



STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
GARY C. RIKARD, EXECUTIVE DIRECTOR

March 17, 2015

Electronic Submittal

<http://www.regulations.gov>

Docket ID No. EPA-HQ-OAR-2008-0699

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mailcode 28221T
Attention: Docket ID No. OAR-2008-0699
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Proposed Rule – National Ambient Air Quality Standards for Ozone [79-FR-75234]

Dear Sir or Madam:

This document is being submitted to the United States Environmental Protection Agency (EPA) on behalf of the State of Mississippi (Mississippi) by the Mississippi Department of Environmental Quality (MDEQ) in its role as the environmental regulatory agency. MDEQ respectfully provides these comments on EPA's Proposed Rule to revise the National Ambient Air Quality Standards (NAAQS) for Ozone, as published in the Federal Register on December 17, 2014 [79-FR-75234]. Our comments are listed below.

Design Value Calculation Issue

MDEQ is concerned that the form of the proposed primary ozone standard – the three-year average of the annual 4th daily maximum – is not consistent with the standards issued for 24-hour PM_{2.5} and the 1-hour NO₂ standards. For these pollutants, EPA used the three-year average of the annual 98th percentile as the form of the standard. Therefore, in order to be consistent, MDEQ urges EPA to set the form of the ozone standard to be a three-year average of the annual

98th percentile. This would be equivalent to a three-year average of the annual 8th daily maximum.

Background Ozone Issue

EPA has not been able to confirm the natural background levels for ozone. This varies from region to region with the Southeast United States having higher background concentrations. As EPA lowers the standard, the background contribution becomes more significant. In 2001, a peer-reviewed paper (A.S.L. and Associates) was published that analyzed hourly average ozone concentrations greater than or equal to 0.05 ppm and 0.06 ppm during the winter and spring at several rural sites across southern Canada, the northern United States, and northern Europe. The results indicated that hourly average ozone concentrations greater than or equal to 0.05 ppm and 0.06 ppm occurred frequently during the winter and spring months. In some of the cases that were studied, a plausible explanation for the higher ozone values was the presence of upper tropospheric and stratospheric air that was transported down to the surface. Another paper published in 2014 (A.S.L. and Associates) characterized the percent contribution from background ozone to the total ozone observed at the Yellowstone National Park site in Wyoming. The authors reported that the contribution of background ozone at the site in Wyoming was very large (i.e., generally greater than 80-90% of the total ozone). The highest ozone concentrations at the site were associated with stratospheric intrusions.

In Mississippi and throughout much of the Southeast United States, the climate during ozone season is conducive for plant life to flourish. Much of this plant life, to varying degrees, emits elevated levels of ozone precursor emissions. This results in background ozone levels that could easily approach the proposed standard, especially on meteorologically-favorable days (e.g., high temperatures and stagnant winds) for ozone formation.

We believe that the ozone background levels in the U.S. are near the proposed standards because of stratospheric intrusions and from biogenic sources that emit ozone precursors. Thus, the proposed standards will greatly limit the anthropogenic emissions allowed in this country.

EPA's data suggests that if the standard is set in the lower end of the range, 558 out of 675 counties will not attain the standard because the standard is approaching background levels. This negatively affects the rural counties more; it will be difficult for them to have new development because they will not have any offsets.

Secondary Standard Form

We agree with EPA's proposal that the secondary standard should take the same form and concentration as the primary standard that will be determined. We feel that the additional regulatory burden that would result from implementing a distinct secondary standard is not needed and would not result in any significant improvement in air quality.

Monitoring Issues

EPA is proposing a new procedure for determining daily maximum 8-hour average ozone concentrations that is based on 17 consecutive 8-hour periods in each day, beginning with the 8-hour period from 7:00 a.m. to 3:00 p.m. and ending with the 8-hour period from 11:00 p.m. to 7:00 a.m. EPA is also proposing to modify the requirement for determining whether a daily maximum 8-hour average ozone concentration is valid for assessing compliance with the NAAQS. This proposal would require valid 8-hour averages for 13 of the 17 8-hour periods in a day to determine a valid daily maximum value. Instead of the current minimum of 7 8-hour averages that would result in an incomplete day, it would only take a minimum of 5 8-hour averages to result in an incomplete day. This would cause us to have fewer days that would be available to evaluate the attainment status of our monitoring sites. Thus, this proposal would make it more difficult to meet our grant requirements and EPA's ozone completeness criteria. Therefore, we oppose this new procedure for determining daily maximum 8-hour average ozone concentrations.

We oppose EPA's proposal to require states with ozone nonattainment areas to develop an Enhanced Monitoring Plan. We believe that this is not needed for Marginal and Moderate nonattainment areas. EPA states that the goal of the Enhanced Monitoring Plan is to allow monitoring agencies flexibility in determining and collecting the data they need to understand their ozone problems in nonattainment areas. We believe that our agency can determine the need to collect additional data to understand our ozone problems and not have this requirement mandated by EPA. Also, EPA has not stated if it would fund the Enhanced Monitoring Plan, thus possibly resulting in an unfunded mandate that our agency could not afford to implement.

National Emission Reductions Regulations

MDEQ strongly recommends that EPA consider several recent, effective transportation-related rules that EPA promulgated primarily to reduce ambient ozone concentrations. As the rules are implemented, emission reductions will continue to increase due to fleet turnover. Thus, there has not been adequate time for the emission reductions mandated by the rules listed below to cause significant decreases in ozone concentrations. MDEQ believes that the promulgation of the proposed standard should be delayed until these reduction measures for the current standard are completely implemented.

Some of the more recent rules that will benefit air quality are as follows:

Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements for Model years 2007 and 2010

EPA established a comprehensive national control program that has regulated the heavy-duty vehicle and fuel as a single system. The new emission standards became effective in model year 2007 and applied to heavy-duty highway engines and vehicles. EPA also reduced the level of sulfur in highway diesel fuel by 97 percent in 2006.

EPA also created a PM emissions standard for new heavy-duty engines to take full effect for diesel engines in the 2007 model year. Also, standards were set for NO_x and non-methane hydrocarbons (NMHC). These NO_x and NMHC standards were phased in together between 2007 and 2010, for diesel engines.

Model Year 2012-2016 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy (CAFE) Standards

EPA and NHTSA established a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles to reduce emissions and improve fuel economy. The standards applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They required these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide (CO₂) per mile in model year 2016, equivalent to 35.5 miles per gallon (mpg) if the automotive industry were to meet this CO₂ level all through fuel economy improvements.

Non-Road Diesel Engines - Tier 3 Marine Diesel and Tier 4 Diesel Engine Emission Standards

The 2008 final rule includes the first-ever national emission standards for existing commercial marine diesel engines, applying to engines larger than 600kW or 800 horsepower with a displacement less than 30 liters per cylinder installed on vessels flagged or registered in the United States when they are remanufactured. As of 2009, EPA set Tier 3 emissions standards for newly built engines. Finally, the rule establishes Tier 4 standards for newly built commercial marine diesel engines above 600kW, based on the application of high-efficiency catalytic after-treatment technology, phasing in beginning in 2014.

On May 11, 2004, EPA signed the final rule introducing Tier 4 emission standards, which are phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of PM and NO_x be further reduced by about 90%. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after-treatment, similar to those required by the 2007-2010 standards for highway engines. The Tier 4 emission standards introduce substantial reductions of NO_x (for engines above 56 kW) and PM (above 19 kW), as well as more stringent HC limits.

PSD Grandfathering Issues

Regarding the two grandfathering options presented in the proposed rule, MDEQ recommends EPA revise the PSD regulations in 40 CFR 51.166 and 52.21 to grandfather those “applications for which the reviewing authority has formally determined that the application is complete on or before the signature date of the revised NAAQS” (i.e., Option 1). In recent experience reviewing applications, MDEQ has found that many are deficient as a result of incorrect application of the air quality analysis. We may spend months in consultation with the applicant to get a satisfactory air quality analysis. Since deeming an application “complete” is the basis of the specific statutory deadline in section 165(c) of the CAA for processing PSD applications within one year (or possibly shorter time periods as in Mississippi), it insinuates that a completeness determination is an important step in moving the permitting process forward. To take a step back and deem an application incomplete due to an unsatisfactory air quality analysis after making such a completeness determination, would likely add months of time to the process, especially if timely regulations and/or guidance are not issued to clearly outline how applicants should evaluate ozone formation from their respective projects.

Implementation Issues

The 2008 ozone implementation requirements have just been issued. Thus, there has not been adequate time for the emission reductions mandated by these requirements to cause significant decreases in ozone concentrations. MDEQ believes that the promulgation of the proposed standard should be delayed until the reduction measures for the current standard are allowed.

Summary and Recommendations

The nation’s air quality has shown good improvement, even in the face of increasing population, vehicle traffic, and energy consumption. There is always the desire for an even cleaner and healthier environment, but there is no immediate health care crisis being created by ambient air quality in areas of the country that are meeting the current standard.

Although cost is proscribed from consideration in establishing a new ozone standard, it is obvious that the implementation of a new ozone standard in the range being considered will have a profound cost impact on this country’s economy, energy infrastructure, fuels, transportation, and consumer goods.

Based on this information, we believe that if EPA and the States concentrate their efforts and limited resources to focus on implementing the current emissions reduction rules effectively, we can reduce ambient ozone concentrations. If we change the current standard, both the EPA and States’ staffs will spend thousands of hours working on new State Implementation Plans (SIPs).

This effort may be unnecessary if the monitors show a marked reduction in ozone concentrations when the full effects of the recent rules are realized. In addition, the proposed ozone levels are nearing possible background levels. We request that EPA delay the promulgation of ozone standards in the range of 65-70 ppb until the issues listed in these comments are addressed. Therefore, we believe that the level of the current primary and secondary standards should be retained at 75 ppb.

Thank you for the opportunity to comment on this proposed rule. If you have any questions or need additional information, please contact Jerry Beasley of my staff by e-mail at jbeasley@deq.state.ms.us or by phone at (601) 961-5134.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary C. Rikard". The signature is fluid and cursive, with a large loop at the end.

Gary C. Rikard
Executive Director
Mississippi Department of Environmental Quality

