applications indicate model estimates are not likely to be biased low and that the model is applied consistently with a protocol on methods and procedures. ~~The EPA~~We plan~~s~~ to finalize this guidance at the same time the final implementation rule is published. Comments on this document are solicited as part of this proposal.

The guidance describes how to apply air quality models. The output from such a model is used to support an attainment demonstration. The recommended procedure for applying a model includes developing a conceptual description of the problem to be addressed; developing a modeling/analysis protocol; selecting an appropriate model to support the demonstration; selecting appropriate meteorological episodes or time periods to model; choosing an appropriate area to model with appropriate horizontal/vertical resolution; generating meteorological and air quality inputs to the air quality model; generating emissions inputs to the air quality model; evaluating performance of the air quality model; and performing diagnostic tests. After these steps are completed, the model is used to simulate effects of candidate control strategies.

The guidance recommends procedures for estimating if a control strategy to reduce emissions of ozone precursors will lead to attainment of the 8-hour NAAQS for ozone. It

explains what is meant by a modeled attainment demonstration, a modeled attainment test, a screening test, and a weight of evidence determination. It also identifies additional data which, if available, should enhance the credibility of model results and results of other analyses used in a weight of evidence determination. States should work closely with the appropriate U.S. EPA Regional Office(s) in executing each step.

~~The EPA is~~We are planning to make substantial changes to the draft version of this document. Changes include: (1) the future year of emission estimates to model, (2) the recommended length of time period to model (i.e., up to full ozone season), and (3) the use of spatial fields of ambient concentrations as part of the "modeled attainment test."

~~The EPA~~We welcome~~s~~ public comments on the guidance at any time and will consider those comments in any future revision of the document. Comments submitted on the modeling guidance document should be identified as such and will not be docketed as part of this rulemaking, nor will a comment/response summary of these comments be a part of the final 8-hour ozone implementation rule since they will not affect the rule itself. The final version of the guidance is scheduled for release by December 2003 and will be posted on EPA's web site (http://www.epa.gov/ttn/scram/).

5. Mid-course review (MCR)

A MCR provides an opportunity to assess whether a nonattainment area is or is not making sufficient progress toward attainment of the 8-hour ozone standard, as predicted in its attainment demonstration. The review utilizes the most recent monitoring and other data to assess whether the control measures relied on in a SIP's attainment demonstration have resulted in adequate improvement in air quality. ~~The EPA~~We believe~~s~~ that a commitment to perform a MCR is a critical element in an attainment demonstration that employs a long-term projection period and relies on weight of evidence.[~~34~~] Because of the uncertainty in long term projections, ~~EPA~~we believe~~s~~ such attainment demonstrations need to contain provisions for periodic review of monitoring, emissions, and modeling data to assess the extent to which refinements to emission control measures are needed.

A number of States have participated in a consultative process with EPA, which resulted in the development of the 1-hour MCR guidance.[42] ~~The EPA is~~We are updating the 1-hour MCR policy and technical guidance to include 8-hour metrics and is soliciting comment on appropriate revisions; final

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[42]Memorandum of March 28, 2002, from Lydia N. Wegman and J. David Mobley, re: "Mid-Course Review Guidance for the 1-Hour Ozone Nonattainment Areas that Rely on Weight-of-Evidence for Attainment Demonstration." Located at URL: http://www.epa.gov/scram001/guidance/guide/policymem33d.pdf .

MCR guidance incorporating 8-hour metrics will be available at the time ~~EPA~~we issue~~s its~~ our final implementation rule. States should consult with EPA prior to using a methodology other than the one developed through the public consultative process.

The procedure for performing a MCR contains three basic steps: (1) perform an administrative test (e.g., demonstrate whether the appropriate emission limits were adopted and implemented); (2) analyze available air quality, meteorology, emissions and modeling data and document findings; and (3) document conclusions regarding whether progress toward attainment is being made using a weight of evidence determination (which may or may not include new modeling analyses).

The EPA does not request that States commit in advance to adopt new control measures as a result of the MCR process. Based on the MCR, if EPA determines sufficient progress has not been made, EPA would determine whether additional emissions reductions are necessary from the State or States in which the nonattainment area is located or upwind States, or both. The EPA would then require the appropriate State or States to adopt and submit the new measures within a specified period. ~~The EPA~~We anticipate~~s~~ that these findings would be made as calls for SIP revisions under section 110(k)(5) and, therefore, the period for

submission of the measures would be no longer than 18 months after the EPA finding. Thus, States should complete the MCR 3 or more years before the applicable attainment date to ensure that any additional controls that may be needed can be adopted in sufficient time to reduce emissions by the start of the ozone season in the attainment year.

~~F~~I. What requirements for reasonable further progress should apply under the 8-hour ozone standard?

1. Background

Section 172(c)(2), which is located in subpart 1 of part D of title I, requires State plans for nonattainment areas to require RFP. Section 171(1) of the CAA defines RFP to mean "such annual incremental reductions in emissions of the relevant air pollutant as are required by this part [part D of title I] or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable [NAAQS] by the applicable date."

Subpart 2 of part D of title I provides more specific RFP requirements for ozone areas classified under Section 181. (In general, ~~EPA~~we ha~~s~~ve used the term "RFP" as the more generic progress requirement, whereas it has used the term "rate of progress" or "ROP" to denote the specific subpart 2 progress requirements that are defined as specific percent reductions from a baseline emissions inventory.) In particular, it specifies the base year emission inventory

upon which ROP is to be planned for and implemented, the increments of emission reductions required over specified time periods, and the process for determining whether the ROP milestones were achieved.

Subpart 2 does not specify ROP requirements for marginal areas. Section 182(b)(1)(A) mandates a 15 percent VOC emission reduction, accounting for growth, between 1990 and 1996 for moderate and above ozone nonattainment areas. Furthermore, section 182(c)(2)(B) of the CAA requires each serious and above ozone nonattainment area to submit a SIP revision providing for an actual VOC emission reduction of at least 3 percent per year averaged over each consecutive 3-year period beginning in 1996 until the area's attainment date (the post-1996 ROP plan). Section 182(c)(2)(C) of the CAA allows for substitution of NO_x for VOC emissions reductions in the post-1996 ROP plan. The EPA's policy, the NO_x Substitution Guidance (December 15, 1993; available at http://www.epa.gov/ttn/oarpg/t1pgm.html), addresses the substitution of NO_x emissions reductions for VOC emission reductions. The baseline emission inventory for determining the required ROP reductions is specified as 1990.

The requirements for RFP under subparts 1 and 2, as described above, are the minimum required for an area. More reductions may be necessary for attainment within the nonattainment area or where the area contributes to a

downwind area's nonattainment problem. Moreover, an upwind area that contributes to nonattainment in a downwind area may need more reductions in a shorter time in order for the downwind area to reach attainment by its required attainment date.

2. Proposed Features in General.

In developing an approach for addressing the RFP requirements for the 8-hour ozone standard, ~~EPA~~we proposes the following:

-The same baseline year would be used both to address growth (in emissions, vehicle miles traveled (VMT) or otherwise) and to calculate the RFP target level.

-Emissions reductions from outside the nonattainment area up to 100 km for VOC and 200 km for NO_x (and Statewide if under a regional strategy) would be allowed consistent with EPA's existing December 1997 interim implementation policy for 1-hour ozone NAAQS.[43]

-For areas classified under subpart 2, the ROP requirements specified in subpart 2 would apply, namely a 15 percent VOC emission reduction, accounting for growth, in the first 6

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[43]Memorandum of December 29, 1997 from Richard D. Wilson to Regional Administrators, Regions I-X re "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM_{10} NAAQS." Located at URL: http://www.epa.gov/ttn/oarpg/t1/memoranda/iig.pdf . The distances used resulted from FACA discussions cited earlier and generally represent transport of 1 to 2 days.

years after the baseline year for moderate and above ozone nonattainment areas. In addition, for areas classified as serious and above, the ROP provisions in subpart 2 require a VOC or NO_x emission reduction of at least three percent per year averaged over each consecutive 3-year period beginning 6 years after the baseline year (specified as under the 1990 CAAA). Areas classified under subpart 2 as marginal, which are required to attain 3 years following classification, are subject only to such RFP as necessary to attain. ~~The EPA~~We believe~~s~~ the periods for RFP under subpart 2 for the 8-hour ozone NAAQS should run from the date of the baseline year under subpart 2, and would be equivalent to the periods under the 1-hour ozone NAAQS. Thus, the first 15 percent reduction would be required for the 6 year period starting from the last day (December 31) of the baseline year and the first 3-year period for the subsequent three percent per year emission reduction requirement in serious areas would begin 6 years after the last day (December 31) of the baseline year. The baseline issue is discussed in section 4 below.

3. <u>For subpart 2 areas, should the initial 15 percent RFP requirement be limited to VOC emissions</u>?

Currently, for many areas of the country, particularly in the Eastern U.S. outside major metropolitan areas, there is a greater need for NO_x reductions rather than VOC

reductions. However, under the prescribed requirements of the CAA, NO_x substitution is only allowed for the post-1996 ROP requirement (three percent per year averaged over 3 years), not for the initial 15 percent ROP requirement. ~~The EPA is~~We are proposing 2 options to address this issue.

a. Option 1. Continue to require 15 percent VOC reductions within 6 years after the baseline year for all areas designated moderate and above for the 8-hour ozone NAAQS. After 6 years, all serious and above areas would be required to achieve a nine percent reduction in VOC and/or NO_x emissions every 3 years, i.e., an average of three percent per year.

b. Option 2. For those areas that have approved 15 percent plans for their 1-hour ozone SIPs, an additional 15 percent VOC reduction is not necessary. Areas that are classified as moderate under the 8-hour standard that have already implemented their 15 percent plans under their 1-hour ozone SIPs would be considered to have met the statutory 15 percent requirement and RFP for the first 6 years from the baseline year would be covered under the more generic RFP requirements of subpart 1. Subpart 1 RFP requirements are discussed below. Areas that are classified as serious and above under the 8-hour standard that have already implemented their 15 percent plans under the 1-hour ozone standard would have to include in their SIPs an additional

RFP plan that would achieve an average of three percent per year of VOC and/or NO_x over each 3-year period out to their attainment year. ~~The EPA~~We recognize~~s~~ that it would be difficult to ~~submit a~~submit--within 2 or even 3 years after designation--a timely plan that provides for the first nine percent emission reduction within 3 years after nonattainment designation. Therefore, ~~so EPA would~~we propose to require under this option that an area classified serious ~~and~~or above~~ areas would~~ submit ~~their~~its ROP plan within 2 years after designation that provides for 18 percent emissions reductions (VOC and/or NO_x) over the first 6 years from the baseline year and then submit within 3 years after designation an ROP plan that provides nine percent emission reductions (VOC and/or NO_x) over each of the next 3-year periods until the area's attainment date.

This option recognizes previous efforts by areas that submitted 15 percent plans as required under the 1-hour ozone NAAQS and provides flexibility to States to use a mix of NO_x and VOC reductions to meet the additional ROP/RFP requirements. ~~The EPA~~We believe~~s~~ that the statute can be interpreted to require the mandatory 15 percent VOC reduction only once for a given area. Once 15 percent VOC reduction requirements have been met, an area would actually have to achieve greater emission reductions, i.e., an average of three percent per year, but could choose either

VOC or NO_x reductions as appropriate. We prefer this second option because it provides more flexibility for the ROP plan to be consistent with the area's needs in attaining the standard.

c. Other options that EPA considered. ~~The EPA~~We considered other options for addressing this issue that are not being proposed here; discussion of them appears in a separate document, available in the docket.[44] However, ~~EPA~~we solicit~~s~~ comments on potential other RFP options and what possible rationales--legal and scientific--might be used to justify other RFP options.

4. What baseline year should be required for the emission inventory for the RFP requirement?

The baseline inventory for RFP (under subpart 2) is used as the starting point for the determination of a target level of emissions for the future year RFP and as the baseline from which creditable reductions are determined. ~~The EPA~~We currently anticipate~~s~~ designating nonattainment areas in 2004. Under the "Consolidated Emissions Reporting Rule (67 FR 39602, June 10, 2002) revised emissions inventories are required for the years 2002 and 2005;

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[44]Additional Options Considered for "Proposed Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC. ~~December~~March 200~~2~~3.

therefore, ~~EPA~~we propose~~s~~ to require use of the 2002 inventory as the baseline inventory for the RFP requirement. This would be the most recently available inventory at the time of designation. ~~The EPA~~We recently issued a memorandum identifying 2002 as the anticipated emission inventory base year for the SIP planning process to address the 8-hour ozone and the $PM_{2.5}$ standards.[45]

~~The EPA~~We considered other options for addressing this issue that are not being proposed here; discussion of them appears in a separate document, available in the docket.[46]

5. Should moderate areas be subject to prescribed additional RFP requirements prior to their attainment date?

For areas initially classified moderate and higher under the 1-hour ozone standard, the baseline inventory was defined as 1990 in the CAA Amendments. Therefore, the 6-year period for the initial 15 percent ROP requirement ended in the same year as the attainment date for moderate areas, viz., 1996. For areas classified moderate and higher under

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[45]Memorandum of November 18, 2002, from Lydia Wegman and Peter Tsirigotis, "2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, $PM_{2.5}$ and Regional Haze Programs." This document is available at the following web site: http://www.epa.~~gov/ttn/naaqs/ozone/ozonetech/o3imp8hr/o3imp8hr.htm.~~gov/ttn/oarpg/meta.442.1.2002baseinv.pdf.

[46]Additional Options Considered for "Proposed Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC. ~~December~~March 200~~2~~3.

the 8-hour ozone standard, however, ~~EPA is~~we are proposing that the 15 percent ROP target level of emissions would be calculated for the 6-year period after the 2002 baseline year, i.e., 2003-2008. Moderate areas would be required to meet an attainment date no later than 6 years after the area is designated nonattainment for the 8-hour standard. If the effective date of designation of nonattainment areas is, for instance, May 15, 2004, the attainment date would be May 15, 2010. This leaves approximately a one and a half year gap between the end of the 6-year period for the 15 percent ROP requirement (i.e., December 31, 2008) and the attainment date. If ~~EPA~~we were to also require moderate areas to obtain an additional three percent per year reductions beyond 2008 for the one and a half additional years out to 2010, the ROP requirement would be more than what ~~EPA~~we believe~~s~~ Congress intended for moderate areas under subpart 2. Additional three percent per year reductions were only required for serious and higher classified 1-hour ozone nonattainment areas. ~~The EPA is~~We are proposing that the only specific ROP requirement applicable for moderate areas is the 15 percent VOC requirement between the end of 2002 and the end of 2008. However, section 172(c)(2) also applies, requiring areas to meet RFP generally. Therefore, a moderate area would still also have to provide any additional emissions reductions-VOC and/or NO_x--needed to

provide for attainment by the area's attainment date. In proposing this approach, ~~EPA is~~we are interpreting the subpart 1 RFP requirement to mean that the area must achieve whatever further reduction is needed for attainment in the remaining period prior to the attainment date (2009 and 2010).

~~The EPA is~~We are proposing that serious and higher classified areas would need to provide in their SIPs an additional average of three percent per year emission reduction over each subsequent 3-year period beyond the initial 6-year period through the attainment year, consistent with what Congress specified in section 182(c)(2)(B) of the Act.

6. What is the timing of the submission of the ROP plan?

Section 182(b)(1) requires that moderate and higher classified areas submit their 15 percent ROP plans within 3 years after 1990. For the attainment dates under the 8-hour ozone standard, ~~EPA~~we propose~~s~~ interpreting the CAA's language referring to the date of enactment of the 1990 CAA Amendments to mean the date of designations under the 8-hour standard. If ~~EPA~~we were to require the ROP plans to be submitted within 3 years after their nonattainment designation date (i.e., in 2007 if ~~EPA~~we designate~~s~~ in 2004), the plans would have to be implemented within 1 year after submission to ensure the 15 percent emissions

reductions are achieved by the end of the relevant 6-year period (i.e., December 2008). ~~The EPA~~We believe~~s~~ this would likely not be sufficient time to ensure that the reductions would occur by the required deadline. Therefore, ~~EPA~~we propose~~s~~ that the ROP SIP be submitted within 2 years after nonattainment designation--namely by 2006. This would provide for 2 years for the State to develop and submit its ROP plan, and another 2 years for the control measures to be implemented.

~~-~~7. How should CAA restrictions on creditable measures be interpreted? Which national measures should count as generating emissions reductions credit toward RFP requirements?

Section 182(b)(1) contains provisions that limit creditability toward meeting RFP for certain limited emission reduction measures required prior to the enactment of the CAA Amendments of 1990. ~~The EPA~~We believe~~s~~ these specific restrictions should continue to apply for purposes of the 8-hour NAAQS as written in the CAA. ~~The EPA~~We believe~~s~~ that Congress intended to prevent areas from taking credit for RFP only for those specific measures that were already adopted and in place (or required to be in place) prior to the date of enactment of the CAA Amendments of 1990 (November 15, 1990). ~~The EPA~~We believe~~s~~ that this same logic holds true for the RFP requirement as it applies to

the 8-hour ozone standard, namely preventing credit toward the mandatory RFP percent reductions for continuing reductions from those specific measures cited in the CAA that were already adopted and in place prior to the date of enactment of the CAA Amendments of 1990. There is no indication in the CAA that this exclusion should be changed. Congress mandated many emission reductions in the 1990 Amendments with no indication that they should not be credited to meeting RFP or attainment of any existing or revised NAAQS. Therefore, ~~EPA is~~we are proposing that all emissions reductions that occur from all Federal and any other measures (not otherwise identified in section 182(b)(1)(D)) implemented after the baseline emission inventory year would be creditable to the RFP requirement. For example, emissions reductions that occur after the 2002 baseline emission inventory year that result from the Tier 2 and sulfur in gasoline rules that were issued by EPA after the CAA Amendments of 1990 are creditable toward the RFP requirement for the 8-hour ozone standard. Another example of emission reductions that would be creditable toward the RFP requirement for the 8-hour ozone standard would be VOC emission reductions from certain MACT standards that will not produce emission reductions until after the 2002 baseline; these would include several recently promulgated MACT standards (such as those covering several surface

coating operations) and also anticipated MACT standards that are expected to be promulgated in the summer of 2003. Obviously, reductions that occur prior to the baseline year would be incorporated into the baseline and could not be credited.

8. For areas covered by subpart 1 instead of subpart 2, how should the RFP requirement be structured?

As described above, the RFP requirement under subpart 1 is more general than that under subpart 2, and EPA thus has more flexibility in determining what RFP means under subpart 1. For instance, the State may rely on emission reductions of VOC or ~~NOx~~NO_x or a combination of both to meet its RFP requirement. However, ~~EPA is~~we are also mindful of the need for ensuring equity between areas with similar 8-hour ozone problems covered under subpart 1 and those covered under subpart 2. ~~The EPA is~~We are proposing rules for three kinds of areas: (a) Areas with attainment dates 3 years or less after designation; (b) Areas with attainment dates between 3 and 6 years after designation; and (c) Areas with attainment dates beyond 6 years after designation. Note that the Act requires that attainment dates for areas subject only to subpart 1 be no longer than 10 years after designation.

a. Areas with attainment dates 3 years or less after designation. ~~The EPA~~We propose~~s~~ an RFP requirement for these areas similar to that for areas under subpart 2 that

are classified as marginal. Such an area would not be subject to a separate RFP requirement, but would have to attain the standard by its attainment date.

b. Areas with attainment dates between 3 to 6 years after designation. These areas would have attainment dates similar to subpart 2 areas classified as moderate. ~~The EPA~~We proposes two options for these areas:

(i) Option 1. This option would require the RFP plan to be submitted with the attainment demonstration within 3 years after designation of the nonattainment area. The SIP would have to show that all emissions reductions needed for attainment would be implemented by the attainment date. This situation would occur, for example, for an area with a base year inventory of 2002, designation in 2004, a required attainment SIP submission date of 2007 and an attainment date of 2010. Where areas have only 3 years after SIP submission before attainment, this option recognizes that there may be only a short amount of time available to achieve any specified emission reduction beyond that needed to demonstrate attainment and therefore would not require a showing that a specified amount of emission reductions occur between the time of SIP submission and the attainment date.

(ii) Option 2. This option would requires these areas to be treated in a manner similar to subpart 2 areas classified as moderate. The RFP SIP would have to provide for a 15

percent emission reduction from the baseline year within 6 years after the baseline year. The RFP SIP would have to be submitted within 2 years after designation. However, since the area is subject only to subpart 1, NO_x emission reductions could be substituted for some or all of the 15 percent reduction requirement, consistent with EPA's NO_x substitution policy.[47] Also, we are soliciting comment on whether a percentage other than 15 percent should be required as the minimum. Additional measures that would provide the remaining portion of the emission reductions needed for attainment would have to be submitted with the area's attainment demonstration within 3 years after designation.

c. Areas with attainment dates beyond 6 years after designation. These areas are similar in attainment dates to areas classified under subpart 2 as serious or higher. ~~The EPA is proposing two options for these areas.~~

~~(i) Option 1. This option would require the RFP plan to be submitted with the attainment demonstration within 3 years after designation of the nonattainment area. The RFP SIP would have to provide for certain increments~~We are proposing that the RFP plan show increments of progress from the baseline emission inventory year out to the attainment ~~year.~~

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[47] NO_x Substitution Guidance. December 15, 1993; available at http://www.epa.gov/ttn/oarpg/t1pgm.html)

~~The amount of the progress requirement emission reduction would be proportionate to the time between the base year and the attainment year. However, the first increment of reduction would have to be at least 50 percent of the amount needed for attainment and would have to be obtained within 6 years after the base year. This situation would occur, for example, for an area with a base year inventory of 2002, designation in 2004, a required attainment SIP submission date in 2007 and an attainment date of 2013. The first increment after the required SIP submission would be at the end of 2008, so the SIP would have to provide for emissions reductions of 50 percent of the total needed for attainment (net of growth) by that date. Subsequent required increments of emissions reductions would have to be obtained every 3 years after the first increment, and would be a portion of the total remaining emissions reductions needed for attainment (for an attainment date in 2013 in the example).~~[41] ~~Note that for subpart 1 areas, the attainment date can be no more than 10 years from the date of designation, so if the designations occur in 2004, the Act requires that the attainment date be as expeditious as practicable but no later than the anniversary of the effective date of the designation in 2014.~~

~~(ii) Option 2. This option would requires these areas to be treated in a manner similar to subpart 2 areas classified~~

~~as serious~~date. The RFP SIP would first have to provide for a 15 percent emission reduction from the baseline year within 6 years after the baseline year. The 15 percent RFP SIP would have to be submitted within 2 years after designation. However, since the area is subject only to subpart 1, NO_x emission reductions could be substituted for some or all of the 15 percent reduction requirement, consistent with EPA's NO_x substitution policy. Also, we are soliciting comment on whether a percentage other than 15 percent would be more appropriate. Then, for each subsequent 3-year period out to the attainment date, another RFP SIP would have to provide for an ~~average~~additional increment of ~~3 percent per year~~progress no less than the amount of emission ~~reduction calculated in a manner similar to serious areas under subpart 2~~reductions that would be proportional to the time between the end of the first increment (in 2008) to the attainment date. This second RFP SIP would have to be submitted at the same time as the attainment demonstration, namely within 3 years after designation.

9. How should the RFP requirements be implemented for areas designated for the 8-hour ozone standard that entirely or in part encompass an area that was designated nonattainment for the 1-hour ozone standard?

~~The EPA is~~ We are proposing ~~2 options~~the following

approach to address this issue~~:~~

~~a~~. ~~Option 1.~~ Develop a new baseline and new ROP/RFP emission reduction targets for the entire 8-hour standard nonattainment area (the old 1-hour standard nonattainment area and the newly added portion of the 8-hour standard nonattainment area). Emissions reductions from measures in the 1-hour ozone SIP that are achieved after the 8-hour ozone NAAQS baseline year could count (subject to creditability restrictions as discussed above in this proposed rulemaking) toward meeting the RFP requirement for the entire 8-hour area.

This ~~option~~approach would set an ROP target for the entire 8-hour ozone nonattainment area. The State would have to ensure that the target is at least as stringent as the 1-hour ROP/RFP target, thus ensuring no backsliding on the 1-hour NAAQS requirements. Under this ~~option~~approach, the new ROP/RFP target for the 8-hour standard would replace the previous 1-hour ozone target (while ensuring that, at a minimum, the emissions reductions required to meet the old target are met). For example, the 1-hour ozone NAAQS nonattainment area may comprise four counties and have a target level for one future RFP increment of 350 tons/day of VOC and 300 tons/day of NO_x. The 8-hour ozone nonattainment area may comprise the initial 1-hour ozone standard nonattainment area and two more counties. The target for

the same increment period for the entire six county nonattainment area may now be, for instance, 400 tons/day of VOC and 350 tons/day of NO_x (assuming that these emission reductions were consistent with the attainment demonstration).

~~b. Option 2. Develop a new baseline and new RFP emission reduction targets for the entire area, but in addition retain current RFP for the 1-hour ozone NAAQS.~~

~~This option would allow the entire area to make progress toward attainment of the 8-hour ozone NAAQS while preserving the adopted ROP plan for the current 1-hour standard nonattainment area. It would establish two ROP targets--one for the area that was subject to the 1-hour standard and one for the entire 8-hour ozone nonattainment area.~~

~~10. Should EPA use the RFP requirement to address an upwind State's responsibility under section 110(a)(2)(D), which requires that the SIP provide for preventing a significant contribution to a downwind jurisdiction's nonattainment situation?~~

~~One of the problems identified by commenters is that transport of ozone and its precursors from emission sources in one or more nonattainment areas upwind may prevent a downwind area from attaining the standard by its attainment date unless the upwind area has the same or an earlier~~

~~attainment date. The EPA's proposed approach for addressing long-range transport of ozone and its precursors is described elsewhere in this notice of proposed rulemaking.~~

~~Under the subpart 2 classification and attainment date structure, a source's emissions from a nonattainment area with a particular classification and attainment date may contribute to nonattainment in a downwind area with a lower classification and therefore an earlier attainment date. The downwind area (for example, a marginal area) may not be able to reach attainment by its mandated attainment date until the upwind area (for example, a moderate or above area) achieves most or all of its emissions reductions, which it would normally not achieve until close to its attainment date. One comment letter from a State air pollution control agency suggested that EPA rely on the RFP requirement to ensure early reductions in upwind areas. Based on this idea, EPA is considering an approach under which the upwind area with the later attainment would be required to achieve greater emissions reductions for its RFP plan from sources that contribute to the downwind area's nonattainment on a tighter schedule (namely by the downwind area's nonattainment date) than that required for reductions from other sources needed to attain the standard within the upwind area by the upwind area's attainment date. This additional RFP constraint would therefore assist the~~

~~downwind area in attaining the standard by its attainment date even if it were subject to transport from an upwind area. This approach would apply to upwind areas that EPA identifies as contributing significantly to nonattainment or interfering with maintenance in another State. Of course, this proposed RFP constraint would likely not be sufficient to wholly address significant interstate transport, EPA's approach for addressing this is discussed elsewhere in this notice of proposed rulemaking.~~

~~The EPA believes this approach partially addresses the problem of mismatched attainment dates in areas affected by transport and therefore proposes it for comment.~~

~~While we have not decided to go forward with this option at this time, we are continuing to examine it and, therefore, request comment on it. In particular, we request comment on possible legal rationales supporting this option. Public comments will help us determine how and whether to include this option in the final rulemaking.~~

~~11~~ We considered another option for this issue. This option, which is not being proposed, is discussed in a separate document available in the docket.[48]

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[48]Additional Options Considered for "Proposed Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC. March 2003.

10. Will EPA's "Clean Data Policy" continue to apply under the 8-hour standard for RFP?

~~The EPA~~We issued a clean data waiver policy on May 10, 1995, which allows EPA to determine that an area has attained the standard and that certain requirements (e.g., RFP) will not apply so long as the area remains in attainment.[49] ~~The EPA~~We propose~~s~~ that this policy would remain effective under the 8-hour ozone NAAQS.

1~~2~~1. How will RFP be addressed in Tribal areas?

As mentioned elsewhere in this proposed rulemaking, the TAR provides the Tribes with the ability to develop Tribal implementation plans (TIPs) to address the NAAQS. However, it also provides the Tribes with flexibility to develop these plans in a modular way, as long as the elements of their TIPs are "severable." For example, each TIP submission must include a demonstration that the Tribe has authority to develop and run its program, the ability to enforce its rules, and the capacity and resources to implement the program it adopts. However, the modular approach provided for Tribes in the TAR allows the TIP to address a particular problem on the reservation. Therefore,

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[49]Memorandum of May 10, 1995, "RFP, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard," from John S. Seitz, Director, Office of Air Quality Planning and Standards. Available at: http://www.epa.gov/ttn/oarpg/t1/memoranda/clean15.pdf.

it may include one or two source-specific requirements but may not include provisions for RFP and other SIP requirements. ~~The EPA~~We will review and approve these TIPs as a step in addressing an overall air quality plan to achieve health and environmental goals. In addition, a Tribe may later add other elements to the plan, or EPA may be obligated to step in to fill air quality gaps. In approving the TIPs, ~~EPA~~we will ensure that they will not interfere with the overall air quality plan for an area when Tribal lands are part of a multi-jurisdictional area.

Because many of the nonattainment areas will include many jurisdictions, including both Tribes and States, it is important for the Tribes and the States to work together wherever possible to coordinate their planing efforts.

1~~3~~2. How will RFP targets be calculated?

~~EPA~~We propose~~s~~ a methodology for the calculation of ROP target levels of emissions that is based on the method developed for the CAA of 1990, while taking into account ~~the EPA~~our interpretation of CAA restrictions on creditable emissions and on ~~the EPA~~our proposal to use the 2002 inventory as the baseline inventory for the ROP requirement. The CAA of 1990 specifies four types of measures that were not creditable toward the 15% RFP requirement. These were:

(1) Any measure relating to motor vehicle exhaust or evaporative emissions promulgated by the Administrator by January 1, 1990;

(2) Regulations concerning Reid Vapor Pressure that would go into effect in 1992;
(3) State regulations submitted to correct deficiencies in existing VOC RACT regulations or previously required RACT rules;
(4) State regulations submitted to correct deficiencies in I/M programs.

These four types of measures were all expected to result in a decrease in emissions between 1990 and 1996. Of these four types of measures, RACT and I/M program corrections and the 1992 RVP requirements were completely in place by 1996 and therefore are already accounted for in the 2002 baseline. As a result, they would produce no additional reductions between 2002 and 2008 or later milestone years.

However, the pre-1990 Federal Motor Vehicle Control Program (FMVCP) will continue to provide benefits during the first two decades of the 21st century as remaining vehicles meeting pre-1990 standards leave the vehicle fleet. Because these benefits are not creditable for ROP purposes, in order to calculate the target level of emissions for ROP milestone years (i.e., 2008, 2011, etc.), states must first calculate the reductions that would occur over these years as a result of the pre-1990 FMVCP. ~~The EPA~~We propose~~s~~ the following methods to properly account for the non-creditable reductions when calculating ROP targets for the 2008 and later ROP milestone years.

Method 1: For areas that must meet a 15% VOC reduction requirement by 2008:

(1) Estimate the actual anthropogenic base year VOC inventory in 2002 with all 2002 control programs in place.
(2) Using the same highway vehicle activity inputs used the calculate the actual 2002 inventory, run MOBILE6 for 2002 and for 2008 with all post-1990 Clean Air Act measures turned off. This is accomplished using the NO CLEAN AIR ACT command as described in the MOBILE6 User's Guide. Any other local inputs for I/M programs should be set according the program that was required to be in place in 1990. Fuel RVP should be set at 9.0 or 7.8 depending on the RVP required in the local area as a result of fuel RVP regulations promulgated in June of 1990.
(3) Calculate the difference between 2002 and 2008 VOC emission factors and multiply by 2002 VMT. The result is the VOC emission reductions that will occur between 2002 and 2008 without the benefits of any post-1990 Clean Air Act measures. These are the non-creditable reductions that occur over this period.
(4) Subtract the non-creditable reductions calculated in Step 3 from the actual anthropogenic 2002 inventory estimated in Step 1.
(5) Reduce the VOC inventory calculated in Step 4 by 15%. The result is the target level of VOC emissions in 2008 in order to meet the 2008 ROP requirement. The actual projected 2008 inventory with all control measures in place and including projected 2008 growth in activity must be at or lower than this target level of emissions.

Method 2: For areas that qualify under Option 2 of Section 3 above and must meet an 18% VOC emission reduction requirement by 2008 with ~~NOx~~NO_x substitution allowed, following EPA's ~~NOx~~NO_x Substitution Guidance:

(1) Estimate the actual anthropogenic base year inventory in 2002 with all 2002 control programs in place.
(2) Using the same highway vehicle activity inputs used the calculate the actual 2002 inventory, run MOBILE6 for 2002 and for 2008 with all post-1990 Clean Air Act measures turned off. This is accomplished using the NO CLEAN AIR ACT command as described in the MOBILE6 User's Guide. Any other local inputs for I/M programs

should be set according the program that was required to be in place in 1990. Fuel RVP should be set at 9.0 or 7.8 depending on the RVP required in the local area as a result of fuel RVP regulations promulgated in June of 1990.

(3) Calculate the difference between 2002 and 2008 VOC emission factors and multiply by 2002 VMT. The result is the emission reductions that will occur between 2002 and 2008 without the benefits of any post-1990 Clean Air Act measures. These are the non-creditable reductions that occur over this period.

(4) Subtract the non-creditable reductions calculated in Step 3 from the actual anthropogenic 2002 inventory estimated in Step 1.

(5) Reduce the inventory calculated in Step 4 by 18%. The result is the target level of emissions in 2008 in order to meet the 2008 ROP requirement. The actual projected 2008 inventory with all control measures in place and including projected 2008 growth in activity must be at or lower than this target level of emissions.

Method 3: For all areas that must meet an additional reduction VOC requirement of 9% every three years after 2008 with ~~NOx~~NO_x substitution allowed, following EPA's ~~NOx~~NO_x Substitution Guidance. Each subsequent target level of emissions should be calculated as an emissions reduction from the previous target.

(1) Using the same highway vehicle activity inputs used the calculate the actual 2002 inventory, run MOBILE6 for 2008 (previously done in step 2 above) and 2011 with all post-1990 Clean Air Act measures turned off. This is accomplished using the NO CLEAN AIR ACT command as described in the MOBILE6 User's Guide. Any other local inputs for I/M programs should be set according the program that was required to be in place in 1990. Fuel RVP should be set at 9.0 or 7.8 depending on the RVP required in the local area as a result of fuel RVP regulations promulgated in June of 1990.

(2) Calculate the difference between 2008 and 2011 emission factors and multiply by 2002 VMT. The result is the emission reductions that will occur between 2008

and 2011 without the benefits of any post-1990 Clean Air Act measures. These are the non-creditable reductions that occur over this period.

(3) Subtract the non-creditable reductions calculated in Step 2 from the 2008 target level of emissions calculated previously.

(4) Reduce the inventory calculated in Step 3 by 9%. The result is the target level of emissions in 2011 in order to meet the 2011 ROP requirement. The actual projected 2011 inventory with all control measures in place and including projected 2011 growth in activity must be at or lower than this target level of emissions.

~~K~~J. Are contingency measures required in the event of failure to meet a milestone or to attain the 8-hour ozone NAAQS?

1. Background

Under the CAA, nonattainment areas must include in their SIPs contingency measures consistent with section 172(c)(9). However, section 182(a) expressly exempts areas classified as marginal from this obligation. States with ozone nonattainment areas classified as moderate and above must include contingency measures in their SIPs consistent with sections 172(c)(9) and 182(c)(9). Contingency measures are additional controls to be implemented in the event the area fails to meet an RFP milestone or fails to attain by its attainment date. These contingency measures must be fully adopted rules or measures which are ready for implementation quickly upon failure to meet milestones or attainment. The SIP should contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measures will be implemented without significant further action by the State or EPA. Additional background information concerning the CAA contingency measure provisions appears in the General Preamble of April 16, 1992 (57 Federal Register 13510-13512 and 13520); and Section 9.2 of "Guidance for Growth Factor, Projections, and Control Strategies for the 15 percent Rate-

of-Progress Plans" ~~(RPP) (~~EPA-452/R-93-002), March 1993.

The guidance indicates that States should adopt and submit contingency measures to provide a three percent emission reduction (beyond what is needed for attainment or the ROP requirement) for moderate and above ozone areas, which EPA concludes is generally acceptable to offset emission increases while States are correcting their SIPs.

Also, EPA guidance suggests that contingency measures that a State adopted for purposes of the 15 percent ROP requirement may be used as the contingency measures for any post-1996 3-year requirements for RFP, provided they have not been triggered and used as contingency measures for the 15 percent plan. See Section 5.6 of "Guidance on the Post 1996 Rate-of-Progress Plan (ROP) and Attainment Demonstration" (corrected version of February 18, 1994). Furthermore, Federal measures that result in additional emission reductions beyond those needed for attainment or ROP in an area could serve as contingency measures for a failure to attain or meet the ROP requirements. The EPA has approved the use of Federal measures as part of contingency measures in several EPA actions approving 1-hour ozone SIPs (62 FR 15844 (April 3, 1997), 62 FR 66279 (December 18, 1997), and 66 FR 30811 (June 8, 2001), 66 FR 586 and 66 FR 634 (January 3, 2001)).

2. <u>Proposal</u>

For the 8-hour ozone standard, ~~EPA~~we intend~~s~~ to continue to observe its existing policies regarding contingency measures for areas covered under subpart 2. Areas that are nonattainment for the 8-hour ozone standard that have unused adopted contingency measures for the 1-hour ozone NAAQS may use those measures as appropriate as contingency measures for the 8-hour ozone NAAQS. For areas covered under subpart 1, ~~EPA~~we will provide additional guidance on the contingency measure requirement, but it is likely that it will be patterned after the subpart 2 requirement.

~~L~~K. What requirements should apply for RACM and RACT for 8-hour ozone nonattainment areas?

1. Background

Subpart 1 of part D includes general requirements for all designated nonattainment areas, including a requirement that a nonattainment plan provide for the implementation of all reasonable available control measures (RACM) as expeditiously as practicable, including such reductions that that may be obtained through reasonably available control technology (RACT). Most areas designated nonattainment for the 1-hour ozone standard are also subject to the requirements of subpart 2 of part D, including its detailed control measure provisions. Under subpart 2, RACT requirements for ozone nonattainment areas apply independent

of the emissions reductions needed to attain the standard. The RACT requirements also apply in attainment areas within the current ozone transport region (OTR) (or any additional OTR that EPA may establish under the CAA), regardless of the emission reductions needed to attain. The RACT requirement applies to both ozone precursors--NO_x and VOC. Since 1990, ~~EPA~~we has~~s~~ve issued guidance on the RACT requirements in subpart 2.[50] Prior to enactment of the CAA Amendments of 1990, EPA also issued detailed guidance on RACT for ozone nonattainment area SIPs.[51] This guidance continues to be relevant.

Elsewhere in this proposed rulemaking, ~~EPA is~~we are proposing one option for classifying 8-hour ozone nonattainment areas in which some areas would be subject to the requirements of subpart 1. Unlike subpart 2, which contains detailed requirements regarding the adoption of

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[50]40 CFR Part 52, State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990; Proposed Rule. April 16, 1992. (57 FR 13498); 40 CFR Part 52, State Implementation Plans; Nitrogen Oxides Supplement to the General Preamble; Clean Air Act Amendments of 1990; Implementation of Title I; Proposed Rule. November 25, 1992. (57 FR 55620).

[51]"Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations-Clarification to Appendix D of November 24, 1987, Federal Register." Ozone/Carbon Monoxide Program Branch, Air Quality Management Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. May 25, 1988; Federal Register of November 24, 1987, Appendix D (52 FR at 45105).

RACT, subpart 1 contains only a general provision which requires that SIPs for nonattainment areas provide for RACM, including RACT. See CAA section 172(c)(1). Because RACT is a control technology requirement, it is somewhat independent of the need to demonstrate attainment or RFP. In the period prior to enactment of the 1990 Amendments, only the general requirements for RACM and RACT existed, and EPA had issued CTGs to provide presumptive norms for RACT for VOC controls for States to follow in adopting RACT for ozone nonattainment areas. In 1990, Congress institutionalized this requirement for NO_x and VOC (as ozone precursors) in subpart 2, and emphasized the role of CTGs and EPA's pre-1990 guidance for ensuring that RACT rules themselves were adequately structured to ensure they would be effective and enforceable. For instance, ozone nonattainment areas classified as marginal or higher that had a previous obligation to submit corrections to their VOC RACT rules were required to complete and submit those corrections within 6 months after the date of classification. See CAA section 182(a)(2)(A). However, the 1990 CAA Amendments did not require marginal areas to adopt any RACT rules if they did not have a pre-1990 obligation to do so.[52]

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[52]The exception to this rule is that States in the OTR are also required for all areas in the State to adopt RACT rules for all sources covered by a CTG and all other major sources of NO_x or VOC regardless of their nonattainment

Also, the amended CAA required EPA to issue CTGs for certain VOC sources by November 15, 1993. See CAA section 183(a) and (b). Similarly, the EPA was required to issue alternative control techniques (ACT) documents for additional categories of VOC and NO_x. See CAA section 183(c). The ACT documents are intended to help States in making RACT determinations.

2. Proposed Approach for RACT in General for Areas Covered under Subpart 2

~~The EPA is~~We are proposing that the RACT requirement for areas covered under subpart 2 apply as specified in subpart 2. Thus areas classified as marginal that had a pre-1990 obligation for RACT would continue to have that obligation. Areas classified as moderate and above would be required to adopt RACT for the categories covered by the CTG's that EPA has issued and to adopt non-CTG RACT measures for major sources.

[53]

3. Proposed Approach for RACT in General for Areas Covered Only under Subpart 1.

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classification. See CAA section 184(b).

[53]Note that under the anti-backsliding provisions proposed above, any portion of an area classified marginal under the 8-hour standard that was classified moderate or higher under the 1-hour standard would also have a continuing RACT requirement from its classification as moderate or higher.

We are proposing two alternative options for addressing RACT for areas covered under subpart 1.

a. Option 1: Treatment of RACT Similar to Subpart 2 Areas.

Based on the provisions of the CAA described above and the apparent differences in treatment regarding RACT between marginal and other areas, ~~EPA~~we propose~~s~~ to interpret the CAA in a manner similar to that under subpart 2 by requiring areas covered under subpart 1 to face different RACT requirements based on the magnitude of the ozone problem. This proposal--in addition to following Congress's intent with regard to RACT--has the advantage of minimizing some of the apparent inequities that might exist under the classification option (discussed elsewhere in this proposed rulemaking) in which some areas are covered under subpart 1 and others under subpart 2.

~~a.~~ (i) Areas ~~s~~Similar to ~~m~~Marginal ~~a~~Areas. Those 8-hour nonattainment areas covered only under subpart 1 that have an ozone problem that is similar in degree to that of a marginal area would be subject to the same RACT requirement as areas classified as marginal under subpart 2. These areas would be defined as those whose 8-hour ozone design value at the time of designation/classification would have placed them in the marginal classification if they had been subject to subpart 2 (i.e., areas that have an 8-hour design

value of less than 0.092 ppm. (See elsewhere in this proposed rulemaking under the section concerning classification.) Similarly, if ~~EPA~~we adopt~~s~~ the incentive feature proposed in the classification section, and a subpart 1 area with a design value of 0.092 ppm or greater can demonstrate that it will attain within 3 years after designation, then it would be subject to the same RACT requirement as applies to marginal areas under subpart 2. As noted in the background of this section, the 1990 CAA Amendments did not require marginal areas (with the exception of those located in the OTR) to adopt any RACT rules if they did not have a pre-1990 obligation to do so. Marginal areas that had a pre-1990 obligation for RACT were required to perform any corrections to those rules that ~~EPA~~we had previously identified.

~~b.~~(ii) Areas ~~s~~Similar to ~~m~~Moderate and ~~h~~Higher-classified ~~a~~Areas. Those 8-hour nonattainment areas covered under subpart 1 that have an ozone problem that is similar in degree to that of a moderate or higher-classified area would be subject to the same RACT requirements as those that apply in subpart 2 for moderate and above areas. These areas would be defined as those whose 8-hour ozone design value at the time of designation/classification would have placed them in the moderate or above classification if they had been subject to subpart 2. As proposed elsewhere in this

proposed rulemaking, this would mean areas that have an 8-hour design value of 0.092 ppm or greater that are not able to demonstrate attainment within 3 years after designation.

b. Option 2: Alternative Treatment for RACT Under Subpart 1.

This option is similar to the approach we proposed in its November 17, 1998 draft implementation guidance.[54] At the time, we stated our draft belief that it had authority under subpart 1 to apply an interpretation for RACT for ozone nonattainment areas for the 8-hour NAAQS that was similar to the Agency's policy for pollutants other than ozone. Under that interpretation and this option, for the 8-hour ozone NAAQS, if the area is able to demonstrate attainment of the standard as expeditiously as practicable with emission control measures in the SIP, then RACT will be met, and additional measures would not be required as being reasonably available. However, if an 8-hour nonattainment area contains sources subject to a RACT requirement that had been approved into a 1-hour ozone SIP, the area cannot remove the RACT requirement without demonstration under section 110(l) that the revision will not interfere with

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[54]Proposed Implementation Guidance for the Revised Ozone and Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS) and the Regional Haze Program. November 17, 1998. Found at: http://www.epa.gov/ttn/oarpg/t1pgm.html.

attainment, RFP, or any other applicable requirement of the Act. In addition, if the RACT requirement was approved into the SIP prior to November 15, 1990, and it applies to an 8-hour nonattainment area, then, to remove the requirement, the State must provide for equivalent or greater emission reductions under section 193 of the Act.

c. Ozone transport regions. In addition, all areas of the OTR are required to adopt NO_x and VOC RACT requirements, regardless of their attainment classification.[55] Of course, these areas were already required to submit RACT rules for purposes of the 1-hour standard.

[55] See CAA section 184(b).

4. Proposed approach for previous source-specific major source RACT determinations.

Section 182(b)(2)(C) requires SIPs in moderate and higher classified areas to provide for RACT for major stationary sources of VOC that are not covered by CTGs. Section 182(f)(1) provided that this requirement also apply to major sources of NO_x. Many areas subject to the major source RACT requirement under the 8-hour ozone standard would have previously addressed the RACT requirement with respect to the 1-hour ozone standard. This includes the non-CTG major source VOC RACT requirement and the NO_x major source RACT requirement. For example, major sources located in States of the OTC were subject to the NO_x RACT requirement in the mid-1990s. ~~The EPA~~We believe~~s~~ that, in many cases, a new RACT determination under the 8-hour standard would call for installation of similar control technology as the initial RACT determination under the 1-hour standard because the fundamental control techniques are still applicable. In other cases, a new RACT analysis could determine that better technology has become available and some additional emissions reductions are achievable. The cost ~~effectiveness~~per ton of NO_x removed associated with installing a second round of RACT controls is likely to be a high number in many cases due to the relatively small ~~incremental~~amount of additional NO_x emission reduction

~~potential~~s expected. In these cases, the additional costs associated with the replacement of the existing RACT controls may be an unnecessary burden, given the small emission benefit potential. In contrast, a RACT analysis for uncontrolled sources would be much more likely to find that cost-effective controls are available.

Therefore, in portions of 8-hour ozone nonattainment areas where major sources or source categories were previously reviewed and controls subsequently applied to meet the RACT requirement under the 1-hour standard, ~~EPA~~we proposes that States may choose to accept the initial RACT analysis as meeting the RACT requirements for the 8-hour program and need not submit a new RACT SIP. At the time the State submits its attainment demonstration, it should submit a certification that it previously met the RACT requirement as part of its SIP revision. ~~The EPA~~We also proposes that a RACT determination would be necessary for major sources in any portion of the 8-hour nonattainment area that was not subject to an initial RACT program under the 1-hour standard. Furthermore, in cases where the initial RACT analysis under the 1-hour standard for a specific source or source category concluded that no additional controls were necessary, ~~EPA~~we proposes that a new RACT determination is required. The new RACT determination is needed to take into account that newer, cost-effective control measures may have

become available for sources that were not previously regulated. Thus, the State needs to reassess whether controls should be required. In addition, any major VOC or NO_x source that exists at the time of final rulemaking on implementation of the 8-hour ozone standard but that did not exist during a previous RACT determination must be subject to a RACT determination as part of the SIP for the 8-hour ozone standard.

~~5~~5. Proposed approach for NO_x RACT determinations in areas affected by the NO_x SIP Call. All States submitting SIP revisions to meet the NO_x SIP Call [October 27, 1998 (63 FR 57356)] have elected to require large boilers and turbines to comply with an emissions cap-and-trade program. The large non-electricity generating units subject to the cap-and-trade program generally achieve a 60% reduction from uncontrolled levels and the electricity generating units achieve more than a 60% reduction from SIP Call baseline levels with a cost effectiveness of approximately $1500/ton, on average. As noted in the NO_x SIP Call final rule (footnote to table 2; 63 FR 57356), this cost effectiveness value represents reductions beyond those required by NO_x RACT. In previously issued guidance to help States determine NO_x RACT for boilers and turbines, EPA indicated that NO_x RACT for certain types of electricity generating units is the most effective level of combustion modification

reasonably available (NO_x General Preamble at 57 FR 55625) and further indicated that NO_x RACT for other sources should generally be expected to achieve approximately 30-50% reduction at costs in the range of $60-1300/ton (March 16, 1994 guidance memorandum from Kent Berry). Since the NO_x SIP Call cap-and-trade requirements are more stringent than NO_x RACT, we expect that States will be able to determine that sources which meet the NO_x SIP Call requirements also meet NO_x RACT.

The EPA's NO_x RACT guidance (NO_x General Preamble at 57 FR 55625) encourages States to develop RACT programs that are based on "areawide average emission rates." That is, some sources may install more stringent controls on some units in exchange for lesser control on others as long as the areawide average emission rate meets RACT requirements. Such programs result in "simplifying State RACT determinations and enhancing the ability of States to adopt market-based trading systems for NO_x." (57 FR 55625) Because the NO_x SIP Call is a market-based program, there may be a few units that choose to meet those requirements simply by emissions trading, even though the vast majority of units affected by the NO_x SIP Call will install controls. Units which do not install controls but comply with the NO_x SIP Call through emissions trading, may be able to meet RACT through areawide averaging. For States that apply this

emissions averaging concept to sources subject to both the NO_x SIP Call and NO_x RACT, we anticipate States will be able to find that the group of sources meets the areawide average NO_x RACT requirements even though a few units may have an emission rate greater than RACT.

Based on economic analyses conducted as part of the NO_x SIP Call rulemaking, we expect that virtually all sources in the cap-and-trade program will choose to install combustion controls. Many sources will also install post-combustion controls and/or purchase allowances to meet their NO_x SIP Call requirements. We do not expect sources to purchase allowances without installing at least combustion controls because combustion controls are likely to be less costly than purchasing emission allowances alone. As noted above, EPA generally considers RACT for boilers to be combustion controls (NO_x General Preamble at 57 FR 55625). Thus, we anticipate that the vast majority of sources subject to the NO_x SIP Call cap-and-trade program will install at least combustion controls and will, therefore, meet RACT through the installation of controls at the source.

For the above reasons, we propose that the State does not need to perform a RACT analysis for sources subject to the State's emission cap-and-trade program where the cap-and-trade program has been approved by EPA as meeting the NO_x SIP Call requirements. In these cases, we propose that

States may choose to accept the NO_x SIP Call requirements as meeting the NO_x RACT requirements for the 8-hour standard and need not submit a new NO_x RACT SIP for those sources. Rather, at the time the State submits its RACT SIP, it should submit a certification that it previously met the RACT requirement as part of its NO_x SIP Call revision. We invite comment on this approach.

In addition, as discussed elsewhere in today's notice, section 182(f) of the CAA specifies circumstances under which NO_x RACT and other requirements would be limited or would not apply ("NO_x waiver"). Guidance previously issued by EPA describes how a State may develop a plan which provides for attainment but which does not include provisions fully implementing NO_x RACT ("Guideline for Determining the Applicability of Nitrogen Oxide Requirements under Section 182(f)," December 1993). That is, the guidance describes the circumstances under which NO_x reductions in excess of those specified in a State's attainment demonstration are not required. Even where a State develops an attainment demonstration based, in part, on emission reductions from the NO_x SIP Call, the State may still be able to petition EPA for a waiver from NO_x RACT under section 182(f).

As described above in section 4, Proposed approach for previous source-specific major source RACT determinations,

States would need to make a RACT determination for major sources not subject to the cap-and-trade program. It should also be noted that this proposal in no way limits states' discretion to require beyond-RACT NO_x reductions from any source (including NO_x SIP call sources) in a plan to demonstrate attainment of the health-based ozone standards. In certain areas, States may choose to require NO_x controls based on more advanced control technologies to provide for attainment of the ozone standards.

6. Proposed approach for NO_x as an ozone precursor.

In addition to the issue regarding the nature of the RACT rules that apply under subpart 1, another issue concerns the pollutants (precursors) to which the RACT rules apply. Although NO_x has long been recognized as a precursor to ozone[56] and several national rules[57] have been promulgated to control NO_x for purposes of helping attain the ozone standard, subpart 1 does not specifically address either NO_x

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[56]For example, the 1991 National Academy of Sciences report entitled Rethinking the Ozone Problem in Urban and Regional Air Pollution recommends that "To substantially reduce O_3 [ozone] concentrations in many urban, suburban, and rural areas of the United States, the control of NO_x emissions will probably be necessary in addition to, or instead of, the control of VOCs."

[57]For example, NO_x SIP Call (published October 27, 1998), Tier 2/Gasoline Sulfur regulations (published on February 10, 2000); and Control of Emissions of Air Pollution from 2004 and Later Model Year Heavy-duty Highway Engines and Vehicles (published October 6, 2000).

or VOC, but rather RACT in general. ~~The EPA~~We propose~~s~~ to clarify this by recognizing both NO_x and VOCs as precursors to ozone and to require NO_x and VOC RACT under subpart 1. This is consistent with the application of RACT under subpart 2. Under section 182(f) (in subpart 2), a waiver from NO_x RACT is possible under certain circumstances (the waiver provision is discussed elsewhere in this proposed rulemaking). ~~The EPA is~~We are proposing to allow areas subject ~~only~~ to subpart 1, as well as subpart 2, to seek a waiver consistent with the tests set forth in section 182(f).

~~6~~7. Proposed approach for RACM

~~The EPA~~We ha~~s~~ve also issued guidance for implementing the RACM provisions of the CAA that interpret those provisions to require a demonstration that the State has adopted all reasonable measures to meet RFP and attainment as expeditiously as practicable and thus that no additional measures that are reasonably available will advance the attainment date or contribute to RFP for the area.[58] The

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[58] "State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990; Proposed Rule." 57 FR 13498 at 13560 (April 16, 1992).

"Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas." John S. Seitz, Director, Office of Air Quality Planning and Standards. November 30, 1999. Web site: www.epa.gov/ttn/oarpg/t1pgm.html.

RACM requirement, which is set forth in section 172(c)(1) of the Act, applies to all nonattainment areas, whether covered under only subpart 1 or also subpart 2.

~~7~~8. Proposed submission date for RACT and RACM requirements.

~~The EPA is~~We are proposing that the SIP provisions for RACT for a nonattainment area--regardless of whether the area is covered under subpart 1 or subpart 2--be submitted within 2 years after the area's nonattainment designation; this is

consistent with the timing for submission of RACT rules in section 182(b)(2) for moderate areas.[59]

~~The EPA is~~We are proposing that the SIP provisions for RACM for a nonattainment area-regardless of whether the area is covered under subpart 1 or subpart 2-be submitted within 3 years after the area's nonattainment designation; this is consistent with the timing for submission of an area's demonstration of attainment.

~~M~~L. How will the section 182(f) NO_x provisions be handled

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Memorandum of December 14, 2000, from John S. Seitz, Director, Office of Air Quality Planning and Standards, re: "Additional Submission on RACM from States with Severe One-Hour Ozone Nonattainment Area SIPs."

[59]Section 182(a) provided that marginal areas with pre-1990 RACT obligations had to submit corrections to their RACT rules within 6 months after classification under the 1990 CAAA. New 8-hour ozone nonattainment areas that are classified as marginal would not have this requirement.

under the 8-hour ozone standard?

In subpart 2 of part D, section 182(f) requires States to apply the same requirements to major stationary sources of NO_x as are applied to major stationary sources of VOC. The applicable requirements are RACT and NSR for major stationary sources in certain ozone nonattainment areas and throughout States in the OTR.[60] In addition, section 182(f) specifies circumstances under which these NO_x requirements would be limited or would not apply ("NO_x waiver"). Further, areas granted a NO_x waiver under section 182(f) may be exempt from motor vehicle I/M and certain Federal requirements of general and transportation conformity.[61] For the same reasons described in the "Nitrogen Oxides Supplement to the General Preamble" with respect to the 1-hour ozone standard, ~~EPA~~we propose~~s~~ to also apply the NO_x requirements and waiver provisions in section 182(f) for 8-hour ozone nonattainment areas under subpart 2 and OTRs.[62]

Elsewhere in today's proposed rulemaking, ~~EPA~~we

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[60]See 57 FR 55622 ("Nitrogen Oxides Supplement to the General Preamble," published November 25, 1992).

[61]As stated in EPA's I/M (57 FR 52950) and conformity rules (60 FR 57179 for transportation rules and 58 FR 63214 for general rules), certain NO_x requirements do not apply where EPA granted an areawide exemption under section 182(f).

[62]See 57 FR 55620, "Nitrogen Oxides Supplement to the General Preamble," published November 25, 1992.

propose~~s~~ to establish NO_x as a precursor to ozone under subpart 1 and require RACT and NSR in subpart 1 nonattainment areas for major sources of NO_x as well as VOC. As noted ~~above~~in the preceding paragraph, ~~EPA is~~we are also proposing that the NO_x RACT and NSR requirements apply in certain subpart 2 nonattainment areas and throughout OTRs. While NO_x emissions are necessary for the formation of ozone in the lower atmosphere, a local decrease in NO_x emissions can, in some cases, increase local ozone concentrations. This potential "NO_x disbenefit" resulted in Congress including NO_x waiver provisions in section 182(f) (in subpart 2 of part D). ~~The EPA~~We believe~~s~~ the NO_x waiver provisions are a prudent safeguard to avoid unnecessary emissions reductions and should be extended into subpart 1 areas that are subject to the NO_x RACT and NSR provisions. Therefore, ~~EPA~~we propose~~s~~ to establish NO_x waiver provisions identical to those in section 182(f) for areas subject ~~only~~ to subpart 1 as well as subpart 2.

In the event that the final rulemaking does not establish NO_x as a precursor to ozone under subpart 1 and the NO_x RACT and/or NSR requirements do not apply, a NO_x waiver provision would be unnecessary with respect to subpart 1 areas. ~~The EPA~~We propose~~s~~ that the concepts

contained in the existing 1-hour ozone guidance[63] regarding section 182(f) would apply for the 8-hour ozone program under subparts 1 and 2. ~~The EPA~~We would update the existing guidance to take into account the new ozone and PM standards and modeling techniques now available. For areas that were previously granted a NO_x waiver under the 1-hour ozone standard, a re-approval probably would be needed to make it clear that the exemption applies, to allow for public comment, to be consistent with the waiver guidance under the 8-hour standard (once issued), and to account for any new information that may point to a different conclusion.

~~N~~M. What requirements for transportation conformity should apply under the 8-hour ozone standard?

1. What is transportation conformity?

Transportation conformity is required under section 176(c) of the CAA (42 U.S.C.§7506(c)) to ensure that federally supported highway and transit project activities are consistent with ("conform to") the purpose of a SIP. Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely

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[63]The EPA's primary guidance regarding section 182(f) is contained in the "Guideline for Determining the Applicability of Nitrogen Oxide Requirements under Section 182(f)," issued by John S. Seitz, Director, Office of Air Quality Planning and Standards, to the Regional Division Directors, December 16, 1993.

attainment of the NAAQS. Transportation conformity applies in nonattainment areas and maintenance areas. The EPA's transportation conformity rule, 40 CFR part 93, establishes the criteria and procedures for determining whether transportation activities conform to the State air quality plan. It also establishes criteria and procedures for determining whether transportation activities conform in areas where no SIP containing mobile source emissions budgets yet exists.

The EPA first published the transportation conformity rule on November 24, 1993 (58 FR 62188) and made minor revisions in 1995 (60 FR 40098, August 7, 1995 and 60 FR 57179, November 14, 1995). On August 15, 1997, a comprehensive set of amendments was published that clarified and streamlined language from the 1993 transportation conformity rule (62 FR 43780). Other amendments were made on April 10, 2000 (65 FR 18911) and most recently on August 6, 2002 (67 FR 50808). These rulemakings, as well as other relevant conformity materials such as guidance documents, policy memoranda, and conformity research can be found at EPA's transportation conformity website, at http://www.epa.gov/otaq/transp.htm (once at the site, click on "Transportation Conformity.")

2. Why is EPA discussing transportation conformity in this proposed rulemaking?

~~The EPA is~~We are discussing transportation conformity in this proposed rulemaking in order to provide affected parties with information on when transportation conformity will be implemented under the 8-hour ozone standard and how we plan to make the transition from the 1-hour ozone standard to the 8-hour ozone standard. Affected parties may include State and local transportation and air quality agencies, metropolitan planning organizations (MPOs) and the U.S. Department of Transportation (DOT). To determine whether this discussion affects your organization, you should carefully examine the applicability requirements in 40 CFR 93.102 of the transportation conformity rule.

3. Are any changes being made to transportation conformity in this proposed rulemaking?

No, we are not proposing changes to the transportation conformity rule in this proposed rulemaking. In the future, ~~EPA~~we plan~~s~~ to conduct a rulemaking to establish the specific conformity tests that will apply under the 8-hour standard. ~~The EPA~~We intend~~s~~ to complete that rulemaking prior to area designations under the 8-hour standard and will provide the public with the opportunity to comment on the proposed changes.

4. When does transportation conformity apply to 8-hour ozone nonattainment areas?

Transportation conformity applies to 8-hour ozone

nonattainment areas one year after the effective date of an area's designation. This 1-year grace period is found in the CAA at 42 U.S.C. 7506(c)(6). Specifically, this section of the CAA provides areas, that for the first time are designated nonattainment for a given air quality standard, with a 1-year grace period before the conformity regulation applies with respect to that standard. Since the 8-hour ozone standard is a different standard from the 1-hour ozone standard, every area that is designated nonattainment for the 8-hour ozone standard will have a 1-year grace period before conformity applies for the 8-hour standard, regardless of whether or not it was designated nonattainment or maintenance for the 1-hour ozone standard.

For more information, please see the proposed and final rulemaking entitled, "Transportation Conformity Rule Amendments: Minor Revision of 18-Month Requirement for Initial SIP Submissions and Addition of Grace Period for Newly Designated Nonattainment Areas," published October 5, 2001 (66 FR 50954); and August 6, 2002 (67 FR 50808), respectively for additional discussion of the 1-year grace period for newly designated areas. (The proposed and final rule can be found on EPA's transportation conformity web site mentioned above.)

5. <u>How does the 1-year grace period apply in metropolitan areas</u>?

Metropolitan areas are those areas that have a MPO designated as being responsible for transportation planning per 23 U.S.C. 134. In these areas, the 1-year grace period means that, 1 year after the effective date of an area's designation as nonattainment for the 8-hour standard, the area must have a conforming transportation plan and Transportation Improvement Program in place to fund or approve transportation projects. If, at the conclusion of the 1-year grace period, a metropolitan area is not able to make a conformity determination for its plan and Transportation Improvement Program, the area will be in what is known as a "conformity lapse." (For the discussion of which projects can proceed during a conformity lapse, please see DOT's January 2, 2002 guidance, published February 7, 2002, at 67 FR 5882; and EPA's May 14, 1999 guidance.[64] Both of these documents can be found on EPA's transportation conformity web site:
http://www.epa.gov/otaq/transp/traqconf.htm.)

6. <u>How does the 1-year grace period apply in isolated rural areas</u>?

For the purposes of conformity, a nonattainment or maintenance area (or portion thereof) is considered to be an

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[64]EPA's Conformity Guidance on Implementation of March 2, 1999, Conformity Court Decision (EPA420-F-99-025, May 1999)

isolated rural area if it does not have a metropolitan transportation plan or Transportation Improvement Program required under 23 U.S.C. 134, and its projects are not considered in the emissions analysis of any MPO's transportation plan or Transportation Improvement Program. Isolated rural areas are distinguished from "donut" areas which are outside the metropolitan planning boundary and inside the nonattainment/maintenance area boundary.

Because isolated rural areas do not have federally required metropolitan transportation plans and Transportation Improvement Programs, a conformity determination need only be done in an isolated rural area when that area has a transportation project or projects that need approval. Therefore, isolated rural areas also have a 1-year grace period before conformity applies under the 8-hour ozone standard, but at the end of that grace period, the area does not have to have made a conformity determination. An isolated rural area would be required to do conformity only at the point when a new transportation project needs approval. This point may occur significantly after the 1-year grace period has ended. (Conformity requirements for isolated rural areas can be found at 40 CFR 93.109(g); in addition, please see the discussion at 62 FR 43785-7, "V. Rural Nonattainment and Maintenance Areas.")

7. <u>Does conformity apply for the 1-hour ozone standard once</u>

the 1-hour ozone standard is revoked?

The CAA only requires conformity in areas that are designated nonattainment or maintenance for a standard. Therefore, conformity will not apply for purposes of the 1-hour ozone standard after the 1-hour standard and an area's 1-hour designation are revoked. In other words, existing 1-hour ozone nonattainment and maintenance areas, including those that will not be designated nonattainment for the 8-hour ozone standard, will no longer be required to demonstrate conformity to the 1-hour standard when EPA revokes the standard, one year after the effective date of EPA's 8-hour ozone designations. This interpretation that conformity would not apply in 1-hour ozone maintenance areas once the 1-hour standard is revoked is a change from the approach we planned to take in 1997. Since that time we have reconsidered whether or not conformity should continue to apply in maintenance areas. We have concluded that the better interpretation is that conformity would not apply in 1-hour maintenance areas once the 1-hour ozone standard is revoked because maintenance areas are relieved of the obligation under section 175A of the CAA to have a maintenance plan. Since a maintenance plan is not required, conformity no longer applies in these areas. A detailed discussion of ~~EPA's~~our plans for revoking the 1-hour standard and the associated 1-hour designations may be found

elsewhere in today's proposed rulemaking.

8. Would transportation conformity apply if motor vehicles are an insignificant portion of an area's air quality problem?

Yes, conformity would apply if motor vehicles represent an insignificant portion of an area's air quality problem. However, the preamble to the 1993 conformity rule (58 FR 62194, "Discussion of Major Issues") explains that a regional emissions analysis is not required of areas with control strategy SIPs that demonstrate that local motor vehicle emissions, including exhaust, evaporative, and re-entrained dust emissions, of such pollutant and/or precursor are insignificant--a major flexibility. If an area's SIP shows that local motor vehicle emissions are less than 10 percent of the area's total local emission inventory and that reductions of the pollutant and/or precursor are not necessary for attainment then the area is not required to perform a regional emissions analysis for that pollutant and/or precursor. However, all other conformity requirements still apply and must be met.

9. What are EPA's plans for amending the conformity rule to address the 8-hour ozone standard?

The conformity rule will need to be amended to address the implementation of both the 8-hour ozone and $PM_{2.5}$ air quality standards. We plan to address both standards in one

revision to the rule. We anticipate proposing this revision in 2003 and finalizing the rulemaking prior to EPA's finalization of designations of nonattainment areas in 2004. This schedule would allow areas to be well aware of the conformity requirements that will apply to them prior to the start of the 1-year grace period. The proposal will provide an opportunity for stakeholders to offer comments and ideas for providing flexibilities that would be appropriate for some or all nonattainment areas.

10. What impact will the implementation of the 8-hour ozone standard have on a State's Transportation Conformity SIP?

Since ~~EPA is~~we are not now proposing to make specific revisions to its ~~General~~Transportation Conformity Regulations in this proposal, States should not need to revise their Transportation Conformity SIPs, unless they need to do so to ensure the regulations apply in the appropriate areas.

~~O~~N. What requirements for General Conformity should apply to the 8-hour ozone standard?

1. What is the purpose of the General Conformity Regulations?

Section 176(c) of the CAA requires that before a Federal entity takes an action, it must make a determination that the proposed action will not interfere with the SIP or the State's ability to attain and maintain the NAAQS. In

November 1993, EPA promulgated two sets of regulations to implement section 176(c). One set, known as the Transportation Conformity Regulations (described above) deals with approval and funding of highway and mass transit project. The other set, known as the General Conformity Regulations, deals with all other Federal activities. Besides ensuring that Federal actions will not interfere with the SIP, the general conformity program also fosters communications with State/local air quality agencies, allows for public participation in the review of air quality impacts from Federal actions, and allows for air quality review of individual projects. In 1995, Congress limited the application of section 176(c) to nonattainment and maintenance areas only.

2. How is the general conformity program currently structured?

Due to the very broad definition of "Federal action" in the statute and the number of Federal agencies subject to the conformity requirement, the number of individual conformity decisions could have been on the order of a thousand or more per day. To avoid creating an unreasonable administrative burden, EPA established de minimis emissions levels and exempted certain actions. In addition, the regulations allow Federal agencies to develop their own list of actions which are presumed to conform. For non-exempt

actions that increase emissions above the de minimis levels, the Federal agency must demonstrate that the action will conform with the SIP or will not cause or contribute to any new violation of any standard in any area; interfere with provisions in the applicable SIP for maintenance of any standard; increase the frequency or severity of any existing violation of any standard; or delay timely attainment of any standard or any required interim emissions reductions or other milestone. ~~The EPA is~~We are currently reviewing the general conformity program and, in a separate action, may revise the regulations as appropriate, with respect to the 8-hour standard.

3. Who runs the general conformity program?

Each Federal agency is responsible for determining if the action it takes is subject to the conformity regulations and, if so, whether the action conforms to the SIP. Each Federal agency's approach to the conformity evaluation differs depending upon the actions being taken. Agencies that are permitting or funding actions subject to the conformity rules generally require the applicant to develop the technical support for the conformity determination, although some agencies undertake the complete evaluation themselves.

4. How does an agency demonstrate conformity?

Depending upon the pollutant and the specific

situation, Federal agencies have several options for demonstrating conformity. For actions in ozone nonattainment and maintenance areas, the Federal agency can demonstrate that the project/action is specifically identified and accounted for in the SIP, obtain documentation from the State that the emissions are included in the SIP, have the State commit to include the emissions in the SIP, or mitigate the emissions or offset the emissions from emissions reductions within the same nonattainment or maintenance area.

5. General Conformity Regulation revisions for the 8-hour ozone standard.

a. What de minimis emission levels will be set for ozone precursors?

For the ozone precursors VOC and NO_x, ~~EPA is~~we are proposing to retain the existing de minimis emission levels. Those levels were based on the definition of a major stationary source for the NSR programs as established by sections 182, 183, and 302 of the CAA. The current de minimis levels are identified in Table 4 below.

TABLE 4

De Minimis Emission Levels for VOC and NO_x

Type of Ozone Area	VOC Tons/year	NO_x Tons/year
Extreme Nonattainment	10	10

Severe Nonattainment	25	25
Serious Nonattainment	50	50
Moderate and Marginal Nonattainment in the OTR	50	100
Other Nonattainment	100	100
Maintenance in OTR	50	100
Other Maintenance	100	100

Areas covered by subpart 1 are included in the "Other Nonattainment" category listed in table 4 and would have de minimis emission levels of 100 tons per year for both VOC and NO_x emissions.

b. What impact will the implementation of the 8-hour ozone standard have on a State's General Conformity SIP?

Since ~~EPA is~~we are not now proposing to make specific revisions to its General Conformity Regulations in this proposal, States should not need to revise their General Conformity SIPs, unless they need to do so to ensure the regulations apply in the appropriate areas.

c. Are there any other impacts on the SIPs related to general conformity based on implementation of the 8-hour standard?

Currently, ~~EPA is~~we are reviewing the General Conformity Regulations and is considering whether it would be appropriate to revise them in the near future. ~~The EPA is~~We are not proposing any revisions at this time. However, as areas develop SIPs for the 8-hour ozone standard, ~~EPA~~we recommend~~s~~ that State and local air quality agencies work with major facilities which are subject to the General Conformity Regulations (e.g., commercial airports and large military bases) to establish an emission budget for those facilities in order to facilitate future conformity determinations. Such a budget could be used by Federal agencies in determining conformity or identifying mitigation measures.

~~P~~6. How does the 1-year grace period apply to general conformity determinations?

Section 42 U.S.C. 7506(c)(6) applies to both transportation and general conformity. Therefore, the general conformity requirements would not apply to actions/projects in newly designated nonattainment areas until one 1 year after the effective date of the designation. As discussed in section M.4., the 8-hour ozone standard is a new standard and the grace period applies to

all the areas designated nonattainment for that standard. Actions/projects in areas previously designated nonattainment or maintenance for the 1-hour ozone standard must demonstrate conformity for the 1-hour standard until that standard is revoked in whole or in part. Once the 1-hour ozone standard is revoked in whole or in part, federal agencies will be required to conduct conformity determinations for the 8-hour standard if the project/action is in an area designated nonattainment for that standard. The General Conformity Regulations specify requirements for actions/projects in areas without approved SIP. Those requirements would apply to 8-hour ozone nonattainment areas until the SIP is approved by EPA.

Q. How should the NSR Program be implemented under the 8-hour ozone NAAQS?

1. Background

The major NSR program contained in parts C and D of Title I of the Act is a preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Act. In nonattainment areas, and throughout the OTR, the program is implemented under the requirements of part D of Title I of the Act, and is referred to as nonattainment NSR. In attainment or unclassifiable areas outside the OTR, the requirements under part C of Title I of the Act apply, and

the program is called the Prevention of Significant Deterioration (PSD) program. Collectively, we also commonly refer to these programs as the major NSR program. These regulations are contained in 40 CFR 51.165, 51.166, 52.21, 52.24 and part 51, appendix S.

In attainment/unclassifiable areas areas outside of the OTR, a new major source, or a major modification to an existing source, must install best available control technology (BACT) and conduct an air quality modeling analysis and an analysis of potential impacts on Class I areas (see section 162 of the Act). If the source is located in a nonattainment area, or anywhere in the OTR, including OTR attainment areas, it must install technology that meets the lowest achievable emission rate (LAER), secure emission reductions to offset any increases in emissions, and perform other analyses.

As of the date areas are designated attainment or nonattainment under the 8-hour standard, major NSR will apply under the standard. In areas outside the OTR that will be designated as attainment for the 8-hour ozone standard, the part C PSD program will apply. As there are currently PSD programs in place in all areas of the country, implementation of the new standard should be a straightforward matter. (Note that one change we will be codifying is the addition of NO_x as an ozone precursor.

This is discussed in more detail later in this section).

In areas newly designated as nonattainment for the 8-hour ozone standard, however, a number of implementation issues will arise, which we discuss below. Typically, upon designation, nonattainment areas would be required to implement nonattainment NSR for major sources and major modifications.[65] However, in order to reduce the burden for nonattainment areas meeting certain conditions, we are proposing a revised set of major NSR requirements under the authority of 40 CFR Part 51, Appendix S, section VI. We are referring to this as the transitional program, and it is discussed in more detail later in this section.

2. Nonattainment NSR under the 8-hour ozone standard

Some States may already have in place a part D major source program applicable to newly designated 8-hour ozone nonattainment areas. For nonattainment areas in states whose SIPs contain a generic requirement to issue part D major source NSR permits in areas designated as nonattainment, nonattainment NSR permit requirements will become automatically effective upon designation (See Figure 1).[66]

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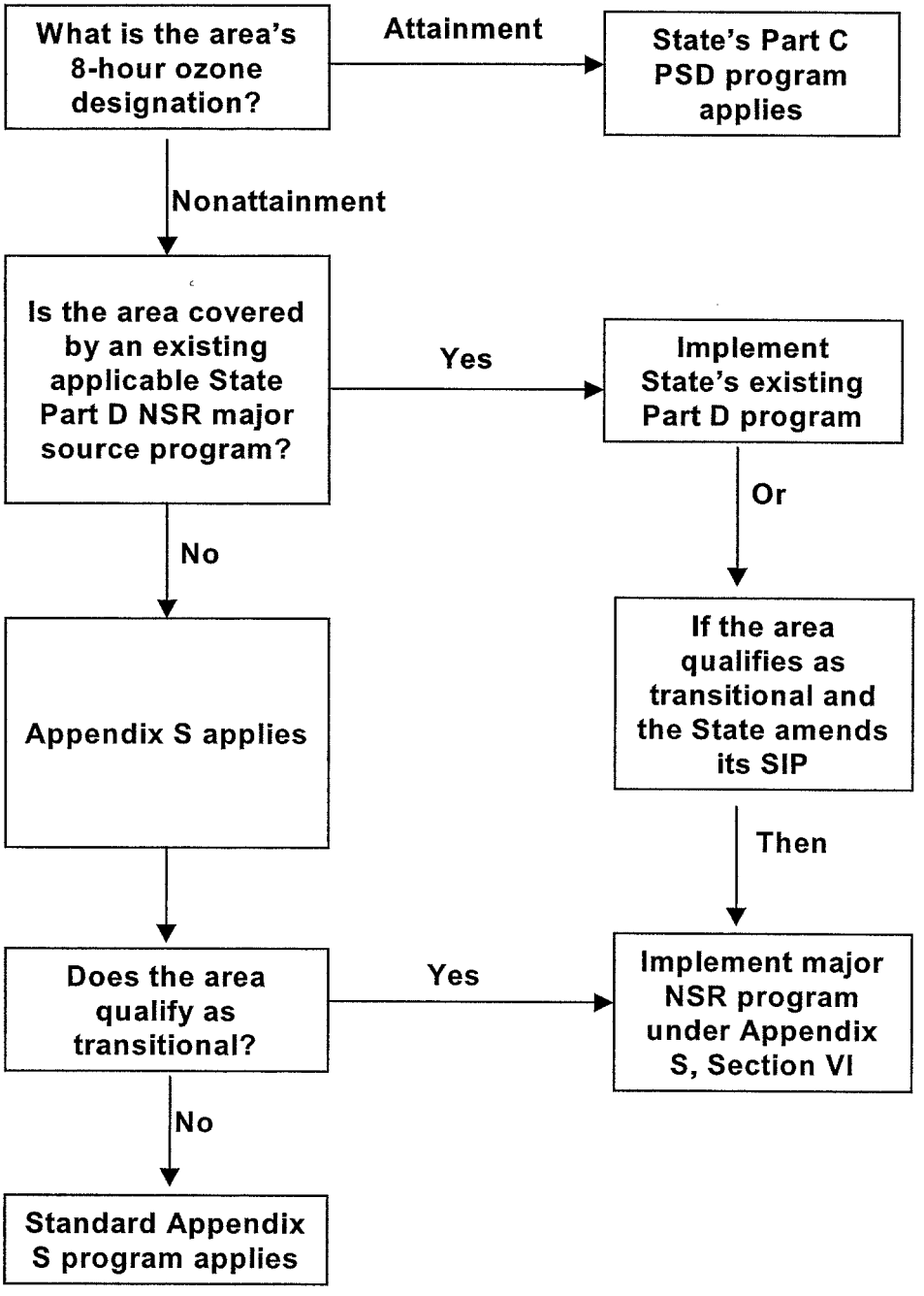
[65]Should EPA issue revisions to these regulations, the revised NSR program would of course apply to new sources and major modifications.

[66]States with already applicable part D NSR programs may choose to amend their SIPs to allow them to take

Figure 1

NSR Program Implementation Under the 8-hour Ozone Standard



advantage of the transitional option described in this section, provided they meet the transitional program eligibility criteria.

For a nonattainment area in a State with a SIP that specifically lists the areas in which part D NSR applies, or in areas which currently have no nonattainment plan, there will be an interim period between the designation date and the date that the state amends its SIP either to list any new nonattainment area(s) or to include a part D plan. During this interim period, part D NSR requirements are governed not by section 51.165, but by Appendix S to part 51.

a. <u>What does Appendix S require for nonattainment areas during the interim period</u>? In general, Appendix S requires new or modified major sources to meet the lowest achievable emission rate (LAER) and obtain sufficient offsetting emission reductions to assure that the new major source will not interfere with the area's progress toward attainment. (Readers should refer to 40 CFR Part 51, Appendix S for a complete understanding of these and other Appendix S permitting requirements.) However, per section VI of Appendix S, we have always recognized the need for flexibility under certain circumstances, which we address in detail below.

Also, note that EPA does not have a federal permit program in place for nonattainment NSR. This creates particular difficulties for the Tribes, because their programs are not as mature as the State programs.

Therefore, in most locations, the EPA, not the Tribes, will need to address the implementation of Appendix S in these areas, until a Tribe develops a nonattainment NSR program on its own.

b. What is the legal basis for requiring States to issue nonattainment NSR permits during the interim period?

Section 110(a)(2)(c) of the CAA establishes a general duty on States to include a program in their SIP that regulates the modification and construction of any stationary source as necessary to assure that NAAQS are achieved. This general duty, often referred to as "minor NSR," exists during all periods, including before a State has an approved Part D NSR permit program.

Although Section 110(a)(2)(c) does not define specific requirements States must follow for issuing major source permits during the interim period between nonattainment designation and EPA approval of a part D nonattainment NSR SIP ("interim period"), EPA's regulations codified at 52.24(k) require States to follow EPA's Emission Offset Interpretative rule codified at 40 CFR Part 51, Appendix S (hereinafter referred to as Appendix S) during this time.[67]

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[67]The actual language at 40 CFR 52.24(k) allows States to issue permits under Appendix S for a maximum period of 18 months after designation. After this time, if the nonattainment area does not have an approved Part D NSR permit program, a construction ban would apply. However, in 1990, Congress altered the provisions of the construction

c. Codification of NO_x as an Ozone Precursor. Currently, only VOCs are expressly regulated as ozone precursors under the PSD regulations. Although Appendix S specifically states that a source is major for ozone if it is major for VOCs, we do not believe this language is exclusive. The more general portion of the "major stationary source" definition states, ". . . any stationary source that emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Act," is considered a major source. There is similar general language within the definition of "major modification." The nonattainment provisions of the Act, as amended in 1990, recognize NO_x as an ozone precursor; section 182(f) of the Act established nonattainment requirements for NO_x. In addition, the definition of air pollutant under Section 302(g) of the Act includes, ". . . any precursors to the formation of any air pollutant . . ." Thus, where NO_x is considered a precursor to the formation of ozone, the State

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ban such that it would not apply when a State lacked an approved Part D NSR permit program in the future. ~~The EPA~~We believe~~s~~ that Congress' removal of the construction ban from the Act supersedes the regulatory language at 52.24(k) and EPA has reinterpreted this language to allow States to issue permits under Appendix S from designation until the SIP is approved even if this exceeds 18 months. See 1991 guidance memo, "New Source Review (NSR) program Transitional Guidance, John S. Seitz, March 11, 1991. ~~The EPA~~We will be revising the language at section 52.24(k) to properly reflect this interpretation.

would use Appendix S to issue a preconstruction permit to a new major source of NO_x emissions during the interim period.[68]

Notwithstanding the above, in order to be completely clear, we are proposing to amend both our NSR and PSD regulations to expressly include NO_x as an ozone precursor in major PSD and major nonattainment NSR programs. Where relevant for both PSD areas and transitional NSR areas, States would be required to modify their existing programs to include NO_x as an ozone precursor.

Elsewhere in today's action, we are proposing to include NO_x as an ozone precursor for RACT requirements under subpart 1. Under section 182(f) (in subpart 2), a waiver from NO_x RACT and nonattainment NSR is possible under certain circumstances. We are proposing tht the section 182(f) waiver provisions would also apply to areas designated nonattainment under either subpart 1 or subpart 2. However, the waiver provisions do not apply in areas where PSD is applicable.

3. <u>Under what circumstances is a transitional program</u>

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[68]Note that new sources or modifications which are major as a result of NO_x emissions, and are thus subject to nonattainment NSR for NO_x, would also be considered major sources of nitrogen dioxide (NO_2), which is also a criteria pollutant. Since all areas are currently in attainment under the NO_2 NAAQS, these new NO_x sources will also need to go through PSD review for NO_2.

needed during the interim period?

We request comment on providing States flexibility regarding major source nonattainment NSR program requirements in areas that meet specific conditions. We believe that a more flexible NSR option is appropriate in areas that are expected to reach 8-hour ozone attainment early - within 3 years after designation - through, for example, national or regional programs such as the NO_x SIP Call and the Tier 2 motor vehicle emissions standards. In these areas, we believe that States should have the flexibility to apply a nonattainment NSR program that provides some relief from certain requirements.

Several factors warrant a flexible approach for implementing NSR in areas which qualify for the transitional program. We expect many areas to attain the new 8-hour standard within three years solely through regional NO_x reductions under the NO_x SIP call rule and other currently applicable Federal programs. We intend this option to be available to any 8-hour ozone nonattainment areas located outside the NO_x SIP Call area, so long as those nonattainment areas can meet the 8-hour ozone NAAQS within 3 years after designation. Some of these areas may be in nonattainment due largely to transport from upwind sources; but no allowance is made under major NSR for sources in areas overwhelmed by transport. As we have construed it,

this option would also encourage the early adoption of attainment plans, which we believe will lead to emissions reductions and resultant health benefits earlier than would otherwise occur. We request comment on the transitional program described in this proposed rulemaking, and in particular welcome information from States regarding how many new major sources or major modifications they anticipate would construct in transitional areas during the period between EPA's approval of a transitional part D nonattainment NSR plan and the State reaching attainment of the 8-hour NAAQS.

4. Elements of the Appendix S transitional program.

a. Which nonattainment areas would be eligible for the transitional program? The Appendix S transitional program would only be available to 8-hour ozone nonattainment areas that are subject to NSR under subpart 1, not subpart 2 (see discussion of classifications elsewhere in this notice). In addition, in order to be eligible for the transitional option, by the date EPA publishes the nonattainment designations under the 8-hour standard (currently expected in 2004) a subpart 1 nonattainment area must: (1) be attaining the 1-hour ozone standard; (2) be subject to subpart 1, not subpart 2, of part D;[69] (3) have submitted an

[69]Certain nonattainment NSR requirements in subpart 2 of part D are specifically spelled out in the Act, and thus

attainment plan that demonstrates attainment within 3 years after designation; the attainment plan would have to include control measures under the NO_x SIP Call rule where applicable; and (4) have submitted an attainment plan containing any additional local control measures needed for attainment of the 8-hour standard. These plans must commit the State to implement, by December 31, 2004, all measures necessary to bring the nonattainment area into attainment by a 2007 attainment date.[70] In addition, when a State submits its attainment plan, it should note that it intends to implement a program under Appendix S, Section VI that meets the requirements for transitional areas discussed below.

Note that, under this option, the attainment plan submission timing (i.e., submission by the date of EPA designation of nonattainment areas) for transitional areas is about three years earlier than is otherwise required for areas not meeting the 8-hour standard. Note also that areas would be eligible for this transitional NSR provision even though ~~EPA is~~we are not establishing a "transitional" nonattainment classification for areas covered under subpart 1. We request comment on these criteria.

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cannot be altered under a transitional program.

[70]The actual attainment ~~date -- as~~date--as proposed elsewhere in this ~~notice -- would~~notice--would be 3 years after the nonattainment designation.

Also, note that while relief from offsets is provided for the NSR transitional program (see discussion below), those States and Tribes subject instead to the main body of Appendix S will still need to provide offset provisions.

~~Finally, the following requirements of a transitional part D nonattainment NSR program could also apply in subpart 1 areas that receive the transport classification, if EPA's final rule includes such a classification.~~

b. What would be the basic requirements of a transitional nonattainment NSR program under Appendix S, section VI?

i. Major source applicability threshold. Under the general part D NSR requirements, the applicability threshold for "major stationary source" is defined as 100 tons per year of a nonattainment pollutant; in some instances under subpart 2 the major source threshold can be as low as 10 tpy. In contrast, the major source threshold under the PSD program is either 100 or 250 tons per year, depending upon the type of stationary source undergoing review. We propose that, consistent with the subpart 1 part D NSR requirements, an Appendix S, subpart VI transitional nonattainment programs will use a major source threshold of 100 tons per year for each ozone precursor.

ii. Emission Control. Another key provision of the part D nonattainment NSR program is that, in order to be permitted, major new and modified sources must minimize their emission

rate by applying control technology to achieve LAER, which is generally the most stringent emission limit contained in a SIP or achieved in practice.

In contrast to LAER, which does not consider costs and other factors, a BACT analysis requires consideration of energy, environmental, and economic impacts in determining the maximum degree of reduction achievable for the proposed new source or modification. In a BACT analysis, as described in the New Source Review Workshop Manual,[71] the most stringent emission limit, including the limit representing LAER and its associated control technology, must be considered. If the most stringent limit is rejected as BACT for a particular case, that decision must be supported by an analysis that shows that the most stringent limit should not be chosen in light of the costs or other relevant factors. For example, if the most effective control technology would impose unacceptably high costs because of site-specific factors, that technology could be rejected as BACT for the proposed source. In this way, BACT may be less stringent than LAER.

We request comment on whether a BACT requirement,

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[71]US EPA Office of Air Quality Planning and Standards, *New Source Review Workshop Manual, Prevention of Significant Deterioration and Nonattainment Area Permitting, Draft,* October 1990. Available at: http://www.epa.gov/ttn/nsr/gen/wkshpman.pdf.

consistent with the BACT approach described in the NSR workshop manual, may be required in transitional Appendix S nonattainment NSR programs in lieu of requiring LAER. We believe granting this relief is appropriate, given the minimal difference we would expect between the emissions reductions achieved from BACT, rather than LAER, for the small number of sources that may trigger nonattainment NSR in transitional areas, for the few years the area is nonattainment.

iii. Relief from source-specific offsets requirements.

~~The EPA is~~We are proposing that major sources and major modifications would not be required to obtain case- and source-specific offsets under the transitional program. However, despite locating in a nonattainment area which qualifies for the NSR transitional program, a new major source may not cause or contribute to the existing violation in the nonattainment area. If the State determines that the source does not contribute to the existing violation, then mitigation would not be required.

There are several circumstances under which it is reasonable to assume that a new major source locating in a nonattainment area will not interfere with timely attainment of the standard. First, if the nonattainment area which qualifies for the NSR transitional option is participating in the NO_x SIP Call (63 FR 57356; October 27, 1998), we

expect that a source locating in the area will not cause or contribute to the existing violation, so long as the new emissions are consistent with growth projections. This is because it is assumed that where new emissions are consistent with growth projections, those new emissions will not interfere with timely attainment of the standard. Under the NO_x SIP Call, we modeled emissions for 2007. We included future growth projections for both VOC and NO_x emissions, and allocated each State a NO_x budget designed to control interstate NO_x transport. Because these budgets include an emission growth factor for VOC and NO_x, we believe that new major sources may locate in those nonattainment areas which qualify for the NSR transitional option without interfering with the area's ability to reach attainment, provided that any new emissions are within the projected emissions growth factor. We expect States to develop appropriate emission inventory procedures to assure that any new emissions are consistent with projected growth in emissions.

Those nonattainment areas which qualify for the NSR transitional program that are not projected to attain under the NO_x SIP Call or are not covered by the NO_x SIP Call may also allow for an increase in new major source emissions if their attainment demonstration includes an emissions growth factor for major new and modified sources and demonstrates

that, provided emission increases from new major sources remain below this level, the area will reach attainment. Again, we expect States to develop appropriate emission inventory procedures to demonstrate that the new emissions are consistent with projected emission growth in

iv. Other requirements. In addition to the control technology requirements discussed above, and consistent with current NSR requirements under Appendix S, section IV, condition 2, sources locating in transitional areas will be required to certify statewide compliance of all existing major sources under the same ownership or control. We believe this requirement will not impose a substantial burden on permit applicants or permitting authorities.

v. Backstop Provisions. Should a nonattainment area under the Appendix S, section VI transitional program fail to meet its SIP obligations to attain the NAAQS before the end of the interim period, then it will no longer be eligible for the transitional program. We request comment on the need for a backstop provision that requires a State to notify us, at the time of such failure, that it is reverting to the traditional nonattainment requirements under Appendix S. We also request comment on any other findings which should end eligibility for the transitional program.

5. Will a State be required to assure that the increased emissions from a new major source do not cause or contribute

to a violation in a nearby nonattainment area before it issues a preconstruction permit under Appendix S? At the current time, EPA allows the State to presume that a source locating outside a designated ozone nonattainment area will have no significant impact on the designated nonattainment area. See Section III of Appendix S. However, given the recent advances in the scientific understanding of ozone formation, ~~EPA~~we may revise these guidelines in the near future. In the meantime, under the PSD rules States may choose to address the impacts of sources in attainment areas on nearby nonattainment areas in a more proactive manner; i.e., through PSD offsets and/or tighter emission controls when the source is shown to contribute to a violation of the NAAQS.

6. What happens at the end of the interim period?

a. Transitional NSR Areas. As noted above, this transitional option is only intended to apply to certain nonattainment areas that expect to attain the 8-hour ozone NAAQS within 3 years after designation. Therefore, we expect these areas to be in attainment on or before an attainment date in 2007. Accordingly, States must submit, by the attainment date in 2007, an attainment demonstration with a maintenance plan. A State may continue implementing transitional NSR under Appendix S, section VI for six months following submission of its attainment plan, or until its

attainment plan is approved, whichever is earlier.

b. Traditional NSR Areas. If a State has never been or is no longer operating under a section VI transitional program, it must submit a part D nonattainment NSR plan within 3 years after designation (in 2007). The State may continue implementing traditional part D nonattainment requirements under Appendix S until we approve its part D plan.

7. What is the legal basis for providing this transitional program?

As stated earlier, Appendix S applies during the period after an area is designated nonattainment but before a part D nonattainment NSR plan is due under subparts 1 and 2 of part D. Application of Appendix S during this interim period ensures compliance with the section 110(a) (2) (C) "minor" NSR program. However, Congress was ambiguous regarding what specific requirements States must follow for issuing major source permits during the interim period described above. Thus, we have discretion to interpret those regulations in a reasonable manner. Chevron, U.S.A. v. NRDC, 467 U.S. 837 (1984).

The transitional Appendix S approach is reasonable for several reasons. First, it would be available only for those areas that are already attaining the 1-hour standard and that will attain the 8-hour standard within 3 years after designation (before a part D nonattainment NSR SIP

revision is due) through national and regional planning. These areas appropriately deserve a different approach for implementing the section 110(a)(2)(C) requirements than areas that are in nonattainment for the 1-hour standard and thus currently implementing NSR, or those areas that are not projected to reach attainment of the 8-hour in the short term.

We believe that the transitional option, as we have constructed it, would result in a level of emissions reductions that is substantially similar to the level that would be achieved from traditional NSR for the small number of sources it will affect in the short period during which these areas are designated nonattainment. Thus, these transitional areas would still be implementing a program that regulates the modification and construction of any stationary source "as necessary" to assure that national ambient air quality standards are achieved as expeditiously as practicable.

Currently, the language of Section VI allows all States to exempt a new major source from complying with the requirement to install LAER and obtain offsets if the source will meet all other applicable SIP requirements and not interfere with the area's ability to meet its attainment date. However, we plan to revise Section VI to remove this general exemption and apply the transitional approach. This

revision is appropriate because ~~EPA~~we do~~es~~ not believe that areas not meeting the transitional approach would be able to ensure that they were implementing an NSR program "as necessary" to ensure the attainment of the NAAQS without complying with Appendix S in general (e.g., Sections I-V). Note that Section VI of Appendix S originally applied only to secondary NAAQS, and we revised Section VI to include primary standards following the 1977 Amendments. The exemption provided by Section VI applied to areas whose attainment dates were shortly after the Act was re-authorized in 1977 because these areas had already submitted their attainment plans to us, and we believed that these areas would reach attainment without having to impose LAER and offsets on new major sources.

While nonattainment areas that qualify for the 8-hour ozone standard NSR transitional option are in a similar situation, areas not qualifying for the transitional approach are not. In order to qualify for the NSR transitional option, States will have to submit an attainment plan by the date of designation for the 8-hour NAAQS in 2004. These plans must commit the State to implement by December 31, 2005, all measures necessary to bring the nonattainment area into attainment and to meet a

2007 attainment date.[72] Similar to the nonattainment areas for which Section VI originally applied, we believe that nonattainment areas which qualify for the NSR transitional option will be able to meet a 2007 attainment date without imposing LAER and offsets on new major sources.

On its surface, Section VI's existing language could be applied in any nonattainment area during the interim period. However, we do not believe that an area that fails to meet the transitional option requirements would be able to show that a new major source or major modification constructing but not applying LAER or obtaining offsets will not interfere with the area's ability to meet its attainment date. Thus, we are proposing to revise the language of Section VI to apply only in areas qualifying for the transitional NSR program.

8. How should the NSR requirements be implemented for new 8-hour ozone areas that encompass the old 1-hour ozone nonattainment areas after EPA revokes the 1-hour ozone standard? Newly-designated 8-hour ozone areas which include areas which have never attained the 1-hour standard will have two different sets of requirements in place until a point in time proposed elsewhere in this proposed rulemaking

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[72]The actual attainment date–as proposed elsewhere in this proposed rulemaking–would be 3 years after the effective date of nonattainment designation, which ~~EPA~~we anticipate~~s~~ will occur in the spring of 2004.

under the anti-backsliding provisions. (There are two options proposed elsewhere in this proposal (in the anti-backsliding section) for that point in time--until either the level of the 1-hour ozone standard is achieved or the 8-hour ozone standard is attained.) The 1-hour NSR requirements and higher offset ratios (if applicable) will remain in place in the area that was designated nonattainment for the 1-hour standard until that point in time. The remaining portion of the newly-designated 8-hour ozone area must comply only with the 8-hour ozone NSR requirements and offset ratios (if applicable).

9. NSR Option to Encourage Development and Transportation Patterns that Reduce Overall Emissions--Clean Air Development Communities.

~~The EPA is~~We are considering ~~an~~two options to recognize the air quality benefits which can accrue when areas site new sources and plan development in a manner that results in overall reduced emissions. ~~The EPA~~We would define a community that changes its development patterns in such a way that air emissions within the non-attainment area are demonstrably reduced as a "Clean Air Development Community" (CADC). We propose that areas that qualify as CADCs would obtain certain flexibilities in their NSR programs. We request comments on the options listed here and encourage commenters to suggest other ways of

encouraging development that will result in lower emissions. In the first option a CADC would have a more flexible NSR program by 1) being subject to subpart 1 NSR as opposed to subpart 2 NSR; 2) lowering NSR major source thresholds for these areas to make them similar to the thresholds for PSD areas; and 3) allowing areas that meet certain development criteria (development zones) to receive NSR offsets from State offset pools. In the second option a CADC would be able to receive a pool of NSR offset credits equal to the reduced emissions from new development patterns. Credits from the pool could be provided to any new or modified source in a "development zone" as offsets.

This would accomplish two goals. The first goal of a CADC option is that it would give communities a ~~tool~~n incentive to achieve air quality benefits that can accrue from strategic location of new sources. The location of new sources (often major job centers) can affect regional travel patterns and air emissions. As a result, new sources have a dual impact on air quality. First, from direct emissions and second from the emissions associated with the travel to the site. This option attempts to recognize the net impact that a new source has on a region, not just from their stationary emissions, but also from their associated mobile source emissions. It provides a mechanism to recognize the emissions reductions associated with locating major job

centers in close proximity with transit, commercial/retail destinations, and workforce housing.

Furthermore, ~~the EPA~~we recognize~~s~~ that brownfields[73] are often prime candidates to realize these locational benefits. Brownfields, as sites of previous economic activity, frequently enjoy excellent proximity to a variety of destinations and a range of transportation infrastructure. Second, given their potentially contaminated state, manufacturing or other industrial uses are often the appropriate type of revitalization. The productive re-use of these sites is a priority for the Agency. This option will provide flexibility within the NSR rule to achieve the dual goals of brownfields revitalization and reduced air emissions.

The second goal of a CADC program would be that it would allow communities to use the air benefits of their development practices as an incentive for locating new

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[73]Brownfields are generally considered to be abandoned or underutilized properties (especially industrial and commercial facilities) where redevelopment or expansion may be complicated by possible environmental contamination (real or perceived). However, a brownfield site, as defined by The Small Business Liability Relief and Brownfields Revitalization Act of January 11, 2002, is any "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Further information is available at: http://www.epa.gov/compliance/resources/faqs/cleanup/brownfields/index.html.

~~source~~sources and their associated economic ~~activity~~ growth.

Man-made emissions within a region come from three ~~kinds of~~different sources: mobile sources, ~~areas~~area and minor stationary sources, and major stationary sources. Thus, the ability of a region to accommodate new major stationary sources is dependent not only on ~~stationary source~~ its emissions but also on the related mobile, area and ~~area~~minor source emissions. Localities which choose to engage in development that reduces emissions from mobile, area and ~~area~~minor sources, with this option, have a tool to turn those reductions into incentives for siting new economic activity.

It should be noted that an area that decides to become a CADC is, in effect, transferring emission reductions which normally would remain in the mobile source sector where they could, for example, be used for conformity determinations to the stationary source sector. Areas would have to think through the implications of doing this.

While we have not decided to go forward with ~~this~~either of these options at this time, we are continuing to examine ~~it~~them and, therefore, request comment on ~~it~~them. In particular, we request comment and suggestions on ~~the~~ possible legal rationales ~~supporting this option.~~for support these options which would enable them to be implemented through rulemaking. We are also very interested in other

potential incentives that we could provide in addition to or instead of those included in this notice. (We encourage commenters to focus on those incentives that could be implemented through EPA action.) Public comments will help us determine how and whether to include ~~this~~either option in the final rulemaking.

a. What is EPA considering? ~~EPA is~~Option 1: We are considering several kinds of flexibility for areas subject to subpart 2 whose land use development meet certain criteria. First, we would allow these areas to be covered under the new source review program under subpart 1 rather than under subpart 2 if: (a) they adopt specified land use measures into their SIPs; and~~,~~ (b)they demonstrate that air quality would not decrease as a result of using subpart 1 instead of subpart 2. This demonstration would have to quantify the emissions reductions from adopted land use measures in their SIPs and ~~showing~~show that the emission decreases from the land use measures are sufficient to offset any potential increase in emissions from using subpart 1 instead of subpart 2. Second, we would ~~lower~~raise the NSR major source thresholds for CADC areas to make them similar for those under the PSD provisions. Third, we would allow development zones, areas that meet certain development criteria, to receive NSR offsets from "pools" or "banks" of offsets established by the State. (A pool would be created

by the State taking action, or requiring others to take actions, that create emission reduction credits that meet the criteria for NSR offsets. The State would then collect these ~~offsets~~credits and ~~they could~~ distribute them to new development that would occur in specific areas.) We believe that these actions would help steer development to development zones—

, where there should be lower VMT and congestion and, therefore, fewer air emissions from the transportation sector than had the development occurred elsewhere. We request comments on whether an area should receive all three incentives or only one or two of them.

Option 2: We are also considering a less ambitious program of incentives that focuses on the development zones. In this option, the reduced emissions calculated to result from the application of improved development patterns are used to create offset pools for use by sources in development zones. We believe that this would also help steer development toward development zones, providing the same benefits discussed above. This differs from Option 1 in which the area must demonstrate that the reduced emission that result from changes in land development are sufficient to offset the increase in emissions that would be expected to result from the application of more flexible NSR program. In this Option the area must make the same calculation of

the expected reductions that would result from the changes in development patterns but instead of comparing that result to another calculation the results are used to create an offset pool for use in the development zones.

The main advantage to a CADC under Option 2 compared to one under Option 1 is that the offset pool could start with considerably more offset credits and, therefore, ~~reduced air emissions from the transportation sector than had~~the credits would not have to be created through additional actions. It would also have the potential of more carefully targeting new development just to the development ~~occurred elsewhere due to.~~

~~b~~zone instead of anywhere in the CADC.

b. What would a CADC be? A CADC would be a community that changes its development patterns in such a way that air emissions within the non-attainment area are demonstrably reduced. A CADC does not have to be, and in most cases probably would not be, an entire metropolitan area covered by a SIP. A portion of an area could be designated a CADC. We expect that this would occur in those cases where the land use changes did not result in a large enough reduction in emissions that the entire area could qualify. It should be noted, however, that if a smaller CADC was designated, any analysis of the effect of any changes in development would have to reflect and consider effects on the

nonattainment area as a whole.

c. What would a development zone be? We propose that areas that meet certain criteria would be considered "development zones," and new sources in these development zones could receive offsets from State offset pools. The following are a list of criteria that we could use to define those zones. Our goal is to identify zones which promote environmentally sound development, the preservation of regionally or locally designated open space, and sites which have adequate, existing infrastructure. Areas would, for example, have to be:

- Located within an 8-hour ozone nonattainment area
- Located within an "urbanized area" as defined by the U.S. Census Bureau[74]
- Zoned for industrial use
- Located within 0.25 miles of rail freight facilities
- Located within 0.5 mile of fixed rail or express bus transit service.
- Designated or qualifies for designation as a Federal or State redevelopment zone.
- Enrolled in a State brownfield remediation plan.
- Designated industrial corridor.

We specifically request comment on these criteria including whether these criteria are appropriate, whether they would need to be modified, or whether others should be included, and, if so, how. We also request comment on whether an area

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[74]Urbanized area - an area consisting of a central place (s) and adjacent urban fringe that together have a minimum residential population of at least 50,000 and generally an overall population density of at least 1,000 people per square mile of land area. Definition found at: http://www.census.gov/geo/tiger/gloss.pdf

must meet all or just some of the criteria to qualify.

d. Why is EPA proposing these ideas? ~~EPA~~We would like to encourage land use practices that reduce emissions, and one possible way could be via NSR program flexibility. ~~The EPA~~We recognize~~s~~ that the way land use occurs in an area can affect emissions that result from the on-road transportation sector. Areas can already include the emissions impacts of their land use choices within their motor vehicle emissions budgets in the SIP, as well as in their transportation conformity determinations. ~~The EPA~~We would like to encourage areas to adopt land use practices that result in fewer emissions even further, by alternatively allowing areas to apply the benefits from certain land use measures to the stationary source sector and creating special NSR flexibilities for areas that do so.

~~c~~e. If areas receive NSR flexibility for adopting land use measures, can the air quality benefits of land use measures also be applied to the transportation sector? No. ~~The EPA~~We want~~s~~ to ensure that areas do not count the effects of a land use activity twice. If areas decide that they want to apply the emissions benefits that result from certain land use decisions toward NSR, then they cannot also include the air quality benefits of land use choices on the transportation side. Therefore, areas that choose to pursue these NSR flexibilities would not be able to include the

effects of land use in their motor vehicle emissions budgets in the SIP, or in the area's transportation conformity determinations. We recognize that this means that areas will have to decide for themselves whether to use the reductions in transportation conformity or for NSR. For many communities this could be a difficult decision that would require the input of many stakeholders representing both the mobile and stationary source sectors as well as the general public.

To help areas avoid double counting, ~~EPA~~we intend~~s~~ to give credit only for new measures that are adopted in response to this proposal. This approach would ensure that the proposal acts as an incentive to encourage new actions that will reduce emissions. Such an approach could, however, be seen as unfairly penalizing areas that have already taken positive actions. We request comment on how best to balance the issues of ensuring fair treatment for all areas, preventing double counting and making this proposal an effective incentive.

Areas ~~could~~would continue to include existing land use measures in their SIP motor vehicle emissions budgets~~-~~ and in their conformity determinations, and apply the reductions from newly adopted land use measures to demonstrate they qualify for the incentives offered here. Quantifying the air quality impacts of land use measures occurs in

transportation modeling (discussed below). Therefore, in a SIP submission that includes land use measures adopted to obtain NSR flexibility, areas would have to show ~~how~~ that their motor vehicle emissions~~ budgets have been adjusted so that the~~ budgets do not also include the effects of the newly adopted land use measures. ~~This approach would ensure that the proposal does act as an incentive to encourage new actions that will reduce emissions. Such an approach could, however, be seen as unfairly penalizing areas that have already taken positive actions. The EPA requests comment on how best to balance the issues of ensuring fair treatment for all areas, preventing~~We also recognize that there may be other, potentially easier ways to avoid double counting and ~~making~~encourages commentors to submit th~~is proposal an effective incentive.~~

~~d~~em.

f. How would areas quantify the benefits of land use choices? Areas would quantify the air quality benefits of land use through their transportation modeling process. The EPA's guidance, "Improving Air Quality Through Land Use Activities"[75] provides information about how land use

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[75] "Improving Air Quality Through Land Use Activities" Report. U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality. (EPA420-R-01-001, January 2001). Found at: http://www.epa.gov/otaq/transp/trancont/r01001.pdf

measures are modeled and possibly quantified. We request comment on other potential methods of quantifying the reductions.

Areas should be aware that quantifying the benefits of land use may not be an easy task. ~~The EPA~~We sees three potential difficulties in quantifying the benefits of land use for application to NSR on which we seek input. First, as stated above, it may be very complicated for areas to avoid double-counting. In order to reduce the risk of double counting, we would suggest that areas do two sets of modeling--one based on the current situation, and the second based on the changes made by the community. The difference between this "before and after modeling" would be the benefit of the changes. We recognize that this modeling may be complex and take time and resources. Complexities arise because in many areas across the country, transportation emissions are estimated using transportation and emissions models. The location where people live and work in an area - the area's development pattern - is the basis of transportation modeling. It may be difficult for areas to precisely quantify the emissions related to land use choices from this modeling, as the benefits of different land use choices are often not be explicitly quantified, but incorporated into the overall estimates. In doing this analysis, State should work closely with metropolitan

planning agencies.

Second, ~~EPA~~we seek~~s~~ comment on the potential difference in the time period over which benefits may be realized from land use strategies compared to the NSR program. Once a particular land use strategy is adopted, it may take several years before the change results in air quality benefits. For example, suppose an area decides to change its zoning regulations to encourage mixed-use development. This strategy may ultimately result in people eliminating vehicle trips because housing, employment, and shopping are located together. However, it may be several years before the zoning regulations actually result in differences in where people and businesses decide to locate. Of course, it should be noted that changes in the NSR program do not necessarily mean that new development will occur right away. To the extent that NSR applies to new development instead of on-site modifications~~than~~, the ~~timing issue~~period of time may be reduced. ~~The EPA~~We request~~s~~ comment on how to take this issue of timing into account in our proposal to give NSR flexibility for adopting land use measures.

~~e. What would a CADC be? A CADC would be a community that changes its development patterns in such a way that air emissions within the non-attainment area are demonstrably reduced. A CADC does not have to be, and in most cases probably would not be an entire metropolitan area covered by~~

~~a SIP. A portion of an area could be designated a CADC. The EPA expects that this would occur in those cases where the land use changes did not result in a large enough reduction in emissions that the entire area could qualify.~~

~~f~~g. How can land development affect air quality? As metropolitan areas continue to expand in both size and population, how and where development occurs has significant implications for environmental quality in general and air quality in particular. In areas where the development is characterized as spread out, low density, and auto-dependent, air pollution from mobile sources tends to increase because of the increased number of miles an individual has to travel for each trip. However, if areas adopt development practices that decrease VMT, automobile and truck emissions would be reduced. The impact of VMT on air quality has long been recognized as significant. The CAAA of 1990 require that the air quality impacts of transportation activities in nonattainment and maintenance areas be accounted for before these activities proceed via the transportation conformity process.

~~g~~h. What is the connection between land development and NSR? A major new source has the potential to be a major economic development generator for a region. ~~I~~For example, if a large new facility were to locate~~s~~ outside of the nonattainment area (in many cases this means outside of the

area with existing development, infrastructure and density) it ~~will~~would likely affect regional travel patterns. ~~A~~Such a facility that hires hundreds of people and is located where there are few opportunities to use alternative modes of transportation (e.g., mass transit or walking to work) usually ~~will~~would result in greater amounts of VMT and vehicle trips ("VT") per employee than a similar facility accessible by mass transit. A long-term effect of locating a large facility in an undeveloped area, particularly one that employs a large number of people, could be that it ultimately attracts additional development. For instance, if enough employees are at the site, the nearby area may become ripe for locating service industries (e.g. fast food, drycleaners, and gas stations). These developments are likely to mimic the existing pattern of sprawl: low density, auto-dependent, and single-use. The NSR program does not consider or offset these emissions, instead these emissions are considered in the transportation planning arena.

On the other hand if a hypothetical source chooses to locate in an area that is already developed, it may generate ~~less~~fewer VMT and therefore fewer emissions than one located in an undeveloped area. The source ~~will~~may be able to take advantage of the existing infrastructure, without the construction of new infrastructure elements (roads, sewer

lines, etc.) that result in their own air emissions and other environmental impacts. ~~Such l~~Location of the source in existing developed areas ~~will~~may result in reduced VMT, and ~~will~~may not open up new areas to development and encourage sprawl. With this option~~ EPA is~~, we are trying to recognize the indirect impacts of development. If communities use CADC techniques, they ~~will~~should, compared to communities that do not use such practices, offset some of the indirect emissions from new sources. The NSR program only considers the direct impacts from a development. This option tries to look more broadly at all the impacts of development. We would reduce the requirements of NSR in exchange for the reduced emissions from CADC practices.

A strategy that recognizes the relationships between stationary and mobile sources, as well as how these impacts affect total environmental quality, is one that will most effectively deal with today's environmental problems. That is why multiple offices in EPA--the Air office, the Water office, the Policy office and the Brownfields office--all have programs encouraging development patterns that reduce environmental impacts. These programs use a variety of tools: regulations, information, and partnerships to encourage such development. It would be consistent with these other Agency efforts to try and develop a way to use the NSR program to encourage CADC practices. It would also

be consistent with the many States and communities that are interested in accounting for the air quality benefits of their development choices.

~~h~~i. Are there other environmental impacts that result from land use choices? Yes, low density development patterns tend to disturb more land and create more impervious cover over a region (e.g., paved roads), harming a region's water quality and disrupting habitat. Because of the close interaction between development and the achievement of national environmental goals, EPA has long been engaged in addressing their environmental impacts. The Office of Water seeks to address the impacts of development through its watershed programs, non-point source programs, source water protection efforts, the National Estuary Program, and Total Maximum Daily Load programs. When EPA reviews projects under the National Environmental Policy Act, it examines the secondary and cumulative impacts of development generated by federal actions. The Brownfields Office, recognizing the necessity of engaging the private sector, has sought specifically to encourage development on brownfields.

~~i~~j. What are some of the land use strategies measures included in ~~Improving~~"Improving Air Quality Through Land Use Activities?"~~?~~ The guidance includes a number of different activities~~,~~; a sampling of them includes:

- Grant incentives to build concentrated activity

centers: encouraging pedestrian and transit travel by creating high density mixed use nodes that can be easily linked by a transit network.

- Change zoning regulations to allow or encourage mixed-use development; this encourages pedestrian travel by putting compatible land uses next to each other.
- Build, or require developers to install, pedestrian and bicycle facilities; and increase the number of sidewalks, paths, crosswalks, bike lanes, etc., to make walking and bike use safe.
- Transfer unused development capacity in outlying areas to increase density above existing limits in central areas and near transit nodes; this moves development away from outlying areas and toward already developed areas.
- Provide incentives such as reduced parking requirements to new infill development; this takes advantage of existing infrastructure and discourages driving. —

~~j~~ If we were to go forward with this concept, the Guidance would be formally incorporated by reference.

k. Does the CAA include the concept of increased flexibility in the NSR program in cases where development is targeted in appropriate areas? Yes, Section 173(a)(1)(B) replaces the traditional requirement that a new or modified stationary source in a nonattainment area obtain offsets with a growth allowance concept in specially designated zones to which "economic development should be targeted."

~~k. What criteria would areas have to meet to be eligible to receive NSR offsets from State offset pools? The EPA proposes that areas that meet certain criteria could be considered "development zones," and new sources in these development zones could receive offsets from State offset pools. The following are a list of criteria that EPA could~~

~~use to define those zones. The EPA's goal is to identify zones which promote environmentally sound development, the preservation of regionally or locally designated open space, and sites which have adequate, existing infrastructure. Areas would, for example, have to be:~~

- ~~Located within an 8-hour ozone nonattainment area~~
- ~~Located within an "urbanized area" as defined by the U.S. Census Bureau[65]~~
- ~~Zoned for industrial use~~
- ~~Located within 0.25 miles of rail freight facilities~~
- ~~Located within 0.5 mile of fixed rail or express bus transit service.~~

~~The EPA specifically requests comment on these criteria including whether these criteria are appropriate, should they be changed and if a site must meet all or just some of the criteria to qualify.~~

~~1. Are there other criteria EPA is considering? Yes EPA is also considering using the following criteria to define a development zone:~~

- ~~Designated or qualifies for designation as a Federal or State redevelopment zone.~~
- ~~Enrolled in a State brownfield remediation plan.~~
- ~~Designated industrial corridor.~~

~~We invite comment on what the criteria should be for an area to be eligible to receive offsets from State offset pools.~~

~~m~~ We recognize, however, that this proposal differs in many respects from Section 173.

l. Does this option mandate any changes to local land use decisions? No. The CAA, in Section 131, clearly supports the position that land use decisions are local. This option would simply recognize that areas that choose to develop in certain patterns are doing more to improve air quality and that such efforts should be rewarded.

~~nm~~. How would this option be enforced? Since the CADC measures would be ~~in~~incorporated into the SIP, they could not be changed without EPA approval of a SIP revision. If measures are changed, they must be replaced with other measures of equal or greater effectiveness, and otherwise meet the requirements of section 110(l) concerning anti-backsliding. Failure to do so would mean that ~~this~~the NSR benefit from either of the proposed options would no longer apply to the area. We understand that it does not have the authority to control local land use decisions. The choice always rests with the community; however, the community would not be able to take advantages of being a CADC unless the area's SIP contains the required measures. Should the area decide to change a land use measure in the SIP, we

would have to determine whether or not other new measures yield sufficient reductions to allow the area to remain a CADC and be able to take advantage of the NSR flexibilities proposed. We request comments on how best to enforce these options.

n. What are the relative advantages of the two options. The first option provides greater incentive for communities and is, therefore, more likely to encourage changes to land development policies. The second option is simpler since it does not make changes to NSR. As a result, unlike Option 1, Option 2 does not require the communities to estimate the increased emissions that could result from changing NSR applicability, which may be difficult.

o. What are the disadvantages of this proposal? In addition to the modeling issues discussed above in section ~~d~~f, there are several other issues associated with reducing NSR requirements for areas that adopt CADC land use measures. First, it~~-~~ may be difficult to ensure that the CADC land use measures are implemented by areas participating in the option. Also, it may be difficult to design penalty measures if those land use measures are not implemented by areas. By encouraging growth in established areas, this option may raise environmental justice concerns and result in unanticipated costs for low-income residents. Some States may have difficulties managing and tracking

offset pools. ~~The EPA~~We requests comment on all of these issues and how we can best resolve them.

10. Tribal Concerns. In addition, we expect that some Tribal areas will be designated as nonattainment because of pollution that is transported from the surrounding state(s) and will have little control over the ability of areas under their jurisdiction to attain the air quality standards. In the event that such an area fails to attain by the attainment date, additional flexibility for the Tribes will be needed to address the fairness issues created by transported nonattainment problems. Tribes have asked that we consider providing offset set-asides in order to address these issues. We request comment on whether emission offset set-asides, possibly generated by innovative measures to promote additional emission reductions, are an appropriate method to help level the playing field for the Tribes in order to support economic development in Tribal areas. In any case, we believe that some provisions will need to be made for Tribal areas, because they will have limited ability, if any, to generate offsets on their own. ~~The EPA~~We may also need to work with States to help provide the Tribes access to offsets from non-Tribal areas. Also, it is important to recognize that the NO_x SIP Call does not provide for an emissions budget for Tribes. Therefore, we are asking for comments on how to provide a set-aside to

provide fair access to development in these areas.

~~O~~P. How will EPA ensure that the 8-hour ozone standard will be implemented in a way which allows an optimal mix of controls for ozone, $PM_{2.5}$, and regional haze?

1. Could an area's 8-hour ozone strategy affect its $PM_{2.5}$ and/or regional haze strategy?

Many of the areas that are violating either the 8-hour ozone or $PM_{2.5}$ NAAQS, may be violating both of these NAAQS. Thus, in many cases, States will have ozone and $PM_{2.5}$ nonattainment areas with overlapping boundaries. Requirements for regional haze apply to all areas. Each State is responsible for developing SIP revisions to meet all the requirements relevant to each nonattainment area for each pollutant as well as developing a regional haze plan. In some cases, ozone control measures may also be useful for a $PM_{2.5}$ control strategy or a regional haze plan. Similarly, controls for $PM_{2.5}$ may lead to reductions in ozone or regional haze. For example, considered in isolation, a metropolitan area's ozone strategy might be based on additional VOC emissions reductions; if the area needs NO_x reductions for $PM_{2.5}$ attainment, however, an optimal approach might include a more complex ozone strategy using both NO_x and VOC reductions. We believe integration of ozone and $PM_{2.5}$ attainment planning will reduce overall costs of meeting multiple air quality goals.

Many of the factors affecting concentrations of ozone also affect concentrations of $PM_{2.5}$. Emissions of NO_x and/or VOC will lead to formation of organic particles and the precursors of particulate nitrate, as well as ozone. The presence of ozone is an important factor affecting $PM_{2.5}$ formation; as ozone builds up, so do OH^- radicals which are instrumental in oxidizing gas phase SO_2 to sulfuric acid. The sulfuric acid may be converted to sulfate particles, increasing the $PM_{2.5}$ concentration. Further, the local ozone concentrations may be decreased by the reaction of ozone with nitric oxide; thus, in some large urban areas, a decrease in local NO_x emissions can result in higher local ozone concentrations, leading to higher OH^- radical concentrations and increases in secondary $PM_{2.5}$. Because the precursors for ozone and $PM_{2.5}$ may be transported hundreds of kilometers, regional scale impacts may also need to be considered.

2. <u>What guidance has EPA provided regarding ozone, $PM_{2.5}$ and regional haze interaction</u>?

As described in an earlier section of today's proposed rulemaking, States must develop ozone attainment demonstrations for many nonattainment areas. General criteria for attainment demonstrations are contained in 40 CFR part 51, Appendix W (i.e., "<u>EPA's Guideline on Air Quality Models</u>"). The EPA's May 1999 draft "Guidance on the

Use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" provides a set of general requirements that an air quality model should meet to qualify for use in an attainment demonstration for the 8-hour ozone NAAQS. The draft guidance encourages States to integrate ozone control strategies with strategies designed later to attain the NAAQS for $PM_{2.5}$ and to meet reasonable progress goals for regional haze. In addition, the draft guidance presents some modeling/analysis principles to help States develop data bases and capabilities for considering joint effects of control strategies for ozone, $PM_{2.5}$ and regional haze. Because emissions and meteorological conditions vary seasonally, the guidance recommends assessing the effects of an ozone control strategy on annual $PM_{2.5}$ concentrations by estimating effects on mean $PM_{2.5}$ for each season and using the resulting information to estimate annual impacts. Emission estimates for VOC, NO_x, primary $PM_{2.5}$, sulfur dioxide and ammonia will be needed. In addition, the modeling should separately estimate the effects of the ozone strategy on the major components of $PM_{2.5}$: mass associated with sulfates, nitrates, organic carbon, elemental carbon, and all other species. ~~The EPA~~We believe~~s~~ that this approach is adequate to ensure that the 8-hour ozone standard will be implemented by States in a way that allows an optimal mix of controls for ozone, $PM_{2.5}$, and

regional haze.

Similarly, EPA's attainment demonstration guidance for $PM_{2.5}$ and regional haze states that models intended to address secondary PM problems should also be capable of simulating ozone formation and transport (January 2, 2001 "Guidance for Demonstrating Attainment of Air Quality Goals for $PM_{2.5}$ and Regional Haze"). The formation and transport of secondary PM are closely related to processes that are important in the formation and transport of ozone. Thus, it makes sense for programs designed to control ozone to be cognizant of programs to reduce $PM_{2.5}$ and improve visibility and vice versa. The $PM_{2.5}$ guidance suggests conducting a "mid-course review" of an approved $PM_{2.5}$ plan to review changes in air quality resulting from implementation of plans to reduce $PM_{2.5}$, regional haze, and ozone. (The EPA guidance on mid-course review of attainment demonstrations is described earlier in today's proposed rulemaking.)

~~The EPA~~We realize~~s~~ that in some cases development of control plans will be complicated by the need to assess the impact of the precursors of ozone, $PM_{2.5}$, and regional haze. The question arises whether such areas may be provided more time to perform the more complicated analyses such that an effective multi-pollutant strategy may be developed. However, the statute provides no express relief for these situations. Thus, the State is still responsible for

developing and submitting demonstrations which show that each standard will be attained by the applicable date or dates provided.

3. What is EPA proposing?

Today, ~~EPA~~we propose~~s~~ to continue its policy of encouraging each State with an ozone nonattainment area which overlaps or is nearby a $PM_{2.5}$ nonattainment area to take all reasonable steps to coordinate the required revisions for these nonattainment areas and meet reasonable progress goals for regional haze. Specifically, ~~EPA~~we encourage~~s~~ States conducting modeling analyses for ozone to separately estimate effects of a strategy on the following: mass associated with sulfates, nitrates, organic carbon, elemental carbon, and all other species. ~~In addition, EPA invites comment on the alternative approach of requiring States to conduct these additional analyses.~~

~~R~~Q. What emission inventory requirements should apply under the 8-hour ozone NAAQS?

The Consolidated Emissions Reporting Rule (CERR)(67 FR 39602, June 10, 2002) has established basic emission inventory requirements. Specific SIP-related inventory issues will be detailed in a guidance document. An important difference between inventories submitted in response to the CERR and SIP inventories is the issue of approvability. While it is likely that an inventory

submitted under the CERR would be identical to the inventory submitted as part of a SIP, the SIP inventory will need to go through public hearing and formal approval by EPA as a SIP element. This public process can be combined with the public process the State undertakes for other SIP elements. The following discussion presents more details on the emission inventory.

Emission inventories are critical for the efforts of State, local, and Federal agencies to attain and maintain the NAAQS that EPA has established for criteria pollutants including ozone. Pursuant to its authority under section 110 of title I of the CAA, EPA has long required States to submit emission inventories containing information regarding the emissions of criteria pollutants and their precursors. The EPA codified these requirements in 40 CFR part 51, subpart Q in 1979 and amended them in 1987.

The 1990 CAA Amendments revised many of the provisions of the CAA related to attainment of the NAAQS and the protection of visibility in mandatory Class I Federal areas (certain national parks and wilderness areas). These revisions established new periodic emission inventory requirements applicable to certain areas that were designated nonattainment for certain pollutants. In the case of ozone, section 182(a)(3)(A) required that States submit an emission inventory every 3 years for nonattainment

areas beginning in 1995 for calendar year 1993. The inventory must include emissions of VOC, NO_x, and carbon monoxide (CO) for point, area, mobile (on-road and non-road), and biogenic sources.

In 1998, EPA promulgated the NO_x SIP Call (§51.121) which calls on the affected States and the District of Columbia to submit SIP revisions providing for NO_x reductions in order to reduce the amount of ozone and ozone precursors transported across State borders. As part of that rule, EPA established emissions reporting requirements for States subject to the SIP Call.[76]

In 2002, EPA promulgated the CERR. 67 FR 39602 (June 10, 2002). The CERR consolidates the various emissions reporting requirements that already exist into one place in the CFR, establishes new reporting requirements for $PM_{2.5}$ and its precursors and establishes new requirements for the Statewide reporting of area source and mobile source emissions.

The CERR establishes two types of required emission inventories:

- Annual inventories, and

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[76]Although the United States Court of Appeals has remanded certain limited issues regarding the NO_x SIP Call to the Agency, those issues do not include the reporting requirements. See *Michigan v. EPA*, 213 F. 3d 663 (D.C. Cir. 2000), and *Appalachian Power Co. v. EPA*, 251 F. 3d 1026 (D.C. Cir. 2001).

- The emission inventory is used as a tracking metric by some programs such as emission trading, NSR offsets trading and RFP. This requires that a year is designated as a "baseline" year and used as the reference for the particular program.

An external review draft of the emission inventory guidance titled "Emission Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" is available at: http://www.epa.gov/ttn/chief/eiinformation.html. Comments on this document are due at the same time as comments on this proposed rulemaking. However, the review of the emission inventory guidance is not part of this proposed rulemaking. Comments submitted on the emission inventory guidance should be identified as such and will not be docketed nor will a comment/response summary of these comments be a part of the final 8-hour ozone implementation rule. Instructions on how to submit comments are included with the draft guidance document.

~~S~~R. What guidance should be provided that is specific to Tribes?

This section summarizes guidance for Tribes offered in various parts of this proposal. The TAR (40 CFR Part 49), which implements section 301(d) of the CAA, gives Tribes the option of developing TIPs. Unlike States, Tribes are not required to develop implementation plans. Specifically, the

TAR, adopted in 1998, provides for the Tribes to be treated in the same manner as a State in implementing sections of the CAA. The EPA determined in the TAR that it was inappropriate to treat Tribes in a manner similar to a State with regard to specific plan submittal and implementation deadlines for NAAQS-related requirements, including, but not limited to, such deadlines in CAA sections 110(a)(1), 172(a)(2), 182, 187, and 191. See 40 CFR 49.4(a). If a Tribe elects to do a TIP, ~~EPA~~we will work with the Tribe to develop an appropriate schedule which meets the needs of each Tribe, and which does not interfere with the attainment of the NAAQS in other jurisdictions. The Tribe developing a TIP can work with the EPA Regional Office on the appropriateness of applying RFP and other SIP requirements that may or may not be appropriate for the Tribe's situation.

The TAR indicates that EPA is ultimately responsible for implementing CAA programs in Indian country, as necessary and appropriate, if Tribes choose not to implement those provisions. For example, an unhealthy air quality situation in Indian country may require EPA to develop a FIP to reduce emissions from sources on the reservation. In such a situation, the EPA, in consultation with the Tribe and in consideration of their needs, would work to ensure that the NAAQS are met as expeditiously as practicable.

Likewise, if ~~EPA~~we determine~~s~~ that sources in Indian country could interfere with a larger nonattainment area meeting the NAAQS by its attainment date, ~~EPA~~we would develop a FIP for those sources in consultation with the Tribe, as necessary and appropriate.

The TAR also provides flexibility for the Tribe in the preparation of a TIP to address the NAAQS. If a Tribe elects to develop a TIP, the TAR offers flexibility to Tribes to identify and implement - on a Tribe-by-Tribe, case-by-case basis - only those CAA programs or program elements needed to address their specific air quality problems. In its proposed Tribal rule, ~~EPA~~we described this flexible implementation approach as the "modular approach." Each Tribe may evaluate the particular activities, including potential sources of air pollution within the exterior boundaries of its reservation (or within non-reservation areas for which it has demonstrated jurisdiction), which cause or contribute to its air pollution problem. A Tribe may adopt measures for controlling only those sources or ozone precursor emissions, as long as the elements of the TIP are "reasonably severable" from the package of elements that can be included in a whole TIP. A TIP must include regulations designed to solve specific air quality problems for which the Tribe is seeking EPA approval, as well as a demonstration that the Tribal air agency has the authority

from the Tribal government to develop and run their program, the capability to enforce their rules, as well as the resources to implement the program they adopt. In addition, the Tribe must receive an "eligibility determination" from EPA to be treated in the same manner as a State and to receive authorization from EPA to run a CAA program.

~~The EPA~~We would review and approve, where appropriate, these partial TIPs as one step of an overall air quality plan to attain the NAAQS. A Tribe may step in later to add other elements to the plan, or EPA may step in to fill air quality gaps as necessary and appropriate. In approving a TIP, ~~EPA~~we would evaluate whether the plan interferes with the overall air quality plan for an area when Tribal lands are part of a multi-jurisdictional area.

Because many of the nonattainment areas will include many jurisdictions, and in some cases both Tribal and State jurisdictions, it is important for the Tribes and the States to work together to coordinate their planning efforts. States need to incorporate Tribal emissions in their base emission inventories if Indian country is part of an attainment or nonattainment area. Tribes and States need to coordinate their planning activities as appropriate to ensure that neither is adversely affecting attainment of the NAAQS in the area as a whole.

T. <u>What are the requirements for OTRs under the 8-hour</u>

ozone standard?

Section 176A of subpart 1 provides the authority to establish interstate transport regions where transport of air pollutants from one or more States contributes significantly to a violation of a NAAQS in one or more other States. When a transport region is established, section 176A requires that a transport commission, comprised of representatives from the States in the transport region, also be established. The role of the transport commission is to assess the degree of interstate transport of the pollutant and precursors throughout the transport region and to evaluate strategies for mitigating the interstate pollution.

Section 184 of subpart 2 establishes additional provisions for OTRs. Section 184(a) specifically established an OTR comprising 12 Northeast and Mid-Atlantic States and the District of Columbia in order to address the longstanding problem of interstate ozone pollution in that region. The general provisions of section 176A apply to any OTR established under section 184. To date, the existing OTR is the only transport region for any pollutant that has been established and is subject to the section 176A requirements.

Section 184(b) of subpart 2 sets forth specific VOC and NO_x control requirements to be applied throughout the entire

OTR, in both attainment and nonattainment areas, to reduce interstate pollution. These additional regional control requirements are part D NSR (for VOC and NO_x), RACT (for VOC and NO_x), enhanced vehicle I/M, and Stage II vapor recovery (for vehicle refueling) or a comparable measure. Some of these requirements duplicate requirements for ozone nonattainment areas that are classified under subpart 2.

~~The EPA~~We believe~~s~~ the clearest legal interpretation of section 184 is that the current OTR and section 184 control requirements apply for purposes of the 8-hour standard. ~~The EPA~~We believe~~s~~ that this interpretation would not result in any ~~additional~~ new control requirements for any area in the OTR because these control requirements are not associated with an area's designation or classification and already apply region wide under the 1-hour ozone standard. Rather, these statutory obligations would remain in place for areas in the existing OTR. If a new OTR is established for purposes of the 8-hour standard pursuant to section 176A, that area would also be subject to the provisions and additional control requirements of section 184.

Because all areas in the existing OTR, including attainment areas, are subject to part D NSR for NO_x and VOC and a number of other control measures, areas in the OTR would not be able to take full advantage of either the transitional option proposed for NSR or the Agency's

existing approach for early reductions, both of which are discussed elsewhere in this proposed rulemaking.

~~U~~T. Are there any additional requirements related to enforcement and compliance?

Section 172(c)(6) requires nonattainment SIPs to "include enforceable emission limitations, and such other control measures, means or techniques . . . as well as schedules and timetables for compliance , as may be necessary or appropriate to provide for attainment . . ." The current guidance (Guidance on Preparing Enforceable Regulations and Compliance Programs for the 15 Percent Rate-of-Progress Plans (EPA-452/R-93-005, June 1993) is relevant to rules adopted for SIPs under the 8-hour ozone NAAQS and should be consulted for purposes of developing appropriate nonattainment plan provisions under section 172(c)(6). This document provides States with guidance on how to prepare enforceable stationary and mobile source regulations for their ROP plans. Developing clear, concise, enforceable rules and establishing strong compliance programs helps to ensure that the emissions reductions projected for specific control strategies are actually achieved. The document identifies the minimum criteria and the information sources that ~~EPA~~we will use to evaluate the enforceability of regulations, and to determine compliance with Federal guidelines and regulations. States should follow the

guidelines provided in this document as part of their quality assurance process involved in the development of control measures for their ROP plans and their attainment demonstrations.

~~V~~U. What requirements should apply to emergency episodes?

Currently, subpart H of 40 CFR part 51 specifies requirements for SIPs to address emergency air pollution episodes and for preventing air pollutant levels from reaching levels determined to cause significant harm to the health of persons. ~~The EPA~~We anticipate~~s~~ proposing a separate rulemaking in the future to update portions of that rule. This separate rulemaking may be done in conjunction with revisions to the emergency episode rules that will address the $PM_{2.5}$ NAAQS.

~~W~~V. What ambient monitoring requirements will apply under the 8-hour ozone NAAQS?

Ozone monitoring data play an important role in designations, control strategy development, and related implementation activities. The ambient monitoring requirements are listed in 40 CFR part 58.

~~The EPA~~We plan~~s~~ to modify these existing ozone monitoring requirements as part of the National Air Monitoring Strategy. These changes are being undertaken in a separate rulemaking effort. ~~The EPA~~We plan~~s~~ to propose a national strategy introducing NCore (national core

monitoring sites) as a replacement for traditional national air monitoring stations/State and local air monitoring stations (NAMS/SLAMS) monitoring currently codified at 40 CFR part 58.

Part of the NCore network[77] would include the existing ozone monitoring sites that currently support the NAAQS-related activities. The number and location of the original sites would likely be very similar to the current network. The regulatory modifications are expected to include ozone monitoring requirements based upon the population of an area and its historical/forecasted ozone air quality values.

In addition, we anticipate that we will include a requirement for measuring multiple air pollutants at select locations. The NCore sites are expected to include high-sensitivity nitrogen oxide (NO) and total reactive oxides of nitrogen (NOy) measurements at locations across the nation to support the tracking of national emission strategy efforts such as the NO_x SIP Call and, if created, a statute codifying the Clear Skies Bill, which addresses NO_x reductions across the nation.

Each State, local, and Tribal air monitoring agency is being asked to assess the adequacy of its air pollution

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[77]A description of the NCore can be found at the following web site: http://www.epa.gov/ttnamti1/files/ambient/monitorstrat/sec4.pdf.

monitoring networks, including those sites that measure ozone. ~~The EPA~~We will work with these agencies to develop network plans to ensure approval of all network designs. On a local basis, there will be some relocation, addition and removal of ozone sites as a result of regional network assessments.

The CAA requires that ozone precursor monitoring be conducted in any ozone nonattainment area classified as serious, severe, or extreme. ~~The EPA~~We adopted regulations reflecting the statutory requirements in 40 CFR part 58 in 1994 as the Photochemical Assessment Monitoring Stations (PAMS) program. Areas that would be designated under the 8-hour ozone NAAQS are not directly addressed in 40 CFR part 58 for ozone precursor monitoring.

The PAMS monitoring will be retained in areas currently designated as 1-hour ozone serious, severe, and extreme nonattainment areas. The monitoring strategy regulation revisions will consider the possibility of reducing some of the sampling schedules. ~~The EPA~~We also intends to promote the use of individually designed PAMS networks to address the very specific ozone and ozone precursor data needs in PAMS areas.

The revised regulation will also cover all areas that are classified as serious or above for the 8-hour NAAQS. Once an area is bumped up to serious or above, it would be

subject to the enhanced monitoring rule and would be required to develop appropriate PAMS plans. ~~These plans must take advantage of NCore level 2 stations~~Where practical, PAMS stations should be incorporated into multi-pollutant NCORE level 2 sites[78] that include NOy, meteorological and CO (a good indicator of mobile emission measurements.) Alternative plans are recommended for 8-hour bump-up areas. This will be reflected in the 40 CFR part 58 changes as well.

~~X~~W. When will EPA Require 8-hour attainment demonstration SIP Submissions?

1. Background

The time for submission of attainment demonstration SIPs is linked to whether the requirements are specified under subpart 1 or subpart 2. In general, all areas designated nonattainment are subject to the planning requirements of subpart 1. However, if the area is subject to a more specific requirement under subpart 2, the subpart 2 planning obligation controls. As proposed elsewhere in the discussion concerning classification options, some, if not all, 8-hour ozone standard nonattainment areas will be subject to the subpart 2 planning obligations.

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[78]A description of the NCore level 2 stations can be found at the following web site: http://www.epa.gov/ttnamti1/files/ambient/monitorstrat/sec4.pdf.

Section 172(b) (in subpart 1) provides that at the time EPA promulgates the designation of an area as nonattainment with respect to a NAAQS under section 107(d), the Administrator shall establish a schedule for submission of a plan that meets the CAA's requirements for nonattainment areas. This schedule may not extend beyond 3 years after the date of nonattainment designation.

Under subpart 2 of the CAA, attainment demonstration SIP submission deadlines for areas designated nonattainment for the 1-hour ozone standard are linked to the date of enactment of the CAA Amendments, i.e., from November 15, 1990. This date is also the date by which most of these areas were designated and classified by operation of law. See CAA section 107(d)(1)(C) and 181(a). Moreover, in subpart 1, Congress linked the time for SIP submission to the time of designations. See CAA section 172(b). Because such dates have long since passed, ~~EPA~~we believe~~s~~ that it is reasonable to tie the SIP submittal dates to the date of nonattainment designations and classifications for the 8-hour standard.[79] While the submission date for all SIP requirements in subpart 2 will be tied to the date of nonattainment designations, this section of the proposed

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[79] Since ~~EPA~~we anticipates that areas will be designated and classified on the same date, we will use the term "designation" to represent the date of designation and classification.

rule discusses the requirement to submit an attainment demonstration. For purposes of the discussion here, ~~EPA is~~we are assuming that designations will occur in 2004.

Subpart 2 requires attainment demonstration submissions at different times depending on an area's classification. Section 182(a) does not require an attainment demonstration for marginal areas. Section 182(b)(A)(1) requires moderate areas to submit an attainment demonstration no later than 3 years after the date of enactment. Section 183(c)(2) requires serious (and higher classified) areas to submit an attainment demonstration no later than 4 years after date of enactment. As provided above, ~~EPA~~we propose~~s~~ to interpret these times to run from the date of an area's nonattainment designation. Despite the fact that the Act's provisions for the timing of submission of attainment demonstration SIPs for subpart 1 areas differs from that of subpart 2 areas, ~~EPA~~we do~~es~~ not believe it is appropriate or desirable to require States to submit attainment demonstrations for areas designated nonattainment under the 8-hour standard at greatly different times. ~~The EPA~~We recognize~~s~~ that photochemical grid modeling--required by the CAA for interstate moderate nonattainment areas, as well as serious and higher-classified areas--will be performed on large enough scales to address transport and will in most cases encompass a number of nonattainment areas. These numerous

nonattainment areas may differ by classification (some areas may be intrastate moderate areas, some inter-state moderate areas, and others serious and above nonattainment areas). Some areas that may require attainment demonstrations may be subject to subpart 1 while others may be subject to subpart 2. Furthermore, the control strategies that may be modeled for all the areas in the modeling domain will likely be modeled simultaneously, especially if all the areas are located in a single State. Also, ~~EPA~~we believe~~s~~ that techniques for photochemical grid modeling, while they were more time-consuming when the 1990 CAAAs were enacted, are now more standardized and less time-consuming. In light of this, ~~EPA~~we do~~es~~ not believe it is reasonable to defer submission of attainment demonstrations beyond 3 years after designation.

The TAR, which implements section 301(d) of the CAA, gives Tribes the option of developing TIPs. Specifically, the TAR provides for the Tribes to be treated in the same manner as a State in implementing most of the CAA. However, in the TAR, EPA determined that it was inappropriate to treat Tribes in a manner similar to a State with regard to schedules. Therefore, Tribes are not required to submit a TIP, nor, if they choose to submit a TIP, are they required to submit a TIP in the same timeframe as the States. Where a Tribe chooses to develop a TIP, ~~EPA~~we will work with them

to develop an appropriate schedule that meets the needs of the Tribe but does not interfere with timely attainment of the NAAQS on Tribal land or in other jurisdictions.

2. Option being proposed

In light of the above discussion and rationale, ~~EPA is~~we are proposing to require all nonattainment areas that are required to perform photochemical grid modeling--regardless of coverage under subpart 1 or 2 or regardless of classification under subpart 2--to submit an attainment demonstration within 3 years after designation.

~~The EPA~~We believe~~s~~ this proposal would result in a closer synchronization of the 8-hour ozone and $PM_{2.5}$ attainment demonstration SIP submittal dates. ~~The EPA~~We discussed the integration of ozone and $PM_{2.5}$ schedules at the three public meetings and numerous conference calls that were held with stakeholder groups. A majority of commenters were supportive of integrating the SIP attainment plan submission schedules for ozone and $PM_{2.5}$ because integration would optimize control strategies, save time and planning resources, streamline deadlines, and maximize cost effectiveness, among other benefits.

The $PM_{2.5}$ standard is anticipated to be implemented under subpart 1 of the CAA, which requires a SIP submission by a date set by EPA, which can be no later than 3 years from designation. Since ~~EPA is~~we are proposing that all 8-

hour ozone nonattainment areas that are required to perform photochemical grid modeling submit their attainment demonstration SIPs within 3 years after nonattainment designation, this would result in a high degree of synchronization and thus allow comprehensive analyses that would evaluate controls to attain both air quality standards. As noted above, ~~EPA is~~we are assuming for this proposed rulemaking that ozone designations will be promulgated in the 2004 timeframe; currently under TEA-21, designations for $PM_{2.5}$ would occur beginning in 2004, and must be completed by the end of 2005. Thus, the later-designated $PM_{2.5}$ areas would not be required to submit their attainment demonstration SIPs until after the ozone SIPs are due. Additional discussion of the benefits of integrating the planning for both standards appears elsewhere in this proposed rulemaking.

VII. PROPOSAL OF INTEGRATED FRAMEWORKS USING VARIOUS OPTIONS

As noted above, ~~EPA is~~we are presenting two possible integrated frameworks that comprise ~~one or more~~an option~~s~~ from each of the above implementation elements to illustrate how they may work in conjunction with each other. In addition to soliciting comment on the options presented for the individual elements, ~~EPA is~~we are also soliciting

comment on how the options can be grouped into an integrated implementation framework. The following frameworks should be considered illustrative of possible ways of combining the element options. For final rulemaking, however, ~~EPA~~we may develop a consolidated framework that uses a different combination of the options proposed above, based on comments received and other information that comes to light during the public comment period.

~~The EPA is~~We are proposing for comment two integrated frameworks:

- Framework 1-an approach considered similar to traditional implementation,
- Framework 2-an approach considered more flexible than traditional implementation.

Table 5 illustrates how ~~the~~ element options ~~are~~may be combined together to form these two frameworks. Elements for which ~~EPA is~~we are proposing only one option would be common to either framework. For elements for which we are proposing several options, only one option has been selected for purposes of illustrating the frameworks depicted below.

In addition, there are several proposed elements where options are presented that only apply to areas that would be covered by subpart 1; these elements include RACT for subpart 1 areas and the NO_x waiver requirement as it would apply to subpart 1 areas. These elements are also not shown in Table 5 below, since they are only applicable to subpart

1 areas.

TABLE 5

8-HOUR OZONE NAAQS IMPLEMENTATION
ELEMENTS/OPTIONS GROUPED INTO FRAMEWORKS FOR PROPOSAL

(This table only summarizes the options and approaches; the full description of the approach or option in the proposed rulemaking should be consulted)

IMPLEMENTATION ELEMENT	FRAMEWORK 1	FRAMEWORK 2
A. Classification of nonattainment areas	Opt 1: Classify all areas under subpart 2 using 8-hour design values	Opt 2: Areas with a 1-hour design value ≥ 0.121 ppm would be classified under subpart 2 using 8-hour design values. Areas with a 1-hour design value < 0.121 ppm would be covered under subpart 1.
B. Classification of subpart 1 areas	All areas would be classified under subpart 2	Opt 1: no classification. ~~OR~~ ~~Opt 2: an interstate transport classification, this option may be implemented by itself or in combination with option 1~~

IMPLEMENTATION ELEMENT	FRAMEWORK 1	FRAMEWORK 2
C. Anti-backsliding for obligations of areas that are designated nonattainment for the 1-hour ozone standard (~~i.e., period of time that these obligations remain "applicable requirements"~~when the State may move the mandatory measures to a maintenance plan in the SIP and treat them as contingency measures)	Until the area attains the 8-hour ozone standard and is designated attainment	Until the area achieves the level of the 1-hour standard

IMPLEMENTATION ELEMENT	FRAMEWORK 1	FRAMEWORK 2
D.1. 15 percent VOC ROP requirement	Opt 1: All areas classified as moderate or above must achieve a 15 percent reduction in VOC emissions for the first 6 years after the base year (2002).	Opt 2: A moderate area that already achieved a 15 percent VOC reduction for the 1-hour ozone standard would be considered to have met the 15 percent requirement already and may instead implement RFP out to attainment under subpart 1. An areas classified as serious or above that already achieved a 15 percent VOC reduction would be considered to have met the 15 percent requirement, but is still responsible for RFP under subpart 2, viz., the additional average of three percent per year out to their attainment dates.
D.2. Baseline year for emission inventory for RFP/ROP	A 2002 baseline year for preparation of the emissions inventory.	
D.3. Restrictions on creditable measures for RFP/ROP under the 8-hour standard (subpart 2 areas only)	All emission reductions that occur after the baseline emissions inventory year from post-1990 Federal measures and any other measures would be creditable for ROP/RFP, except those specifically prohibited in section 182(b(1)(D).	
D.4. Areas covered by subpart 1-the RFP	All areas subject to subpart 2	a. <u>Areas with attainment dates 3 years or less after</u>

IMPLEMENTATION ELEMENT	FRAMEWORK 1	FRAMEWORK 2
requirement		designation. RFP requirement similar to that for marginal areas-- not subject to a separate RFP requirement. b. Areas with attainment dates between 3 to 6 years after designation. ~~2 options:~~ Option 1. RFP plan submission with the attainment demonstration within 3 years after designation. RFP SIP would have to show that all emissions reductions needed for attainment would be implemented by the attainment date. ~~Option 2. Requires these areas to be treated in a manner similar to moderate areas. RFP SIP would have to provide for a 15 percent emission reduction from the baseline year within 6 years after the baseline year. RFP SIP submission within 2 years after designation. NO_x emission reductions could be substituted for some or all of the 15 percent reduction requirement~~ c. Areas with attainment

VII. Other Considerations

A. Will EPA be contemplating incentives for areas that want to take early action for reducing ozone under the 8-hour standard?

This section discusses the extent to which ~~EPA~~we will provide incentives for areas that wish to voluntarily expedite the path to cleaner air by initiating early planning and control actions for reducing ground-level ozone prior to EPA's designations for the 8-hour ozone NAAQS. State, local and Tribal air pollution control agencies have continued to express a need for added flexibility in implementing the 8-hour ozone NAAQS, including incentives for taking action sooner than EPA requires for reducing ground-level ozone. ~~The EPA~~We encourage~~s~~ localities to make decisions that will achieve clean air sooner than otherwise is mandated by the CAA. Early planning and early implementation of control measures that improves air quality will likely accelerate protection of public health. This section is not part of the proposed rulemaking and therefore we are not entertaining comment on this section.

1. What are the Ozone Flex Guidelines for the 1-hour ozone NAAQS?

In June 2001 ~~EPA~~we announced the "Ozone Flex Guidelines" program (Ozone Flex), which supports and rewards

innovative, voluntary, local strategies to reduce ground-level ozone. Ozone Flex is a framework for local communities to develop voluntary solutions for areas concerned about potential future nonattainment of the ozone standards. While this program is only available to areas to address the 1-hour ozone standard, it provides a flexible approach for areas that are currently attaining the 1-hour ozone standard. Ozone Flex is intended to achieve emission reductions and avoid future nonattainment problems. It also recognizes that areas may secure emission reductions and public health benefits toward attaining the 8-hour ozone standard prior to EPA's designation of areas. These voluntary measures may be creditable to future planning efforts for the 8-hour standard, to the extent allowed by the CAA and EPA guidance or rules. Any emission reductions targeted for a period after the base year would provide "credit" for a State, local, or Tribal area in any future plan. Emission reduction credits toward meeting RFP are discussed elsewhere in this proposed rulemaking.

2. <u>What is the "Early Action Compact" for implementing the 8-hour ozone NAAQS</u>?

Following EPA's issuance of the "Ozone Flex Guidelines" for continued attainment of the 1-hour standard, the Texas Commission on Environmental Quality (TCEQ) encouraged EPA to consider additional incentives for early planning towards

achieving the 8-hour ozone NAAQS. On March 20, 2002, the TCEQ submitted to EPA the *Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-hour Ozone Standard (Protocol)*. The Protocol was designed to achieve emissions reductions and clean air sooner than would otherwise be required under the CAA for implementing the 8-hour ozone NAAQS. The TCEQ proposed that the Protocol would be formalized by "Early Action Compact" agreements (Compacts) primarily developed by local, State and EPA constituents. The principles of the Compacts are the following:

- early planning, implementation, and emissions reductions leading to expeditious attainment and maintenance of the 8-hour ozone standard;
- local control of the measures employed, with broad-based public input;
- State support to ensure technical integrity of the early action plan;
- formal incorporation of the early action plan into the SIP;
- designation of all areas attainment or nonattainment in April 2004, but for Compact areas, deferral of the effective date of the nonattainment designation and/or designation requirements so long as all Compact terms and milestones ~~are~~continue to be met; and
- safeguards to return areas to traditional SIP attainment requirements should Compact terms be unfulfilled (e.g., if the area fails to attain in 2007), with appropriate credit given for reduction measures already implemented.

Under ~~Texas's~~this approach, an early, voluntary 8-hour air quality plan would be developed through an Early Action Compact agreement for each area that approaches or monitors exceedances of the 8-hour standard and that is designated

attainment for the 1-hour ozone standard. ~~The~~This approach would also apply to maintenance areas for the 1-hour ozone standard to the extent such areas continue to maintain that standard. One-hour ozone maintenance areas are areas that were previously designated nonattainment for the 1-hour ozone standard, but were redesignated to attainment pursuant to section 107(d)(3)(E) and subject to the requirements of section 175A of the Act.

Under a Compact, the local area (including a 1-hour maintenance area) would commit to develop a SIP based on recent emission inventories and air quality modeling demonstrating attainment of the 8-hour standard by 2007. In addition, the area would identify additional local controls beyond Federal and State requirements, which would be implemented by 2005. According to the Protocol, ~~EPA~~we would recognize the local area's commitment to early, voluntary action by designating the area attainment or nonattainment in April 2004 (at the time of national designations for all areas of the country), but deferring the effective date of the nonattainment designation for participating Compact areas that are monitoring a violation of the 8-hour ozone standard, so long as all terms and milestones of the Compact ~~are being~~continue to be met, including submission of the early action SIP revision no later than December 31, 2004. ~~The EPA~~We circulated the Protocol to numerous organizations

for review and comment. A copy of the ~~final Texas~~revised Protocol is available in the docket for this proposed rulemaking.

3. What is EPA's response to the Texas "Early Action ~~Compact"?~~Compact?"

In a letter dated June 19, 2002, from Gregg Cooke, Administrator, Region 6, to Robert Huston, Chairman, TCEQ, EPA endorsed the principles ~~proposed~~outlined in the Protocol. ~~In addition, EPA encourages Texas and other State agencies to begin, as soon as possible, engaging eligible local communities in the development of Compacts, to assure that each plan represents an early action program~~The Protocol was subsequently revised on December 11,2002, based on comments from EPA. Upon the completion of ~~a Compact~~Compacts by December 31, 2002 in areas that meet~~s~~ the requirements of the Protocol (including 1-hour maintenance areas), ~~EPA~~we intend~~s~~ to honor the commitments ~~as outlined in the Protocol. Any other areas that wish to develop a Compact, following the principles and schedules outlined in the Texas Protocol, should work closely with the appropriate EPA Regional Office~~established in these agreements. Any control measures identified by a Compact area must be submitted to EPA for approval as a SIP revision.

In a proposed settlement with nine environmental groups, ~~EPA~~we agreed to designate areas for the 8-hour ozone

standard by April 15, 2004. This deadline gives states and tribes ample time to update their recommendations by April 15, 2003 for nonattainment area boundaries. The EPA lodged the proposed consent decree on November 13, 2002 with the U.S. District Court for the District of Columbia. Also on November 14, 2002, ~~EPA~~we issued a guidance memorandum outlining the new designations schedule, requirements for designating tribal areas, and discussing the impact of the designation schedule on areas that are developing early action compacts. (Memorandum dated November 14, 2002, from Jeffrey R. Holmstead, Assistant Administrator, to EPA Regional Administrators.)

~~EPA~~We ha~~s~~ve entered into early action compacts with a number of areas of the country. As a result, ~~EPA plans~~we will designate all areas of the country either attainment or nonattainment in April 2004 (including Compact areas). At that time, we plan to propose to defer the effective date of the nonattainment designation for ~~these areas contingent upon each~~ participating ~~area's meeting all remaining terms and milestones~~Compact areas that are monitoring a violation of the 8-hour ozone standard, provided all terms of the agreement~~. However, while~~ continue to be met, including timely completion of all Compact milestones. However, as the Compacts were signed prior to the 2004 designations process, the Agency cannot prejudge the ~~2004~~outcome of

designations~~ process~~. Consequently, States are advised that if ~~a compact area is determined to be part of an area that is designated nonattainment for the 8-hour standard, its~~EPA determines that any portion of a compact area should become part of an 8-hour ozone nonattainment area, that portion would no longer be eligible for participation in the Early Action Compact, and the effective date of the nonattainment designation for that portion of the Compact would not be deferred.~~-~~ Also, as noted above, this proposed rulemaking does not propose to establish attainment/nonattainment designations, nor does it address the principles that will be considered in the designation process, nor does it take comment on the ~~e~~Early ~~a~~Action ~~c~~Compact program.

4. Did EPA consider other options for incentives for areas that take early actions for reducing ozone?

The ~~EPA~~we did consider another option, which is discussed in a separate document available in the docket.[80]

5. What is the difference between the early action compact program and the transitional NSR program?

Appendix ~~E~~D of this proposed rulemaking contains a table comparing the two programs. It should be noted that

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[80]Additional Options Considered for "Proposed Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC. ~~December~~March 200~~2~~3.

areas that may be initially eligible for the ~~e~~Early ~~a~~Action ~~c~~Compact but that become ineligible later may still be eligible for the transitional NSR program.

B. Clarification of How Transition from 1-hour to 8-hour Standard Will Work for Early Action Compact Areas, for Conformity, and for NSR and PSD.

Appendix E presents a table that describes our interpretation of the applicability of conformity and traditional NSR and PSD under the various potential transition scenarios. This table is included for informational purposes only and does not constitute part of the proposed rule. It is intended only to inform comment on the proposal itself. As discussed elsewhere in this preamble, we are proposing options transitioning from the 1-hour standard to the 8-hour standard. Under one of the options, we would revoke the 1-hour standard 1 year after the effective date of the 8-hour designations. For Early Action Compact areas, the nonattainment designation for the 8-hour ozone standard is promulgated, but the effective date of that designation is deferred as long as the area continues to meet compact milestones. These milestones are described in the Holmstead memorandum referenced earlier. Shortly after December 2007 (i.e., by April 2008), we intend to make a determination of whether the area attained the 8-hour ozone standard. For all Compact areas, under the

transition option described earlier in this paragraph, we would revoke the 1-hour standard for these areas 1 year after the effective date of the designation of attainment or nonattainment for the 8-hour standard. Therefore, if we make in April 2008 a determination of(and designates areas) attainment or nonattainment, we would revoke the 1-hour standard 1 year later in April 2009.

C. How will EPA's proposal affect funding under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program?

Depending on the specific characteristics of a nonattainment area, revocation of the 1-hour ozone standard will have varying effects on some Federal transportation program funds apportioned to the States through a formula established by the Transportation Equity Act for the 21st Century (TEA-21). TEA-21 establishes eligibility for the Congestion Mitigation and Air Quality Improvement (CMAQ) Program transportation funds for nonattainment and maintenance areas, designated under section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)), provided the area is, or was, classified in accordance with CAA Sections 181, 186, and 188. Areas designated nonattainment after December 31, 1997 are also eligible, but without regard to classification. The amount of CMAQ funds available to States for use in nonattainment and maintenance areas is set at levels authorized by TEA-21.

The funds are apportioned to States through the statutory formula contained in section 104(b) of Title 23. The formula takes into account the classifications of ozone and carbon monoxide nonattainment areas, and the population in such areas. The formula is weighted toward ozone nonattainment areas and does not account for particulate matter nonattainment areas.

As we begin implementation of the new 8-hour ozone NAAQS, changes regarding the classification of nonattainment areas, or the number of designated nonattainment or maintenance areas, will likely change the amount of CMAQ funds apportioned to each State, and thus available to nonattainment areas. Subsequently, nonattainment areas designated under the 8-hour ozone standard would all be eligible, but the formula for determining the amount of funds apportioned to the States would only take into account the areas that are classified pursuant to CAA Sections 181, 186, and 188. Until the option for classifying 8-hour ozone nonattainment areas is determined, it is impossible to predict the overall change in CMAQ funding for individual States or specific nonattainment areas.

We are aware that apportionment of CMAQ funds is calculated yearly and vary according to changing appropriations, population, number of nonattainment areas, and severity of air pollution. Fortunately, TEA-21 is due

for reauthorization beginning October, 2003 and adjustments to the CMAQ eligibility criteria and apportionment formula can be made to account for the implementation of the 8-hour ozone standard. We understand the importance of CMAQ funding to States and nonattainment areas and is prepared to work with the U.S. Department of Transportation and Congress to minimize the unintended impact of the 8-hour ozone NAAQS, on those funds.

D. Are there any environmental impact differences between the two major classification options being proposed?

Both of the major classification options being proposed would result in attainment by an expeditious attainment date. However, the EPA analysis of costs of the options notes that they do not necessarily have the same environmental impact. The subpart 2-only option is more expensive for some of the 10 areas analyzed in the cost analysis--largely because subpart 2 ROP requires more emissions reductions, and it requires these reductions by 2008, 2 years earlier than the attainment date of 2010 that is assumed for the analysis areas. This would result in an earlier air quality benefit. We have not performed air quality modeling to determine the increment of air quality benefit from the subpart 2-only option compared to the option under which some areas are covered under subpart 1.

VIII. **STATUTORY AND EXECUTIVE ORDER REVIEWS**

Upon promulgation of the National Ambient Air Quality Standards (NAAQS), the Clean Air Act (CAA) requires EPA to designate areas as attaining or not attaining that NAAQS. The CAA then specifies requirements for areas based on whether such areas are attaining or not attaining the NAAQS. This proposed rule fleshes out the statutory requirements that areas not meeting the NAAQS are obligated to meet. In some instances, the statute is ambiguous regarding the statutory obligations that apply--thus ~~EPA is~~we are proposing various options that it believes are consistent with the ambiguous language of the statute. One set of options attempts to provide the most flexible and least-cost option for States and the sources that States may choose to regulate. The other, follows a more traditional statutory interpretation.[81]

~~A.~~ A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory

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[81]U.S. EPA, *Cost, Energy, and Economic Impact Assessment of the Proposed Rule Establishing the Implementation Framework for the 8-Hour, 0.08ppm Ozone National Ambient Air Quality Standard,* Prepared by the Innovative Strategies and Economics Group, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. December 2002.

action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order."

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action" because it raise novel legal or policy issues arising out of legal mandates. As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an Agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the Agency certifies the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as: (1) a small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards. (See 13 CFR 121.); (2) a governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action

will not have a significant economic impact on a substantial number of small entities. This proposed rule will not impose any requirements on small entities. Rather, this rule interprets the obligations established in the CAA for States to submit implementation plans in order to attain the 8-hour ozone NAAQS.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), P.L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than

the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. The estimated administrative burden hour and costs associated with implementing the 8-hour, 0.08ppm NAAQS were developed upon promulgation of the standard and presented in Chapter 10 of U.S. EPA 1997 U.S. EPA 1997, *Regulatory Impact Analyses for the Particulate Matter and Ozone National Ambient Air Quality Standards,* Innovative Strategies and Economics Group, Office of Air Quality Planning and

Standards, Research Triangle Park, N.C. July 16. The estimated costs presented there for States in 1990 dollars totaled $0.9 million. The corresponding estimate in 1997 dollars is $1.1 million. Should the more traditional classification option be adopted as the implementation framework, these costs may increase modestly, but would not reach $100 million. Thus, today's rule is not subject to the requirements of section 202 and 205 of the UMRA.

The CAA imposes the obligation for States to submit SIPs to implement the 8-hour ozone NAAQS; in this rule, EPA is merely fleshing out those requirements. However, even if this rule did establish a requirement for States to submit SIPs, it is questionable whether a requirement to submit a SIP revision would constitute a Federal mandate in any case. The obligation for a State to submit a SIP that arises out of section 110 and part D of the CAA is not legally enforceable by a court of law, and at most is a condition for continued receipt of highway funds. Therefore, it is possible to view an action requiring such a submittal as not creating any enforceable duty within the meaning of section 421(5)(9a)(I) of UMRA (2 U.S.C. 658(a)(I)). Even if it did, the duty could be viewed as falling within the exception for a condition of Federal assistance under section 421(5)(a)(i)(I) of UMRA (2 U.S.C. 658(5)(a)(i)(I)).

In the proposal, EPA has determined that this proposed

rule contains no regulatory requirements that may significantly or uniquely affect small governments, including tribal governments. Nonetheless, the EPA carried out consultations with governmental entities affected by this rule.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. As described in section D, above (on UMRA), EPA previously determined the costs to States to implement the 8-hour ozone NAAQS to be

approximately $1 million. While this proposed rule considers options not addressed at the time the NAAQS were promulgated, the costs for implementation under these options would rise only marginally. This rule fleshes out the statutory obligations of States in implementing the 8-hour ozone NAAQS. Finally, the Clean Air Act establishes the scheme whereby States take the lead in developing plans to meet the NAAQS. This proposed rule would not modify the relationship of the States and EPA for purposes of developing programs to implement the NAAQS. Thus, Executive Order 13132 does not apply to this proposed rule.

Although section 6 of Executive Order 13132 does not apply to this rule, EPA actively engaged the States in the development of this proposed rule. The EPA held regular calls with representatives of State and local air pollution control agencies. The EPA also held three public hearings at which it described the approaches it was considering and provided and opportunity for States and various other governmental officials to comment on the options being considered.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials

F. Executive Order 13175: Consultation and Coordination

with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This proposed rule does not have "tribal implications" as specified in Executive Order 13175.

This proposed rule concerns the implementation of the 8-hour ozone standard in areas designated nonattainment for that standard. The CAA provides for States and Tribes to develop plans to regulate emissions of air pollutants within their jurisdictions. Th~~is~~e proposed~~ rulemaking proposes~~ regulations ~~flesching~~flesh out the statutory obligations of States and Tribes that develop plans to implement the 8-hour ozone NAAQS. The TAR gives Tribes the opportunity to develop and implement CAA programs such as the 8-hour ozone NAAQS, but it leaves to the discretion of the Tribe whether to develop these programs and which programs, or appropriate elements of a program, they will adopt.—

~~For Tribes that choose to develop and implement CAA programs~~

This proposed rule does not have Tribal implications as defined by Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes,

since no Tribe has implemented a CAA program to attain the 8-hour ozone NAAQS~~,~~ at this time. Furthermore, this proposed rule does not affect the relationship or distribution of power and responsibilities between the federal government and Indian Tribes. The CAA and the TAR establish the relationship of the federal government and Tribes in developing plans to attain the NAAQS, and this proposed rule does nothing to modify that relationship. Because this proposed rule does not have Tribal implications, Executive Order 13175 does not apply.

Assuming a tribe is implementing such a plan at this time, while the proposed rule would have tribal implications upon that tribe, it would not impose substantial direct ~~compliance~~ costs upon it, or would it preempt Tribal law. As provided above, EPA has determined that the total costs for implementing the 8-hour ozone ~~standard~~by State, local, and tribal governments is approximately $1 million in all areas designated nonattainment for the standard. The percentage of ~~t~~Tribal land that will be designated nonattainment for the 8-hour ozone standard is very small. For ~~t~~Tribes that choose to regulate sources in Indian country, the costs would be attributed to inspecting regulated facilities and enforcing adopted regulations.~~—~~

~~Furthermore, this action does not pre-empt tribal authority. The CAA and the TAR establish the relationship~~

~~of the federal government and tribes in developing plans to attain the NAAQS and this rule does nothing to modify that relationship. Thus, Executive Order 13175 does not apply to this rule.~~

Although Executive Order 13175 does not apply to this proposed rule, EPA consulted with tribal officials in developing this proposed rule. The EPA has encouraged Tribal input at an early stage. The EPA supports a national "Tribal Designations and Implementation Work Group" which provides an open forum for all Tribes to voice concerns to EPA about the designation and implementation process for the 8-hour ozone standard. These discussions have given EPA valuable information about Tribal concerns regarding implementation of the 8-hour ozone NAAQS. The work group sends issue summaries and suggestions for addressing them to the newly formed National Tribal Air Association, who in turn will send them to Tribal leaders. The EPA has encouraged Tribes to participate in the national public meetings held to take comment on early approaches to the proposed rule. Several Tribes made public comments at the April 2002 public meeting in Tempe, Arizona.

Furthermore, EPA will send individualized letters to all federally recognized Tribes about this proposal and will give Tribal leaders the opportunity for consultation. EPA specifically solicits additional comment on this proposed

rule from tribal officials.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Executive Order 13045: "Protection of Children From Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The proposed rule is not subject to the Executive Order13045 because the Agency does not have reason to believe the environmental health risks or safety risks addressed by this action present a disproportionate risk to children. Nonetheless, we have evaluated the environmental health or safety effects of the 8-hour ozone NAAQS on children. The results of this evaluation are contained in 40 CFR Part 50, National Ambient Air Quality Standards for Ozone, Final Rule, (62 FR 38855-38896; specifically, 62 FR 38854, 62 FR 38860 and 62 FR 38865).

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This proposed rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

Information on the methodology and data regarding the assessment of potential energy impacts is found in Chapter 6 of U.S. EPA 2002, *Cost, Energy, and Economic Impact Assessment of the Proposed Rule Establishing the Implementation Framework for the 8-Hour, 0.08ppm Ozone National Ambient Air Quality Standard,* Prepared by the Innovative Strategies and Economics Group, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. December 2002.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub L. No. 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical

standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

The EPA will encourage the States and tribes to consider the use of such standards, where appropriate, in the development of the implementation plans.

~~J.~~

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 requires that each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionate high and adverse human health or environmental effects of its programs, policies, and activities on minorities and low-income populations.

The EPA believes that this proposed rule should not raise any environmental justice issues. The health and environmental risks associated with ozone were considered in

the establishment of the 8-hour, 0.08ppm ozone national

| ambient air quality standard. The level is designed to be—

protective with an adequate margin of safety. The proposed rule provides a framework for improving environmental quality and reducing health risks for areas that may be designated nonattainment.

LIST OF SUBJECTS

Air pollution control
Intergovernmental relations
Ozone
Particulate matter
Transportation
Volatile organic compounds

AUTHORITY
42 USC 7408; 42 USC 7410; 42 USC 7501-7511f; 42 USC 7601(a)(1).

_____
Dated:

_____
Christine Todd Whitman,
Administrator.

IX. APPENDICES

~~APPENDIX A~~

~~RECENT RESEARCH ON THE HEALTH EFFECTS OF OZONE~~~~RECENT RESEARCH ON THE HEALTH EFFECTS OF OZONE~~

~~The 8-hour standard is based on well-documented science demonstrating that more people are experiencing adverse health effects at lower levels of exertion, over longer periods, and at lower ozone concentrations than addressed by the 1-hour ozone standard. The 8-hour standard greatly limits ozone exposures of concern for the general population and populations most at risk, including children active outdoors, outdoor workers, and individuals with pre-existing respiratory disease, such as asthma.~~

~~Since the 8-hour ozone NAAQS were promulgated in 1997, over 1,700 new health and welfare studies have been published in peer-reviewed journals. Many of these studies have investigated the impact of ozone exposure on such health effects as changes in lung structure and biochemistry, inflammation of the lungs, exacerbation and causation of asthma, respiratory illness-related school absence, hospital and emergency room visits for asthma and other respiratory causes, and premature mortality. EPA is currently in the process of evaluating these and other studies as part of the ongoing review of the air quality criteria and NAAQS for ozone. A revised Air Quality Criteria Document for Ozone and Other Photochemical Oxidants will be prepared in consultation with the EPA's Clean Air Scientific Advisory Committee (CASAC).~~

~~Key new health information falls into four general areas: development of new-onset asthma, hospital admissions for young children, school absence rate, and premature mortality. Examples of new studies in these areas are briefly discussed below.~~

~~Aggravation of existing asthma resulting from ambient ozone exposure was reported prior to the 1997 decision and has been observed in studies published since (Thurston et al., 1997; Ostro et al., 2001). Although preliminary, an important new finding is evidence reporting that air pollution and outdoor exercise could contribute to the development of new-onset asthma. In particular, a relationship between long-term ambient ozone concentrations and the incidence of asthma in adult males was reported by McDonnell et al. (1999). Subsequently, McConnell et al. (2002) reported that incidence of new diagnoses of asthma in children is associated with heavy exercise in~~

~~communities with high concentrations of ozone.~~

~~Previous studies have shown relationships between ozone and hospital admissions in the general population. A new study in Toronto reported a significant relationship between 1-hour maximum ozone concentrations and respiratory hospital admissions in children under two (Burnett et al., 2001). Given the relative vulnerability of children in this age category, this is likely an important addition to the literature on ozone and hospital admissions.~~

~~Increased school absence rate caused by respiratory illness has been associated with 1-hour daily maximum and 8-hour average ozone concentrations in studies conducted in Nevada (Chen et al., 2000) in grades K-6 and in Southern California (Gilliland et al., 2001) in grades 4-6. These studies suggest that higher ambient ozone levels may result in increased school absenteeism.~~

~~The ambient air pollutant most clearly associated with premature mortality is particulate matter (PM), with dozens of studies reporting such an association. However, repeated ozone exposure may be a contributing factor for premature mortality, causing an inflammatory response in the lungs which may predispose elderly and other sensitive individuals to become more susceptible to the adverse health effects of other air pollutants, such as PM. The findings of three recent analyses provide consistent data suggesting that ozone exposure is associated with increased mortality. Although the National Morbidity, Mortality, and Air Pollution Study (NMMAPS) did not find an effect of ozone on total mortality across the full year, Samet et al. (2000), who conducted the NMMAPS study, did report an effect after limiting the analysis to summer when ozone levels are highest. Similarly, Thurston and Ito (1999) have reported associations between ozone and mortality. Toulomi et al., (1997) reported that 1-hour maximum ozone levels were associated with daily numbers of deaths in 4 cities (London, Athens, Barcelona, and Paris), and a quantitatively similar effect was found in a group of 4 additional cities (Amsterdam, Basel, Geneva, and Zurich).~~

~~Recently, the Health Effects Institute (HEI) reported findings by investigators at Johns Hopkins University and others that have raised concerns about aspects of the statistical methodology used in a number of recent time-series studies of short-term exposures to air pollution and health effects (Greenbaum, 2002a). While the investigators focused on PM time-series studies, the same statistical methods were~~

~~used in many of the studies reporting a significant relationship between short term ambient ozone concentrations and mortality. As discussed in HEI materials provided to sponsors and to the Clean Air Scientific Advisory Committee (Greenbaum, 2002a, 2002b) these investigators found problems in the default "convergence criteria" used in Generalized Additive Models (GAM) and a separate issue first identified by Canadian investigators about the potential to underestimate standard errors in the same statistical package.[72] The EPA and others are sponsoring reanlaysis efforts by the original investigators and HEI to address this concern. As appropriate, the results of these reanalysis efforts will be incorporated into the revised Air Quality Criteria Document for Ozone, in consultation with CASAC, and will be taken into account in analyses of benefits associated with reducing ground-level ozone.~~

~~APPENDIX B~~

APPENDIX A

COMPARISON OF SUBPART 1 & 2 REQUIREMENTS

This is only an outline of the general requirements of subparts 1 and 2 and should not be relied on for regulatory purposes.

ELEMENT	**SUBPART 1**	**SUBPART 2**	
		Classification	**Requirement**
Attainment Dates For all areas, attainment should occur as expeditiously as practicable, but no later than specified timeframe	Up to 5 years after nonattainment designation; may extend up to 10 years based on specified considerations	Marginal	3 years from CAA Amendments enactment
		Moderate	6 years from CAA Amendments enactment
		Serious	9 years from CAA Amendments enactment
		Severe-15	15 years from CAA Amendments enactment
		Severe-17	17 years from CAA Amendments enactment
		Extreme	20 years from CAA Amendments enactment

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
RFP	"annual incremental emission reductions"	Marginal	none
		Moderate	15% VOC reduction from baseline within 6 years of enactment
		Serious	moderate req't plus 9% ~~VOC/NOx~~VOC/NO_x reductions for years 7-9 after CAA Amendments enactment
		Severe-15	serious req't plus 9% ~~VOC/NOx~~VOC/NO_x for years 9-15 after CAA Amendments enactment
		Severe-17	serious req't plus 9% ~~VOC/NOx~~VOC/NO_x for years 9-17 after CAA Amendments enactment

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
		Extreme	severe req't plus 9% ~~VOC/NOx~~VOC/NO_x for years 9-20 after CAAA enactment
Milestone Compliance Determination	Not required as such; contingency measures supposed to be implemented upon failure to meet RFP	Marginal/moderate	no further requirement
		Serious & above	requires milestone compliance demonstration to be made following milestone; failing area must elect one of the following: 1. bump-up 2. implement contingency measures 3. economic incentive
Attainment demonstration submission	EPA sets date which can be no later than 3 years after designation	Marginal	none
		Moderate	due 3 years after CAA Amendments enactment.

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
		Serious	due 4 years from CAA Amendments enactment
		Severe	due 4 years from CAA Amendments enactment
		Extreme	due 4 years from CAA Amendments enactment

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
NSR and RACT major source applicability	100 TPY	Marginal	100 TPY
		Moderate	100 TPY
		Serious	50 TPY
		Severe	25 TPY
		Extreme	10 TPY
NSR offsets	>1 to 1	Marginal	1.1 to 1
		Moderate	1.15 to 1
		Serious	1.2 to 1
		Severe	1.3 to 1
		Extreme	1.5 to 1
NSR permits	Permits required	All	construction permits for new or modified major stationary sources pre-1990 permit program corrections
Bump-up to higher classification	NA	All except severe & extreme	required to bump-up to higher classification if area doesn't meet attainment date

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
~~NOx~~NO_x control for RACT	no specificity	Moderate & above; all areas in OTC	Requirements under this subpart for major stationary VOC sources (NSR & RACT) also apply to all major NO_x sources, unless EPA approves NO_x waiver
~~NOx~~NO_x control for NSR	no specificity	Marginal & above	
Emission inventory	required in nonattainment area; no express requirement for updates or emission statements	All	Comprehensive emissions inventory within 2 years of enactment; update every 3 years (until area attains). Provision for submission to State of annual emissions statements from VOC and NO_x stationary sources
RACM/RACT	general requirement for RACM including RACT	Marginal & above	Pre-1990 RACT fix-up
		Moderate & above	RACT for all CTG sources and all other major sources

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
I/M	Nothing specified	Marginal	Pre-1990 corrections to previously required I&M programs immediately upon CAA Amendments enactment
		Moderate	Basic I&M
		Serious & above	Enhanced I&M within 2 years of CAA Amendments enactment
Conformity (transportation and general)	required	All	No additional specificity
Stage II vapor recovery (VOC)	not specified	Moderate & above	Stage II for gas stations within 2 years
Consequences of failure to attain	EPA to specify additional requirements; up to 10 more years to attain	Marginal, moderate and serious	Bump-up for failure to attain

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
		Severe and extreme	Fee system; continued ROP; possible stricter NSR major source cut-offs
Maintenance	Requirement for maintenance plans for areas redesignated from nonattainment to attainment	All	No additional specificity
Contingency measures	Required for failure to make RFP or attainment	All	Required for failure to meet ROP milestones or attain
Enhanced (ambient) monitoring (PAMS)	Not specified	Marginal and moderate	Not specified
		Serious & above	Ambient ozone precursor monitoring (VOC and NO_x)
VMT demonstration and transportation control measures (TCMs) if needed	Not specified	Marginal and moderate	Not specified

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
		Serious & above	Demonstration of whether current aggregate vehicle mileage, emissions, congestion levels are consistent with attainment demo
Clean fuels program	Not specified	Marginal and moderate	Not specified
		Serious & above	Certain percentage of fleet vehicles for 1998 and higher to be clean vehicles and use alternative fuels (if needed)

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
Reformulated Gas*	Not specified	Marginal, moderate & serious	Not specified
*required under section 211(k)(10)(D), which requires the use of reformulated gasoline in 9 covered areas, and areas that are bumped-up to Severe under section 181(d)		Severe & above	Prohibition of sale of gas that has not been reformulated to be less polluting
TCMs to offset growth in VMT emissions	Not specified	Marginal, moderate & serious	Not specified
		Severe & above	Enforceable transportation control strategies and TCMs to offset any emissions growth due to VMT growth

ELEMENT	SUBPART 1	SUBPART 2	
		Classification	**Requirement**
Clean Fuels for Boilers	Not specified	Marginal, moderate, serious & severe	Not specified
		Extreme areas	Use of clean fuels or advanced technology for certain boilers that emit more than 25 TPY of NO_x
TCMs during heavy traffic hours	Not specified	Marginal, moderate, serious & severe	Not specified
		Extreme areas	Option to have TCMs during periods of heavy traffic that reduce use of high polluting or heavy-duty vehicles
New Technologies	Not specified	Marginal, moderate, serious & severe	Not specified
		Extreme areas	New or future technologies for emission reductions

APPENDIX ~~C~~

~~SUMMARY OF TODAY'S PROPOSAL~~B

"APPLICABLE REQUIREMENTS" UNDER SUBPART 2

~~This summary is intended to give an overview of EPA's proposed rule; however, it should not be relied on for the actual proposal. The proposal should be consulted directly.~~

ELEMENT ~~Text Was Moved From Here.~~ ~~1~~ ~~**Attainment Deadlines**~~ ~~Text Was Moved From Here.~~ ~~2~~ ~~**Transition**~~	Classification	Requirement
RFP	Moderate	15% VOC reduction from ~~1-hour to 8-Hour Ozone Standard~~ ~~EPA is proposing that the 1-hour standard remain in effect until one~~baseline within 6 year ~~after EPA designates 8-hour ozone nonattainment areas~~s of enactment
	Serious	Text Moved Here: 5 moderate req't plus 9% VOC/NOx reductions for years 7-9 after CAA Amendments enactment

ELEMENT ~~Text Was Moved From Here:~~ ~~1~~ ~~Attainment Deadlines~~ ~~Text Was Moved From Here:~~ ~~2~~ ~~Transition~~	Classification	Requirement
	Severe-15	serious req't plus 9% VOC/NOx for years 9-15 after CAA Amendments enactment
	Severe-17	serious req't plus 9% VOC/NOx for years 9-17 after CAA Amendments enactment
	Extreme	severe req't plus 9% VOC/NOx for years 9-20 after CAAA enactment

ELEMENT	Classification	Requirement
~~Text Was Moved From Here: 1~~ ~~**Attainment Deadlines**~~ ~~Text Was Moved From Here: 2~~ ~~**Transition**~~		
Milestone Compliance Determination	Serious & above	requires milestone compliance demonstration to be made following milestone; failing area must elect one of the following: End Of Moved Text ~~. At that point, it would be revoked to avoid duplicative planning processes for the 1-hour and 8-hour ozone standards.~~ ~~**Antibacksliding Provisions**~~ ~~Consistent with CAA requirements, EPA is proposing two options to address anti-backsliding to ensure that progress achieved under the 1-hour standard is maintained, and to avoid negating statutory control requirements Congress~~

ELEMENT ~~Text Was Moved From Here.~~ ~~1~~ ~~Attainment Deadlines~~ ~~Text Was Moved From Here.~~ ~~2~~ ~~Transition~~	Classification	Requirement
NSR and RACT major source applicability	Marginal	100 TPY
	Moderate	100 TPY
	Serious	50 TPY
	Severe	25 TPY
	Extreme	10 TPY
NSR offsets	Marginal	1.1 to 1
	Moderate	1.15 to 1
	Serious	1.2 to 1
	Severe	1.3 to 1
	Extreme	1.5 to 1
NSR permits	All	construction permits for new or modified major stationary sources pre-1990 permit program corrections

ELEMENT ~~Text Was Moved From Here:~~ ~~1~~ ~~**Attainment Deadlines**~~ ~~Text Was Moved From Here:~~ ~~2~~ ~~**Transition**~~	Classification	Requirement
NOx control ~~obligations~~for RACT	Moderate & above; all areas in ~~SIPs developed for that standard must be retained as applicable requirements~~OTC	Requirements under ~~the Act: 1) until the area achieves the level of the 1-hour standard, or 2) until the area attains the 8-hour standard and is designated to attainment (even if the area is not meeting the 1-hour standard).~~ ~~**Mandatory Measures**~~ ~~EPA believes that the CAA is clear that once an area is classified under~~this subpart ~~1 or subpart 2~~for major stationary VOC sources (NSR & RACT) also apply to all major NO_x sources, ~~the area's State implementation plan must contain the~~unless EPA approves NO_x waiver
NOx control for NSR	Marginal & above	

ELEMENT ~~Text Was Moved From Here:~~ ~~1~~ ~~Attainment Deadlines~~ ~~Text Was Moved From Here:~~ ~~2~~ ~~Transition~~	Classification	Requirement
RACM/RACT	Marginal & above	Pre-1990 RACT fix-up
	Moderate & above	RACT for all CTG sources and all other major sources
I/M	Marginal	Pre-1990 corrections to previously required I&M programs immediately upon CAA Amendments enactment
	Moderate	Basic I&M
	Serious & above	Enhanced I&M within 2 years of CAA Amendments enactment
Stage II vapor recovery (VOC)	Moderate & above	Stage II for gas stations within 2 years
Maintenance	All	No additional specificity
Enhanced (ambient) monitoring (PAMS)	Serious & above	Ambient ozone precursor monitoring (VOC and NO_x)

ELEMENT ~~Text Was Moved From Here: 1~~ ~~**Attainment Deadlines**~~ ~~Text Was Moved From Here: 2~~ ~~**Transition**~~	Classification	Requirement
VMT demonstration and transportation control measures ~~enumerated in the Act for its classification. However, today's proposal contains several features intended to provide States with flexibility on the measures included in SIPs for 8-hour areas. In addition, EPA is proposing to consider case-by-case waivers if the applicant can show,~~ (TCMs) if needed	Serious & above	Demonstration of whether current aggregate vehicle mileage, emissions, congestion levels are consistent with ~~case law on this issue, that implementing a requirement~~attainment demo
Clean fuels program	Serious & above	Certain percentage of fleet vehicles for 1998 and higher to be clean vehicles and use alternative fuels (if needed)

ELEMENT	Classification	Requirement
~~Text Was Moved From Here: 1~~ ~~**Attainment Deadlines**~~ ~~Text Was Moved From Here: 2~~ ~~**Transition**~~		
Reformulated Gas*	Severe & above	Prohibition of sale of gas that has not been reformulated to be less polluting

ELEMENT	Classification	Requirement
~~Text Was Moved From Here: 1~~ ~~**Attainment Deadlines**~~ ~~Text Was Moved From Here: 2~~ ~~**Transition**~~		
TCMs to offset growth in ~~a particular area would cause "absurd results."~~ VMT emissions ~~Text Was Moved From Here: 3~~ ~~EPA is taking comment on a proposed approach to the issue of interstate transport of ozone pollution and its precursors. Under this approach, any further requirements would be imposed through a separate rule, not through the 8-hour ozone implementation rule. The EPA plans to investigate the extent, severity and sources of interstate transport after the NO_x SIP call, which was issued in 1998, is implemented. If further~~	Marginal, moderate & serious	Not specified
	Severe & above	Enforceable transportation control strategies and TCMs to offset any emissions growth due to VMT growth

ELEMENT ~~Text Was Moved From Here:~~ ~~1~~ ~~Attainment Deadlines~~ ~~Text Was Moved From Here:~~ ~~2~~ ~~Transition~~	Classification	Requirement
Clean Fuels for Boilers	Extreme areas	Use of clean fuels or advanced technology for certain boilers that emit more than 25 TPY of NO_x
TCMs during heavy traffic hours	Extreme areas	Option to have TCMs during periods of heavy traffic that reduce use of high polluting or heavy-duty vehicles

	Classificatio	Requirement
New Technologies	Extreme areas	New or futu technologie reductions- EPA would a requiring t in conjunct planned rul interstate transport t to unhealth $PM_{2.5}$ in dow The EPA bel interstate should be a front," bef attainment adopted. T would enabl know as the local attai extent to w quality at boundary wi

*required

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- Use of RFP for addressing transport.

RACM/RACT

In the event classification option 2 is selected, EPA is proposing an interpretation of the requirements for reasonably available control measures (RACM) and reasonably available control technology (RACT) for areas covered by subpart 1.

For RACT, areas with 8-hour ozone levels that would place them in a moderate or above classification under subpart 2 would be required to meet the traditional technology-based RACT control requirement that are

~~applicable to moderate and above areas under subpart 2.~~

~~For subpart 1 areas with 8-hour ozone levels that would place them in a marginal classification if classified~~ under ~~subpart 2~~section 211(k)(10)(D), ~~the RACT requirement would be similar to~~which requires ~~that for marginal areas~~e use of reformulated gasoline in 9 covered ~~under subpart 2. This RACT approach also would be available to~~areas, and areas that ~~qualified for marginal status via the incentive feature.~~

~~EPA proposes~~are bumped-up to ~~formally recognize NOx, as well as VOC, as an ozone precursor, so that reasonably available control technology for NOx would be required for areas classified under either subpart 1 or subpart 2 for the same kinds of sources covered under the 1-hour ozone standard.~~

~~The RACT requirements for areas~~Severe under ~~subpart 1 would have to be submitted within 2 years after an area's nonattainment designation.~~

~~For RACM, EPA proposes to continue with the same interpretation that it has used for implementing the 1-hour ozone standard. To show that all RACM have been included in the plan, the State must show that there are no additional measures that are technically and economically feasible that will advance the attainment date,~~section 181(d)

~~Conformity~~

~~No changes to the transportation conformity rule are proposed in this rulemaking. Transportation conformity is discussed in this notice for informational purposes. By statute, transportation conformity applies to 8-hour nonattainment areas one year after the effective date of an area's designation. The EPA's proposal to revoke the 1-hour standard one year after 8-hour ozone area designations means that transportation conformity requirements under the 1-hour standard would end at the same time 8-hour transportation conformity requirements begin. The EPA is proposing that conformity would not apply in 1-hour ozone standard~~

~~maintenance areas after EPA revokes the 1-hour ozone standard.~~

~~For the general conformity program, which ensures that federal actions will not interfere with an area's air quality plan, EPA plans to retain the existing *de minimis* emissions levels for actions exempt from the rule. EPA is not proposing to revise its General Conformity Regulations in this rulemaking.~~

~~**New Source Review**~~

~~The EPA is proposing three options for NSR:~~

- ~~A "status quo" NSR program under which subpart 1 areas would be covered by subpart 1 NSR, while subpart 2 areas would be covered by subpart 2 NSR.~~
- ~~A more flexible "Transitional" NSR program for areas that submit early SIPs and that attain early. This program would be available to areas covered under subpart 1 and that are attaining the 1-hour ozone standard.~~
- ~~A "Clean Air Development Community" program that would allow a more flexible NSR program for areas that manage growth in emissions-producing activities.~~

APPENDIX ~~D~~C

~~"APPLICABLE REQUIREMENTS" UNDER SUBPART 2~~

~~ELEMENTClassificationRequirementRFPModerate15% VOC reduction from baseline within 6 years of enactment Serious~~

~~Text Was Moved From Here: 5~~

~~1. bump-up~~

~~2. implement contingency measures~~

~~3. economic incentiveNSR and RACT major source applicabilityMarginal100 TPYModerate100 TPYSerious50 TPYSevere25 TPYExtreme10 TPYNSR offsetsMarginal1.1 to 1Moderate1.15 to 1Serious1.2 to 1Severe1.3 to 1Extreme1.5 to 1NSR permitsAllconstruction permits for new or modified major stationary sources~~

~~pre-1990 permit program correctionsNOx control for RACTModerate & above;~~

~~all areas in OTCRequirements under this subpart for major stationary VOC sources (NSR & RACT) also apply to all major NO_x sources, unless EPA approves NO_x waiverNOx control for NSRMarginal & aboveRACM/RACTMarginal & abovePre-1990 RACT fix-upModerate & aboveRACT for all CTG sources and all other major sourcesI/M~~

~~MarginalPre-1990 corrections to previously required I&M programs immediately upon CAA Amendments enactmentModerateBasic I&M Serious & aboveEnhanced I&M within 2 years of CAA Amendments enactmentStage II vapor recovery (VOC)Moderate & aboveStage II for gas stations within 2 yearsMaintenanceAllNo additional specificityEnhanced (ambient) monitoring (PAMS)Serious & aboveAmbient ozone precursor monitoring (VOC and NO_x) VMT demonstration and transportation control measures (TCMs) if neededSerious & aboveDemonstration of whether current aggregate vehicle mileage, emissions, congestion levels are consistent with attainment demoClean fuels program Serious & aboveCertain percentage of fleet vehicles for 1998 and higher to be clean vehicles and use alternative fuels (if needed)Reformulated Gas*Severe & aboveProhibition of sale of~~

~~gas that has not been reformulated to be less pollutingTCMs to offset growth in VMT emissionsMarginal, moderate & seriousNot specifiedSevere & aboveEnforceable transportation control strategies and TCMs to offset any emissions growth due to VMT growthClean Fuels for BoilersExtreme areasUse of clean fuels or advanced technology for certain boilers that emit more than 25 TPY of NO_x TCMs during heavy traffic hoursExtreme areasOption to have TCMs during periods of heavy traffic that reduce use of high polluting or heavy-duty vehiclesNew TechnologiesExtreme areasNew or future technologies for emission reductions~~

~~*required under section 211(k)(10)(D), which requires the use of reformulated gasoline in 9 covered areas, and areas that are bumped-up to Severe under section 181(d)~~

~~APPENDIX E~~

COMPARISON OF TRANSITIONAL NSR AND EARLY ACTION COMPACT PROGRAMS

Program Elements	Transitional New Source Review (NSR)	8-hour Early Action Compact
Eligibility*	- Meet 1-hr standard - Must be 8-hr nonattainment - Must be covered under Subpart 1**	- Must have monitoring data meeting 1-hr standard - Must be designated attainment for 1-hr standard
Initiation Date	Submit attainment demonstration by designations date (4/15/04)	Signed compact by 12/31/02
Other Dates	- All measures must be implemented by 12/31/05 - Projected attainment of 8-hr standard by April 2007	- Submit progress reports every 6 months beginning 6/03 - Describe planned measures by 6/16/03 - Submit local plan to State by 3/31/04 - Submit SIP to State by 12/31/04 - Implement all measures by 12/31/05 - Submit progress report to certify continued implementation & air quality improvements - Area must attain 8-hr standard by 12/31/07

Program Elements	Transitional New Source Review (NSR)	8-hour Early Action Compact
Benefits	- BACT instead of LAER (cite NSR workshop manual) - No required emission offsets	- Deferred effective date of nonattainment designation - Implies no new source review or conformity - Implementation of measures earlier than required by CAA (early reductions in emissions)
Consequences	If 2007 attainment date is missed, State must submit by April 2007 a Part D NSR plan, which meets requirements under sec. 51.165 (i.e., traditional nonattainment NSR)	- Nonattainment designation becomes effective soon after failure to meet milestone - Nonattainment requirements must be met (NSR, conformity, RACT, etc) if missed milestone

*Areas not eligible for Early Action Compact may still be eligible for transitional NSR.
**Areas in the Ozone Transport Region are not eligible for transitional NSR because they are not covered under Subpart 1 for purposes of NSR applicability.

APPENDIX D
GLOSSARY OF TERMS AND ACRONYMS

ACT	Alternative control techniques
BACT	Best available control technology
bump-up	Reclassify to higher classification
CAA	Clean Air Act
CAAA	1990 Clean Air Act Amendments
CADC	Clean Air Development Community
CASAC	Clean Air Scientific Advisory Committee
CERR	Consolidated Emissions Reporting Rule
CFR	Code of Federal Regulations
CO	Carbon monoxide
Compacts	Early Action Compact Agreements
CSA	Clear Skies Act
CTGs	Control techniques guidelines
DOT	Department of Transportation
EPA	Environmental Protection Agency
FACA	Federal Advisory Committee Act
FIPs	Federal implementation plans
FMVCP	Federal Motor Vehicle Control Program
GAM	Generalized additive models
HAPs	Hazardous air pollutants
HEI	Health Effects Institute
LAER	Lowest achievable emission rate
MACT	Maximum achievable control technology
MCR	Mid-course review
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NAMS	National Air Monitoring Stations
NCore	National Core Monitoring Sites
NMMAPS	National Morbidity, Mortality, and Air Pollution Study
NO_x	Nitrogen oxides
NO_y	Reactive oxides of nitrogen
NO_2	Nitrogen dioxide
NSCR	Non-selective catalytic reduction
NSR	New source review
NTTAA	National Technology Transfer and Advancement Act of 1995
OH	Hydroxyl
OMB	Office of Management and Budget
OTAG	Ozone Transport Assessment Group
OTC	Ozone Transport Commission
OTR	Ozone Transport Region
Ozone Flex	Ozone Flex Guidelines Program
PAMS	Photochemical Assessment Monitoring Stations
PM	Particulate matter

$PM_{2.5}$	Fine particle
ppm	Parts per million
Protocol	Protocol for Early Action Compacts designed to achieve and maintain the 8-hour ozone standard
PSD	Prevention of significant deterioration
RACM	Reasonably available control measures
RACT	Reasonably available control technology
RFP	Reasonable further progress
ROP	Rate of progress
RPOs	Regional Planning Organizations
SBA	Small Business Administration
SIPs	State implementation plans
SLAMS	State and Local Air Monitoring Stations
TAR	Tribal Authority Rule
TCEQ	Texas Commission on Environmental Quality
TCMs	Transportation control measures
TEA-21	Transportation Equity Act for the Twenty-first Century
TIP	Tribal implementation plan
TSP	Total suspended particulates
UMRA	Unfunded Mandates Reform Act of 1995
VMT	Vehicle miles traveled
VOC	Volatile organic compound
VT	Vehicle trips

APPENDIX E

APPLICATION OF CONFORMITY, NEW SOURCE REVIEW AND PREVENTION OF SIGNIFICANT DETERIORATION UNDER VARIOUS TRANSITION CASES

If an area's 1-hr situation is:	**And its 8-hr situation is:**	**How would conformity apply?**	**How would traditional* NSR/PSD apply?**
Designated Attainment (never been nonattain-ment)	Designated Attainment	Under 1 hr std: Conformity does not apply Under 8 hr std: Conformity does not apply	Under 1 hr std: PSD continues to apply until the 1-hr standard is revoked. Under 8 hr std: PSD applies [Note: PSD applies as long as area is attainment for the 8-hr std.]

If an area's 1-hr situation is:	And its 8-hr situation is:	How would conformity apply?	How would traditional* NSR/PSD apply?
	Designated Nonattain-ment	Under 1 hr std: Conformity does not apply Under 8 hr std: conformity applies 1 year after the effective date of designation (2005)	Under 1 hr std: PSD applies until the 1-hr standard is revoked [but nonattainment NSR requirements for 8-hr std. would tend to override]. Under 8-hr std: (1) NSR under 40 CFR Appendix S applies before SIP (containing §51.165(a) NSR program) is approved by EPA. (2) Nonattainment NSR under §51.165 applies after SIP approval

If an area's 1-hr situation is:	And its 8-hr situation is:	How would conformity apply?	How would traditional* NSR/PSD apply?
	Early Action Compact (EAC)	Under 1 hr std: Conformity does not apply Under 8 hr std: Assuming all milestones are met, conformity would not apply through 2007. If the area is violating in 2007, its nonattainment designation would become effective 4/15/2008, and conformity would apply 1 year later (4/15/2009). If area not violating in 2007, the area would be designated attainment, and no conformity would apply.	Under 1 hr std: PSD continues to apply to EAC areas until the 1-hr standard is revoked. Under 8 hr std: Assuming all milestones are met, PSD would apply through 2007.** If the area is violating in 2007, it would become subject to nonattainment NSR. If area is not violating in 2007, the area would be designated attainment, and PSD continues to apply.
Designated Nonattain-ment	Designated Attainment	Under 1 hr std: conformity applies until 1 year after the effective date of the area's designation under the 8-hr standard (2005). Under 8 hr std: Conformity does not apply	Under 1 hr std: Nonattainment NSR applies until it is no longer an "applicable requirement" (see proposal on anti-backsliding) Under 8 hr std: PSD applies.***

If an area's 1-hr situation is:	And its 8-hr situation is:	How would conformity apply?	How would traditional* NSR/PSD apply?
	Designated Nonattain-ment	Under 1 hr std: conformity applies until 1 year after the effective date of the area's designation under the 8-hr standard (2005). Under 8 hr std: conformity would apply 1 year after the effective date of the area's designation (2005)	Under 1 hr std: Nonattainment NSR continues to apply until it is no longer an "applicable requirement" (see proposal on anti-backsliding) Under 8 hr std: (1) Nonattainment NSR under Appendix S applies until the nonattainment NSR SIP (containing §51.165(a) NSR program) is approved by EPA; (2) Nonattainment NSR applies under §51.165 after SIP approval
	(EAC: Not eligible)	--	--

If an area's 1-hr situation is:	And its 8-hr situation is:	How would conformity apply?	How would traditional* NSR/PSD apply?
Designated attainment with Maintenance Plan	Designated Attainment	Under 1 hr std: conformity applies until 1 year after the effective date of the area's designation under the 8-hr standard (2005). Under 8 hr std: Conformity does not apply	Under 1 hr std: PSD applies until 1-hr std. is revoked. Under 8 hr std: PSD applies
	Designated Nonattain-ment	Under 1 hr std: Conformity applies until 1 year after the effective date of the area's designation under the 8-hr standard (2005). Under 8 hr std: Conformity would apply 1 year after the effective date of the area's designation under the 8-hr standard (2005).	Under 1 hr std: PSD applies until the 1-hr standard is revoked Under 8-hr std: (1) NSR under 40 CFR Appendix S applies before SIP (containing §51.165(a) NSR program) is approved by EPA; (2) Nonattainment NSR under §51.165 applies after SIP approval

If an area's 1-hr situation is:	And its 8-hr situation is:	How would conformity apply?	How would traditional* NSR/PSD apply?
	Early Action Compact	Under 1 hr std: 1-hour conformity applies until 1 year after the effective date of the area's designation under the 8-hr standard (4/15/2009, or earlier if the area misses an EAC milestone). Under 8 hr std: Assuming all milestones are met, conformity would not apply through 2007. If the area is violating in 2007, its nonattainment designation would become effective 4/15/2008 and conformity would apply 1 year later (4/15/2009). If area not violating in 2007, the area would be designated attainment, and no conformity would apply.	Under 1 hr std: PSD continues to apply until the 1-hr standard is revoked. Under 8 hr std: Assuming all milestones are met, PSD would apply through 2007.[2] If the area is violating in 2007, it would become subject to nonattainment NSR. If area is not violating in 2007, the area would be designated attainment, and PSD continues to apply.

* Traditional New Source Review is nonattainment NSR under 40 CFR part 51, either §51.165 or Appendix S.

** PSD applies even if the attainment designation under the 8-hr standard is not yet effective.

*** Generally, nonattainment NSR requirements would supersede most PSD requirements.

However, note that in specific instances PSD may mandate additional analyses, such as preconstruction monitoring or analysis of impacts on Class I areas.