Air quality notifications keep public in the loop

By John Cox Bakersfield Californian, Sunday, Feb. 21, 2021

There's nothing wrong with sticking your head out the window to see if you can spot a mountain. But there's another way to check local air quality that can offer more ... clarity.

The regional air district has put out a concise update every day for years offering a county-by-county summary of the previous day's air quality and a forecast for the current and next day. Numbers offer detail but the system comes down to assigning one of five colors to signify different levels of health risk.

Reading the updates takes a little advance explanation, and the information isn't as current or necessarily as accurate as some would like.

But the little bursts of information are more easily digestible than looking at raw data, plus they offer simple advice — and a glimpse of a complex problem — important to anyone in the southern Central Valley breathing what often ranks as the nation's most polluted air.

Jon Klassen, director of air quality science and planning at the San Joaquin Valley Air Pollution Control District, said the system is required because the region is classified as a zone that doesn't meet federal standards for ozone or particulate matter 2.5 micrometers or smaller.

Dating to the 1990s, it is intended to help people decide how to manage their outdoor activities, like whether to take a long walk.

At its most basic level, the system describes air quality as corresponding to one of three levels. An index reading of 1 to 50 classifies as "good," or green; 51 to 100 is "moderate," or yellow; 101-150 is "unhealthy for sensitive populations," or orange. A reading of 151 to 200 means "unhealthy," red; and 201 to 300 is "very unhealthy." Anything higher than that is "hazardous" and shown as black.

Klassen noted the index readings don't tell the actual concentrations of contaminants. Another thing to keep in mind is that the update only tells the pollutant with the higher index reading, be it ozone or "pm2.5." That's significant because the two pollutants carry different health risks.

Anyone looking to track pollution levels on an hourly basis can do so using the district's Realtime Air Advisory Network, or RAAN. The air district's website offers links to a historical archive of local index readings.

Kern County air quality advocate T.J. Frantz says the district's RAAN data lags enough to be of little use to people who want to make decisions about current conditions.

"It's not very useful since there are often dramatic swings in air quality throughout the day," he said. Frantz added that another source of online information called PurpleAir offers more frequently updated information that isn't quite as sophisticated as the air district's network and doesn't correspond exactly to its system.

Even so, Klassen said the air district's system helps people plan their days, especially people with respiratory problems for whom "it's really important ... to watch this closely."

"We do get comments from (members of the) public who appreciate the forecast," he said. "Because it does help them plan for the next day."