

**TO:** Principals

**FROM:** Gary Bradbury, Director Safety & Risk Management

**RE:** **Air Quality Determination and Response**

**DATE:** November 1, 2023

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

At times our schools are impacted by poor air quality; either from common weather/municipal air pollution conditions or by local disasters such as a wildfire. In situations of poor air quality, the District’s first priority is to safeguard the health and wellbeing of students and staff. The purpose of this memo is to provide schools administrators with information on how to obtain and interpret air quality data and on the recommended response protocols that pertain to specific levels of air pollution.

**Outside Air Quality in Question – Take the Following Steps**

**STEP 1** Obtain Real Time Air Quality Status – Consult the [Purple Air Map](https://www.purpleair.com/map?opt=1/mAQI/a10/cC0#11/34.1907/-118.8619) for the Air Quality Index (AQI) for your location.

**STEP 2** Follow the [CDE AQ Guide](https://www.conejousd.org/cms/lib/CA50010930/Centricity/Domain/102/Air%20Quality%20Index%20Activity%20Chart.pdf) for curtailing outside activity and protecting persons sensitive to poor air quality. Sensitive individuals include all those with asthma or other chronic heart/lung conditions.

**STEP 3** For an AQI above 150, close all doors and widows and run the building’s HVAC to circulate air through the system filtration. Utilize the large Carrier Portable Air Cleaners for large indoor assembly rooms such as the GYM or MPR to provide for additional air filtration in those rooms.

**STEP 4** Inform Executive Cabinet and Risk Management as to the response measures being taken.

**Background Information and Agency Guidance**

**The Appropriate Air Quality Standard**

The standard used by the District for determining outside air quality is the Air Quality Index (AQI) as established by the Environmental Protection Agency (EPA) and reported by the EPA (<https://airnow.gov>). The AQI has six categories of air quality and a numerical range from 0 to 500. For each category there are guidelines for the level of outdoor activity that is considered safe and precautions for persons who are sensitive to poor air quality.

Unfortunately, there is only one government operated air sensor for all of the Conejo Valley. In the event of an immediate inundation of smoke from a wildfire or in the case of some other acute air pollution incident this single monitor may not provide the school principal or the district office with adequate real time local AQI data. Aside from any available objective data, the administrator may need to take action to protect students and personnel based upon subjective evidence of extremely poor air quality: poor visibility, obnoxious odor, and reported respiratory symptoms. With this kind of an incident, the basic response would be to keep students and staff indoors with doors and windows closed and to contact the District Operational Center for further directions.

**Alternate** **Source for Obtaining the AQI Data**

In the case of a wildfire smoke situation where the local air quality can change rapidly and where a real time measurement of the PM 2.5 particulate level is critical, the Purple Air network [Purple Air Map](https://www.purpleair.com/map?opt=1/mAQI/a10/cC0#11/34.1907/-118.8619) can be used to obtain a more real time AQI for the Conejo Valley. PM2.5 is the primary pollution indicator for determining air quality in wildfire incident. It is important to understand that the Purple Air network is made up of privately installed monitors that are not regularly serviced or calibrated and thus are subject inaccuracies due to these limitations. Therefore, the key is not to rely upon the reading from one monitor, but to gauge the range of readings from multiple monitors in your area.

**The California Department of Education (CDE) Guidelines**

The CDE has published guidelines [CDE AQ Guide](https://www.conejousd.org/cms/lib/CA50010930/Centricity/Domain/102/Air%20Quality%20Index%20Activity%20Chart.pdf) for responding to poor air quality caused by a wildfire incident. Because these guidelines are based upon the EPA air quality recommendations for schools and tailored for K-12 school operations they should be used in responding to **all** poor air quality situations and not just wildfire smoke. It is important to note that Sensitive Groups category is described in the CDE guidelines as those individuals (adult or child) with asthma or other heart/lung conditions. Students who fall within this group should be identified prior to a poor air quality event. Employees who have a medical condition that restricts their ability to perform their duties outside when the AQI reaches a certain level should provide their supervisor with a doctor’s note stating this information so that a reasonable accommodation can be determined. If an employee is in need of such an accommodation, contact the HR Department and Risk Management.

In addition to following the CDE Guidelines, the District is required by law to take specific measures to protect employees from the harmful effects of wildfire smoke when the AQI exceeds 150 for fine particulates (PM 2.5). These measures pertain to employees who must work outside for one hour or more during their shift. If during a wildfire smoke incident it is necessary for an employee to work outside for more than an hour with an AQI above 150 they must be provided with a N95 respirator for voluntary use and with instructions on its safe use.

The Director of Safety and Risk Management should be contacted if the administrator encounters air quality circumstances that generate questions not covered in this memo. Risk Management and M&O have handheld meters that can be used to gauge the PM 2.5 level and other parameters of indoor air quality.

**CC:** Cabinet