DAVIS POLICE DEPARTMENT
OUTDOOR SMOKE & POOR AIR QUALITY
Policy and Procedure 1.39-AA

DEPARTMENT MANUAL

Index as:
Employee Protection Smoke
Outdoor Smoke
Air Quality

I. POLICY

The inhalation of wildfire smoke and contaminants has been identified as a cause of respiratory problems and other health issues. Smoke contains chemicals, gases and fine particles that can harm health. The greatest hazard comes from breathing fine particles in the air, which can reduce lung function, worsen asthma and other existing heart and lung conditions, and cause coughing, wheezing and difficulty breathing.

The California Division of Occupational Safety and Health, better known as Cal/OSHA, issued regulations requiring employers to protect workers from the hazards associated with wildfire smoke. The regulation applies to workplaces, where the current Air Quality Index (AQI) for airborne particulate matter (also known as PM2.5) is 151 or greater, and where employers should reasonably anticipate that employees could be exposed to wildfire smoke. Because these regulations are a State requirement, they must be followed.

Members that work outside shall be issued a field-expedient PPE (Personal Protective Equipment) kit that contains:

- A disposable Tyvex suit (commonly referred to as paper suit)
- Protective eyewear
- Ear-protection
- Hazardous waste disposal bags
- Single use eye saline (emergency eye wash)
- Spit-sock hoods
- Disposable overshoes
- N95 masks.

Members shall have ready access to their PPE while on-duty. Members are individually responsible for maintaining their kit and replacing damaged and/or used equipment.

II. PROCEDURE

A. AQI Program

Professional Standards carries the overall responsibility for the administration and training of these requirements, while other supervisory staff are responsible for its practical implementation.

Supervisors shall ensure all of the following:
- The timely identification of harmful exposure of members to airborne particulate matter from wildfire smoke at the start of each shift and periodically throughout shifts by ensuring the performance of checks of the AQI for PM2.5 in regions where departmental members are located.

- The notification of on duty and working members regarding hazardous AQI, if necessary.

- The reduction harmful exposure to wildfire smoke if feasible and practical (i.e., relocating work to an enclosed building with filtered air or to an outdoor location where the AQI for PM2.5 is 150 or lower).

- The provision of respirators such as N95 masks to members for voluntary use if reasonable efforts cannot reduce harmful exposure to wildfire smoke.

- The training on the regulation/policy, the health effects of wildfire smoke, and the safe use and maintenance of the N95 mask.

- The identification and proper maintenance of shelter-spaces which can be made available to members in case of a hazardous AQI event.

All members are expected to assist supervisors in fulfilling their duties related to these procedures.

B. Identification of hazardous AQI

Particulate matter is often measured in micrometers. The smallest, and usually the most harmful, particulate matter is called PM2.5 (solid particles and liquid droplets suspended in air with an aerodynamic diameter of 2.5 micrometers or smaller). In other words, PM2.5 would be about 0.0001 inches in diameter or smaller and is therefore not perceivable by humans without proper equipment. The higher the content of PM2.5 in the air, the more hazardous the conditions for the employee become.

The AQI based upon its content of PM2.5 is currently measured as follows:

<table>
<thead>
<tr>
<th>Air Quality Index (AQI) Values</th>
<th>Levels of Health Concern</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the AQI is in this range:</td>
<td>Air quality conditions are:</td>
<td>As symbolized by this color:</td>
</tr>
<tr>
<td>0 to 50</td>
<td>Good</td>
<td>Green</td>
</tr>
<tr>
<td>51 to 100</td>
<td>Moderate</td>
<td>Yellow</td>
</tr>
<tr>
<td>101 to 150</td>
<td>Unhealthy for Sensitive Groups</td>
<td>Orange</td>
</tr>
<tr>
<td>151 to 200</td>
<td>Unhealthy</td>
<td>Red</td>
</tr>
<tr>
<td>201 to 300</td>
<td>Very Unhealthy</td>
<td>Purple</td>
</tr>
<tr>
<td>301 to 500</td>
<td>Hazardous</td>
<td>Maroon</td>
</tr>
</tbody>
</table>
On-duty dispatchers are responsible for checking the AQI for PM2.5 in the geographical area of the City of Davis, and other regions where on-duty members are located, at the beginning of their shift and periodically during their shift. RIMS will generate an automatically re-occurring incident at 0600, 1200, 1800 and 0000 hrs each day. These incidents will be referred to as “AQI-Check.”

For an AQI-Check incident, dispatchers will, when practical, access one of the following websites and check the current AQI for PM2.5:

- [https://airnow.gov/](https://airnow.gov/)
- [https://www.ysaqmd.org/](https://www.ysaqmd.org/)

The California Air Resources Board (1-800-242-4450) and local Air Pollution Control District (Yolo County OES 1-530-666-8920) also offer information by phone.

Once a dispatcher obtains the AQI, they shall log the information (for example, “AQI=123”) into the incident and close the call with a disposition of “Service”. If the AQI is equal to or greater than 151 the dispatcher shall inform the watch commander so protective measures can be implemented. The watch commander is responsible for the dissemination of information regarding AQI to on-duty members. This can be done via MDT messaging, in person notification and/or radio announcement. Dispatch will do an administrative notification. Dispatch will re-contact the on-duty watch commander once the AQI falls below 151.

C. Notification and Deployment of N95 Masks

Members will have ready access to their PPE and N95 mask to ensure readiness in case the AQI exceeds unhealthy limits.

The Department shall allow members to use respirators or N95 masks on a voluntary basis when the current AQI for PM2.5 is equal to or greater than 151 (unhealthy for certain groups) but less than 500.

The use of a respirator is required when the current AQI for PM2.5 is equal to or greater than 500.

D. Storage of N95 Mask

Professional Standards, or their designee, is responsible for the overall storage and maintenance of the non-issued N95 masks. The two primary storage locations for the N95 masks are:

- Watch Commander 1 (Sergeant’s Office), minimum of 60 masks
- Room #150, for bulk storage

Members may issue themselves a suitable number of masks for work-assignments. Mask shortages shall be promptly reported to Professional Standards, or their designee.

E. Donning, Wearing and Doffing the N95 Mask

Detailed end-user instructions for donning, wearing and doffing the N95 Mask are made available by the manufacturer. Instructions are located:

- In new N95 mask packaging (“3M Health Care Particulate Respirator and Surgical Mask 1870”)
- The 3M official website at:
  [https://multimedia.3m.com/mws/media/92131O/3m-8000-series-n95-particulate-respirator-user-instructions.pdf](https://multimedia.3m.com/mws/media/92131O/3m-8000-series-n95-particulate-respirator-user-instructions.pdf)
Attached to this policy.

The following are important points about the N95 mask:

- The respirator will provide some protection against the particles in smoke, but it will not provide complete protection.
- A respirator, excluding an N95 mask, which has not been fit-tested may not provide the maximum level of protection.
- Disposable dust mask respirators marked N95, N-99, N-100, R-95, P-95, P-99, or P-100 do not protect against gases or vapors.
- Although a medical evaluation is not required for using an N95 mask, members are advised to consult their doctor about potential exposures to smoke and respirator use, particularly if they have certain health problems such as respiratory or heart conditions.
- Respirators are deemed unserviceable when soiled, deformed, previously worn for a prolonged period or otherwise damaged.
- 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.

Additional information can be located online at: https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/masks-and-n95-respirators

F. Cal/OSHA Advisement Under Appendix D to Section 5144:

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker.

Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designated to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else’s respirator.
G. Protection from Exposure to Wildfire Smoke

When the AQI is over 151, the Department will place certain restrictions on members to reduce their exposure to wildfire smoke. When feasible, members will be assigned to duties that are inside the Police Department.

Additional restrictions may include, but are limited to:

- Locating work in enclosed structures or vehicles where the air is filtered.
- Changing procedures such as moving members to a place with a lower AQI.
- Reducing work time in areas with unfiltered air.
- Increasing rest time and frequency, and providing a rest area with filtered air.
- Reducing the physical intensity of the work to help lower the breathing and heart rates.

H. Wildfire Smoke Protection in a Vehicle

Members operating vehicles where the air is filtered by a cabin air filter should ensure that windows, doors, and other openings are kept closed, to the extent possible, to minimize contaminated outdoor or unfiltered air. Department vehicles will have the cabin air filters changed with manufacturer recommended filters during regularly scheduled preventative maintenance checks. Air cabin filters should be changed after a vehicle is exposed to high levels of AQI (e.g.; after the deployment in a wildfire area).

I. Training

The Department will provide annual training on the Cal/OSHA regulation, this policy, the health effects of wildfire smoke, and the safe use and maintenance of respirators.

Darren Pytel
Police Chief
12/19