Internal Deliberative

South Coast & San Joaquin Valley Air Quality Challenges

ISSUE SUMMARY:

The twenty million people who live in California's South Coast (SC) and San Joaquin Valley (SJV) suffer from the worst air quality in the nation. In addition to significant emissions from vehicles, industrial, agricultural, and other sources, factors such as topography and meteorology contribute to the problem. Mobile sources, including cars, heavy duty trucks, locomotives, ships, and non-road equipment, are the largest source category contributing to the formation of ozone and particulate matter ($PM_{2.5}$) in these areas.

We work closely with the California Air Resources Board (CARB) and the SC and SJV air districts during development and implementation of State Implementation Plans (SIP). These plans, created by state and local air pollution control agencies, detail how air pollution will be controlled from various sources to ensure that air quality meets the National Ambient Air Quality Standards (NAAQS). We recognize that achieving the NAAQS in these areas will require substantial reliance on large-scale deployment of cleaner mobile source technologies.

UPCOMING MILESTONES:

The SC and SJV air districts along with CARB have significant efforts underway to develop and implement State Implementation Plans to meet the ozone and $PM_{2.5}$ standards. The following table summarizes the schedule for these plans.

NAAQS	Status of State Implementation Plan Submittals
SC – 1979 1-hour ozone	Plan approved. EPA has an overdue statutory obligation to determine, by June 30, 2023, if the area attained by its attainment date.
SC – 1997 8-hour ozone	Proposed finding of failure to attain. The comment period for this proposal closed on September 16. The state withdrew the SIP submittal.
SC – 1997 $PM_{2.5}$	Approved plan in place and area attained the standard.
SC – 2006 $PM_{2.5}$	Integrated plan covering multiple standards submitted April 27, 2017. EPA approved the 2006 $PM_{2.5}$ plan in 2018 and 2021, and the 2008 ozone plan in 2019.

SC – 2008 8-hour ozone	
SC – 2012 $PM_{2.5}$	South Coast withdrew the 2012 $PM_{2.5}$ portion of the April 2017 submittal and submitted a revised Serious area plan on August 6, 2024. South Coast is working on revisions to several District rules to ensure all requirements have been met and expects to submit the revised rules in summer 2025.
SC – 2015 8-hour ozone	Submitted February 23, 2023.
SJV – 1997 $PM_{2.5}$	EPA approved the plan for the 1997 24-hour $PM_{2.5}$ NAAQS and found that the area attained the NAAQS as of 2020. We are currently working to propose to extend the 1997 annual $PM_{2.5}$ attainment date by a year to December 31, 2024. Approval of the plan for the 2006 NAAQS was remanded to EPA. We received the 2012 plan in August 2024.
SJV – 2006 $PM_{2.5}$	
SJV – 2012 $PM_{2.5}$	
SJV – 2008 8-hour ozone	Plan approved in 2019. EPA disapproved the contingency measure element on November 2, 2024, and the air district has submitted a replacement measure. We expect to propose conditional approval and an interim final determination prior to triggering highway sanctions stemming from the disapproval.
SJV – 1987 PM10	TBD – SJV is working on exceptional events (EEs) needed for their overdue 2nd 10-year maintenance plan. Submittal not expected until after 2024.

BACKGROUND:

The Ports of Los Angeles and Long Beach receive 36% of the nation's imports and the San Joaquin Valley produces a quarter of the Nation's food, including 40% of the Nation's fruits, nuts, and other table foods, which are transported throughout the state and to the rest of the country. As long-haul heavy-duty trucks, ocean going vessels, port equipment, and locomotives transport these goods, many communities, particularly those around freight hubs such as ports, rail yards, and distribution centers, are significantly impacted by the emissions.

While federal engine emission standards and state regulations for vehicles have reduced emissions from mobile sources, deployment of zero- and near-zero-emission technologies is essential if California is to attain the federal air quality standards. Mobile source emissions are responsible for approximately 76% of nitrogen oxide (NOx) emissions, 90% of diesel PM2.5, and nearly half of greenhouse gas emissions in SC and SJV.

CARB and the SC and SJV Air Districts have repeatedly asked EPA and the federal government to do more to reduce emissions from sources that are not within their authority to control, such as interstate trucks, ships, and locomotives. In March of 2024, EPA, SC, and CARB formed a three-agency workgroup to assess strategies to attain the 1997, 2008, and 2015 ozone NAAQS in the South Coast air basin. The goal of the group is to evaluate all

significant emission categories, the availability of technologies and practices that support emission reductions, and regulatory and other pathways, both traditional and innovative, to drive the required emission reductions, with an initial focus on sources over which the federal government retains primary authority, i.e., locomotives, aviation, ocean-going vessels, and non-road engines.

We have built strategic partnerships to help advance cleaner technologies needed for clean air, including the West Coast Collaborative, California Clean Air Technology Initiative and the Targeted Airshed Grants. Through these programs, we partner with state, federal, and local air, energy, and transportation agencies to support demonstration and deployment of cleaner engines and zero and near-zero emission equipment in SC and SJV.

CARB and the Districts will likely continue to request more federal funding for cleaner technologies and federal support for documenting SIP credit for emissions reductions from incentive programs. In addition to NOx from mobile sources, PM2.5 exceedances in SJV are impacted by direct sources of PM2.5 (i.e., combustion soot, smoke, and dust). Industries that are significant sources of multiple air pollutants include agriculture, dairy, and oil and gas.

Non-governmental organizations (NGOs) often litigate EPA's actions on the SC and SJV Air Districts' attainment plans that the NGOs deem inadequate to protect public health.

KEY EXTERNAL STAKEHOLDERS:

☒ Congress ☒ Industry ☒States ☐ Tribes ☒ Media ☒ Other Federal Agency
☒ NGO ☒ Local Governments ☐ Other (name of stakeholder)

MOVING FORWARD:

We will continue to work with CARB, SC, and SJV Air Districts toward cleaner air with an emphasis on air quality plan development and emission reductions, support for documenting SIP credit for emission reductions gained from incentive programs, and technology advancement activities.

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