

Proposed Approvals of California's San Joaquin Valley and South Coast 8-hour Ozone Air Quality Plans

U.S. EPA Fact Sheet

September 7, 2011

Summary

- EPA is proposing to approve the 8-hour ozone air quality plans for the San Joaquin Valley (SJV) and South Coast (SC) areas in California. These plans, known as the State Implementation Plans (SIPs), are the roadmaps to meeting the 1997 8-hour ozone National Ambient Air Quality Standards (NAAQS) of 0.08 ppm by 2024. The NAAQS are set by the U.S. EPA to protect public health.

Ozone and Public Health

- Ozone pollution can cause inflammation and irritation of respiratory airways, coughing, shortness of breath, reduced lung function, asthma symptoms and increased hospitalizations for respiratory cases. Children and elderly are most impacted by ozone pollution.
- Ground-level ozone is formed when nitrogen oxides (NO_x) and volatile organic compounds (VOCs) react in the atmosphere in the presence of sunlight. NO_x and VOCs are called ozone precursors. Motor vehicle exhaust, industrial emissions, and chemical solvents are the major sources of these chemicals. Ozone pollution is a concern especially when the weather conditions needed to form it, lots of sun and hot temperatures, occur.
- These two areas suffer from some of the worst air quality in the country due to a number of factors, such as meteorology, geography, climate and weather. However, air quality in most of the SJV and SC has improved over the last ten years. For instance, the worst air quality locations in the SJV and SC have improved 6% and 23%, respectively, with many locations having even greater air quality improvements.

Today's Proposed Action

- EPA's proposed approvals of the 8-hour ozone air quality plans for the SJV and SC include:
 - Attainment demonstrations, including enforceable commitments and reductions from new technologies
 - Emissions inventories
 - Reasonable further progress demonstrations
 - Reasonably available control measures demonstrations
 - Contingency measures for progress and attainment

- Transportation conformity budgets
- These plans demonstrate that, by 2024, pollution will be reduced to the level needed to attain the 1997 8-hour ozone standard of 0.08 ppm.
 - For the SJV to attain by 2024, NO_x will have to be reduced by 75% and VOCs by 25% from 2002 levels.
 - For the SC to attain by 2024, NO_x will have to be reduced by 90% and VOCs by 52% from 2002 levels.
- Numerous new near-term state and district rules associated with these plans will reduce air pollution.
 - In the SJV, statewide measures such as the in-use truck and off-road diesel rules, and smog -check improvements will reduce air pollution. District rules reduce pollution from confined animal feeding operations, biosolids composting, open burning, and boilers, among other sources.
 - In the SC, statewide measures such as the in-use truck and off-road diesel rules, marine vessel rules, and smog-check improvements will reduce air pollution. District rules reduce pollution from solvents, lubricants, boilers and furnaces, among other sources.
- The Clean Air Act (CAA) also allows areas such as the SC and SJV (designated and classified as “extreme” nonattainment under the CAA) to rely on the development and implementation of new and improved technologies given the relatively long time between SIP development and attaining clean air.
- In their 8-hour ozone plans, roughly 12% of the needed NO_x reductions in SJV and 26% of the needed NO_x reductions in SC reductions are attributed to new and improved technologies. The SC also attributes 9% of the needed VOC reductions to new and improved technologies. Examples of the combined efforts to develop new technologies include:
 - The Clean Air Technology initiative - The EPA, California Air Resources Board, South Coast Air Quality Management District and San Joaquin Valley Air Pollution Control District have signed an agreement and are working cooperatively to develop the needed new technologies.
 - Air Quality Improvement Program (AQIP) – AQIP expands California’s portfolio of air quality incentives to include projects that do not fit into the framework of statutory programs. For example, in 2009-2010 AQIP spent over \$20 million for accelerating deployment of new hybrid medium and heavy duty truck vehicles.
 - The EPA along with the SC and SJV air districts have provided funding to projects to help spur early-stage, innovative technologies that need further testing and demonstration prior to deployment and commercialization. One project has funded the purchase of zero-emission electric delivery trucks, which will replace 28 UPS delivery diesel trucks with zero-emission medium-duty trucks. This will

further the effort to deploy cleaner engines on a large scale to end-users who may be considering retaining or rebuilding their old diesel vehicles.

- Other state agencies, such as the CA Energy Commission (CEC), invest considerable funds in innovative technologies. For instance, CEC's AB118 Alternative and Renewable Fuel and Vehicle Technology Program aims to develop and deploy alternative and renewable fuels and advanced transportation technologies to help meet the state's goals for reducing greenhouse gas emissions. Approximately \$100-\$120 million per year over the next 7 years will fund projects that develop and improve alternative and renewable low-carbon fuels.

SJV Reasonably Available Control Technology (RACT)

- In a separate but related action, EPA is proposing partial approval and partial disapproval of San Joaquin's demonstration that the area has imposed all reasonably available control technology (RACT) on all large commercial and industrial air pollution sources. The partial disapproval identifies nine activities where EPA has not yet confirmed RACT for the area, but which the agencies are working to adequately address in the next few months.

Next Steps

- EPA is providing a 30-day public comment period on its 8-hour ozone proposed actions. The agency has a consent decree deadline to take final action by December 15, 2011.

For More Information:

<http://www.epa.gov/region9/air/actions/ca.html>