



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

AUG 15 2006

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: 8-Hour Ozone National Ambient Air Quality Standards (NAAQS)
Implementation--Reasonable Further Progress (RFP)

FROM: *for* William T. Harnett *Scott Mathias*
Director, Air Quality Policy Division (C504-01)

TO: Regional Air Division Directors

The attached RFP document provides additional clarification that will be helpful for the RFP State implementation plans (SIPs) which are due June 15, 2007. The document includes a table summarizing situations covered by the Phase 2 8-hour ozone NAAQS implementation rule (November 29, 2005; 69 FR 71612). In addition, it summarizes questions raised by the Regional Offices and States and provides answers to those questions. Please distribute this document to your States, local control agencies, and tribal governments.

Regional Office staff may contact David Sanders at (919) 541-3356, or by email at sanders.david@epa.gov or John Silvasi (919) 541-5666, or by email at silvasi.john@epa.gov with any questions.

Attachment

8-Hour Ozone Implementation Q's and A's Concerning RFP

1. Appendix A of the Phase 2 8-hour ozone implementation rule provides guidance on calculating the RFP targets for several kinds of areas. However, it does not provide guidance for moderate areas that have an approved 15% VOC ROP plan under the 1-hour standard and that have an attainment date beyond 5 years after designation (Situation B in the table). How should the 8-hr ozone RFP target be calculated for these areas?

Response: These areas are treated like subpart 1 areas, which must obtain a 15% emission reductions (can be for NO_x or VOC or a combination of either) for the first 6 years after the baseline year. OTAQ is developing guidance for this situation. In the meantime, the State should use Appendix A/Method 2 (which applies to serious and higher classified areas) except that instead of demonstrating RFP for a total of 18% emission reductions for the first 6 years, the total would be 15% due to the moderate classification. See 40 CFR 51.910(a)(1)(ii)(A), which refers to section 51.910(b)(2).

2. A state is planning to request a reclassification (“bump up”) for an area from marginal to moderate for ozone. They want to develop an RFP plan by the end of the year for the primary purpose of establishing motor vehicle emissions budgets (MVEBs) for transportation conformity purposes and they would like to do so relying on current emissions reductions programs (i.e., without developing new regulations). If the area has achieved the 15% RFP requirement for the 1-hour standard in the portion of the area that was designated nonattainment for the 1-hour standard, would they only need to address 8-hour RFP for the counties that were not a part of the 1-hour nonattainment area?

Response: This example sounds like it fits under situation D in the attached chart. The State can choose to treat the two portions of the 8-hour area together or separately. If treated together, then the State would need to develop a new 15% RFP plan for the entire area. If treated separately, the portion of the area with an approved 15% plan for the 1-hour standard would be considered to have met the section 182(b)(1) RFP requirements and would instead be subject to the subpart 1 (section 172(c)(2)) RFP requirement. If the attainment date for the 8-hour area is greater than 5 years after designation, then these counties need a 15% reduction, but may use both VOC and NO_x. If the attainment date is 5 or fewer years following designation, then the state could meet the RFP requirement for the former 1-hour nonattainment counties by adopting a SIP that demonstrates attainment as expeditiously as practicable. The counties that were not subject to the 15% RFP requirement for the 1-hour standard would be subject to the section 182(b)(1) RFP requirements and would need to achieve a 15% reduction in VOC emissions for the 6-year period following the baseline. Depending on the circumstances, the area that was not previously subject to the 15% requirement for the 1-hour standard could possibly fall under either situation F or G.

3. To meet the 8-hour 15% RFP requirement in the counties that were not previously subject to the 1-hour 15% RFP requirement, can the state rely on emission reductions that are being achieved by control programs (i.e., I/M) in the former 1-hour counties to account for RFP in the additional counties?

Response: Control programs that are being implemented in the counties not previously subject to the 1-hour 15% requirement can be relied on for purposes of meeting the 8-hour 15% RFP requirement in those counties. However, reductions can be relied on only to the extent that (a) they are achieved after the baseline year and meet the other criteria for creditability under CAA section 182(b)(1); (b) have not been relied on for purposes of meeting the RFP requirement for the 8-hour standard in the area previously subject to the 1-hour ozone 15% VOC ROP requirement; and (c) cover the period required for RFP. States should consult the appropriate EPA Regional Office for situations not explicitly described in the rule, preamble or in this guidance.

4. Can the state use reductions from 100 km for VOC and 200 km for NO_x outside of the nonattainment area to account for RFP?

Response: Yes, permanent, enforceable and quantifiable reductions outside the designated nonattainment area can be used to meet RFP, but there needs to be a showing that these reductions are beneficial to the nonattainment area. We have existing guidance that discusses how the RFP calculation should be performed when relying on reductions outside the nonattainment area.¹

5. Must 2002 be used as the baseline for RFP and, if so, does that mean that a state cannot take credit in its RFP plan for programs that were implemented prior to 2002?

Response: The Phase 2 Rule indicates a strong preference for using 2002 as the baseline but does provide limited leeway for choosing a different year. Reductions achieved up to the end of the baseline year cannot be relied on for purposes of RFP. Any reductions occurring prior to the end of the baseline year are accounted for in the baseline emissions inventory. RFP reductions are reductions from the level reflected in the baseline inventory and so reductions already accounted for in the baseline inventory cannot be relied upon for RFP credit. However, certain programs, particularly programs achieving reductions from the mobile sector, achieve additional emission reductions for many years after they are first implemented. Thus reductions that are not actually achieved until after the baseline year could be relied on for purposes of the 15% RFP requirement. We note that section 182(b)(1)(D) provides a short list of measures that are not creditable for purposes of the 15% RFP requirement.

6. Does a moderate area need to achieve an additional 3 percent RFP reduction beyond 2008 (i.e., should they have to achieve the 3 percent reductions through 2011)?

Response: Moderate areas are not subject to the “3% RFP” requirement in subpart 2, which applies only to serious and higher classified areas. The RFP SIP is only required to provide for RFP to the attainment date, not beyond the attainment date.

7. How should the state account for shutdowns and other emission reduction credits? How should they include these in RFP calculations?

Response: Any shutdowns prior to December 31, 2002 are reflected in the base year inventory emissions levels. A shutdown is creditable for RFP if it is permanent, enforceable, occurs after the baseline emissions inventory year, and is not being counted elsewhere. No growth should be assumed in emissions from the time of the shutdown to the time of the use of the emission

¹ Memorandum of 12/29/1997 from Richard D. Wilson “Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM₁₀ NAAQS”

reduction credit in the RFP calculation. Consistent with our longstanding policy, for purposes of equity, EPA encourages States to allow sources to use banked emissions reductions credits for offsetting purposes. (57 FR 13553).

8. How does the State derive average summer weekday emission estimates? (Including those for shutdowns and other emission reduction credits?)

Response: To the extent that we can credit such shutdowns in the rate-of-progress plans, the State would need some procedure for calculating the emission reduction credits in units consistent with the needs of the rate-of-progress plans. The State can use techniques recommended in EPA guidance to calculate summer weekday emissions. See also response to question 3 above.

9. For RFP in situations where one part of the nonattainment area has met the 15% VOC ROP requirement under the 1-hour standard (the "1-hour area"), and another part of the area has not (the "new area"), the state may rely on emission reductions from the "1-hour area" to meet its VOC RFP requirement for the new area under the 8-hour standard. Are there other restrictions that apply?

Response: Yes. The attached chart indicates several different situations that might fit the example provided (see specifically, situations D – G, which provide details on how the RFP requirements would apply).

Reasonable Further Progress (RFP) Guidance for 8-hr O3 NAAQS Implementation—A Quick Reference Tool (not to be a substitute for the Phase 2 rule itself)

SUBPART 2 AREAS

| Situation ¹ | IF | | | | | AND IF | THEN | Reference 40 CFR 51.910 (unless otherwise noted) |
|------------------------|--|-----------------------|--------------------------------|--------------------------|--------------------------|--------|---|---|
| | Area type ² | Subpart 2 Moderate | Subpart 2 Above Moderate | Attain Date ≤ 5 years | Attain Date > 5 years | | | |
| A | Entire NA area has approved 15% VOC ROP plan under 1-hr O3 NAAQS | X | | X | | | Area considered to have met the 15% VOC ROP requirement in Sect. 182(b)(1). Area subject to subpart 1 RFP, satisfied with measures that demonstrate attainment as expeditiously as practicable (see situation J). | (b)(2)(i) |
| B | Entire NA area has approved 15% VOC ROP plan under 1-hr O3 NAAQS | X | | | X | | Area considered to have met the 15% VOC ROP requirement in Sect. 182(b)(1). Area subject to subpart 1 RFP; satisfied with RFP plan to demonstrate 15% emission reductions (VOC and/or NOx) from 2002 ³ to 2008 and time-proportional emission reductions every 3 years beyond 2008 out to attainment date (see situation K). | (b)(2)(ii) |
| C | Entire NA area has approved 15% VOC ROP plan under 1-hr O3 NAAQS | | X | | X | | Area considered to have met the 15% VOC ROP requirement in Sect. 182(b)(1). Area subject to RFP requirements of section 182(c)(2)(B); satisfied with plan achieving an average of 3 percent per year reductions (VOC and/or NOx) over the 6 years following the baseline year and then an average of 3 percent per year (VOC and/or NOx) for each subsequent 3 year period out to the attainment year | (a)(1)(ii)(B) |

¹ Situations other than those identified here should be discussed with the appropriate Regional Office.

² Applies to an individual State portion if it is part of an interstate nonattainment area.

³ Assuming 2002 is the base year for the inventory; 40 CFR 51.910(d) provides for using an alternative year.

| Situation ¹ | IF | | | | | AND IF | THEN | Reference 40 CFR 51.910 (unless otherwise noted) |
|------------------------|---|-----------------------|--------------------------------|--------------------------|--------------------------|--|--|---|
| | Area type ² | Subpart 2 Moderate | Subpart 2 Above Moderate | Attain Date ≤ 5 years | Attain Date > 5 years | | | |
| D | <p>Part of area has approved 15% VOC ROP plan under 1-hr O3 NAAQS</p> <hr/> <p>Part of area without approved 15% VOC ROP plan under 1-hr O3 NAAQS</p> | X | | | | Area does not meet criteria of situation G | <p>The 8-hr nonattainment area has 2 options: Opt 1: Develop new baseline and new 8-hr 15 % VOC RFP emission reduction target for entire 8-hour area. OR Opt 2: Treat area as divided between portions of the area that have an approved 15% VOC ROP plan and those portions without an approved 15% VOC ROP plan under the 1-hr O3 NAAQS. For the portion with the approved 15% VOC ROP plan, subpart 1 RFP requirements apply (see situation J); for the portion without an approved 15% VOC ROP plan under the 1-hr O3 NAAQS, State must develop 8-hr 15 % VOC RFP emission reduction target for that portion of the 8-hour area; however, reductions may come from anywhere within the entire 8-hr O3 nonattainment area.</p> | (a)(1)(iii) |

| Situation ¹ | IF | | | | | AND IF | THEN | Reference 40 CFR 51.910 (unless otherwise noted) |
|------------------------|---|-----------------------|--------------------------------|--------------------------|--------------------------|--|---|---|
| | Area type ² | Subpart 2 Moderate | Subpart 2 Above Moderate | Attain Date ≤ 5 years | Attain Date > 5 years | | | |
| E | <p>Part of area has approved 15% VOC ROP plan under 1-hr O3 NAAQS</p> <hr/> <p>Part of area without approved 15% VOC ROP plan under 1-hr O3 NAAQS</p> | | X | | | Area does not meet criteria of situation G | <ul style="list-style-type: none"> This bullet is the same as under situation D. The 8-hr nonattainment area has 2 options: Opt 1: Develop new baseline and new 8-hr 15 % VOC RFP emission reduction target for entire 8-hour area for first 6 years after baseline year. OR Opt 2: Treat area as divided between portions of the area that have an approved 15% VOC ROP plan and those portions without an approved 15% VOC ROP plan under the 1-hr O3 NAAQS. For the portion with the 15% VOC ROP plan, subpart 1 RFP requirements apply (see situation K); for the portion without an approved 15% VOC ROP plan under the 1-hr O3 NAAQS, State must develop 8-hr 15 % VOC RFP emission reduction target for the first 6 years after the baseline year for that portion of the 8-hour area; however, reductions may come from anywhere within the entire 8-hr O3 nonattainment area. Section 182(c)(2)(B) RFP requirements apply after the first 6 years. | (a)(1)(iii) |

| Situation ¹ | IF | | | | | AND IF | THEN | Reference 40 CFR 51.910 (unless otherwise noted) |
|------------------------|---|-----------------------|--------------------------------|--------------------------|--------------------------|--|---|---|
| | Area type ² | Subpart 2 Moderate | Subpart 2 Above Moderate | Attain Date ≤ 5 years | Attain Date > 5 years | | | |
| F | <p>Part of area has approved 15% VOC ROP plan under 1-hr O3 NAAQS</p> <hr/> <p>Part of area without approved 15% VOC ROP plan under 1-hr O3 NAAQS—but had actually achieved 15% VOC due to adopted measures</p> | X | X | | | <p>The part of the area without an approved 15% VOC ROP plan under the 1-hr standard--</p> <p>a. had at one time been subject to the 15% VOC ROP requirement under the 1-hour ozone standard;</p> <p>b. actually obtained 15% VOC reductions after 1990; and</p> <p>c. had adopted and implemented control measures (that are approved in the SIP) that resulted in the 15% VOC reductions per section 182(b)(1) of the CAA and it is shown that the reductions are as expeditious as practicable.</p> | <p>EPA may treat the portion of the 8-hour nonattainment area without an approved 1-hr 15% VOC plan as under situations A, B, or C above, as appropriate).*</p> | <p>Not previously referenced</p> |

| Situation ¹ | IF | | | | | AND IF | THEN | Reference 40 CFR 51.910 (unless otherwise noted) |
|------------------------|--|-----------------------|--------------------------------|--------------------------|--------------------------|--|---|---|
| | Area type ² | Subpart 2 Moderate | Subpart 2 Above Moderate | Attain Date ≤ 5 years | Attain Date > 5 years | | | |
| G | Part of area has approved 15% VOC ROP plan under 1-hr O3 NAAQS <hr/> Part of area without approved 15% VOC ROP plan under 1-hr O3 NAAQS | X | X | | | a. At the time the area with an approved 15% VOC ROP plan adopted rules to meet the 15% ROP requirement, the area without an approved 15% VOC ROP plan had adopted and implemented control measures (and that were approved in the SIP) that were similar to those in the area with an approved 1-hr 15% VOC ROP plan; and b. The area had a similar mix of sources to that of the area with an approved 1-hr 15% VOC ROP plan. | EPA may treat the portion of the 8-hour nonattainment area without an approved 1-hr 15% VOC plan as under situations A, B, or C above, as appropriate.* | Preamble, 70 FR 71636, col 2 |
| H | Entire area without approved 15% VOC ROP plan under 1-hr O3 NAAQS | X | X | | | The area cannot meet conditions of situation I (below) | The area must meet the RFP requirements of section 182(b)(1) (and (c)(2)(B) depending on its classification). | (a)(1)(i) |
| I | Entire area without approved 15% VOC ROP plan under 1-hr O3 NAAQS; area had at one time been subject to 15% VOC ROP under 1-hour O3 standard | X | X | | | a. The area actually obtained 15% VOC reductions after 1990; and b. The area had adopted and implemented control measures (that have been approved in the SIP) that resulted in the 15% VOC reductions per section 182(b)(1) of the CAA and it is shown that the reductions are as expeditious as practicable. | EPA may treat the 8-hour nonattainment area without an approved 1-hr 15% VOC plan as under situations A, B, or C above, as appropriate.* | Not previously referenced |

* Rulemaking would also have to set forth EPA approval of the 15% VOC ROP plan under the 1-hour ozone standard.

SUBPART 1 AREAS

| IF | | | | THEN | Reference 40 CFR 51.910 (unless otherwise noted) |
|------------------------|------------------------|-----------------------------|--------------------------------|---|---|
| Situation ⁴ | Area type ⁵ | Attain Date ≤ 5 years | Attain Date > 5 years | | |
| J | Entire area—Subpart 1 | X | | Area subject to subpart 1 RFP, satisfied with measures that demonstrate attainment as expeditiously as practicable | (b)(2)(i) |
| K | Entire area—Subpart 1 | | X | Area subject to subpart 1 RFP; satisfied with RFP plan to demonstrate 15% emission reductions (VOC and/or NOx) from 2002 ⁶ to 2008 and time-proportional emission reductions every 3 years beyond 2008 out to attainment date. | (b)(2)(ii) |

ACRONYMS:

RFP Reasonable Further Progress (for 8-hour standard)
 NA Nonattainment
 ROP Rate of Progress (used with 1-hr standard)
 VOC Volatile organic compound
 NOx Nitrogen oxides
 O3 Ozone
 NAAQS National ambient air quality standard
 CAA Clean Air Act

⁴ Situations other than those identified here should be discussed with the appropriate Regional Office.

⁵ Applies to an individual State portion if it is part of an interstate nonattainment area.

⁶ Assuming 2002 is the base year for the inventory; 40 CFR 51.910(d) provides for using an alternative year.