



Sent Electronically

March 17, 2015

U.S. Environmental Protection Agency
Attention Docket ID No. EPA-HQ-OAR-2008-0699

Re: National Ambient Air Quality Standards for Ozone, Proposed Rule, Docket ID No. EPA-HQ-OAR-2008-0699, 79 Fed. Reg. 75,234 (December 17, 2014)

The American Chemistry Council (ACC)¹ is pleased to submit these comments on EPA's proposed National Ambient Air Quality Standards (NAAQS) for Ozone (79 Fed. Reg. 75,234, December 17, 2014). ACC supports health, safety and environmental protection policies that incorporate objective, realistic, comprehensive and scientifically balanced analyses. In addition to the comments below, ACC participated with a coalition of industry associations ("the Associations") that submitted detailed comments on this proposed rule dated March 17, 2015, and in those submitted by Gradient, dated March 16, 2015.

ACC member companies operate facilities throughout the country and as a result, have to comply with the ozone NAAQS as implemented by each state. Some ACC members are planning capital expansion projects due to the increased access to affordable, reliable supplies of unconventional natural gas. These projects will increase the number of jobs in the U.S., and society in general will benefit from products made from these chemical processes. These members are planning to build new production capacity in both ozone attainment and nonattainment areas and are therefore providing several comments in support of retaining the current standard. ACC believes that retaining the current standard would continue to yield improvements in air quality while allowing the U.S. economy to grow and reap economic benefits.

EPA Administrator Has Discretion to Set the Standard

In setting the 2008 ozone standard, EPA Administrator Stephen Johnson said CASAC's recommendation appeared to be based on "a mixture of scientific and policy considerations," noting that he was "in general agreement with CASAC's views concerning the interpretation of

¹ *The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is an \$812 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for twelve percent of all U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.*



the scientific evidence.” The Administrator also note[d] that “*there is no bright line clearly directing the choice of level and the choice of what is appropriate is clearly a public health policy judgment entrusted to the Administrator.*”² Given the discretion afforded him under the Clean Air Act (CAA), Administrator Johnson set the standard at 0.075 ppm, which he found to be protective of human health with an ample margin of safety.

Looking back to the 1997 ozone NAAQS, Administrator Browner also used her discretion in setting the ozone NAAQS at 0.08 ppm rather than at 0.07 ppm. As her rationale for setting the 1997 ozone NAAQS, she noted that “an 8-hour standard set at a 0.07 ppm level would be closer to peak background levels that infrequently occur in some areas due to non-anthropogenic sources of O₃ precursors, and thus more likely to be inappropriately targeted in some areas on such sources.”³

Administrator McCarthy has the same discretion as did past Administrators in choosing where to set this NAAQS. For the reasons described below, and contained in the Gradient and Associations’ comments, we strongly urge her to retain the existing standard.

The Health Science Evidence Does Not Support Lowering the Standard

ACC believes in appropriately peer-reviewed sound science. EPA’s existing ozone standard of 0.075 ppm, through a series of significant emission control programs, will continue to provide ample protection of public health. The peer-reviewed scientific body of literature does not support a lowering of the standard. Moreover, there are numerous questions about the science being used to justify a lower standard. Some recent health studies contain inconsistent or conflicting findings, while others are simply re-analyses of previous studies. A detailed analysis of the science was prepared by Gradient on behalf of ACC and other trade associations, and was submitted separately to the docket.

U.S. Air Quality Continues to Improve

The nation’s air quality has significantly improved and continues to improve with new voluntary and regulatory programs already in place or being implemented. According to EPA, total emissions of the six principal criteria air pollutants fell by 62 percent between 1980 and 2013, and ozone emissions have decreased by 33 percent in that same time frame.⁴

Voluntary and regulatory emission reduction programs will continue to yield benefits for decades to come. In the preamble to the ozone NAAQS, EPA explains in great detail that cleaner fuel rules and utility regulations are expected to produce large air quality improvements over the next

² 73 Fed. Reg. 16,482-83, March 27, 2008, National Ambient Air Quality Standards for Ozone, Final Rule, *emphasis added*

³ 62 Fed. Reg. 38,868, July 18, 1997, National Ambient Air Quality Standards for Ozone.

⁴ See: <http://www.epa.gov/airtrends/aqtrends.html#comparison>



twenty years.⁵ Current emission reduction programs will continue to reduce ozone concentrations through 2030.⁶

ACC Member Company Contributions to Cleaner Air

ACC members understand and value the importance of clean air, and we support protecting public health and the environment. Our commitment is reflected in our significant and continued progress in reducing emissions. Since 1990, ACC member companies and the broader business of chemistry have reduced nitrogen oxides by 70%, sulfur dioxide by 58%, volatile organic compounds by 87% and fine particulate emissions by 65%. These results are due to a combination of member company voluntary initiatives, such as Responsible Care[®], and regulatory programs.⁷

ACC member companies make a wide range of energy-saving solutions, such as plastics and insulation products used in vehicles, homes, and businesses. The energy savings result in lower emissions of greenhouse gases and ozone precursors such as NO_x.

A Lower Standard Could Stall Manufacturing Growth

The shale gas revolution is driving an historic expansion in American chemistry. More than \$138 billion in new chemical industry investment is planned or underway, thanks to plentiful and affordable supplies of natural gas and natural gas liquids. The 225 projects – new plants, expansions, and factory restarts – could create and support more than 650,000 jobs by 2023.⁸ They will also generate increased GDP, tax revenue, and access to innovative new products.

A lower ozone standard would impede manufacturing growth in many areas of the country, resulting in much of the U.S. being unable to meet a lower NAAQS. Manufacturing growth could slow or stop in states that find themselves in non-compliance, since facilities located in “nonattainment” areas would face new, burdensome and extensive regulatory requirements. These requirements would make investment projects far more costly and complex. In some areas that are attaining the current ozone NAAQS but will be later designated as nonattainment under a lower standard, new facilities will be required to obtain offsets where there are none available, thus halting the planned investment.

To safeguard the significant planned investment in chemical manufacturing in the United States, and to ensure that the industry can create the jobs and products that foster economic growth, we need regulatory policies that do not impose unnecessary barriers to growth in our sector. EPA’s

⁵ 79 Fed. Reg. 75,370-72, December 17, 2014.

⁶ *Id.*

⁷ See: <http://responsiblecare.americanchemistry.com/Performance-Results/Environment>

⁸ See: <http://www.americanchemistry.com/138-Billion-and-Counting>



anticipated proposal to lower the ozone NAAQS will impose significant burdens and hurdles on new investment.

Communities and Industry in “Nonattainment” Areas Face Significant Challenges

Currently, 222 counties covering a population of over 120 million people are designated as “nonattainment” with the 0.075 ppm standard.⁹ If EPA revises the standard to the lower end of the proposed range, we estimate that more than 2000 counties – urban and rural – would be in nonattainment, based on the 2011-2013 design values and interpolation.

Communities designated “nonattainment” will have a hard time attracting and retaining industry and sustaining economic activity and growth. Industry located in a nonattainment area faces increased operating costs, permitting delays, and restrictions on building or expanding facilities. These challenges increase the “time to market” for innovative new products.

New facilities and proposed expansions in nonattainment areas cannot proceed until their emissions are offset at ratios greater than 1:1. Offsets are not always readily available, and increase in price as they become scarce. For example, offset prices in the Houston-Galveston-Brazoria nonattainment area are currently more than \$200,000/ton for NO_x and \$300,000/ton for VOC.

Even facilities that have no plans to expand can experience the burdens of operating in a nonattainment area. For example, in the Houston area, which is in nonattainment with the current standard, existing facilities are subject not only to federal emission controls but also to more stringent state emission controls under the Highly Reactive VOC (HRVOC) rule. Combustion units, such as boilers and ethylene crackers, must install costly SCRs and low-NO_x burners to meet more stringent controls. Furthermore, facilities located in counties designated as “severe” or “extreme” nonattainment will face significant CAA Section 185 penalty fees for emissions, even though many of these facilities have already spent many millions of dollars to reduce emissions.

Finally, nonattainment areas may also lose critical federal highway and transit funding, as federal projects must conform with State Implementation Plans (SIPs) in order to proceed.

Implementation Concerns

ACC appreciates EPA’s acknowledgement of implementation issues in this ozone proposal, and would like to provide input on several key concerns of the chemical industry.

⁹ See EPA’s Green Book for the 2008 Ozone Standard: <http://www.epa.gov/airquality/greenbk/hntc.html>. (Note that the Baton Rouge Area was declared in attainment with the 2008 Ozone NAAQS, effective June 14, 2014. 79 Fed. Reg. 21,139, April 14, 2014.)



Timing of Rules and Guidance

ACC strongly believes that timely rules and guidance are needed to ensure that the states and impacted facilities are able to properly plan for and implement a more stringent ozone NAAQS. ACC is encouraged by EPA's commitment to issue guidance concerning the designations process within 4 months of the promulgation of the final NAAQS, issue updated infrastructure SIP guidance no later than 1 year after promulgation of a revised ozone NAAQS, and promulgate appropriate rules to assist with implementing a new ozone NAAQS. (79 Fed. Reg. 75,372-3.) The timing of these rules and guidance documents recognize the critical need for timely state assistance. However, ACC is concerned about EPA's ability to meet the proposed timeline for issuing such needed tools. In February 2015, EPA finalized the implementation rule for the 2008 Ozone NAAQS, seven years after the promulgation of the standard.¹⁰ To date, EPA has not been able to issue needed NAAQS implementation guidance according to the schedule that EPA has proposed in the preamble to this rulemaking.

PSD Permits

ACC recognizes that EPA is evaluating the models and techniques used to address atmospheric chemistry of ozone formation from single sources, and welcomes EPA's proposal this coming spring to consider the need for updating Appendix W. As NAAQS continue to get more stringent, it is critical that the states and regulated community be afforded the ability to use the most up-to-date models and tools to more accurately reflect the impacts. However, ACC is concerned that any Appendix W changes will not be made until well after the revised ozone NAAQS is finalized, causing issues for facilities planning expansion prior to the adoption of a revised Appendix W. ACC urges EPA to make these changes in an expedited manner, and requests that EPA, in the interim, issue guidance to aid states and the regulated communities in modeling efforts as a result of a lower ozone standard.

ACC strongly supports EPA's proposal to grandfather PSD permit applications. EPA is proposing to add a grandfathering provision that would apply to PSD permit applications for which the reviewing authority has: 1) formally determined that the application is complete on or before the signature date of the revised NAAQS; or 2) first published a public notice of a draft permit or preliminary determination before the effective date of the revised NAAQS. As EPA noted, states have different implementing rules, and both proposed grandfathering provisions are appropriate. Permit applicants at these stages will have already made the necessary demonstration that the project will not cause or contribute to a violation of the current NAAQS, and the permit applicants are essentially waiting for the permitting agency to proceed down the review and approval process. ACC agrees that these grandfathering provisions would avoid substantial additional burden and delay. Permit applications that have reached a stage in the review process where significant resources have been expended to complete PSD analyses and demonstrations would need to be revised to address the new NAAQS. EPA adopted these same two grandfathering provisions in the most recent PM_{2.5} NAAQS review (78 Fed. Reg. 3,087, January 15, 2013). ACC is aware of at least one member company that was able to obtain its

¹⁰ 80 Fed. Reg. 12,264, March 6, 2015



PSD permit in a timely manner because of the grandfathering provision in the 2013 PM_{2.5} NAAQS.

However, ACC is concerned that EPA's proposed grandfathering provisions will provide relief for relatively few projects that were well underway prior to this ozone proposal. ACC believes that grandfathering should apply to any PSD permits that have gone through their public notice periods by the time designations pursuant to any revised NAAQS are finalized.

A project that has a substantial PSD permit application submitted close to the time of the NAAQS finalization will have invested years of engineering and resources associated with securing a viable project. It is not uncommon for new projects to take five years from conception to permit application, given the complicated engineering design and multiple rounds of pilot studies before a design can be finalized. A permit application submitted near the date of the final NAAQS revision will be based upon the current NAAQS and associated designation at the time. Yet due to the complexity of the project, it is possible that it would not qualify for the grandfathering provision, and have to start the permit process all over again – or cancel the project entirely.

For an area with an ozone design value very near the revised NAAQS, or an area that will be designated in nonattainment with the revised NAAQS, there is the possibility that a PSD permit application will be almost complete when the final nonattainment designation is made. A change in an area's designation would require a permit applicant to start over with a nonattainment new source review (NNSR) permit application, and require additional work to obtain that same preconstruction permit. In order to minimize the burden on facilities and permitting authorities, EPA should grandfather those PSD permit applications that have completed the public notice periods prior to the final nonattainment area designations for a revised NAAQS.

PSD Transition Issues

ACC appreciates EPA's acknowledgment that permitting new facilities may be challenging in some areas with a lower ozone NAAQS. ACC agrees with EPA's assessment that with a lower ozone NAAQS, some areas presently in "attainment" with the 2008 standard will need to be re-designated "nonattainment". Until those areas are formally designated as "nonattainment", proposed new major source construction or major modifications located in these areas, will continue to be required to conduct a PSD review. This raises the question as to how a source can be issued a PSD permit where ambient monitoring data indicates violations of the revised NAAQS. This is an issue that ACC has voiced in the past. ACC members need assurances that there will be a clear path forward for facilities to obtain PSD preconstruction permits until the area is formally reclassified as "nonattainment."

EPA has noted that sources applying for PSD permits may utilize offsets as part of the required PSD demonstration under CAA Section 165(a)(3)(B). (79 Fed. Reg. 75,379.) ACC agrees with EPA's conclusion that 40 C.F.R. 51.165(b)(3) allows a proposed new major source or modification to reduce the impact of its emissions on air quality by obtaining sufficient emissions reduction offsets to compensate for its adverse ambient impact where the source or



modification would otherwise cause or contribute to a violation of any NAAQS. ACC is not aware of any instance where emissions offsets have been used to obtain a PSD permit.

In nonattainment areas, the offset emission reduction credits are certified by the permitting agency, and can be purchased through a formal offset market or may be available through informal means. In an attainment area, there is no formal offset market. Permitting agencies may not be familiar with the offset process and may not be able to certify the offsets for use in a PSD permit. ACC urges EPA to include guidelines in the final ozone NAAQS as to how facilities would be able to obtain offsets and demonstrate they do not “cause or contribute” to a violation of the NAAQS when obtaining a PSD permit.

PSD for a Distinct Secondary Standard

ACC supports EPA’s proposal to not establish a distinct ozone secondary standard, particularly in light of the CAA requirement that proposed new major sources and modifications demonstrate that their emissions increases will not cause or contribute to a violation of the NAAQS, including any secondary NAAQS. Introduction of an additional layer of complexity to an already complex preconstruction permitting process would certainly grind all permits to a halt while everyone learned how to address the new secondary standard.

If the Administrator decides to establish a distinct secondary ozone NAAQS, ACC strongly supports EPA establishing a surrogacy policy that would allow a source to make the PSD-required demonstration of compliance with a distinct secondary standard solely through a demonstration of compliance with the primary NAAQS.

Background O₃ Concerns

EPA has acknowledged that there can be events where O₃ levels approach or exceed the concentration levels being proposed in this notice due to background sources. (79 Fed. Reg. 75,382.) EPA noted that there are several policies that may provide regulatory relief for elevated background O₃, including exceptional events, rural transport areas, and international transport provisions. As outlined in the “Associations” comments, ACC has serious reservations about the effectiveness and usefulness of these policies.

To date, EPA has only approved a handful of exceptional event requests from states. Until EPA revisits the Exceptional Events Rule, ACC does not expect states will be able to obtain much relief from the policy. The exceptional events policy does not apply to exceedances that are due to a mix of background concentrations and anthropogenic sources. In any case, having a standard set below background levels does not appear to allow for the use of the exceptional event request.

ACC expects that more areas would attempt to qualify as rural transport areas under a revised NAAQS than in the past, a regulatory hurdle that could be difficult to overcome. In the preamble, EPA notes that it will not consider any rural area with a monitor “heavily influenced by short-range upwind contributions from a nearby urbanized area” as a candidate for relief as a rural transport area (79 Fed. Reg. 75,384.) This alone presents a significant obstacle for many



areas. EPA further notes each area will also have to make a demonstration supporting its request that includes emissions, air quality, meteorological and/or photochemical grid modeling data and must justify its analysis that such evidence supports the conclusion that it is a rural transport area. Such daunting requirements would likely discourage many areas from pursuing the rural transport classification.

ACC supports EPA utilizing CAA Section 179B to allow states to demonstrate attainment despite international contributions to elevated ozone levels. That said, EPA has provided little guidance on how states would make such a demonstration, and very few areas have successfully made such a demonstration in the past. For all intents and purposes, these areas would still function as nonattainment areas, given the requirements for offsets at major sources.

Conclusion

The current ozone standard of 0.075 ppm is the most stringent to date and has not been fully implemented across the United States. EPA and states should focus on full implementation and attainment of the existing standard before EPA lowers the standard – an approach that will continue to provide the requisite public health protection without halting U.S. economic growth. As the science develops further, EPA will have the opportunity to determine whether any additional actions might be warranted in the future.

Thank you in advance for your consideration of ACC's comments. If you have any questions, or need clarification on any of our comments, please contact me at lorraine_gershman@americanchemistry.com or 202-249-6411.

Sincerely yours,



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