

## U.S. EPA Fact Sheet

# Approvals of California's San Joaquin Valley and South Coast 8-hour Ozone Attainment Plans

December 15, 2011

### Summary

- EPA is approving 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.
- Federal, State and District control measures will reduce emissions in these areas. In addition, both plans also rely on development and deployment of new and improved technologies to achieve clean air.
- The Clean Air Act allows areas, such as the SC and SJV that are classified as “extreme” nonattainment, to rely on new and improved technologies given the magnitude of the reductions needed to attain clean air.

### Background

- In September 2011, EPA proposed to approve all elements of the SC and SJV 8-hour Ozone Plans and related portions of the California Air Resources Board (CARB) State Strategy, and invited the public to comment on its proposal.
- EPA considered all public comments. Commenters asserted that the new and improved technologies provisions are too large and not well defined. EPA has responded to this and other significant comments in the final rules.
- EPA's approvals of the 8-hour ozone air quality plans for the SJV and SC include:
  - Base year emission inventories;
  - Reasonable further progress demonstrations;
  - Reasonably available control measure demonstrations;
  - Attainment demonstrations;
  - Transportation conformity budgets;
  - Transportation control measures and transportation control strategies ;
  - State and District's commitments, including commitments for new and improved technologies; and
  - Contingency measures.
- These plans demonstrate that, by 2024, nitrogen oxide (NO<sub>x</sub>) and volatile organic compounds (VOCs) will be reduced to the level needed to attain the 1997 8-hour ozone standard of 0.08 parts per million (ppm).

- For the SJV to attain by 2024, NOx will be reduced by 75% and VOCs by 25% from 2002 levels.
- For the SC to attain by 2024, NOx will be reduced by 90% and VOCs by 52% from 2002 levels.
- The plans rely on new and improved technologies that have not yet been developed and extensively deployed.
  - In SJV, new and improved technologies are needed for 12% (about 50 tons per day) of NOx reductions from 2002 levels.
  - In the SC, new and improved technologies are needed for 26% (about 241 tons per day) of NOx reductions from 2002 levels and for 9% (about 40 tons per day) of VOC reductions.
- Both the Districts and CARB have research, demonstration, and grant programs underway to identify and develop the needed technologies. The State will meet annually with EPA to discuss strategies to maximize the clean air benefits of emerging advanced technologies and to provide annual summaries of activities and progress.

### **Ozone and Public Health**

- Ozone pollution can cause inflammation and irritation of respiratory airways, coughing, shortness of breath, reduced lung function, asthma symptoms, increased hospitalizations for respiratory cases and even premature death. Children and the elderly are most impacted by ozone pollution.
- Ground-level ozone is formed when NOx and VOCs react in the atmosphere in the presence of sunlight. NOx and VOCs are called ozone precursors. Motor vehicle exhaust, industrial emissions, and chemical solvents are the major sources of these chemicals.
- 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.

### **Next Steps**

- Today's final action will become effective 60 days after publication in the Federal Register. To view a pre-publication version, please visit: <http://www.epa.gov/region9/air/actions/ca.html>