



MP&MS Air Quality Protocols

The United States Environmental Protection Agency (EPA) developed the Air Quality Index, or AQI, to make information available about the health effects of common air pollutants and how to avoid those effects. According to the EPA, “for each pollutant an AQI value of 100 generally corresponds to an ambient air concentration that equals the level of the short-term national ambient air quality standard for protection of public health. AQI values at or below 100 are generally thought of as satisfactory. When AQI values are above 100, air quality is unhealthy: at first for certain sensitive groups of people, then for everyone as AQI values get higher.”

MP&MS will be using AirNow (AirNow.gov) to determine our AQI. AirNow is a partnership of the EPA, National Weather Service, National Park Service, NASA, CDC, and tribal, state, and local air quality agencies. It is considered to be the most accurate measure of regional air quality and is used by the California Air Resources Board, Marin County Public Health and Marin County Office of Education.

AirNow displays current air quality *and* also predicts forecasted air quality. Current AirNow AQI is referred to as the “NowCast AQI” and shows the AQI for ground-level ozone and particulate pollution (also known as particulate matter, or PM 2.5/PM 10). The “NowCast AQI” shows the most current hour available for the AQI by using a calculation that involves multiple hours of past data. The “NowCast AQI” uses longer averages during periods of stable air quality and shorter averages when air quality is changing rapidly, such as during a wildfire.

AirNow’s “AQI Forecasts” issues forecasts each afternoon for the next day. The “AQI Forecasts” informs users of what the next day’s AQI is expected to be, which groups of people may be affected, and steps individuals can take to reduce their exposure to air pollution. The forecast is developed using a number of tools – including weather forecast models, satellite images, air monitoring data, and computer models that estimate how pollution travels in the air.

In addition to AirNow’s “NowCast AQI” and “AQI Forecasts”, MP&MS will also cross reference Air Now’s fire and smoke reports at www.fire.airnow.gov and will follow any recommendations from the Smoke Outlook Special Statement report for our region.

Based on the above, MP&MS will implement the following AQI protocols:

When the AQI reaches **YELLOW** (51-100), MP&MS will:

- Hold regular outdoor activities
- Operate classroom air purifiers on high or smart mode
- Keep windows open to maximize outdoor air exchange (per COVID-19 health & safety protocols)
- Watch for sensitive students who may develop symptoms



When the AQI reaches **ORANGE** (101-150), MP&MS will:

- Decrease physical activity outside - can be outside, but with less strenuous activities
- Operate classroom air purifiers on high or smart mode
- Keep windows open to maximize outdoor air exchange (per COVID health & safety protocols)
- Watch sensitive students closely for signs of respiratory distress or need for rescue inhalers
- Work with families who may wish to keep children home due to respiratory issues
- If we have multiple days in the Orange Zone, we will work closely with Marin County Public Health and the Marin County Office of Education to determine if we need to close the school

When the AQI reaches or is forecasted to reach **RED** (151-200), MP&MS will:

- Close school. The EPA recommends that windows are closed when the AQI reaches the Red Zone. However, due to COVID-19 health & safety protocols, we cannot close our windows as we will not have the necessary fresh air exchange. Therefore, school must close.