



Frequently Asked Questions About Portable Sensors *July 2022*

How Do Federally Registered Monitoring Stations Differ From Portable Sensors?

The Sac Metro Air District operates seven of the eight federally registered air monitoring stations in Sacramento County. The District's monitoring network measures a wide range of air pollutants and particulate matter. Data from these stations are approved by the Environmental Protection Agency (EPA) and are used for specific regulatory purposes under state and federal law. Most of Sacramento County's air monitoring stations have been established for over two decades.

Portable sensors, like Purple Air, are a class of non-regulatory technology for measuring fine particulate matter in the air. Portable sensors are individually owned. These sensors have a more extensive network because they are commercially available and relatively low cost and can be installed near homes, businesses, schools, and many other locations in the community. Portable sensors can be useful for providing general air quality readings and hour-by-hour trends about air quality levels, especially during localized smoke episodes.

Why Should Residents Use The Fire & Smoke Map?

The Fire and Smoke map shows current air quality readings from Purple Air portable sensors, permanent monitors and temporary monitors that report to AirNow all in one place. The Purple Air map only shows data collected using their product.

The Fire and Smoke map lets users access:

- Air quality info from permanent, regulatory-grade monitors operated by experts from state, local and tribal air quality agencies
- Air quality info from temporary monitors operated by agencies' experts
- Crowd-sourced air quality info from Purple Air portable sensors, adjusted to be more comparable with the data reported by the permanent monitors that report to AirNow
- Fire locations
- Smoke plume locations
- Smoke forecast outlooks for large fires

Why Do Readings From EPA's Fire & Smoke Map Differ From The Purple Air Map?

The AirNow Fire and Smoke map may look different from the Purple Air map because:

- Purple air portable sensors do not receive professional or on-going maintenance. The EPA takes this into account and adjusts portable sensor data included on the AirNow Fire and Smoke Map.
- While the Purple Air map reports AQI as a 24-hour average that gets updated every hour or so, depending on the setting you select, AirNow Fire and Smoke map users can view PM2.5 concentrations in 1-hour or 10-minute averages. The AirNow Fire and Smoke Map also displays the color-coded AQI for the past several days.