

Federal Clean Air Act Ozone Standards Attainment Challenges for South Coast Region

All information is based on the 2012 South Coast Air Quality Management Plan (AQMP); an updated analysis will be a part of the 2016 AQMP

Which ozone standards will the 2016 South Coast AQMP address?

The 2016 South Coast AQMP will address three federal ozone standards: 1979 1-hour ozone (though revoked in 2005), 1997 8-hour ozone (80 parts per billion or ppb), and 2008 8-hour ozone (75 ppb).

In which years must the required emission reductions be made to attain these standards?

Ozone Standard	1979 1-hour	1997 8-hour	2008 8-hour
Attainment Year	2023	2024	2032
Reduction Year ¹	2022	2023	2031
Specify Black Box ²	2019	2020	2028

¹ An attainment demonstration requires that needed emission reductions be achieved the year prior to the attainment year.

² As required by federal law, the State Implementation Plan (SIP) contains commitments to adopt and submit specific measures to address emission reductions assumed in the "black box" no later than three years before they are scheduled to be implemented.

What are the challenges associated with attaining the standards?

The most pressing challenge is that nitrogen oxides (NOx) emissions must be reduced by two-thirds beyond all existing adopted measures by 2023. Specifically, over 200 tons per day must be reduced from a 300+ tons per day baseline. Further, the "black box" accounts for nearly all of the needed NOx emission reductions.

Why is the 2016 South Coast AQMP important to the region especially with respect to the transportation projects?

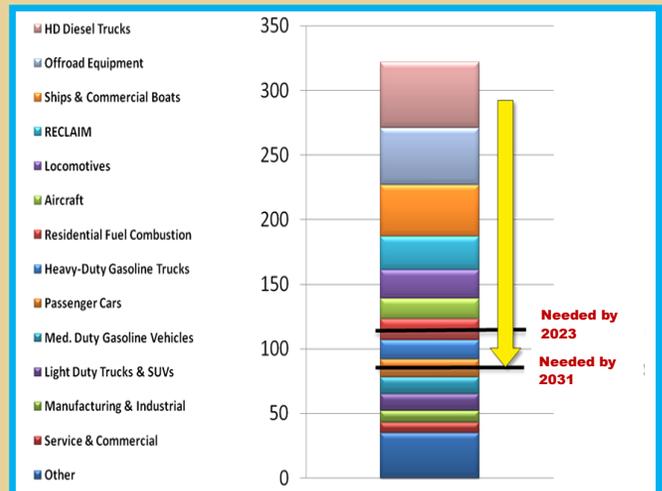
A failure to submit the required air plan or measures, a failure to implement an approved plan, or disapproval of a required plan can lead to restrictions on construction or modification of major stationary sources, federal highway funding restrictions, conformity freeze/lapse, and federal imposed plan. If an area has an approved air plan but fails to timely attain, the plan must be revised and additional measures may be required, though the attainment year may also be extended.

What is the schedule of 2016 South Coast AQMP?

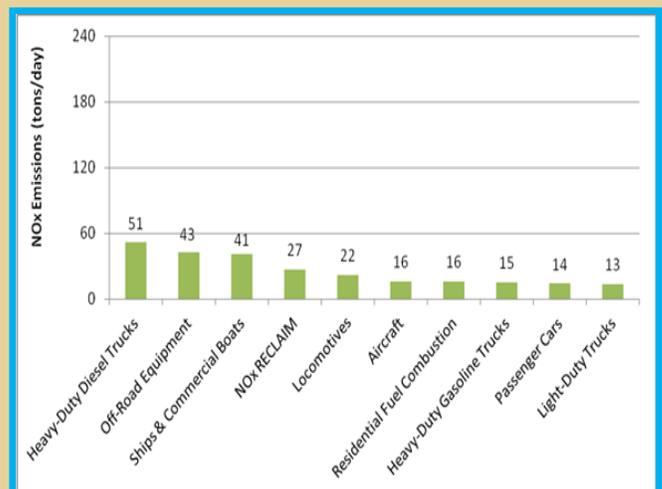
It is due to the U.S. Environmental Protection Agency (EPA) by July 2016.

Required Reduction of NOx Emissions

- ❖ South Coast NOx emissions must be reduced by 65% and 75% (beyond 2023 baseline which includes all existing adopted rules) to attain the 1997 and 2008 8-hour ozone standards in 2023 and 2031 respectively.
- ❖ Mobile sources account for over 75% of the 2023 NOx emission inventory; goods movement is a major portion of the mobile source emission inventory.



Top 10 NOx Source Categories (2023)



Key Facts and Statistics

Roles of Agencies Responsible for Preparing 2016 South Coast AQMP

- South Coast Air Quality Management District (SCAQMD): lead agency; stationary source control strategy; and some mobile source strategies
- California Air Resources Board (ARB): mobile-source and consumer product control strategy; SIP submittal to U.S. EPA; responsible for about three-quarters of 2016 AQMP base year 2012 NOx emissions
- SCAG: growth forecast; travel activity projections; and regional transportation strategy and control measures (Note: These components will be from the upcoming 2016 RTP/SCS, thus the 2016 RTP/SCS may need to consider how regional policies, strategies, and investment programs can appropriately contribute to attaining the more stringent ozone and PM2.5 standard.)

Components of 2016 South Coast AQMP

- New SIP to attain the 2008 8-hour ozone standard by 2031.
- New SIP to attain the 2012 annual PM2.5 standard between 2020 and 2025.
- These two new SIPs will each include new emission budgets, which set an upper limit on how much on-road transportation activities are permitted to emit in specific milestone years, for future transportation conformity post 2016 RTP/SCS.
- Update to the previously submitted 1997 8-hour ozone and 1-hour ozone SIPs.

“Black Box”/Section 182(e)(5) Measures

- “Black box” measures are commitments in the SIP for long-term emission reductions that rely on advancement of technologies as authorized under Section 182(e)(5) of the federal Clean Air Act
- “Black box” measures account for nearly all of the NOx emission reductions needed, over 200 tons per day, to attain the standards
- The SIP has commitments to minimize the size of the “black box” and ultimately eliminate it through the successive revision to the AQMP. Further, the air plan requires adoption and submittal to U.S. EPA contingency measures to address the “black box” reductions no later than three years before such measures are scheduled to be implemented.

For detailed information about the 2016 South Coast AQMP, visit <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>

2016 South Coast AQMP White Papers

To lay out technical and policy issues and to initiate dialogues with and seek input from stake-holders regarding control strategy development, SCAQMD staff has been coordinating the preparation of ten White Papers covering the following topics:

- Preface to Clean Air
- 21st Century Goods Movement Systems and Air Quality
- Passenger Transportation
- Energy Outlook
- Residential and Commercial Energy Use
- Industrial Facility Modernization
- VOC Controls
- PM Controls
- A Business Case for Clean Air
- Off-Road Commercial/Industrial Equipment

For detailed information about the White Papers, visit <http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers>