




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Implementing the 2015 Ozone National Ambient Air Quality Standards

FROM: Janet G. McCabe, Acting Assistant Administrator 
Office of Air and Radiation

TO: Regional Administrators, Regions 1-10

Following the directives of the Clean Air Act (CAA), on October 1, 2015, Administrator McCarthy signed a rulemaking action that revises the current national ambient air quality standards (NAAQS) for ozone to a new, more protective level of 0.070 parts per million (70 parts per billion). These revised standards will improve the health and well-being of millions of Americans in the coming years. They are built on a foundation of sound health and ecosystem science.

I am writing to you today to let you know about the process going forward for delivering the protections afforded by the revised standards. In doing so, I want to emphasize that we will work with our state, local, federal and tribal partners to carry out the duties of ozone air quality management in a manner that maximizes common sense, flexibility and cost-effectiveness while achieving improved public health expeditiously and abiding by the legal requirements of the CAA. The goal is achieving cleaner air, while recognizing the many other activities underway and the resource constraints that we and our co-regulators face. This has proved a successful partnership in the past, and I am confident it will continue to be so in the future. In particular, I note that a number of the other clean air programs currently underway will work to lower ozone levels nationally, such as Tier 3 vehicle standards, Mercury and Air Toxics Standards, measures to address the 2010 sulfur dioxide NAAQS, the Clean Power Plan and others.

The attached document highlights many of the issues related to implementing the revised national ozone standards, including policy and technical aspects of implementation that we anticipate facing in the coming years. It outlines actions that the EPA will take and our expectations of our air agency partners. Please share this memo with our state, local and tribal partners within your regions.

Attachment

ATTACHMENT

How Air Agencies and the EPA Will Move Forward to Implement the 2015 Ozone Standards

This document provides an outline of how the EPA will work with state, federal and tribal air agencies to carry out the duties of air quality management (AQM) for the revised ozone standards in a manner that maximizes common sense, flexibility and cost-effectiveness while abiding by the legal requirements of the Clean Air Act (CAA). It highlights many of the key issues and activities related to implementing the revised national ozone standards, including policy and technical aspects of implementation that we anticipate facing together in the coming years. It outlines commitments that the EPA will endeavor to meet, and our expectations of our air agency partners with regard to some of these issues. It is not intended to be a comprehensive communication on implementing the revised ozone standards, nor does it constitute new guidance.

A. Plan for Ensuring Air Agencies and Emissions Sources Have Timely Guidance and Clear Rules to Follow

The CAA places important obligations for implementing the ozone National Ambient Air Quality Standards (NAAQS) on various parties, but primary responsibility for administering the CAA to assure attainment of the NAAQS falls to the state and federal governments.¹ There is now a long history of managing ozone air quality under the CAA, underpinned by a wealth of previously-issued EPA rules and guidance. While portions of some existing rules and guidance need to be updated when the ozone NAAQS are revised, much of it remains applicable to the revised standards (e.g., the rule that applies to nonattainment areas for implementing the 2008 NAAQS). The EPA is committed to ensuring that air agencies have adequate guidance, and new rules where necessary, to carry out CAA directives through the state implementation plan (SIP) process. We have identified existing rules and guidance documents, and we are developing schedules for proposing and finalizing several new guidance documents and rulemakings to provide timely support for implementing the revised ozone standards. We will share more specific information regarding these actions and documents, including the timing, in the coming months.

To implement the revised ozone NAAQS, all states will need to review their existing air quality management (AQM) infrastructure State Implementation Plan (SIP) for ozone to ensure it is appropriate and adequate. The EPA's 2013 guidance on infrastructure SIPs titled, "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)," should be a helpful guide for conducting a comprehensive review of the state's AQM infrastructure. States were last required to review their AQM infrastructure SIP for ozone following the 2008 revision to the ozone standards. Accordingly, we expect most states will not have to make significant changes to existing infrastructure SIPs, and will simply need to submit a certification that their existing SIP is sufficient to meet applicable CAA AQM requirements for the revised ozone standards.²

¹ States also have primary regulatory jurisdiction in non-reservation areas of Indian country (i.e., Indian allotments located outside of reservations and dependent Indian communities) within its geographic boundaries unless the EPA or a tribe has demonstrated that a tribe has jurisdiction over a particular area of non-reservation Indian country within the state. *See Oklahoma Department of Environmental Quality v. EPA*, 740 F.3d 185 (D.C. Cir. 2014). For tribal areas of Indian country (i.e., reservations), tribes are generally not required to submit tribal implementation plans (TIPs), but are encouraged to reference the EPA's current 2008 Ozone NAAQS SIP Requirements Rule (2008 ozone NAAQS SRR) (80 FR 12264, March 6, 2015) and guidance should they choose to develop a TIP.

² Certifications are SIP submissions that must meet the requirements of 40 CFR part 50 appendix V and undergo the SIP review process required under CAA section 110(k).

For states with areas that are designated nonattainment, there are additional planning and control obligations that will apply. The final 2008 Ozone NAAQS SIP Requirements Rule (2008 ozone NAAQS SRR) contains the EPA's latest rules and guidance for implementing the ozone standards under the statutory provisions of CAA part D, subpart 2. The EPA believes that the overall framework and policy approach reflected in this rule provide an effective and appropriate template for the general approach states would follow in planning for attainment of the revised ozone standards. However, to assist with the implementation of the revised ozone standards, the EPA intends to develop and propose an additional ozone NAAQS implementation rule that will address certain subjects. We also recognize the rules and guidance cannot anticipate every possible situation or innovation, and we continue to be committed to working one-on-one with air agencies to explore case-specific innovative or untested approaches that have promise to fulfill CAA requirements and achieve clean air faster and more cost-effectively. In particular for areas where states are still actively working toward attaining the 2008 ozone NAAQS, we encourage air agencies to look for and take advantage of potential planning and emissions control efficiencies that may occur within the horizon for attaining the 2015 standards. Formal attainment plans for the 2015 standards are not anticipated to be due until 2020 or 2021, but this timeframe would roughly coincide with the next planning cycle for any current Moderate areas that fail to attain by the 2018 deadline for the 2008 ozone NAAQS.

The EPA has made significant efforts in recent years to update guidance and rules that relate to NAAQS implementation, so as not to have to update every document each time a NAAQS is revised. Below is a list of guidance and rules that are current and applicable to the 2015 ozone NAAQS, followed by a list of updates to guidance and rules that the EPA expects to complete for states' use in 2015 ozone NAAQS planning.

Guidance and Rules That Remain Current and Applicable to the Revised NAAQS

- Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2) – September 13, 2013 (<http://www.epa.gov/airquality/urbanair/sipstatus/infrastructure.html>)
- Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze – December 2014 and Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze – April 2007 (http://www.epa.gov/scram001/guidance_sip.htm)
- Draft Emissions Inventory Guidance for Implementation of Ozone [Particulate Matter] National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations – April 2014 (<http://www3.epa.gov/ttn/chief/eidocs/eiguid/index.html>)
- Revisions to the General Conformity Regulations (75 FR 17254, April 5, 2010) and guidance (40 CFR part 93, subpart B and 40 CFR part 51, subpart W) (<http://www3.epa.gov/airquality/genconform/regs.html>)
- Transportation Conformity Rule (77 FR 14979, March 14, 2012) and Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas – February 2012 (40 CFR part 93, subpart A and 40 CFR part 51, subpart T) (<http://www3.epa.gov/otaq/stateresources/transconf/index.htm>)

Expected Updates to Implementation-Related Guidance and Rules and other Actions

- Rulemaking to establish nonattainment classification thresholds, incorporate SIP due dates into the EPA regulations, and update (as necessary) policy interpretations of CAA SIP requirements (expected to closely follow the 2008 Ozone NAAQS SRR) (*see section A*)

- Rulemaking to revoke 2008 ozone NAAQS effective 1 year after initial area designations and plan for transitioning from 2008 to 2015 standards (expected to closely follow the 2008 Ozone NAAQS SRR)
- Analysis of interstate ozone transport contributions for the 2015 NAAQS (expected to include an analysis similar to the Notice of Data Availability (NODA) for transport contributions for the 2008 NAAQS) (*see section E*)
- Guidance on meeting transportation conformity requirements for nonattainment areas under the revised ozone NAAQS (expected to closely follow the transportation conformity guidance for the 2008 ozone NAAQS) (*see section H*)
- Exceptional Events Rule revisions and guidance on exceptional events demonstrations for wildfire events that may influence ozone concentrations (*see section D*)
- Guidance or rulemaking on the use of PSD permit screening tools and offsets in attainment areas (*see section B*)
- White paper on background ozone and stakeholder workshop (*see section D*)

Based on the EPA's recent work with states to identify the types of guidance and rules that would facilitate NAAQS implementation and the schedule on which those materials are needed to assist states in meeting required submittal dates, the EPA is developing schedules for these materials. The EPA will continue to prioritize development of these materials with input from co-regulators and other stakeholders.

B. Plan for Ensuring Major Source Permitting is Effective and Efficient

Starting on the effective date of the revised ozone NAAQS, the CAA requires permit authorities to consider the revised ozone standards when issuing preconstruction permits to new or modified major emissions sources. Generally, this means that a proposed source obtaining a prevention of significant deterioration (PSD) permit for construction in an ozone attainment area must show that its emissions of ozone precursors will not cause or contribute to a violation of the revised standards. However, in the final 2015 ozone NAAQS rule the EPA finalized a grandfathering provision that allows some sources with PSD permit applications pending to apply the ozone standards that were in effect when certain milestones in the application process were reached to satisfy certain PSD requirements. Specifically, this provision would apply to applications for which the reviewing authority has either formally determined that the application is complete on or before the signature date of the 2015 ozone NAAQS or has published a public notice of a draft permit or preliminary determination before the effective date of the 2015 ozone NAAQS. Although some sources may continue to focus on compliance with the prior ozone standards under the grandfathering provision, all existing EPA-issued, permitting-related rules and modeling guidelines applicable to ozone remain in effect until they are formally revised. In addition, the EPA continues to recommend following its existing permitting guidance pending additional guidance specific to ozone and the revised standards.

We recognize that the owners and operators of emissions sources need clarity and certainty about regulatory requirements, especially when there are changes in air quality standards that may affect their construction and operations. In an effort to add clarity and certainty for preconstruction permitting generally, the EPA is planning some enhancements to existing rules and guidance and providing additional guidance to assist with applying PSD requirements to ozone generally, and with implementing specific aspects of the 2015 ozone NAAQS. For example, the EPA recently proposed a comprehensive update to the PSD permit modeling guidelines in Appendix W of 40 CFR part 51 (80 FR 45340, July 29, 2015). We intend to finalize the proposed action in 2016. In this proposed action, we

took comment on incorporating new recommendations for evaluating single-source ozone contributions, including the appropriate use of single-source modeling tools. I want to emphasize, however, that until final changes are made to Appendix W, the existing guidelines in Appendix W remain applicable to ozone. Even if changes are made, we intend to provide a transition period before any new guidelines become effective.

There are a number of existing program tools that can be used to help facilitate the permitting process, and the EPA continues to work with stakeholders on others that will improve the permitting process while assuring attainment and protection of the ozone standards. These include the use of emission offset programs and significant impact levels (SILs) for ozone for PSD permitting. The existing “PSD offsets” tool continues to be available for permit applicants and reviewing authorities to address ozone impacts from a proposed source or modification, including in an area that is not designated nonattainment but where ambient monitoring data shows ozone concentrations that exceed the revised NAAQS. We believe that SILs and related “screening tools”³ are useful in determining the extent to which an ambient impact analysis must be completed to make the required demonstration for the applicable pollutant. We intend to provide additional guidance on these screening tools in the near future.

Finally, in areas that are likely to be designated nonattainment for the 2015 ozone NAAQS, state and local permit authorities can help facilitate efficient nonattainment NSR permitting by establishing emissions offset banks and registries.

C. Plan for Ensuring All Areas Are Appropriately Designated

One of the most important near-term implementation efforts is completing the process for initially designating all areas as to whether each area is meeting or not meeting the 2015 ozone NAAQS. Because designating areas is typically a 2-year process (and may even, in some cases, be extended another year), the final designations will be based in part on future air quality data (i.e., 2014-2016 data). Current air quality data may not be a reliable indicator of likely nonattainment areas. Nevertheless, 2012-2014 data indicate that many counties with design values above the 2015 ozone standards have previously been designated nonattainment for ozone, which suggests that there is already widespread experience with ozone nonattainment planning.

In early 2016, the EPA will issue new guidance to facilitate the designations process. We expect this guidance will be similar in concept and scope to the designations guidance issued for the 2012 PM_{2.5} NAAQS (see “Initial Area Designations for the 2012 Revised Primary Annual Fine Particle National Ambient Air Quality Standard,” April 16, 2013). It will include a discussion of the factors that the EPA plans to consider in evaluating designation recommendations from states and tribes and in determining nonattainment area boundaries. It will also include information on establishing Rural Transport Areas under CAA section 182(h) where it is appropriate to do so. Using this guidance approach, the EPA has established a good track record of finalizing designations that are based on sound technical assessment and policy judgment, and that have withstood a variety of legal challenges.

³ For example, in the July 2015 proposed update to Appendix W, we introduced a new demonstration tool for ozone precursors referred to as Model Emissions Rates for Precursors (MERPs). A MERP would represent a level of emissions of precursors that is not expected to contribute significantly to concentrations of ozone.

The statutory deadline for the EPA to finalize area designations is October 1, 2017. State recommendations on area designations are due October 1, 2016. Designations completed by October 1, 2017, would, as noted above, involve ozone air quality data collected during the most recent 3-year period (i.e., 2014-2016). In some locations, these data may have been impacted by events that could be determined to be exceptional events. We recognize the importance of timely review and approval of any data exclusions requested under the Exceptional Events Rule, and will work with states to prioritize review of any exceptional events demonstrations that would materially impact an attainment determination or nonattainment area classification. The final ozone NAAQS rule establishes October 1, 2016, as the deadline for states to submit exceptional event demonstrations for events that occurred in 2014 and 2015, and May 31, 2017, as the deadline for events that occur in 2016.

D. Issues Related to Background Ozone

Background ozone is ozone arising from natural events (e.g., stratospheric intrusions and wildfires) or non-United States (U.S.) anthropogenic sources (e.g., ozone and ozone precursor emissions from Mexico, Canada or other international locations). A number of stakeholders have expressed a concern that some locations in the U.S. may violate the ozone standards due to background ozone concentrations. We anticipate that there are only a few locations in the western U.S. where levels in excess of 70 ppb could be due to the overwhelming influence of background ozone. These are generally high elevation sites in the western U.S. that are impacted by stratospheric intrusions, sites impacted by large-scale wildfires, or locations along the U.S.-Mexican border influenced by Mexican emissions.

Under the CAA, states are not responsible for reducing emissions from background sources. We intend to work directly with responsible air management agencies in these areas to ensure that all CAA provisions that would provide regulatory relief associated with background ozone are recognized. However, even if elevated levels of ozone are influenced by natural events or are caused by human activities outside the U.S., it is critically important that the public is informed about whether the air is healthy to breathe.

The CAA provides for the exclusion of emissions data showing exceedances of the ozone standards when such exceedances are caused by certain natural events like stratospheric ozone intrusions and wildfires. We acknowledge that the CAA requires that there be demonstrated evidence of these exceptional events and a public review process in order to use the exclusion; these requirements are provided in the Exceptional Events Rule (72 FR 12560, March 22, 2007). We fully expect to work with states to ensure they are able to exclude such data in locations where they are warranted. Any exceedances of the standards that result from stratospheric ozone intrusion events or wildfire impacts could be evaluated for exclusion of ambient concentration data under the Exceptional Events Rule. We already work closely with states to review exceptional events submissions, and we are currently developing revisions to the Exceptional Events Rule to simplify and expedite the process for states developing technical demonstrations and for the EPA to approve exclusions for these types of events. This proposal, which we expect to issue this fall, has been well informed by our discussions with states and other stakeholders and by our experience with past exceptional events submittals. We are also developing additional guidance for preparing exceptional events demonstrations for wildfire events that may influence ozone concentrations. It is our intent to finalize the rulemaking and wildfire event guidance before states must submit recommendations on area designations and we stand ready to work with states, as needed, in addressing potential exceptional event demonstrations prior to that final rulemaking.

For areas impacted by international sources, the CAA contains provisions in section 179B that ensure states only need to address man-made sources within their jurisdiction, and only need to impose emissions controls on local sources to the extent they are reasonably available. We intend to ensure that states that may be impacted by international sources, such as California, Arizona, New Mexico and Texas, are able to employ these provisions, where applicable, and we will offer whatever technical assistance we can feasibly provide to these states and impacted communities.

During this latest review of the ozone NAAQS there has been a good deal of discussion about background ozone. To further ensure that all interested stakeholders have a common understanding of the nature of background ozone and how it could be accounted for in implementing the ozone standards, we are developing a white paper on background ozone that we will make available soon for stakeholder review. We intend to hold a workshop in the next few months to discuss the information in the white paper and to further advance our collective understanding of the technical and policy issues that may be involved with background ozone. We will evaluate the need for further guidance or regulatory tools to address background ozone after receiving stakeholder input and after conducting the workshop. We emphasize again that the EPA headquarters and regional offices will work with states to ensure they can successfully invoke all of the CAA provisions that are legally and technically warranted for ensuring background ozone does not result in ineffective air quality management actions.

In addition, the EPA continues to work with other federal agencies, our counterparts in other countries, and the international community to improve our understanding of the sources and impacts of background ozone and to enable and motivate control of pollution sources in other countries that affect the U.S. Working with the European Commission in the context of the Convention on Long-Range Transboundary Air Pollution, we are leading an international scientific effort to improve the databases and modeling tools that enable us to characterize the intercontinental transport of ozone and assess potential control strategies.⁴ We are working with Mexico through the Border 2020 Program,⁵ with Canada under the US-Canada Air Quality Agreement,⁶ and with China through agreements on cooperation with their environment and science ministries⁷ to improve air quality management and address key sources in these countries. And we are working through multilateral efforts, such as the Global Methane Initiative⁸ and the Climate and Clean Air Coalition to Reduce Short Lived Climate Pollutants⁹ to engage both governments and the private sector to achieve decreases in methane emissions which contribute to background ozone. Ultimately, these efforts will benefit air quality in the United States by decreasing international contributions to background air pollution.

E. Plan for Addressing Interstate Ozone Transport

The “Good Neighbor” provision of the CAA, section 110(a)(2)(D)(i)(I), requires upwind states to develop SIPs that prohibit emissions of pollutants in amounts that will contribute significantly to nonattainment, or interfere with maintenance of, a NAAQS in another state. These Good Neighbor SIPs are due within 3 years of promulgation of a new or revised NAAQS, meaning that transport SIPs for the 2015 ozone NAAQS will be due by October 2018. If the EPA finds that states have not timely submitted SIPs or the EPA disapproves such a SIP, then the EPA must promulgate Federal Implementation Plans

⁴ <http://www.htap.org/>

⁵ <http://www2.epa.gov/border2020>

⁶ <http://www.epa.gov/airmarkets/programs/us-canada.html>

⁷ <http://www2.epa.gov/international-cooperation/epa-collaboration-china>

⁸ <https://www.globalmethane.org/>

⁹ <http://www.ccacoalition.org/>

(FIPs) that eliminate the emissions that significantly contribute to nonattainment and interfere with maintenance of the standards in downwind states.

We believe that the Good Neighbor provision for the 2015 NAAQS can be addressed in a timely fashion using the framework of the Cross-State Air Pollution Rule (CSAPR), especially given the recent court decisions upholding the rule. The CSAPR framework involves a 4-step process to address the requirements of the good neighbor provision: (1) identifying downwind receptors that are expected to have problems attaining or maintaining clean air standards (i.e., NAAQS); (2) determining which upwind states contribute to these problems in amounts sufficient to “link” them to the downwind air quality problems; (3) for states linked to downwind air quality problems, identifying upwind emissions that significantly contribute to nonattainment or interfere with maintenance by quantifying upwind reductions in ozone precursor emissions and apportioning upwind responsibility; and (4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, adopting SIPs or FIPs that eliminate such emissions.

As a first step in facilitating the implementation of the Good Neighbor provision for the 2015 NAAQS, the EPA intends to provide timely information regarding steps 1 and 2 of the CSAPR framework. We expect to conduct modeling necessary to identify projected nonattainment and maintenance receptors and identify the upwind states that contribute significantly to these receptors. We would make such information available in fall 2016 through a NODA process (similar to the one the EPA recently used in developing the transport modeling for the 2008 ozone NAAQS) so that air agencies and others can help assure that the EPA is using the best available information.

Finally, in light of our shared responsibility to address interstate transport, we intend to continue ongoing discussions with eastern states and to undertake discussions with western states. These discussions are necessary to make sure we have a common understanding of the nature of inter-state ozone transport in each part of the country and that we are working together on appropriate solutions.

F. Addressing the Challenges in California

California has unique challenges among the states in addressing ozone pollution. Air basins surrounded by mountains and a generally warm climate combine to make many areas of the state conducive to ozone formation. In particular, the South Coast air basin in the Los Angeles area and the San Joaquin Valley in the central part of the state are the only two areas in the U.S. classified as “Extreme” nonattainment areas for the 1979, 1997 and 2008 ozone standards. Although ozone levels have decreased by 30 percent in South Coast and nearly 20 percent in the San Joaquin Valley since 2000, South Coast still has the highest 2012-2014 8-hour ozone design value in the nation at 102 ppb, and San Joaquin has the second highest at 95 ppb. Through September 29, 2015, South Coast had exceeded the 2008 ozone standards on 81 days this year, the San Joaquin Valley on 73 days. More than 25 million people in California breathe air that does not meet the 2008 ozone standards.

Air pollution from mobile sources dominates the ozone precursor emissions in California. With ports that bring in forty percent of the nation’s goods and agricultural areas that produce nearly half of the nation’s produce, as well as a population of over 38 million, the state is challenged by high levels of NOx emissions from freight movement and from transportation generally. Under section 209 of the CAA, California has the authority to regulate mobile sources. Beginning in the 1970s, the state has used this authority to set stringent emissions standards. In 2008, California began regulating in-use trucks and buses to reduce emissions from the legacy fleet, the only such mandatory program in the country. More

recently, it adopted a voluntary low-NO_x emissions standards for heavy-duty engines to help engine technology move toward even cleaner levels. In addition, the state has funded incentive programs to further reduce emissions from the legacy fleet and has pursued numerous advanced mobile source technologies. Since 2008, California has spent nearly \$3 billion in funding the demonstration and deployment of innovative technologies such as zero-emission trucks and buses, hybrid-electric medium- and heavy-duty vehicles, and zero-emission freight equipment. The federal government has provided more than \$200 million, largely through Diesel Emissions Reduction Act grants and the Department of Agriculture's Environmental Quality Incentives Program funds.

Even with these aggressive regulatory and non-regulatory programs to control mobile-source emissions, and with the most stringent stationary source emission standards in the U.S., most of central and southern California is likely to be designated nonattainment for the 2015 ozone standards. The South Coast Air Quality Management District estimates that it will need a reduction of at least 85 percent in NO_x emissions from 2012 levels to attain a standard of 70 ppb by 2037.¹⁰

With the implementation of all the measures currently adopted and planned by 2032¹¹, the sources contributing the most NO_x emissions in California's nonattainment areas will be heavy-duty diesel trucks, ships and commercial boats, off-road equipment, locomotives, aircraft, agricultural engines, and passenger cars. For California's ozone nonattainment areas to attain the 2015 ozone standards, the state and the EPA have recognized that transformational change is likely needed. For example, recent discussions have focused on a transition to largely zero and near-zero emissions vehicle technologies as well as significant turnover of the legacy fleet of vehicles. Additionally, California is undertaking a comprehensive review of its goods movement system with the goal to release a sustainable freight plan in July 2016. The state is also developing attainment plans for the 2008 ozone NAAQS, to be submitted to the EPA in 2016. For these and other related efforts, the EPA will work closely with California, local air quality officials, nongovernmental organizations, other federal agencies, and interested commercial representatives to identify both regulatory and non-regulatory emission control solutions best designed to achieve reductions in the transportation sector.

G. Managing Ozone Monitoring Networks

A sound ambient pollution monitoring program is one of the foundations of delivering environmental protection. The public counts on states and other air agencies to establish and operate air quality monitoring networks, and provide reliable, high quality air quality measurement data. We encourage air agencies to ensure their ozone networks are efficient and effective at determining public exposure to ozone, and in full compliance with existing air monitoring regulations. In rules accompanying the 2015 revision to the ozone NAAQS, we took three actions related to air monitoring. First, the monitoring season period for ozone monitors was extended in 32 states and the District of Columbia starting in 2017. All previously approved ozone monitoring site waivers are now revoked, however we encourage air management agencies to work with their respective EPA regional office in cases where they believe new waivers should be granted. We have not changed the process or reasons for granting seasonal exemptions for collecting monitoring data in cases where access or operations of the monitor are affected by inclement weather conditions. As a reminder, we expect that the CASTNET monitors will

¹⁰ South Coast Air Quality Management District documents:

<http://www4.aqmd.gov/enewsletterpro/uploadedimages/000001/Celia/FactSheet-2016%20AQMP-v9.pdf>;

<http://www.aqmd.gov/docs/default-source/Agendas/aqmp/advisory4-item3.pdf?sfvrsn=2>.

¹¹ The year 2032 is the attainment deadline under the 2008 ozone NAAQS for California nonattainment areas that are classified Extreme for that standard.

continue to provide ozone air quality information that is comparable to the ozone NAAQS. The revised ozone monitoring seasons become effective at state and local air monitoring stations or SLAMS (including NCore stations) on January 1, 2017.

Second, to improve implementation of the CAA's requirement for "enhanced" ozone monitoring, we modified the network requirements for Photochemical Assessment Monitoring Stations (PAMS) to modernize and streamline the network. These revisions were based on a 2011 evaluation of the network, along with consultation with the EPA's independent science advisers (the Clean Air Scientific Advisory Committee) and an organization of state air agencies. PAMS will now be required at existing NCore sites in large urban areas with a population of 1,000,000 or more. This change will improve the geographic distribution of PAMS sites, while reducing redundancy in the existing network. In addition, monitoring agencies with Moderate (and above) nonattainment areas and states in the Ozone Transport Region will now be required to establish Enhanced Monitoring Plans (EMPs). This process gives states the flexibility to determine and collect the additional data they need to better understand the ozone problems unique to their area. States will need to comply with the new PAMS monitoring at NCore sites by June 1, 2019. States will need to submit EMPs within 2 years of designations or by October 1, 2019, whichever is later. The EPA intends to redistribute available PAMS funding to support the new requirements.

Third, we established a new procedure for determining daily maximum, 8-hour average ozone concentrations to avoid "double counting" overlapping daily maximum 8-hour averages. This procedure prevents the situation in which we count two exceedances of the NAAQS on 2 consecutive days based on overlapping 8-hour periods with up to 7 hours in common. The criteria for determining whether a daily maximum 8-hour average is valid for the purpose of calculating a design value has been changed accordingly, so that 13 of 17 possible 8-hour averages are now required instead of 18 of 24. In addition, we have retained the requirement that daily maximum 8-hour average values greater than the level of the NAAQS will be considered valid regardless of data completeness.

H. Other Implementation Issues

Community Involvement. We believe it is vitally important for state and local air agencies to engage with their communities as they plan to address attainment and/or maintenance of the 2015 ozone standards. Communities experiencing disproportionate impacts of air pollution may reasonably expect more stringent ozone standards to lead to improved air quality that meets the EPA's standards as soon as possible. To fully benefit from the opportunities the revised standards present, these communities' voices must be heard by the air agencies responsible for meeting the standards. The EPA recommends that state and local air agencies take steps to ensure that minority populations, low-income communities, tribes and indigenous populations are involved meaningfully in the development and implementation of regulations and programs to meet the 2015 ozone standards.

The EPA has developed a guidance document titled, "Guidance on Considering Environmental Justice during Development of Regulatory Actions," to assist its own staff in considering and addressing environmental justice issues as it develops rules. We recommend that state and local air agencies consider the approaches described in this document as they undertake their planning activities around the 2015 ozone standards. For example, the guidance includes specific steps to make public involvement meaningful and effective, ideas for using web-based tools for communicating with a variety of communities, and best practices for engaging environmental justice communities in developing and implementing environmental regulations. All communities deserve to breathe air that meets federal

standards. We are committed to working with states as they engage their most vulnerable communities toward achieving this goal.

Opportunity for Multi-pollutant Planning. Ozone pollution does not need to be addressed independently from other air pollution concerns. Emissions affecting compliance with other criteria pollutant NAAQS and contributing to greenhouse gases may have similar sources. We encourage air agencies to consider multi-pollutant planning, as a means to ensure environmental protection and at the same time take advantage of potential efficiencies, synergies, and provide more certainty to the regulated community. It is possible to work within the statutory requirements to plan and implement in a multi-pollutant fashion. Most recently, in the preamble for the final Clean Power Plan, the EPA noted "... the Clean Power Plan provides an opportunity for states to consider strategies for meeting future CAA planning obligations as they develop their plans under this rulemaking. Multi-pollutant strategies that incorporate criteria pollutant reductions over the planning horizons specific to particular states, jointly with strategies for reducing CO₂ emissions from affected EGUs needed to meet Clean Power Plan requirements over the time horizon of this rule, may accomplish greater environmental results with lower long-term costs." We believe that the coincident planning periods for the Clean Power Plan and the NAAQS for ozone, PM_{2.5} and SO₂, and for the Regional Haze program, should encourage states to take a multi-pollutant approach in addressing these regulatory requirements.

Emissions from Wildland Fires. We understand that fire is an unavoidable occurrence on many types of wildland, and that changing climate conditions will increase the occurrence of damaging wildfires unless fuel loads are managed by other means including science-based use of prescribed fire.^{12,13,14} Emissions from fires on wildland, particularly large wildfires, can impact concentrations of ozone and other harmful pollutants, such as PM_{2.5}, both in the locations with fire and downwind. In areas where wild fires have been prevalent or are likely, we encourage air agencies to work with state, federal and private land managers on promoting prescribed fire and other strategies that may reduce wildfire emissions and their effects on ozone exceedances; we appreciate that such strategies may have other public safety, ecological, and property protection benefits as well. Recognizing the importance of various fire management strategies, in the proposed revisions to the Exceptional Events Rule we intend to encourage air agencies to rely on burn managers' use of basic smoke management practices¹⁵ by identifying a set of generally applicable practices that would be employed during prescribed fires. The EPA and the federal land management agencies will support state efforts to educate the public on the ecological role of fire, and wildfire and prescribed fire concepts. Where a prescribed fire program has been developed and is being implemented in and/or upwind of a nonattainment area, the EPA recommends that air agencies account for the expected prescribed fire emissions in the attainment and maintenance planning process. In those areas where prescribed fires are known to be capable of causing occasional ozone exceedances, the EPA will continue to work with air agencies and stakeholders to improve the long-term effectiveness of the existing basic smoke management practices and smoke management programs.

¹² The Administrator's finding on the adverse effects of greenhouse gases included the observation that wildfires have increased, and that there are potential serious adverse impacts from further wildfire occurrence. (74 FR 66530, December 15, 2009).

¹³ *Climate Change in the United States: Benefits of Global Action*, U.S. EPA, EPA-430-R-15-001, June 2015. Available at <http://www2.epa.gov/cira>.

¹⁴ *The National Strategy: The Final Phase in the Development of the National Cohesive Wildland Fire Management Strategy*, Report to Congress developed by the U.S. Department of Agriculture and the U.S. Department of the Interior, April 2014. Available at <http://www.forestsandrangelands.gov/strategy/thestrategy.shtml>.

¹⁵ *Basic Smoke Management Practices*, October 2011, U.S. Forest Service and Natural Resources Conservation Service, http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046311.pdf.

Transportation Planning. The CAA requires that transportation plans, transportation improvement programs (TIPs) and projects must be consistent with, or “conform” to, attainment and maintenance of the ozone NAAQS. The EPA intends to issue an update to existing guidance for purposes of addressing issues that are expected to arise in implementing the 2015 NAAQS in future nonattainment areas. The EPA issued a similar guidance update for the 2008 NAAQS. The guidance for the 2015 ozone NAAQS will address transportation conformity requirements that apply in ozone nonattainment areas including:

- When will conformity apply for the 2015 ozone NAAQS;
- Requirements for completing transportation plans and TIP conformity determinations in metropolitan areas; and
- Requirements for completing conformity determinations in rural areas.

For more details on topics that will be addressed in transportation conformity guidance for the 2015 ozone NAAQS please refer to the current guidance for the 2008 ozone NAAQS, which is available at: <http://www.epa.gov/otaq/stateresources/transconf/2008naaqs.htm>. With the exception of issues unique to the 2015 ozone NAAQS (such as implementation dates), we expect the new guidance to be very similar to the guidance for the 2008 NAAQS.

The CAA also requires certain areas to implement vehicle inspection and maintenance (I/M) programs. These areas are limited to ozone nonattainment areas that have been classified as Moderate or worse and meet CAA-specified population thresholds (200,000 based upon the 1990 U.S. Census for Moderate nonattainment areas, and 200,000 based upon the 1980 U.S. Census for Serious or worse nonattainment areas). In addition, any Metropolitan Statistical Area within the Ozone Transport Region with a 1990 population of 100,000 or more is also required to implement I/M, regardless of attainment status.

While it is too soon to know, we expect few if any areas not already implementing vehicle I/M programs will need to do so as a result of being initially designated and classified nonattainment for the 2015 ozone standards. For those areas that may eventually be required to implement I/M as a result of missing their initial attainment deadline under the 2015 standards, a great deal of flexibility and many implementation options exist that were not available during the last period during which new I/M programs were required. This implementation flexibility is the result of numerous revisions to the original I/M rule as well as technological advances such as the use of onboard diagnostics on most in-use vehicles.

Ozone Advance Program. Finally, we also want to remind states, tribes, and communities about the EPA’s Ozone Advance program, which encourages expeditious emission reductions in ozone attainment areas to help these areas continue to meet the ozone NAAQS. While the program to date has focused on helping attainment areas continue to meet the 2008 NAAQS, we now plan to re-focus the program toward continued attainment of the 2015 NAAQS. Early reductions of the pollutants that form ozone can be achieved by any area without participating in Ozone Advance, however the program may be of interest to areas that would like to work more collaboratively with the EPA when planning and implementing measures to reduce ozone. Areas with air quality that currently does not meet the 2015 NAAQS can participate in Advance until final nonattainment area designations (expected in fall 2017), and for as long as the area is classified as Marginal (and therefore is not subject to planning requirements).

Ozone Advance participants have voluntarily opted to undertake a variety of emission reducing measures, including diesel reductions, congestion mitigation, fleet management, alternative fuels, point

and area source reductions, and energy efficiency improvements. They are also taking steps to build public awareness about the connections between air quality and health and actions individuals can take to improve air quality locally. Further information is available at <http://www.epa.gov/ozoneadvance/participants.html>.