

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

CONTACT: Sage Swain, Air Quality Specialist, Planning Division, (805) 979-8303

SUBJECT: 2024 Annual Air Quality Report

RECOMMENDATION:

Receive and file a presentation and attached 2024 Annual Air Quality Report for Santa Barbara County.

BACKGROUND:

In 2024, the District operated a network of 12 ambient air quality and meteorological monitoring stations throughout Santa Barbara County. These stations are designed to measure concentrations of the following pollutants: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter less than 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}). Two of the twelve stations measure odorous air pollutants from industrial facilities. Wind speed, wind direction, and ambient temperature are also measured at most stations. Each year, the District prepares an annual air quality report after all of the air quality data has been reviewed and verified.

DISCUSSION:

The United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for certain air pollutants where public health criteria have been established. The EPA currently has NAAQS established for six pollutants: ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter.

The California Air Resources Board (CARB) has established air quality standards for the same criteria pollutants as the NAAQS. The state standards are either the same or more stringent than the federal standards. CARB has also adopted standards for four additional pollutants: sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

In 2024, the state 24-hour PM₁₀ standard of 50 µg/m³ was exceeded on sixteen days in total, between three different monitoring stations: Santa Maria, Lompoc H Street, and Goleta. It should be noted that there were thirteen exceedances at the Santa Maria station, while the Lompoc H Street station had two exceedances and the Goleta station had just one exceedance in 2024. Thirteen of the sixteen exceedance days were due to high wind events in the Santa Maria Valley and were recorded at the Santa Maria station. The Goleta exceedance was caused by mowing that occurred in the field adjacent to the station and the two exceedances at the Lompoc H Street station was due to smoke impacts from the Santa Lucia fire. There was one exceedance of the state and federal 8-hour ozone standards of 70 ppb at the Paradise Road station. The state and federal ambient air quality standards were met for all other measured pollutants.

The attached 2024 Annual Air Quality Report provides a brief discussion of our local air quality throughout the duration of the calendar year. The report summarizes the four highest concentrations for each pollutant at each monitoring station. Included in the report are maps and tables showing the locations of each monitoring station and the pollutants measured. The report also includes a discussion of long-term air quality trends for Santa Barbara County. The presentation to your Board will summarize the 2024 Annual Air Quality Report as well as other recent updates related to the District's air monitoring network.

ATTACHMENT:

- A. 2024 Annual Air Quality Report

ATTACHMENT A

2024 Annual Air Quality Report

August 21, 2025

Santa Barbara County Air Pollution Control District
Board of Directors

260 San Antonio Road, Suite A
Santa Barbara, California 93110