over 500 would typically only occur in the immediate vicinity of a fire. A citywide AQI of over 500 would only be expected during a catastrophic fire in SF.	All employees	<ul style="list-style-type: none"> Send home all non-emergency personnel. Follow emergency instructions from City notification system 	<ul style="list-style-type: none"> Essential personnel must wear appropriate respirators Postpone non-essential work Follow emergency instructions from City notification system