

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) FOR GROUND-LEVEL OZONE

On March 12, 2008, EPA revised the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The final rule appeared in the March 27, 2008 Federal Register and will be effective May 27, 2008.

Regulatory review of NAAQS

The Clean Air Act requires the EPA to review the standards every five years for each of the common air pollutants including

- Ground level ozone
- Carbon monoxide
- Nitrogen dioxide
- Particulate matter
- Lead and
- Sulfur dioxide.

Based on review of scientific information, existing standards and advice from the Clean Air Scientific Advisory Committee (CASAC), the EPA sets new NAAQS.

When was the last revision to the Ozone Standard?

In 1997 the EPA revised the primary (health-based) and secondary (welfare-based) ozone standards, setting both at 0.08 ppm (effectively 0.084 ppm due to rounding) with an 8-hour averaging time.

What are the new revisions to the Primary & Secondary Ozone Standards?

The EPA has determined that 1997 primary standard is not adequate for protection and welfare of the public. The new 8-hour primary and secondary ozone standards have been set to 0.075 ppm. Emphasis has been placed on a “three decimal standard” to prevent common rounding practices which inadvertently allowed for greater emissions and consequently had greater impacts on public health and welfare.

What factors are considered when setting NAAQS for ozone?

Ground-level ozone has the greatest impact on people with respiratory illnesses, children, older adults and people with greater exposure (those who work outside). Those groups sensitive to ground level ozone are monitored and studied to see how pollution impacts their health. Environmental impacts are considered as well. Plant species are studied to see if adsorption of ozone has impacted growth, disease and pest resistance, and biomass or production yields.

Revised ozone Air Quality Index (AQI)

The Air Quality Index used by the states to forecast air quality during ozone season has been revised to reflect the new primary standard set by the EPA.

Category	AQI Value	1997 8-hr (ppm)	2008 8-hr (ppm)
Good	0-50	0.000-0.064	0.000-0.059
Moderate	51-100	0.065-0.084	0.060-0.075
Unhealthy for Sensitive Groups	101-150	0.085-0.104	0.076-0.095
Unhealthy	151-200	0.105-0.124	0.096-0.115
Very Unhealthy	201-300	0.125-0.374	0.116-0.374
Hazardous	301-400	N/A (applicable to 1-hr std.)	N/A (applicable to 1-hr std.)
	401-500		

What is the timeline for implementation of the new NAAQS for ozone?

- The Final Rule was signed on March 12, 2008.
- States will have until March 12, 2009 to provide area designation recommendations to the EPA.
- Final designations are expected no later than March 12, 2010.
- Attainment Demonstration SIPs will be due in 2013.
- Attainment of the new standards should be achieved between 2013-2030 depending on the severity of non-attainment classifications.

What are the immediate implications of the new Ozone Standard?

Under the new ozone standard, a large number of areas in the county that are currently attainment areas under the 1997 standard will become non-attainment areas. However, States will continue to comply with the 1997 8-hour ozone NAAQS and the associated regulatory requirements. The EPA will address the transition to the new NAAQS for ozone in a future rulemaking. The EPA plans to propose these rules in the fall of 2008, which will

address issues such as new source review, conformity, and other implementation requirements.

What are the implications to industrial facilities?

For facilities that are located in areas that are currently in attainment but will become nonattainment once designation is made, these facilities will be subject to Nonattainment New Source Review (NNSR), a different set of permitting rules. The major elements of NNSR include acquiring emission credits to offset emissions of proposed projects and applying Lowest Achievable Emission Rate (LAER). In addition, States may impose additional controls in order to achieve attainment status within a specified time frame.

Areas that are currently in nonattainment may be bumped up to a more severe classification under the new ozone standard. Facilities located in such areas may be subject to a higher offset ratio.

For further questions concerning this rule and other air quality management issues, please contact Yousheng Zeng, Ph.D., P.E. using the following contact information.



PROVIDENCE

**1201 Main Street
Baton Rouge, Louisiana 70802
Phone: (225) 766-7400
Fax: (225) 766-7440**

PROVision is a publication of Providence Engineering & Environmental Group LLC. Every effort has been made to remain consistent with official statutes, regulations, policy, and guidance. If this article conflicts with a state or federal regulation or standard, then the regulatory language or standard prevails.

Copyright © 2008 by Providence Engineering & Environmental Group LLC