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Reasonable Further Progress Requirement Under 8-Hour Ozone Standard

Issue: What should be the requirements for reasonable further progress under the 8-hour ozone standard?

Background: Section 171(1) of Subpart 1 of the CAA defines "reasonable further progress" (RFP) to mean such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable NAAQS by the applicable date. Section 172(c)(2) requires States' nonattainment plan provisions to require reasonable further progress. Subpart 2, part D, Title I governs RFP for the 1-hour ozone standard, and provided much more specificity regarding the base year emission inventory upon which rate of progress was to be planned for and implemented, the increments of emission reductions required over which time periods, and the process for determining whether the RFP milestones were achieved. Section 182(b)(1)(A) (in Subpart 2) mandates a 15 percent VOC emission reduction, net of 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 by 11/15/94 regarding how the area will achieve an actual VOC emission reduction of at least 3% per year averaged over each consecutive 3-year period beginning 6 years after enactment (the post- 1996 rate of progress plan) until the area's attainment date, prescribed in section 181(a). Also, the CAA allows for substitution of NOx for VOC emission reductions in the post-1996 rate of progress plan, consistent with EPA's 12/15/93 NOx Substitution Guidance. The baseline emission inventory for determining the required rate of progress reductions is specified as 1990.

Starting Assumptions:

1. Under subpart 2, the same baseline year would be used to both address growth (VMT or otherwise) and to calculate the RFP target level.
2. Contingency measures would be handled as previously under the 1-hour ozone NAAQS
3. Emission reductions from outside the nonattainment area up to 100 km for VOC and 200 km for NOx areas (and statewide if under a regional strategy) would be allowed consistent with EPA's existing 12/97 Interim Implementation policy for 1-hour ozone NAAQS.
4. Anti-backsliding would apply across 1-hour ozone nonattainment areas.

Issue 1–VOC required for initial 15% progress period: Most areas that are or were nonattainment for the 1-hour standard have adopted and implemented VOC RACT reductions. Currently, for many areas of the country, particularly in the Eastern U.S. outside major metropolitan areas, one ton of NOx reduction will achieve more ozone reduction than a ton of

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VOC reduction. However, under the prescribed requirements of the Act, NOx substitution is only allowed for the post-1996 3% per year requirement, not for the initial 15%.

Options:

Option 1. Continue to require 15% VOC reductions within 6 years of designations from all moderate and above 8-hour ozone nonattainment areas. After 6 years, all areas would be required to achieve a 9% reduction every 3 years via combined VOC/NOx emissions, i.e. 3% per year.

Implications: Clearly consistent with CAA. Does not allow NOx reductions to count toward 15% RFP requirement for initial six years of implementation.

Option 2. Don't impose an additional 15% requirement for those areas that submitted 15% plans under the 1-hour ozone NAAQS and hold them responsible for only 3% per year VOC/NOx reduction requirement under the 8-hour ozone NAAQS.

Implications: Need to identify legal rationale. Recognizes previous efforts by areas that submitted 15% plans as required under 1-hour ozone NAAQS. Provides flexibility to states to use a mix of NOx and VOC reductions to meet 15% requirement.

Option 3. Interpret the Act as having already provided for the 15% ROP requirement back in the early 1990's ; therefore, only the 9% VOC/NOx initial (3% per year for 3 years) requirement currently applies for all new nonattainment areas under the 8-hour ozone NAAQS. Alternatively, because 3 years after designations may be too short a time to develop, submit, and implement an initial 9% plan, require the area to obtain 18% VOC/NOx emission reductions over 6 years for the initial plan.

Implications: Need to identify legal rationale. Would get 18% mix over 6 yrs. period from designation (averaged over 1st 3 years), getting more than 15%.

Issue 2–Baseline year of emission inventory: What should be the baseline inventory for the reasonable further progress requirement? The key function of the baseline inventory for RFP (under subpart 2) is the determination of a target level of emissions for the future year RFP and to serve as the baseline from which creditable reductions are determined. EPA currently anticipates designating nonattainment areas in 2004. Under the "Consolidated Inventory Reporting Rule," revised emissions inventories are required in 2002 and 2005. Would we use the 2002 inventory for a 2004 baseline year (modify 2002 to project out to 2004), or wait for 2005 data which will not be ready until 2007, or use some other year such as '90 or '96 ?

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Option 1. For new baseline, use closest year to designations. Use CAA time periods under Section 181(b)(1) for subsequent dates. Therefore under this option, if designate in 2004, would use 2002 baseline inventory.

Implications: Using 2002, would tie baseline inventory to a more up-to-date inventory; however, will not be the same year as actual designations (2004). More importantly, may not account for all the reductions taking place, i.e., results from NOx SIP call, Tier II, etc.

Option 2. Use another year, such as 1990

Implications: The CAA requires use of the 1990 emission inventory. This would allow States to take credit for measures they adopt and implement after 1990. However, 1990 would be an older inventory and does not reflect current year inventories and most recent tools and techniques used in emission inventory development.

Issue 3–Creditability: How should CAA restrictions on creditable measures be interpreted? What should be the baseline year for credit for national measures? [see Attachment A for CAA provisions concerning creditability]

Option 1. Status quo as per CAA (i.e., use 1990 baseline) even if 2002 is used as the baseline year for setting the RFP target.

Implications: May allow credit for many of the Federal measures adopted and implemented after 1990; however, it is outdated and probably not relevant to the attainment demonstration, which will likely use a later baseline year (e.g., 2002).

Option 2. Use the same baseline year (2002) that was used to calculate the rate of progress target for the period in question, assuming 1990 is not used.

Implications: More up-to-date emission inventory; however if, e.g., the 2002 baseline is used, it may not allow credit for Tier I, n-LEV, etc.

Issue 4–RFP under subpart 1: If an area is covered under subpart 1 instead of subpart 2, how should the RFP requirement be structured?

Option 1. This option would address attainment dates of the individual areas

- If less than 6 years to attainment, then all reductions needed for attainment must be obtained in enough time to ensure attainment by the attainment date.
- If greater than or equal to 6 years to attainment, then get ½ reductions in ½ the time
- If greater than 9 yrs. to attain, then get 1/3 reductions in 3 equal intervals

Option 2. Use the subpart 2 structure for RFP under subpart 1.

Implications: Under Subpart 1 the amount (%) of reductions is not prescribed; therefore, allows areas more flexibility in determining what (VOC or NOX, or mix) and how much is needed. However, emphasis from Court was to examine more carefully implementation under Subpart 2 and its interaction with Subpart 1.

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ATTACHMENT A
SECTION 182(b)(1) PROVISIONS CONCERNING 15% ROP REQUIREMENT

(C) General rule for creditability of reductions.– Except as provided under subparagraph (D), emissions reductions are creditable toward the 15 percent required under subparagraph (A) to the extent they have actually occurred, as of 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, from the implementation of measures required under the applicable implementation plan, rules promulgated by the Administrator, or a permit under title V.

(D) Limits on creditability of reductions.– Emission reductions from the following measures are not creditable toward the 15 percent reductions required under subparagraph (A):

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

(ii) Regulations concerning Reid Vapor Pressure promulgated by the Administrator by the date of the enactment of the Clean Air Act Amendments of 1990 or required to be promulgated under section 211(h).

(iii) Measures required under subsection (a)(2)(A) (concerning corrections to implementation plans prescribed under guidance by the Administrator).

(iv) Measures required under subsection (a)(2)(B) to be submitted immediately after the date of the enactment of the Clean Air Act Amendments of 1990 (concerning corrections to motor vehicle inspection and maintenance programs).