UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

APR 4 2012

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Ozone Advance - Supporting Proactive Local Efforts to Keep Communities' Air Clean

FROM: Stephen D. Page, Director
Office of Air Quality Planning and Standards

TO: Regional Air Division Directors, Regions I-X

I am pleased to announce the Ozone Advance program, which continues and expands the U.S. Environmental Protection Agency's (EPA) cooperative work with state, tribal, and local governments. Ozone Advance is a collaborative effort to encourage ozone attainment areas nationwide to reduce ozone emissions expeditiously so they can continue to meet the National Ambient Air Quality Standard (NAAQS) for ozone. Through Ozone Advance, we are encouraging states, tribes, and local governments to take near-term steps to improve air quality and ensure continued health protection over the long term. Actions undertaken as part of the program could result in air quality improvements that provide a buffer against future violations of the standard. Ozone Advance will encourage the use of local strategies to reduce ground-level ozone and will emphasize coordination with stakeholders.

Ozone Advance is similar to the 2001 (for the 1-hour NAAQS) and 2006 (for the 8-hour 1997 NAAQS) Ozone Flex programs. Similar to those programs, Ozone Advance provides a framework for local actions to reduce ozone precursors in attainment and maintenance areas and thus maintain the ozone NAAQS. It also provides a means for local governments to take the initiative in maintaining and improving their air quality. Ozone Advance and Ozone Flex differ slightly in that Ozone Advance allows participation by an expanded set of areas, and includes simplified program participation requirements.

Areas eligible to participate in Ozone Advance are those that are not yet designated or that are designated as attainment, unclassifiable/attainment, or unclassifiable for the 2008 ozone NAAQS (0.075 ppm). Areas designated nonattainment for the 1997 8-hour standard (0.08 ppm) are not eligible to participate. The state, tribe, and/or local government should generally identify the affected area(s) for the program, and the air monitor(s) that reflect the air quality in the area. Emissions inventory reporting responsibilities should be met prior to applying for participation in Ozone Advance.

Participation in Ozone Advance will begin by submitting a sign up letter to the Office of Air Quality Planning and Standards (OAQPS) by a state, tribe, and/or local agency, and OAQPS' acknowledgment that the state, tribe, and/or local agency has met the basic program eligibility criteria. The participating state, tribe, and/or local agency will then begin to work with the EPA and stakeholders to understand the local issues and options for addressing them. Following these discussions, and preferably no later than a year after signing up for the program, the participating state, tribe, and/or local agency will indicate the measures and programs that will be put in place and a schedule for implementation.

Participants will work with the EPA to quickly evaluate, select, and implement control measures and programs. The EPA can share information about available tools, resources, and data that may be of use in resolving participants' issues, identify emission reduction and public awareness/education options that could feed into the strategies chosen by participants and provide technical advice. The EPA will also facilitate information sharing between participating areas and other areas and organizations that have experience with local programs.

We will encourage Ozone Advance participants to maximize multi-pollutant reductions when selecting measures and programs to further reduce ozone. In addition, we envision offering a similar program in the future to address particulate matter (PM) in PM near-nonattainment areas. Strategies to achieve multi-pollutant (nitrogen oxides (NO_x) and PM in particular) reductions related to diesel emissions will be critical to this effort, along with work to reduce residential wood smoke. The EPA will encourage Ozone Advance participants that are also near-nonattainment for PM to combine their Advance programs into one multi-pollutant program that addresses both ozone and PM.

With this memorandum, I am transmitting the guidance for Ozone Advance and request that Regional Offices forward it to their states as well as to any tribes and local agencies that may have an interest in the program, and promote participation in the program where appropriate. Some Regional Offices may prefer and are encouraged to work with interested states, tribes, and local agencies directly as part of this program, in coordination with OAQPS. Other Regional Offices may prefer to refer interested agencies to OAQPS, who will engage with the agencies directly in coordination with the Regional Office. In either case, we will involve the Office of Transportation and Air Quality (OTAQ) if the area is pursuing mobile source strategies or needs assistance with on- or near-road inventories.

The following individuals have been identified as contacts for each Regional Office:

Region 1	Anne Arnold	Region 6	Carrie Paige
Region 2	Paul Truchan	Region 7	Lachala Kemp
Region 3	Cristina Fernandez	Region 8	Jody Ostendorf, Scott Jackson
Region 4	Jane Spann	Region 9	John Kelly
Region 5	Steve Rosenthal	Region 10	Claudia Vaupel

Please notify Laura Bunte of my staff at (919) 541-0889, or ADVANCE@epa.gov if you would like to select different or additional Regional Office contact(s) for this effort. Laura is available to answer any questions you may have, and can provide you with information which you may consider using in communicating with states, tribes, and local governments regarding Ozone Advance. Information about the program may also be found on the program website: www.epa.gov/ozoneadvance.

Attachment

cc: Gina McCarthy, OAR
Janet McCabe, OAR
Kevin McLean, OGC
Gregory A. Green, OAQPS
Margo Oge, OTAQ
Karl Simon, OTAQ
Bill Becker, NACAA
R. Steven Brown, ECOS
Bill Thompson, NTAA
Janice Nolen, ALA

Ozone Advance

Introduction

Ozone Advance is a collaborative effort by EPA, states, tribes, and local governments to encourage emission reductions in ozone attainment areas nationwide to maintain the 2008 National Ambient Air Quality Standard (NAAQS) for ozone. The goals of the program are to (1) help attainment areas take action in order to keep ozone levels below the level of the ozone NAAQS to ensure continued health protection for their citizens, (2) better position areas to remain in attainment, and (3) efficiently direct available resources toward actions to address ozone problems quickly.

The Ozone Advance program offers participating states, tribes, and local governments the opportunity to work in partnership with EPA and each other within a framework that can help focus participants' efforts to keep their air clean. While participation in the program is not a guarantee that an area will avoid a future nonattainment designation or other Clean Air Act requirements, it can better position the area to comply with the requirements associated with such a designation. For example, emission reduction actions undertaken as part of the program could potentially receive "credit" in State/Tribal Implementation Plans (SIPs/TIPs) in the event an area is eventually designated nonattainment with a Moderate or higher classification, either in terms of reflecting a lower baseline from which additional reductions are needed to meet reasonable further progress goals or, if they occur after the baseline year, as a measure that shows progress toward attainment.[1]

Other flexible ozone attainment programs preceded the current Ozone Advance program, including the Flexible Attainment Region (FAR) approach in the 1990s, the 2001 1-hour Ozone Flex Program,[2] and the 2006 8-hour Ozone Flex Program,[3] each of which was focused on taking proactive steps to reduce emissions of ozone precursors in attainment areas in order to ensure continued maintenance of the relevant ozone NAAQS. The Early Action Compact (EAC) program[4] was distinct from these attainment area programs in that it focused on areas that were violating or close to violating the 1997 NAAQS at the time of designation, but was similar in that it encouraged early action, the use of innovative measures, and the development of stakeholder groups.

This document provides guidance on Ozone Advance, including general applicability, regulatory issues, program participation, and timelines. This program guidance has been developed with the input of

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[1] In order to receive emission reduction credit as a measure in a SIP, the measure would need to be quantifiable, surplus (in terms of not being double counted both as part of the baseline and as a control measure in the SIP), federally enforceable, and permanent. It would also need to meet any other relevant requirement in CAA section 110 and/or 172, and if the measure is voluntary, the state would need to make an enforceable commitment to ensure that the estimated emissions reductions are achieved.

[2] Six areas participated in the 2001 1-hour Ozone Flex program: Austin and Corpus Christi, TX; Little Rock, AR; Shreveport-Bossier City, LA; Tulsa, OK; and Quad Cities Metropolitan Area, IA/IL.

[3] Five areas participated in the 2006 8-hour Ozone Flex program: Corpus Christi, TX; Oklahoma City, OK; Tulsa, OK; Austin-Round Rock, TX; and Quad Cities Metropolitan Area, IA/IL.

[4] Information about the former EAC program can be found at http://www.epa.gov/ttn/naaqs/ozone/eac/

stakeholders that include state and local government officials and organizations, tribes and tribal organizations, and environmental and health groups.

Please visit the program website (www.epa.gov/ozoneadvance) or contact Laura Bunte, EPA Office of Air Quality Planning and Standards, at (919) 541-0889 or ADVANCE@epa.gov if you would like additional information about Ozone Advance.

General Applicability

1. What is Ozone Advance?

Ozone Advance is intended to preserve or improve the air quality in ozone attainment areas, particularly in areas that have ambient ozone levels close to the level of the NAAQS and thus are at the greatest risk of violating the standard. The program provides a structure for local actions that reduce emissions, and thus helps areas maintain air quality that meets the 2008 ozone NAAQS or any future revised ozone NAAQS, and offers a means for states, tribes, and local governments to take the initiative in maintaining and improving their air quality.

Local areas can take steps to reduce ozone on their own, and EPA encourages these proactive efforts. However, some states, tribes, or local governments may prefer to pursue reductions within the program framework with closer involvement and support from EPA. Representatives from participating areas will work with EPA to quickly evaluate, select, and implement control measures and programs. EPA can point to available tools and resources that may be used to resolve their issues, provide technical advice and other support, and, where appropriate, may recognize areas that have been especially proactive and successful in pursuing reductions.

The program may assist an area with efforts aimed at (1) reducing air pollution, (2) ensuring continued healthy air quality levels, (3) avoiding violations of the NAAQS that could potentially lead to a nonattainment designation and associated requirements, and (4) increasing public awareness about ground-level ozone as an air pollutant.

2. Why should an area want to take action to reduce emissions that contribute to ozone formation now, if it is not currently required to do so?

Proactive work to address ozone precursors can reduce emissions sooner and avoid violations of the ozone NAAQS that might compromise public health. In addition, if the ozone NAAQS is ever lowered in the future, reductions now could position an area to achieve air quality concentrations that enable it to avoid a nonattainment designation or, if eventually designated nonattainment, could result in a lower classification. A lower classification means fewer mandated control requirements for the area. By acting in the near-term, a local government or state will have greater flexibility to choose control measures that make the most sense and are cost-effective for an area. Once a nonattainment designation is made, specific federal requirements apply, some of which, for Moderate and higher classifications,

relate to specific categories of sources. Early actions to reduce ozone that keep an area in attainment, whether through Ozone Advance or otherwise, are expected to be less resource intensive than waiting until a nonattainment designation occurs before taking action.

Many measures that a local government, tribe or state may choose to implement could result in multi-pollutant benefits. For example, reductions of nitrogen oxides (NO_x) can lead to lower ambient fine particulate matter (PM) levels as well as lower ambient ozone levels. An area interested in taking proactive steps to address ozone has the opportunity to maximize ozone control co-benefits per the area's unique situation.

3. Does EPA also plan to work with PM near-nonattainment areas to achieve emission reductions that will ensure continued maintenance of the PM NAAQS?

The National Research Council of the National Academy of Sciences recommended that an integrated, multi-pollutant approach to managing air quality would be most effective. EPA encourages Ozone Advance participants to maximize multi-pollutant reductions when selecting measures and programs to further reduce ozone. We envision offering a program similar to Ozone Advance to address PM in near-nonattainment areas. Strategies to achieve multi-pollutant (NO_x and PM in particular) reductions related to diesel emissions will be central to this work, as well as efforts to reduce residential wood smoke and other PM sources. Ozone Advance participants that are also near-nonattainment for PM should combine their Advance efforts into one multi-pollutant program that addresses both ozone and PM. In addition, EPA will work with participants to provide information on the multi-pollutant co-benefits associated with transportation, land use, energy efficiency, and climate change programs.

4. Who can sign up to participate in Ozone Advance?

States, tribes, and/or local governments that want to sign up to participate in Ozone Advance must meet the basic program eligibility criteria in A, B, C, and D below.

A. States, tribes, and/or local governments can sign up to participate with respect to areas that are not designated nonattainment for either the 1997 8-hour or the 2008 ozone NAAQS, including areas that are not yet designated nonattainment for the 2008 ozone NAAQS at the time a sign-up letter is submitted to EPA (i.e., the effective date of final designations for the 2008 ozone NAAQS has not yet arrived).

B. States, tribes, and/or local governments must generally identify the area(s) with respect to which they are signing up.

C. Where possible, states, tribes, and/or local governments should identify and be able to report on the air monitor(s) that reflect or best represent the air quality in the area(s); this may require consultation with the state to determine what monitor(s) the state has reported to EPA as being indicative of air quality in the area(s). EPA recognizes that some areas, particularly

in parts of the western U.S., may need to utilize data from outside the given area to track progress. These areas should discuss their situation with EPA prior to signing up for Ozone Advance.

D. EPA will evaluate a state's compliance with existing emissions inventory requirements before accepting the state into the program. States with reporting responsibilities would need to meet their reporting obligations for the National Emissions Inventory prior to applying for participation in Ozone Advance. Some local agencies' emissions reporting supercedes the state-submitted emissions; where this is the case, the prospective participant(s) should consult EPA prior to signing up for the program.

Other applicants, such as a regional, multi-state, or local council of governments (COG), will be considered by EPA. These organizations should discuss the possibility of their participation with EPA prior to signing up. Whether or not a COG becomes a direct participant in the program, it will be important for state, tribal, and local government participants to coordinate with area COGs to give them an opportunity to provide input during the development of an Ozone Advance "path forward," and to ensure they are kept informed about efforts undertaken within the program.

EPA does not necessarily intend for townships or other similarly small local governments to participate, on their own, in Ozone Advance. However, small local governments will be considered by EPA and should discuss the possibility of their participation with EPA prior to signing up.

States, tribes, and/or local governments that are already signed up and that are participating in Ozone Advance may continue to participate in the program if the area of concern is eventually designated nonattainment and classified Marginal. Such areas would not be exempt from any requirements that apply to them, such as New Source Review, transportation conformity, and the requirements to submit an emission statement rule and a base year actual (i.e., not projected) emissions inventory. Marginal areas do not have specific Clean Air Act-mandated planning requirements. Rather than wait until planning is eventually required, it makes sense for these areas to actively step up their efforts to reduce ozone. This may better position an area to attain within three years after designation, and thereby avoid reclassification to a higher classification. Regardless of a Marginal area's participation in the Ozone Advance program, if the area continues to violate and is not eligible for the Clean Air Act's one-year extensions, it will be reclassified to a higher classification. Although the state, tribe, and/or local government would not be able to continue participating in Ozone Advance with respect to the area, the efforts they pursued under Ozone Advance should not end, but would transition into SIP planning efforts. Areas classified as Moderate or a higher classification have specific attainment planning requirements that are not required for Marginal areas. If a Marginal area participating in Ozone Advance is reclassified to Moderate or a higher classification, the Ozone Advance activities could be helpful in meeting certain SIP requirements. EPA would provide SIP assistance and support as it does for all areas classified as Moderate or higher.

Areas that have been redesignated to attainment for the 1997 8-hour ozone NAAQS and that have an approved maintenance plan may participate in Ozone Advance. However, these areas must implement their maintenance plans as approved. Participation in Ozone Advance would not relieve any area from any requirements to which they are otherwise subject under the Act or EPA's regulations, including the transport regulations issued pursuant to Clean Air Act section 110(a)(2)(D), or from any requirement in an approved SIP. Measures and programs undertaken as part of Ozone Advance would be in addition to those included in the approved SIP, and could provide the area with a buffer against future violations.

An area that is designated nonattainment for the 1997 8-hour and/or 2008 ozone NAAQS, but that is currently attaining the ozone NAAQS may not sign up for Ozone Advance until the area has been redesignated attainment with an approved maintenance plan. However, early progress can still be made. If a state has submitted a maintenance plan to EPA, then pending EPA approval of the plan EPA could consult with you and provide some level of assistance. Full participation in Ozone Advance would not occur until the area has been redesignated attainment with an approved maintenance plan, and has met the other program eligibility criteria (i.e., ensure that emissions inventory reporting requirements are met and, where possible, identify the monitor(s) that reflect the area's air quality).

Ozone Advance is the program EPA is offering to provide assistance to areas interested in taking steps to stay in attainment of the 2008 ozone NAAQS. Former Early Action Compact (EAC) areas and current and former 8-hour Ozone Flex (also called 8-O3 Flex) areas that meet the Ozone Advance program eligibility criteria are encouraged to participate in Ozone Advance.[5] Some of the action plans developed as part of the 8-hour Ozone Flex program are still in effect, and some of the areas are considering renewing their existing plans in order to be consistent with maintaining the 2008 ozone NAAQS of 0.075ppm. Areas that have current Ozone Flex action plans associated with maintaining the 1997 8-hour ozone NAAQS of 0.08ppm are encouraged to continue working with EPA in the same manner under the auspices of Ozone Advance. EPA expects these areas to operate under Ozone Advance with the same level of rigor as they have been implementing in Ozone Flex, given that the current Ozone Flex areas have demonstrated success in maintaining the 1997 ozone NAAQS.

A state, tribe, or local government that intends to sign up for Ozone Advance should discuss the prospect with the other potentially affected governmental entities, and all of the parties interested in participating should submit one joint sign-up letter together. If a state, tribal, or local government signs up, but other potentially affected governmental entities choose not to participate, the applicant should copy the other potentially affected governmental entities on any sign-up letter submitted to EPA. Once EPA acknowledges the area's acceptance into the program in writing (i.e., an e-mail or letter), the participant(s) should coordinate with the other potentially affected governmental entities to give them an opportunity to provide input during the development of the area's path forward, and to ensure they are

[5] Ozone Advance participants may be interested in reviewing the types of activities that were pursued by Ozone Flex and EAC areas; information about these efforts will be made available on the Ozone Advance website, www.epa.gov/ozoneadvance. The website will also contain a table comparing the Ozone Flex and Ozone Advance programs.

kept informed about efforts undertaken within the program. Prospective program applicants should also coordinate with EPA and appropriate stakeholders prior to signing up for the program.

5. Who cannot sign up for Ozone Advance?

States, tribes, and local governments cannot sign up for the program if the area of concern is designated nonattainment for the 1997 8-hour and/or 2008 ozone NAAQS. An area that is designated nonattainment for the 1997 8-hour and/or 2008 ozone NAAQS, but that is currently attaining the ozone NAAQS may not sign up for Ozone Advance until the area has been redesignated attainment with an approved maintenance plan. If a state has submitted a maintenance plan to EPA, then pending EPA approval of the plan EPA could begin consulting with you and provide some level of assistance. Full participation in Ozone Advance would not occur until the area has been redesignated attainment with an approved maintenance plan.

Applicants must also be able to generally identify the area(s) with respect to which they are signing up. In addition, emissions inventory reporting requirements must have been complied with prior to sign up and, where possible, applicants should indicate the air monitor(s) that reflect the air quality in the area(s).

6. What is the timing for participation in Ozone Advance?

We encourage states, tribes and local governments to participate in Ozone Advance as early as possible, but there is no requirement that an area commit to the program by a specific date as long as they sign up prior to being designated nonattainment (i.e., prior to the effective date for final designations for the 2008 ozone NAAQS). There is currently no expiration date for enrollment. We recommend that an area commit to Ozone Advance for a five-year term, with the option to renew at the end of the first term and each successive term. An area can choose to end its participation in the program at any time, with notice to EPA.

7. How can an area apply for participation in Ozone Advance?

We encourage interested states, tribes, and local governments to carefully consider participation, reviewing pertinent issues including, but not limited to, projected industrial and population growth, trends and concerns regarding air quality, and support of such a program by the state, tribes, and local governments.

To sign up for the program, submit a brief **"sign-up letter"** to Laura Bunte of the EPA Office of Air Quality Planning and Standards (OAQPS) at ADVANCE@epa.gov and/or to the following address:

Ozone Advance
c/o Laura Bunte, Mail Code C304-01
109 TW Alexander Drive
RTP, NC 27711

The sign-up letter should be signed by the appropriate state, tribal, and/or local government official(s) with the authority to implement the program and to assist in leveraging staff and other resources as needed. A copy should also be sent to the relevant EPA Regional Office. EPA will review to determine that the applicant(s) has/have met the basic program eligibility requirements, and will then indicate by e-mail or letter whether the applicant(s) has/have been accepted into the program.

8. Must a Memorandum of Agreement/Memorandum of Understanding (MOA/MOU) be developed and signed in order to participate in Ozone Advance?

No. However, to the extent a participating state, tribe, or local government would benefit from having a more formal agreement in place, EPA would be willing to work with them to develop an MOA/MOU.

9. What other submissions to EPA are needed?

As a first step toward minimizing the potential for ozone concentrations in excess of the ozone NAAQS, a participating area should evaluate a variety of voluntary and mandatory control options and other programs. EPA can provide advice during this evaluation. No later than one year after signing up for the program, the area should submit a **"path forward letter"** to the EPA program contact via mail per #7 above, or via e-mail to ADVANCE@epa.gov, with a copy to the relevant EPA Regional Office. The path forward letter should fully describe the measures and/or programs the area will implement and provide a schedule for the implementation of each one. Information from these letters and/or the letters themselves may be made available on the program website.

Unlike a formal SIP submission, EPA will not approve or disapprove the commitments made by the state, tribe, and/or local government, and the input provided by EPA during the course of Ozone Advance will not serve as an approval for purposes of any eventual SIP. However, EPA may provide feedback to the area regarding whether commitments are likely to result in emission reductions and/or other public health benefits.

The path forward developed for the area can be submitted by a state and/or a tribe and/or a local government, although preferably it would be submitted jointly by all of the program participants. The letter specifies actions the signatories have agreed to implement to reduce ozone precursor emissions and thereby improve local air quality. The path forward letter is not a federally enforceable document and does not institute any legal or financial obligations on any entity.

10. What happens after a path forward letter is submitted?

The area should begin or continue implementing the selected measures and programs expeditiously. In order to most quickly impact ambient ozone levels, implementation should occur to the extent possible for the ozone season immediately following the path forward letter, recognizing that some

measures/programs may take longer to implement or may have longer lead times until emission reductions are realized.

11. Should participants periodically share information with EPA?

Yes, participants should stay in communication with EPA periodically throughout the program. In addition, at least once a year from the time the path forward letter is sent to EPA, a participating area should briefly and informally summarize the status of each of the area's measures and programs undertaken under Ozone Advance (including a comparison of current status for each measure/program as compared with the schedule laid out in the path forward letter), current air quality, stakeholder meetings/events, and any other information the area would like to highlight. The information should be sent to the EPA program contact via mail per #7 above, or via e-mail to ADVANCE@epa.gov. Information from these annual check-ins may be made available on the program website, www.epa.gov/ozoneadvance .

Regulatory Issues

12. Does Ozone Advance establish new or avoid existing regulatory requirements?

No, this program does not create or avoid any regulatory requirements. As noted previously, participation in Ozone Advance does not allow the participant(s) or regulated entities in those communities to avoid applicable requirements under the Clean Air Act, EPA regulations, or an approved SIP. While the program itself does not establish any regulatory requirements for state, tribal, or local government participants, if, as part of the program, state, tribal, or local authorities adopt regulations, such regulations likely would establish enforceable requirements on the regulated entities (i.e. enforceable by the state or local government; state and local regulations may even become Federally enforceable if they are incorporated into the SIP).

13. What happens if violations of the ozone NAAQS occur despite an area's participation in the program?

The area should quickly evaluate, select, and implement additional measures and programs to mitigate its ozone problem. It is important to note that Ozone Advance does not shield an area from being redesignated nonattainment if the area eventually violates the ozone NAAQS. Should a violation occur, EPA would consider the factors in section 107(d)(3)(A) of the Act. These include "air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate." Where control measures are actively being implemented by program participants, EPA may allow time to determine whether such measures bring the area back into attainment. This is not meant to suggest that participation in Ozone Advance will result in special treatment by EPA should an area begin to measure violations. It is meant to acknowledge that EPA may include an area's active pursuit of control measures and programs as one factor among the set of factors it considers when

exercising its discretion to revise the area's designation to nonattainment, and this would equally be the case whether the area is a participant in Ozone Advance or not.

14. Might the way an area is defined for purposes of participation in Ozone Advance affect future nonattainment boundaries, for example might it result in the eventual designation of partial counties/cities or non-contiguous nonattainment areas?

No. Regulatory decisions regarding nonattainment boundaries will not be impacted by Ozone Advance participants' definition of areas included in the Ozone Advance program.

15. Will states receive SIP "credit" for emission reduction measures undertaken as part of Ozone Advance?

EPA will not, as part of Ozone Advance, review commitments made under Ozone Advance for purposes of approval or disapproval into a SIP. However, if an area participating in Ozone Advance is subsequently designated nonattainment for the 2008 ozone NAAQS or any future revised ozone NAAQS, emission reductions achieved from measures implemented as part of the program could be accounted for in future SIP planning. We describe two ways in which they could potentially be accounted for below in #16.

EPA encourages participating states, tribes, and/or local governments to adopt proven, effective control measures to reduce ozone expeditiously. We also recognize that some of the measures states, tribes, and localities may choose to adopt under the program may be innovative measures. EPA supports flexible approaches that account for the complex nature of ozone formation and in various previous SIP approvals has provided SIP credit for innovative measures that meet SIP approval criteria. [6] EPA is interested in working with areas to help them identify innovative measures that suit the area's unique needs.[7]

16. How can early reductions achieved as part of Ozone Advance be recognized in any future SIP that the area may need if designated nonattainment with a Moderate or higher classification for the 2008 ozone NAAQS or any future revised ozone NAAQS?[8]

If emission reductions occur through Ozone Advance **prior to** the baseline year for purposes of attainment demonstration modeling or a reasonable further progress demonstration, then the reductions

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[6] EPA encourages states to seek SIP credit for voluntary emission reductions. A variety of guidance materials are available to guide states considering voluntary measures for adoption into a SIP. See Attachment C for some examples; this list is not exhaustive of all guidance on SIP credit.

[7] In order to receive emission reduction credit as a measure in a SIP, the measure would need to be quantifiable, surplus (in terms of not being double counted both as part of the baseline and as a control measure in the SIP), federally enforceable, and permanent. It would also need to meet any other relevant requirement in CAA section 110 and/or 172, and if the measure is voluntary, the state would need to make an enforceable commitment to ensure that the estimated emissions reductions are achieved.

[8] See also Question #4 above regarding eligibility to participate in Ozone Advance.

would lower the emissions baseline. A lower baseline means that the area would need fewer future emission reductions in order to demonstrate attainment and/or proportionally fewer emission reductions would be needed to show reasonable further progress.

If emission reductions occur through Ozone Advance **after** the baseline year, the area may take credit for those reductions subject to Clean Air Act requirements, such as demonstrating that the reductions are surplus, quantifiable, enforceable, and permanent. Credit earned in this way means that fewer additional emission reductions will be needed to meet reasonable further progress goals and to demonstrate attainment, thereby bringing the finish line of attainment with the ozone NAAQS closer.

For example, if the area must achieve a 15% reasonable further progress reduction in VOC emissions over six years, reductions that occurred before the baseline year for calculating the 15% would be reflected in a reduced baseline; reductions that occur after the baseline year but during the six-year period could be counted toward the 15% reduction requirement.

EPA plans to address the issue of SIP baselines in the ozone implementation rule for the 2008 ozone NAAQS; this rule is expected to be proposed in spring 2012, and finalized by the end of the year. Although the approach that will be taken in the upcoming rule cannot be specified at this point, it is worth noting that in the past EPA has allowed some flexibility in determining the appropriate baseline year.

17. Can EPA guarantee that participating in Ozone Advance will cause an area to remain in attainment?

EPA can provide no guarantees. A participating state, tribe, and/or local government's success in the program depends largely on its/their level of commitment and the effectiveness of the actions taken under Ozone Advance. Evaluating, choosing, and expeditiously implementing measures and programs that result in actual emission reductions will be critical, and in many cases essential, to success. One of the benefits of participating in the program is that governmental entities and citizens become more aware of emission sources and what may cause ozone levels to increase, and may be more likely to react to potential issues before ozone levels rise. Proactive work to address these issues should lead to a greater chance of success in keeping ambient levels of ozone below the level of the NAAQS or, if the area is eventually designated nonattainment, could help prevent a higher classification than the area would otherwise have had (e.g., Marginal instead of Moderate).

18. If Federal measures are likely to provide the reductions needed in order to bring many eventual Marginal areas back into attainment, why should these areas pursue local reductions?

EPA will continue to promulgate Federal measures that reduce NO_x and VOC emissions and that should lead to improved air quality levels in many areas; however, local action is still needed in some areas in order to attain. Many Marginal areas are expected to attain the 2008 ozone NAAQS within three years of designation due to reductions of ozone precursors resulting from a number of Federal and state emission reduction actions that have already been adopted. Such programs include more stringent

emission standards for on-road and non-road vehicles and equipment (with associated fleet turnover), regional reductions in power plant emissions to address interstate transport, and other rules such as the boiler maximum achievable control technology (MACT) standards. EPA estimates that in about half of the Marginal areas, these reductions in conjunction with other ongoing state and federal controls should be sufficient to bring about attainment. In other areas, additional control measures may be needed for timely attainment. While Federal measures are likely to bring some Marginal areas back into attainment, these areas should consider taking steps to better ensure that once they return to attainment, they will remain in attainment. Among other things, Ozone Advance can facilitate actions that reduce emissions to provide an improved buffer against future nonattainment.

19. How should transported air pollution be accounted for within Ozone Advance?

Ozone Advance is not intended to address transport obligations pursuant to Clean Air Act section 110(a)(2)(D). Ozone Advance participants should be aware of their area's potential to adversely affect downwind air quality, as well as the potential impact of upwind air quality on the area.

20. Can a state seek to incorporate measures into its SIP even if it is not currently subject to nonattainment area planning requirements?

Yes. A state can consider submitting adopted measures as a SIP revision at any time, even if there are no Clean Air Act requirements to do so. Assuming EPA approves the SIP revision, it will strengthen the SIP, ensure that control measures are Federally enforceable, and provide the mechanism to allow credit for the emission reductions associated with the measures for any future RFP or attainment plan requirements, assuming they are not counted in the baseline.

Program Participation

21. What are the steps in participating in Ozone Advance?

Step 1 – Send a Sign-Up Letter to EPA

Participation in Ozone Advance is begun by the state, tribe, and/or local government submitting a sign-up letter to EPA, and EPA accepting them into the program following a review to ensure the eligibility criteria described in #4 above are met. The letter should express the willingness of all of the signatories to coordinate with each other and with EPA and to quickly implement measures and other programs to reduce ozone. Specific measures do not need to be identified in the sign-up letter, although if the applicant would like to highlight any existing measures and programs, they are welcome to do so. The letter should be signed by the appropriate local, state, and/or tribal official(s) with the authority to implement the program and to assist in leveraging staff and program funds as needed.

Step 2 – Identify Available Information Regarding the Area's Ozone Issue

This information could relate to the sources of ozone precursors, the degree of the local contribution to ozone based on available modeling by EPA or others, the appropriate area from which emissions reductions should occur, and existing or upcoming control measures and programs affecting sources in the area.[9] It would be helpful if this information were shared informally with EPA.

Step 3 – Secure Stakeholder Participation

It is important to identify, contact, and secure the participation of key stakeholders. This is commonly accomplished by the formation of a local air quality committee consisting of representatives from local government, industry, environmental and citizens groups (such as environmental justice organizations), and other interested parties. Stakeholders may need to be added as emissions sources and control measures are identified.

Step 4 – Coordinate Control Strategy Development

Ozone Advance participants should consider a variety of emission reduction measures and programs, which may include traditional control measures as well as other measures, policies, and programs related to, for example, energy efficiency and mobile sources. EPA is available to assist areas that are interested in exploring their options for potential measures and programs that could be included in their Ozone Advance path forward/action plan.

The participating state, tribe, and/or local government will lead coordination efforts with stakeholders and with EPA. EPA will work with the participant(s) early in the process as needed to identify and help them resolve technical and other issues and provide information about emission reduction and public awareness/education options. EPA's technical assistance will generally be in the form of directional advice; EPA does not anticipate, for example, conducting new modeling on behalf of a particular Ozone Advance area. The participant(s) will be the lead on any technical efforts they decide are appropriate, with EPA's guidance. The state should be included in these discussions to ensure technical consistency.

The control measures an area chooses to implement may require businesses, industries, and citizens to comply with ordinances, codes, or other binding state or local regulations, or may encourage voluntary actions that reduce ozone precursors. The geographic area covered by such measures should be based on the location and nature of sources, or other factors important to the area and to achieving reduction of ozone precursor emissions. Other programs that relate to public education and awareness may be considered as well. The process should offer opportunities for discussion and debate among stakeholders; these opportunities should be provided and led by the participating state, tribe, and/or local government(s).

[9] One source of information on the emissions sources in the area is the National Emissions Inventory (NEI). NEI data can be found at www.epa.gov/ttn/chief/.

States, tribes and EPA can provide valuable information for local governments. It may be helpful to meet with the state/tribal and EPA representatives to discuss issues and options before the path forward letter is submitted. EPA will review and provide comments on the area's preliminary decisions and will work with local technical or policy committees and the state/tribe(s). Local plans should complement current or potential future state/tribal or Federal efforts for the area. Local governments participating in Ozone Advance should identify the state-level controls and programs that may impact local ozone, and, similarly, participating states should identify any local controls and programs that may have an effect in the local area.

EPA suggests that participating areas consider developing an action plan which would provide the area's path forward along with background on the area's ozone issue and additional detail about the area's plans for addressing it. An action plan should include, at a minimum, an executive summary, list of measures to be implemented and a detailed implementation schedule, discussion of roles and responsibilities, and provisions for public/stakeholder involvement. Such a plan is not a requirement for participation in Ozone Advance; however it could serve as a useful blueprint for the area to work from in working with stakeholders and as a focal point for public recognition of the area's efforts to improve air quality. See Attachment A for further information regarding action plans.

Some participating areas may also consider technical work (e.g., emissions inventory development/refinement, air quality modeling, looking at intrastate transport and the effect of planned new sources outside the Ozone Advance area) to support their work to address ozone. Although the development of technical analyses is not a requirement of the program, to the extent a program participant elects to pursue appropriate technical work, EPA encourages these efforts and will be available to provide advice to the program participant(s) who wish to develop these analyses. The development of technical support should be of particular interest to areas that are very close to, or already violating the 2008 ozone NAAQS, in order to best align their efforts under Ozone Advance with any eventual SIP requirements.

Step 5 – Submit a Path Forward Letter to EPA

Once the area has sought stakeholder involvement and input, the area should send a letter to EPA describing the measures/programs the area will implement and providing a schedule for the implementation of each measure/program selected. The area may also describe any measures/programs already in place, in order to provide a fuller view of the efforts underway. If the area developed an action plan (see Attachment A), the area can submit the plan to EPA in lieu of a path forward letter.

Step 6 – Implement Control Strategy Per Schedule and Provide Annual Status Updates

Program participants should begin implementing the measures and programs specified in the path forward letter immediately, per the schedule laid out in the letter. Participants should stay in communication with EPA periodically throughout the program. In addition, each year from the time the path forward letter is sent to EPA, a participating area should briefly summarize the status of each of the

area's measures and programs undertaken under Ozone Advance (including a comparison between current status for each measure/program as compared with the schedule laid out in the path forward letter), current air quality, stakeholder meetings/events, and any other information the area would like to highlight. These status updates should be provided via letter or e-mail to the EPA contact noted in #7 above.

Step 7 – Apply for Federal Grants, if Desired

The Federal grants website http://www.grants/gov may be of interest to program participants. The website enables agencies and organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies. Over 1,000 grant programs offered by the 26 Federal grant-making agencies can be accessed from the website, and some of these may be useful in the context of this program.

There is currently no funding associated specifically with the Ozone Advance program, however EPA may provide preferred status to Ozone Advance participants when applying for existing grants programs. One such grant program is EPA's Diesel Emissions Reduction Act (DERA) program, which provides grant funding to eligible entities to reduce diesel emissions by retrofitting, repowering, and replacing older diesel engines. Funding for eligible entities to complete diesel emission reduction projects is periodically offered through a competitive process. For the Fiscal Year (FY) 2012 funding competition, eligible entities may receive additional scoring points within the DERA competition if the proposed projects are located in an area that has been accepted to participate in Ozone Advance by the close of the competition. Additional information on the DERA program, including availability of funding and requirements for applicants can be found at http://www.epa.gov/cleandiesel/prgnational.htm.

22. What should an action plan contain, should the participating area elect to develop one?

Attachment A provides suggestions regarding the content of an action plan.

23. Must a participating area undertake emissions inventory refinement or modeling as part of participation in Ozone Advance?

No. Compliance with existing emissions inventory requirements must have occurred prior to acceptance into the program. However, further emissions inventory refinement and modeling are not otherwise necessary prerequisites to participation in Ozone Advance. EPA encourages participating areas to (1) consider existing emissions inventories and modeling information and/or develop new analyses as necessary in order to characterize the nature of the ozone issue in the area (i.e., is the area NO_x or VOC limited, is the area upwind of nonattainment areas, might the area be considered to affect ozone levels downwind in any future revised ozone NAAQS), (2) provide a technical foundation for control selections and schedules, and (3) ensure that available resources are used efficiently and effectively. Attachment B provides a general discussion of emissions inventories, modeling, and controls.

24. What happens if the ozone concentrations in an area violate the ozone NAAQS?

The success of Ozone Advance for a given area will lie in the area's willingness to undertake new measures that result in real emission reductions. EPA recognizes that some areas are affected by the transport of upwind pollution; however, it is still important for local reductions to be achieved, where possible. Similarly, an area's emissions may affect an ozone nonattainment area downwind. As soon as an area determines that the air quality is deteriorating, the area should act quickly to supplement the measures and programs as listed in its path forward letter and/or action plan with additional measures/programs. If the air quality in the area deteriorates and a violation occurs, EPA may revise the area's designation to nonattainment; pending any decision, EPA will continue working with the area to see what additional measures can be taken to help improve the air quality.

25. Must a participating area commit to contingency measures?

No. Ozone Advance does not require that areas commit to adopt and implement specific contingency measures in the event the area violates the ozone NAAQS. EPA has attempted to streamline the program to the extent possible in order to encourage areas to keep their focus on actually taking proactive steps to improve their air quality. The goal is to encourage areas to take action to reduce ozone concentrations even though they are not currently required to do so. In lieu of contingency measures, Ozone Advance participants should consider quickly implementing additional measures should the quality of the air in their area begin to deteriorate; while participants are not required to develop contingency measures, they should begin to consider their options regarding additional measures well before they are needed. Measures undertaken should not be discontinued even if the area continues to remain in attainment, in order to protect against increases in local as well as downwind transported ozone concentrations.

26. What implementation schedule will participating areas follow?

EPA recommends that an area commit to Ozone Advance for a five-year term, with an option to renew at the end of the term and each successive term. An area's ambient air quality over the next several years would potentially affect designations following any possible revisions to the NAAQS in the future; therefore, it is important that the area work to improve air quality for a sustained period in order to best ensure it remains in attainment. The path forward letter should provide a schedule for implementation of the indicated measures. Significant actions that are necessary or may affect control measure implementation, such as required reviews/approvals, acquisition of equipment, etc., should be included in the schedule.

The Ozone Flex program specified the submission of a semi-annual program report, which could become an annual report if the area's design value was maintained or decreased. EPA contemplated eliminating these reports in order to further streamline the administration of Ozone Advance and the level of state/tribal/local resources directed to the program. However, EPA believes that some level of

information sharing is beneficial to ensure that all parties are kept informed about program progress. The intention is that the status updates submitted to EPA each year will be informal (e.g., in the form of a check-in e-mail or letter) and will provide a brief, general summary of the status of each of the area's measures and programs undertaken under Ozone Advance (including a comparison of current status for each measure/program with the schedule laid out in the path forward letter), current air quality, stakeholder meetings/events, and any other information the area would like to highlight.

27. What provisions should be made for public and stakeholder involvement?

Support for the proposed measures in the area's list of Ozone Advance commitments from organizations and institutions in the area is vital. Local officials can determine the best means to seek and respond to input from groups or individuals interested in or affected by the measures. We recommend that the commitments be developed by a local air quality committee that includes environmental, health, and citizens groups, as well as representatives from local industry and government. Input on appropriate measures from environmental and health groups, citizens groups, industry representatives, the general public, states/tribes, and EPA should be given thoughtful consideration by the committee.

28. How long should an area plan on participating in Ozone Advance?

Participation should last for a period of five years or longer as needed/desired. Participants may terminate their involvement in Ozone Advance at any time, with notice to EPA. Similarly, EPA may end a state's, tribe's or local government's participation in the program at any time, such as where a participant does not demonstrate any effort to make air quality improvements during the course of the program.

29. How does the Ozone Advance timeline compare with EPA's current schedules for implementation of the current (2008; 75ppb) ozone NAAQS and the next ozone NAAQS review?

Ozone Advance participants should keep the NAAQS implementation dates in mind when deciding upon the extent and timing of the measures and programs to be put in place. In particular, areas likely to be designated nonattainment with a Marginal classification should be aware of their window of opportunity to effect change before reclassification to a higher classification may occur.

Sample Timeline
Current as of March 2012; All Dates Are Tentative

Spring/Summer 2012	State, tribe, and/or local government submits sign-up letter to EPA
Mid-2012	Effective date of 2008 ozone NAAQS designations
Early 2013	Participant decides on measures/programs, submits intended path forward to EPA
Mid-2014	Completion of next ozone NAAQS review, including any revision of the NAAQS determined necessary
2015	2008 NAAQS Marginal area attainment date

Mid-2015	State recommendations for designations for any revised 2014 ozone NAAQS
Mid-2015	Attainment demonstration/ROP/RFP SIPs due for areas classified as Moderate or higher for the 2008 ozone NAAQS
Mid-2016	Final designations for any revised 2014 ozone NAAQS
Mid-2018	2008 NAAQS Moderate area attainment date
2019	Attainment demonstration/ROP/RFP SIPs due for areas classified Moderate or higher for any revised 2014 ozone NAAQS

30. Who did EPA coordinate with prior to beginning the Ozone Advance program?

OAQPS asked the EPA Regional Offices to talk with their states about our plans to offer Ozone Advance. We briefed the National Association of Clean Air Agencies (NACAA) criteria pollutants committee and the National Tribal Air Association, and described our plans to the Environmental Council of the States (ECOS) and multijurisdictional organizations. We also discussed the program with the American Lung Association and EPA's Clean Air Act Advisory Committee.

The draft guidance was distributed to states, tribes, local governments; state, tribal, and local organizations; environmental, health, and transportation organizations; and industry representatives for review and comment. During the review period we provided a webinar to summarize the draft guidance and respond to questions; this presentation was attended by over 200 individuals from 44 states and the District of Columbia (including state environmental and transportation agencies, regional organizations and Councils of Government, and local governments); 12 tribes; several state, local and tribal organizations, environmental, health, and transportation organizations, and industry representatives. We also spoke directly with several individual states and local areas who had questions about the program, as well as some of the states and areas participating in the Ozone Flex program.

The draft guidance was modified to reflect the input from these discussions, and this final guidance will be clarified via supplemental questions and answers which we will provide via the program website: www.epa.gov/ozoneadvance.

31. EPA Contacts

Questions about Ozone Advance may be referred to Laura Bunte, Office of Air Quality Planning and Standards (OAQPS), (919) 541-0889 or ADVANCE@epa.gov, or to the appropriate EPA Regional Office. Questions about mobile sources may be directed to Rudy Kapichak, Office of Transportation and Air Quality (OTAQ), (734) 214-4574 or kapichak.rudolph@epa.gov.

EPA Regional Office contacts include:

Region 1	Anne Arnold	(617) 918-1047
Region 2	Paul Truchan	(212) 637-3711

Region 3	Cristina Fernandez	(215) 814-2178
Region 4	Jane Spann	(404) 562-9029
Region 5	Steve Rosenthal	(312) 886-6052
Region 6	Carrie Paige	(214) 665-6521
Region 7	Lachala Kemp	(913) 551-7214
Region 8	Jody Ostendorf	(303) 312-7814
	Scott Jackson	(303) 312-6107
Region 9	John Kelly	(415) 947-4151
Region 10	Claudia Vaupel	(206) 553-6121

Some EPA Regional Offices will serve as the main EPA point of contact for participating areas within the Region and will work with participating states, tribes, and local governments directly, in coordination with OAQPS. In other Regions, OAQPS will serve as the primary EPA point of contact for participating areas and will engage with participants directly, in coordination with the EPA Regional Office.

Attachment A

Ozone Advance

Action Plan

The focus of Ozone Advance is on participating areas adopting measures and programs that will achieve emission reductions of ozone precursors to help areas remain in attainment of the 2008 ozone NAAQS and to increase the chances that they will be in attainment for any future revised NAAQS that may be promulgated. The program does not require extensive upfront analysis and planning, such as is required as part of the SIP process. However, participating areas may have an interest in developing a plan that lays out the current status of the area's air quality issues, describes any technical analysis undertaken by the area, such as modeling to understand the area's emission sources and appropriate controls, and indicates the path the area will take to reduce ozone. Although this work is not required as part of participation in the program, EPA encourages participating areas to develop such an action plan. An action plan can serve as the area's blueprint for actions into the future, and can help focus stakeholder and public understanding of the amount of pollution reduction needed in order to ensure the plan will be effective, as well as the steps the area is taking to ensure continued protection of citizens' health.

EPA suggests that the following sections be included in an action plan, at a minimum, if a participating area chooses to develop one:

- Introduction
- Description of the measures and programs to be implemented, responsible parties, how the measure will be implemented
- Implementation schedule for each measure and program
- Provisions for public and stakeholder involvement

A. Introduction

In the introductory section, information should be provided about the area to be covered by the plan, including the rationale for choosing the geographic boundaries. At a minimum, the geographic area should include the urbanized area, where applicable.[10] A map showing the geographic boundaries would be helpful. It is important to include brief information about the participating groups/agencies, and the general objectives of the plan. The executive summary should also identify the plan's duration.

The number and location of ozone monitors, and the number and extent of ozone concentrations above the ozone NAAQS should be provided, along with observed trends in emissions and ozone concentrations. If any modeling has been conducted, it should be mentioned as well.

Information on the sources (i.e., point, area, non-road, and on-road) and the total amounts of emissions should be summarized. It is important to note the extent and availability of information about NO_x and

[10] An urban area generally consists of a large central place and adjacent densely settled census blocks that together have a total population of at least 2,500 for urban clusters, or at least 50,000 for urbanized areas. An urban area can be in a metropolitan or non-metropolitan area.

volatile organic compound (VOC) emissions which contribute to ozone formation in the area. To the extent known, indicate the types of sources of these pollutants and the extent to which each type or specific source contributes to the total emissions in the area. Large sources in adjacent areas should be identified.

B. Description of Measures to be Implemented and Responsible Parties

The specific control measures or programs the local government, state, tribe, and/or community organizations commit to undertake as a result of Ozone Advance should be described in detail. The description for each measure should indicate how, where, when, and by whom the measure will be implemented. At a minimum, the list of measures should be designed to keep ozone levels below the current ozone NAAQS. More stringent air quality targets can be agreed to by the interested parties. Reductions should be achieved as expeditiously as practicable to provide maximum benefits.

The measures and programs may be mandatory or voluntary. The plan should include details about the means of ensuring the implementation of any measures and programs selected by the area, such as regulations, agreed orders, and verification mechanisms. It should also discuss how the effectiveness of voluntary measures might be assessed. The effectiveness of these measures may vary depending on the extent of participation or other circumstances.

Any existing background explaining how the list of measures was selected, such as any technical analysis conducted, would be helpful. Areas should consider developing or refining emissions inventories, assessing whether VOC or NO_x emission controls are most needed, and conducting photochemical modeling. While this work is not required in order to participate in the program, it would be helpful; EPA and Regional Planning Organizations can provide assistance in the direction and scope of these efforts, such that available resources can be used most effectively. If existing modeling is unavailable for reference and new analyses are not conducted by the area, the action plan should explain what means were used to select the measures in the plan. These technical efforts provide a foundation for an area's plan, and can be used to identify and analyze the sources of emissions in the area. Such information will suggest which control strategies may be most effective in reducing emissions that lead to ozone formation, and could help the area most efficiently use its limited resources. Attachment B contains more detailed information about the emissions inventory, modeling, control measures and selection.

EPA encourages use of the latest planning assumptions and emissions models available to evaluate and accurately estimate the benefits that control measures provide. Examples of assumptions include estimates of current and future population, employment, activity, projections and growth factors, and vehicle age and fleet mix. For on-road mobile source emission estimations, the current emissions model is MOVES (Motor Vehicle Emissions Simulator) (http://www.epa.gov/otaq/models/moves/index.htm). The most current version should be used. For non-road mobile sources, the current model is NONROAD2008a (http://www.epa.gov/otaq/nonrdmdl.htm). Areas in California would use the latest Emission Factors (EMFAC) model.

The measures and programs in the plan should, as a group, achieve emission reductions beyond those already being achieved in the area, given that the program is aimed at taking action to keep ozone levels below the level of the NAAQS. However, participants are encouraged to highlight existing, ongoing measures along with new, planned measures in order to fully represent the proactive work being done to maintain/improve air quality in the area. To the extent possible, the amount of NO_x and/or VOC emission reduction anticipated from each measure or combination of measures should be estimated. The plan should not include measures that are required under state/tribal or Federal law, such as the measures included in approved maintenance plans.

The state, tribe, and/or local government should commit to adjusting the list of measures and programs as appropriate in order to speed up progress in achieving reductions, and to ensure continued attainment in light of any future revised ozone NAAQS.

C. Implementation Schedule

EPA recommends that an area commit to Ozone Advance for a five-year term, with an option to renew at the end of the term and each successive term. See sample timeline in #29 above. The path forward letter should provide a schedule for implementation of the indicated measures. Significant actions that are necessary or that may affect control measure implementation, such as required reviews/approvals, acquisition of equipment, etc., should be included in the schedule.

D. Provisions for Public/Stakeholder Involvement

Support for the proposed measures in Ozone Advance commitments is vital. Local officials can determine the best means to seek and respond to input from groups or individuals interested in or affected by the measures. We recommend that the commitments be developed by a local air quality committee that includes environmental and citizens groups, as well as representatives from local industry and government. Input on appropriate measures from environmental groups, citizens groups, industry representatives, the general public, states/tribes, and EPA should be given thoughtful consideration by the committee.

Attachment B

Ozone Advance

Emissions Inventory, Modeling, and Controls

Emissions inventory (EI) work and source apportionment, dispersion, or other modeling are not required as part of Ozone Advance. However, the use of an emissions inventory and technical support for the selection of control measures is encouraged, and EPA will provide technical advice to participating areas who seek it. The state should be included in these discussions to ensure technical consistency. Areas with well-developed emissions inventories and technical support are better positioned to target and select control measures that maximize emission reductions that will result in air quality improvements given local conditions and characteristics.

Emissions Inventory

One of the first steps in determining how to improve air quality in an area is to gather information on the sources and amounts of emissions. In many cases, existing state, multijurisdictional or regional planning organization (MPO/RPO), and Federal EIs may provide a guide in targeting sources of interest in a particular local area to enable appropriate control selections. Ozone Advance participants are not required to develop a baseline emissions inventory for NO_x and VOCs; however, they are encouraged to do so in order to identify the level of emissions that would represent continued attainment for the area and to monitor growth.

The extent of the geographic area inventoried will vary by community. The EPA recommends evaluating the Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area (MSA/CMSA) (or the county or parish if there is no MSA) and enlarging the area if necessary. Local EIs can help an area identify, target, and obtain emission reductions that are feasible and that are most likely to lead to reduced ozone formation in the area. EPA's protocol for developing an EI and additional information on EIs are available at http://www.epa.gov/ttn/chief/eiinformation.html. In particular, information regarding EPA's Emission Inventory Improvement Program (EIIP) can be found at http://www.epa.gov/ttn/chief/eiip. While some aspects of this website, such as mobile source information, are out of date, much of the information provided may be useful to participating states, tribes, and local governments that want basic information about how to further develop and refine their EIs.

Emissions are generated by stationary sources (industrial or commercial facilities), mobile sources (on and off-road vehicles, aircraft, ships and locomotives), and area sources (gas stations, dry cleaners, auto body paint shops, etc). Emissions of NO_x and VOC contribute to ozone formation and should be the focus of EI efforts.

Information should be gathered on the number and types of emission sources in the area and the types and amounts of pollutants emitted. It is important to summarize the extent and availability of information on NO_x and VOC emissions which contribute to ozone formation in the area. To the degree

it is known, the extent to which each type of source or specific source contributes to the release of the total emissions in the area should be specified.

Expected emission reductions from planned efforts or controls should be identified and should be quantifiable, to the extent possible. Emission reductions from some measures may be difficult to quantify (e.g., voluntary measures due to unknown levels of participation), but it may be possible to specify a percentage, range, or time-adjusted sequence of anticipated emission reductions from each or a combination of these "hard to estimate" measures.

The following steps outline the process for emissions inventory development:

Step 1: Determine if inventory information currently exists
The state/tribe may have information on the sources and emissions in the area. EPA and MPOs/RPOs may have additional information. EPA compiles the NEI every three years. The most recent NEI includes 2008 emissions. States are required by the Air Emissions Reporting Requirements (AERR) rule to submit emissions inventory information every three years. Ozone Advance participants should identify information sources and compile the information relevant to their area.

Step 2: Determine the extent of available information
The extent of available EI information varies from area to area. The state/tribe or EPA can provide guidance on the types of EI information that has been collected for your area and which may be useful for your local efforts.

Step 3: Gather additional information as necessary
In addition to specific EI data from the state/tribe or EPA, the following information may be of use to local EI development:

Information about VOCs of particular concern in an area:
- National-Scale Air Toxics Assessment (NATA), www.epa.gov/ttn/atw/natamain

Stationary source data:
- VOC/NO_x sources/emissions not included in the state/tribal emissions inventory
- Development of the most current EI possible for a year with high ozone observed in the area

Mobile source data:
- Useful mobile source information that could improve estimates available from other sources such as the NEI
- Non-road vehicle, engine and equipment types, numbers, emissions, hours/frequency of operation
- On-road vehicle types, numbers, emissions, vehicle miles traveled (possible data sources include local Metropolitan Planning Organizations and the local Department of Transportation)

- For additional information on the use of MOVES for estimating on-road emissions and NONROAD for estimating emissions from most types of non-road equipment please see: http://www.epa.gov/otaq/models.htm.

Additional useful information regarding EIs is available electronically through http://www.epa.gov/ttn/chief/.

Modeling and Data Analysis

Photochemical air quality modeling that can predict the effectiveness of a proposed control strategy or a proposed control measure in reducing the local ozone concentration, and other modeling or data analyses are not required for participation in Ozone Advance. However, these types of analyses could be used as a tool in the program to help areas identify which emissions may be the most beneficial to reduce. Before beginning any modeling effort, an area should contact the state/tribe or EPA Regional Office for suggestions regarding whether sufficient relevant modeling information for the area already exists, and, if not, what types of analyses are appropriate. A review of any existing modeling could add credence to the selection of control measures and could conserve both time and money. If the area intends to perform modeling, it should follow EPA or state-approved modeling protocols; see the EPA modeling information at http://www.epa.gov/scram/.

Other considerations include:

A. Photochemical Grid Modeling

If used, photochemical grid modeling should be SIP-quality and developed according to current EPA ozone modeling guidance. This modeling can help answer questions such as:

- Is it more effective for Ozone Advance efforts to concentrate on reductions of VOCs, NO_x, or both?
- If a combination of both VOC and NO_x reductions appears to be called for, what percentage of each would be appropriate?
- What amounts of reductions are necessary to make a difference in ozone concentrations?
- Which control measures will result in emission reductions that would be most effective at reducing ozone concentrations in the area?

Photochemical grid modeling may also be used to assess the effectiveness of a control strategy in helping to reduce ambient ozone levels. In such a demonstration, there may be a need for assessing some future year(s), and for developing future emissions inventories.

B. Air Quality Data Analysis

In some cases, it may be possible to address the questions posed in the previous section without the use of time and resource-intensive photochemical grid modeling via careful statistical analysis of monitored

ambient ozone, ozone precursor, and meteorological data. This analysis is used to produce a meteorologically-adjusted ozone trend that reflects summertime average ozone levels under typical meteorological conditions. Data analysis efforts designed to answer the questions listed below can also be used to support and confirm any modeling results.

- Which meteorological conditions are most often associated with elevated ozone concentrations in the area?
- Does the meteorologically-adjusted trend confirm that summertime average ozone concentrations in the area are decreasing?
- Has there been a relationship in the recent past between local ozone precursor emissions reductions and the meteorologically-adjusted trends?

C. Data and Time Periods of the Assessment

If a participating state, tribal, or local government decides, in consultation with EPA, that analyses are needed in order to understand the area's air quality issues, decisions will need to be made regarding which data will be used, and the period(s) to be modeled. The following questions are among those that would need to be answered:

- How many and which sources should be modeled?
- What types of pollutants and amounts of emissions from each source should be evaluated?
- Are the emissions inventory and other necessary data (i.e., meteorological data) available?
- Should modeling be done for an extended period such as five years or for shorter periods, such as each year?

D. Use of an Appropriate Model

Different models are available to predict air quality impacts. Participating local governments should consult with the state/tribe and EPA regarding which models would be appropriate for the purpose intended as well as the area, pollutants and sources to be evaluated. As stated earlier, a review of existing modeling analyses, if they exist, could simplify the selection of control measures and conserve resources.

Pollution Reduction Measures and Programs

Once the sources and types and amount of emissions are generally known, a list of potential air quality improvement and/or emission pollution reduction options can be developed. These options should be different from actions required by state/tribal or Federal law prior to or during the agreement term. These options may include, for example, public awareness, notification, and participation in local programs; requiring the installation of control devices or implementation of procedures by stationary sources; or mobile source control options. Other options may include voluntarily adopting state/tribal or

certain Federal measures like those designed and mandated for ozone nonattainment areas.[11] To the extent that it is possible, these measures could be implemented on a voluntary basis and adapted as necessary. Consideration of multi-pollutant benefits (such as maximizing reductions in both NO_x and PM) should be incorporated into any selection of measures and programs.

Emission reduction measures are specific emission reduction commitments from specific facilities or industrial sources, broader measures applicable to an entire area, measures which target a specific group of emission sources or category of emissions (e.g., sources with VOC emissions greater than 25 tons per year), or voluntary programs such as those that encourage behavior change in order to achieve reductions (e.g., transportation programs that reduce vehicle miles traveled). Public notification and education programs include activities to inform and educate the public of the impact of their daily activities and to encourage them to participate in efforts to improve local air quality and to take actions to protect their health when exposed to poor air quality.

New state/tribal or Federal requirements may impact the emissions in an area. In order to best ensure continued attainment of the ozone NAAQS, Ozone Advance participants may need to consider going beyond Federal and state/tribal requirements that are already in place or that are anticipated in the near term. Consequently, in order to effectively evaluate potential control measures to adopt, local governments should become informed of requirements that already apply or are scheduled to apply within the area. Even where Federal, state, and tribal controls are generally expected to be sufficient to keep an area in attainment, local measures may provide an extra buffer against future violations, and will help to ensure continued public health benefits.

A variety of sources provide information about air quality improvement options that areas may want to explore. These include, for example, the Reasonably Available Control Technology/Best Available Control Technology/Lowest Achievable Emission Rate (RACT/BACT/LAER) Clearinghouse (http://cfpub.epa.gov/RBLC/), the Ozone Reduction Strategies website (www.epa.gov/airquality/ozonestrategy/), the National Clean Diesel Campaign and Diesel Emissions Reduction program (DERA) grants (www.epa.gov/cleandiesel), and the State and Local Transportation Resources website, www.epa.gov/otaq/stateresources/index.htm. EPA will be available to provide assistance in identifying options that may best suit an area's unique needs and priorities.

Also consider contacting other states, tribes, and/or local governments, particularly those with similar sources and air quality issues, for information on measures they have considered or implemented. A list of some general categories of control measures follows, but Ozone Advance participants are not limited to these categories for sources of controls. Additional information on emission control options for specific sources can be obtained from EPA. Also, see Attachment C for a list of guidance documents that apply to a wide variety of control measures for stationary, area, and mobile sources.

[11] Some federal measures are not available for state or local adoption because they are preempted legally. Vehicle emission standards and fuel standards are examples of this. Please consult your EPA Regional Office early in your process for considering measures.

Control Measure Selection

Emissions, modeling, source, and control information can be analyzed to select appropriate control measures that will help achieve emission reductions and prevent ozone levels that may exceed the level of the NAAQS. Specific Ozone Advance action plans can tailor the use, combination, and timing of specific measures to meet local needs. Aside from control measures/programs identified in the plans, the plans may contain public education and awareness programs. Factors which may be considered in selecting control measures include, but are not limited to:

A. Determination of amount/type of emission reductions

The type and amounts of emission reductions impacts the selection of controls. An area with air quality affected predominantly by mobile sources and needing NO_x emission reductions would need different control measures than an area with air quality affected predominantly by large stationary sources of VOCs. Emissions inventory and modeling data may be beneficial in making these determinations. Considerations include:

- Is ozone formation in the area driven by NO_x or VOC emissions or a combination of the two?
- What are the primary types of NO_x and VOC emissions sources in the area? For example, are mobile or stationary sources emitting most of the NO_x or VOC in the area?
- Are there a few very large emitters of NO_x or VOC, many smaller ones, or a combination?
- Are there additional air quality improvements, such as toxic emissions reductions, that result from implementation of the controls under consideration for this program?
- Are there possible benefits to environmental justice communities?

B. Analysis of available control measures

Even if the types and amounts of emission reductions that would provide the greatest benefits are known, the availability and ease of implementation of emission control options may impact selection of a particular measure. Considerations include:

- What available control technologies/measures would be feasible to implement?
- What is the effectiveness of these control technologies/measures in achieving emission reductions?
- What are the timeframes necessary to implement the measure and see results?
- What is the cost (dollars/resources) necessary to implement the measure?
- What are the challenges to “sell” the measure to specific companies, decision makers or citizens?

It is worth noting that, although local ordinances imposing mandatory control measures may or may not satisfy the requirements associated with eventual SIP “credit,” these measures are certainly acceptable in terms of actions that may be taken as part of a participant’s proactive work under Ozone Advance.

C. Selecting the proposed control measures

The state/tribe and EPA can assist in evaluating data and in reviewing the modeling for control options. Cooperative discussions with stakeholders can help determine the most appropriate control measures. Other states/tribes or local governments with similar sources and air quality issues, could be contacted for additional ideas or measures to consider.

Attachment C
Ozone Advance
Relevant EPA Guidance

A. Websites

1. Ozone Reduction Strategies, http://www.epa.gov/airquality/ozonestrategy/

2. State and Local Transportation Resources, http://www.epa.gov/otaq/stateresources/index.htm
   Note: Includes information concerning a wide variety of policy and guidance, partnership programs, grants and other sources of funding, and calculators and modeling tools.

3. National Clean Diesel Campaign (NCDC), http://epa.gov/cleandiesel/

4. Emission Inventory Improvement Program, http://www.epa.gov/ttn/chief/eiip/techreport/

5. Heat Island Effect, http://www.epa.gov/heatisland/

B. Documents

1. Improving Air Quality with Economic Incentive Programs, EPA-452/R-01-001, Jan. 2001, http://www.epa.gov/ttncaaa1/t1/memoranda/eipfin.pdf

2. Incorporating Voluntary Stationary Source Emission Reduction Programs Into SIPs--Final Policy, Jan. 19, 2001, http://www.epa.gov/ttncaaa1/t1/memoranda/coverpol.pdf
   Note: This guidance has been subsumed in 4, below.

3. Incorporating Emerging and Voluntary Measures in a State Implementation Plan (SIP), Sept. 2004, http://www.epa.gov/ttncaaa1/t1/memoranda/evm_ievm_g.pdf

4. Roadmap for Incorporating Energy Efficiency/Renewable Energy Policies and Programs Into State Implementation Plans/Tribal Implementation Plans, External Review Draft, March 30, 2011, http://www.epa.gov/airquality/pdfs/eeremanual.pdf

5. Guidance on Incorporating Bundled Measures in a State Implementation Plan, Aug. 16, 2005, http://www.epa.gov/ttn/caaa/t1/memoranda/10885guideibminsip.pdf

6. A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency (EE) and Renewable Energy (RE), Jan. 27, 2005, http://www.epa.gov/statelocalclimate/documents/pdf/sep_toolkit.pdf

7. Guidance on SIP Credits for Emission Reductions from Electric Sector Energy Efficiency and Renewable Energy Measures, Aug. 5, 2004, http://www.epa.gov/ttncaaa1/t1/memoranda/ereseerem_gd.pdf

8. Guidance on Airport Emission Reduction Credits for Early Measures Through Voluntary Airport Low Emission Programs, Sept. 30, 2004, http://www.epa.gov/airprogm/oar/genconform/documents/aerc_040930.pdf

9. Policy and Guidance Documents to Assist Areas in Developing Strategies to Reduce Emissions from On-road and Non-road Sources, http://www.epa.gov/otaq/stateresources/policy/index.htm The web page provides access to numerous guidance documents including:

   Guidance on Innovative and Voluntary Air Pollution Control Strategies:
   Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (SIPs), Oct. 27, 1997

   Transportation-related Documents:
   - Diesel Retrofits: Quantifying and Using Their Benefits in SIPs and Conformity, Guidance for State and Local Air and Transportation Agencies, EPA420-B-06-005, June 2006
   - Guidance for Quantifying and Using Long Duration Truck Idling Emission Reductions in State Implementation Plans and Transportation Conformity, Jan. 14, 2004
   - Guidance for Quantifying and Using Long Duration Switch Yard Locomotive Idling Emission Reductions in State Implementation Plans, Jan. 14, 2004
   - Analyzing Emissions Reductions from Travel Efficiency Strategies
   - Information on Developing and Implementing Transportation Control Measures
   - Improving Air Quality Through Land Use Activities
   - Methodologies for Assessing Transportation and Air Quality Impacts of Brownfields and Infill Development
   - SmartWay SIP and Conformity Guidance
   - Implementation of Accelerated Retirement of Vehicles Programs

10. Information on clean diesel programs, technologies, emission reduction strategies and a broad array of other related information, including tools and resources can be found at www.epa.gov/cleandiesel. Publications can be found at http://epa.gov/cleandiesel/publications.htm

The web page provides access to numerous documents on clean diesel programs that address specific types of vehicles or equipment and other related information including:

School buses
Emission Reduction Technologies
Ports
Cost Effectiveness and Incentives
Construction and Agriculture
SmartWay Transport

Information on grants for diesel emissions reduction activities can be found at www.epa.gov/cleandiesel/grantfund.htm.