UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 28 1992

MEMORANDUM

SUBJECT: State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (Act) Deadlines

FROM : John Calcagni, Director
Air Quality Management Division, OAQPS (MD-l 5)

TO: Director, Air, Pesticides and Toxics
Management Division, Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation, and Toxics Division,
Region III
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The purpose of this memorandum is to clarify issues related to redesignation requests and SIP actions submitted in response to Act deadlines, and specifically address SIP elements that are due November 15, 1992. The following topics are addressed below: completeness determinations on commitment submittals: requests for parallel processing. to meet Act deadlines: effect of redesignation requests on mandatory Act submittals; completeness determinations on emission inventory submittals; and issuing letters to the States making a finding of failure to submit a required SIP, or SIP element.

Completeness Determinations on Commitment Submittals

In anticipation of commitment SIP's being submitted to the Environmental Protection Agency (EPA) as authorized by section 110(k)(4) of the Act, my staff are working with the Office of General Counsel (OGC) to revise the completeness criteria in Appendix V of 40 CFR Part 51.[1] Specifically, it is our intent to include specific completeness criteria for committal SIP's.

[1] A July 22, 1992 memorandum from Michael Shapiro identified a number of statutory requirements for which EPA is inclined to accept committal SIP's. (A clarification of that memorandum was issued by Michael Shapiro on September 16, 1992.)

The current completeness criteria do not address commitments submitted under section 110(k)(4) of the Act. However, we are interpreting section 110(k)(4) as allowing EPA to accept commitments from a State as complete submittals even though commitments will lack some of the substantive elements required under the current completeness criteria. Consequently, committal SIP's submitted to EPA should be reviewed against only those elements of the completeness criteria that are directly applicable to commitments in order to be determined complete. The elements of the completeness criteria that are applicable to commitments are:

1. A formal letter of submittal from the Governor or his designee requesting EPA approval of the commitment.

2. The commitment was subject to a public hearing pursuant to 40 CFR 51.102.

3. The submittal contains a schedule for the adoption of the statutorily required measures.

Additionally, States should be encouraged to submit documentation and a justification explaining the need for a commitment.

If a Regional Office receives a submittal that contains one or more Commitments in association with other rules or control measures, the Region should consult with the responsible Headquarters program office to determine if a commitment is acceptable in that specific circumstance. (Please refer to my July 9, 1992 memorandum entitled "Processing of State Implementation Plan Submittals," specifically the part on conditional approvals.) If EPA determines that it will consider the commitment under the conditional approval process, the commitment should be reviewed only as to the criteria that would be applicable for commitments. However, if EPA determines that a commitment cannot be used to meet the statutory requirement, the submittal should be reviewed against all elements Of the completeness criteria.

Requests for Parallel Processing to Meet Act Deadlines

The EPA expects a number of States to request parallel processing of draft rules as a way to meet Act deadlines. A State request for parallel processing is not an official submittal satisfying a statutory deadline since it is a draft rule (i.e., the State has yet to adopt the regulation).

When the completeness criteria were promulgated with an exception for parallel processing, EPA was not anticipating submittals subject to statutory deadlines. The intent was to continue the timesaving concept of parallel processing State-initiated actions. However, the exceptions in the completeness criteria could be interpreted as requiring EPA to accept draft

rules in order to meet statutory deadlines. As noted above, draft submittals are not considered plan submittals under the Act because they have not been adopted by the State. Consequently, EPA is not precluded from making a finding of failure to submit a required SIP element when a State submits a draft rule.

If a request for parallel processing is submitted to EPA before the statutory deadline, EPA may agree to parallel process the action. However, EPA will not make a completeness finding under section 110(k)(l) since that section applies to official plan submittals and not draft rules. However, if the statutory deadline passes and a State has not submitted the fully-adopted regulation, the Regions should make a finding of failure to submit under section 179(a)(l). This will initiate the sanctions time clock.

Subsequently, if a State submits a fully-adopted rule or maintenance plan, EPA will review the submittal against the completeness criteria. The EPA will commence rulemaking action if the submittal is complete. If the completeness criteria are met, a finding of completeness will stop the time clock for sanctions. If the completeness criteria are not met, EPA should make a finding of incompleteness, thereby maintaining the previous time clock for sanctions.

Because the parallel processing exception could be interpreted to require EPA to accept draft rules as meeting a statutory deadline, we are presently revising the completeness criteria to remove the parallel processing exception. It should be noted, however, that although parallel processing submittals are not official plan submittals, EPA will continue to use parallel processing as an effective avenue for approving State rules expeditiously.

Effect of Redesignation Requests on Mandatory Act Submittals

It has come to our attention that some States plan to submit redesignation requests prior to November 15, 1992 with the understanding that this will exempt them from implementing mandatory Act programs due to start in November (e.g., oxygenated fuels program, stage II vapor recovery rules, etc.). The approvability of a redesignation request is based on the requirements applicable as of the date of submittal of a complete redesignation request.[2] States, however, are statutorily

[2] For a redesignation request to be complete, any portions of the redesignation request that are SIP revisions (e.g., maintenance plans and any additional control measures) must meet the completeness criteria for SIP revisions. Redesignation requests submitted for parallel processing will not be considered official submittals; therefore, they will not be treated as complete submittals.

obligated to meet SIP requirements that become due any time before an area is actually redesignated to attainment. Such redesignation occurs when EPA has taken final rulemaking action to approve a redesignation request.

Hence, if there is a failure by the state to meet a statutory deadline for an area (before EPA has redesignated the area as attainment), a finding of failure to submit should be made. This, in turn, begins the sanctions process under section 179(a) (see September 4, 1992 memorandum, entitled "Procedures for Processing Requests to Redesignate Areas to Attainment"). The findings letter should recognize any pending redesignation request, note the State's statutory obligation to implement any mandatory requirements that are due, and indicate that one of the sanctions will be imposed after 18 months unless EPA approves the redesignation request before the 18-month period has ended. Thus, the Regions should make all reasonable attempts to ensure that the redesignation approval process does not take over 18 months.

Completeness Determinations on Emission Inventory Submittals

In a September 29, 1992 memorandum from William Laxton and myself addressing public hearing requirements for emission inventory submittals, it was stated that EPA was providing a "de minimis" deferral of the public hearing requirement for emission inventory submittals. In that memorandum, it was also stated that if emission inventory submittals do not meet the completeness criteria (except for the deferred public hearing requirement), EPA should make a finding of incompleteness. However, that memorandum did not specify the process for making completeness determinations on emission inventory submittals that only lack the public hearing element.

After discussion with OGC, we have determined that for the emission inventory submittals that are only lacking evidence of a public hearing, EPA should make a finding of completeness contingent upon the State fulfilling the public hearing requirement. The completeness letter to the State should indicate that the completeness determination is contingent upon the State's fulfilling the public hearing requirement by the time identified in the September 29 memorandum. If the public hearing requirement is not met by the time specified, then EPA will make a finding of incompleteness on the original emission inventory submittal. The completeness letter should further state that the public hearing requirement must be met before or at the time of submittal of a rate-of-progress or maintenance plan, or at the time the inventory takes on regulatory significance such as providing a basis for banking or trading.

As noted in the September 29 memorandum, EPA also is providing a "de minimis" deferral of the requirement for EPA to take action On the emission inventory submittals. The 12-month statutory timeframe for approving or disapproving the emission inventory submittal will start at the time the public hearing requirement is met. If EPA has found the submittal incomplete, EPA will not be required to take approval action on the submittal.

Issuing Letters to the States Making a Finding of Failure to Submit a Required SIP or SIP Element

The Regional Offices should be planning to issue findings of failure to submit to States not meeting the November 1992 (and other) statutory deadlines. The Agency has taken a strong stance that such findings should be made soon after a due date has passed. Notice that a State has failed to submit a SIP, or SIP element, is made in the form of a letter from the Regional Administrator to the Governor of a State. Please refer to the July 22, 1992 Shapiro memorandum, entitled "Guidelines for State Implementation Plan (SIP) Submittals Due November 15, 1992," for further information. Further guidance will be made available on the schedule and format of the findings.

If you have any questions on this memorandum, please contact Denise Gerth at (919) 541-5550.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Research Triangle Park, North Carolina 27711

4 SEP 1992

MEMORANDUM

SUBJECT: Procedures for Processing Requests to Redesignate Areas to Attainment

FROM: John Calcagni, Director
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TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Purpose

The Office of Air Quality Planning and Standards (OAQPS) expects that a number of redesignation requests will be submitted in the near future. Thus, Regions will need to have guidance on the applicable procedures for handling the these requests, including maintenance plan provisions. This memorandum, therefore, consolidates the Environmental Protection Agency's (EPA's) guidance regarding the processing of requests for redesignation of nonattainment areas to attainment for ozone (0_3 carbon monoxide (CO), particulate matter (PM-IO), sulfur dioxide ($S0_2$) nitrogen dioxide ($N0_2$), and lead (Pb). Regions should use this guidance as a general framework for drafting Federal Register notices pertaining to redesignation requests. Special concerns for areas seeking redesignation from unclassifiable to attainment will be addressed on a case-by-case basis.

Background

Setion 107(d)(3)(E) of the Clean ACT, as amended, states that that area can be redesignated to attainment if the following conditions are met:

1. The EPA has determined that the national ambient air quality standards (NAAQS) have been attained.

2. The applicable implementation plan has been fully approved by EPA under section 110(k).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and Part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Each of these criteria is discussed in mare detail in the following paragraphs. Particular attention is given to maintenance plan provisions at the end of this document since maintenance plans constitute a new requirement under the amended Clean Air Act. Exceptions to the guidance will be considered ox a case-by-case basis.

1. Attainment of the Standard

The State must show that the area is attaining the applicable NAAQS. There are two components involved in making this demonstration which should be considered interdependently. The first component relies upon ambient air quality data. The data that are used to demonstrate attainment should be the product of ambient monitoring that is representative of the area of highest concentration. These monitors should remain at same location for the duration of the monitoring period required for demonstrating attainment. The data should be collected and quality-assured in accordance with 40 CFR 58 and recorded in the Aerometric Information Retrieval System (AIRS) in order for it to be available to the public for review. For purposes of redesignation, the Regional Office should verify that the integrity of the air quality monitoring network has been preserved.

For PM-10, an area may be considered attaining the NAAQS if the number of expected exceedances per year, according to 40 CFR 50.6, is less than or equal to 1.0. For 0_3 the area must show that the average annual number of expected exceedances, according to 40 CFR 50.9, is less than or equal to 1.0 based on data from all monitoring sites in the area or its affected downwind environs. In making this showing, both PM-10 and 0_3 must rely on 3 complete, consecutive calendar years of quality-assured air quality monitoring data, collected in accordance with 40 CFR 50, Appendices H and K. For CO, an area may be considered attaining the NAAQS if there are no violations, as determined in accordance

with 40 CFR 50.8, bared on 2 complete, consecutive calendar years of quality-assured monitoring data. For SO_2 according to 40 CFR 50.4, an area must show no more than one exceedance annually and for Pb, according to section 50.12, an area may show no exceedances on a quarterly basis.

The second component relies upon supplemental EPA-approved air quality modeling. No such supplemental modeling is required for 0_3 nonattainment areas seeking redesignation. Modeling may be necessary to datermine the representativeness of the monitored data. For pollutants such as SO_2 and CO, a small number of monitors typically is not representative of areawide air quality or areas of highest concentration. When dealing with SO_2, Pb, PM-l0 (except for a limited number of initial moderate nonattainment areas), and CO (except moderate areas with design values of 12.7 parts per million or lower at the time of passage of the Clean Air Act Amendments of 1990), dispersion modeling will generally be necessary to evaluate comprehensively sources impacts and to determine the areas of expected high concentration based upon current conditions. Areas which were designated nonattainment based on modeling will generally not be redesignated to attainment unless an acceptable modeling analysis indicates attainment, Regions should consult with OAQPS for further guidance addressing the need for modeling in specific circumstances.

2. State Implementation Plan (SIP) Approval

The SIP for the area must be fully approved under section 110(k),[1] and must satisfy all requirements that apply to the area. It should be noted that approval action on SIP elements and the redesignation request may occur simultaneously. An area cannot be redesignated if a required element of its plan is the subject of a disapproval; a finding of failure to submit or to implement the SIP; or partial, conditional, or limited approval. However, this does not mean that earlier issues with regard to the SIP will be reopened. Regions should not reconsider those things that have already been approved and for which the Clean Air Act Amendments did not alter what is required. In contrast, to the extent the Amendments add a requirement or alter an existing requirement so that it adds something more, Regions should consider those issues. In addition, requests from areas known to be affected by dispersion techniques which are inconsistent with EPA guidance will continue to be considered unapprovable under section 110 and will not qualify for redesignation.

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[1]Section 110(k) contains the requirements for EPA action on plan submissions. It addresses completeness, deadlines, full and partial approval, conditional approval, and disapproval.

3. Permanent and Enforceable Improvement in Air Quality

The State must be able to reasonably attribute the improvement in air quality to mission reductions which are permanent and enforceable[2] Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions.

In making this showing, the the State should estimate the percent reduction (from the year that was used to determine the design value for designation and classification) achieved from Federal measures such as the Federal Motor Vehicle Control Program and fuel volatility rules as well as control measures that have been adopted and implemented by the State. his estimate should consider emission rates, production capacities, and other related information to clearly show that the air quality improvements are the result of implemented controls. The analysis should assume that sources are operating at permitted levels (or historic peak levels) unless evidence is presented that such an assumption is unrealistic.

4. Section 110 and Part D Requirements

For the purposes of redesignation, a State must meet all requirements of section 110 and Part D that were applicable prior to submittal of the complete redesignation request. When evaluating a redesignation request, Regions should not consider whether the State has met requirements that come due under the Act after submittal of a complete redesignation request.[3]

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[2]This is consistent with EPA'S existing policy on redesignations as stated in an April 21, 1983 memorandum titled "Section 107 Designation Policy Summary." This memorandum state that in order for an area to be redesignated to attainment, the State must show that "actual enforceable emission reductions are responsible for the recent air quality improvement." This element of the policy retains its validity under the amended Act pursuant to section 193. [Note: other aspects of the April 21, 1983 memorandum have since been superseded by subsequent memorandums: interested parties should consult OAQPS before relying on these aspects, e.g. those relating to required years of air quality data.]

[3]Under section 175A(c), however, the requirement of Part D remain in force and effect for the area until such time as it is redesignated. Upon redesignation to attainment the requirements that became due under section 175A(c) after submittal of the complete redesignation request would no longer be applicable.

However, any requirements that came due prior to submittal of the redesignation request must be fully approved into the plan at or before the time EPA redesignates the area.

To avoid confusion concerning what requirements will be applicable for purposes of redesignation, Regions should encourage States to work closely with the appropriate Regional Office early in the process. This will help to ensure that a redesignation request submitted by the state has a high likelihood of being approved by EPA, Regions should advise States of the practical planning consequences if EPA disapproves the redesignation request or if the request is invalidated because of violations recorded during EPA's review. Under such circumstances, EPA does not have the discretion to adjust schedules for implementing SIP requirements. As a result, an area may risk sanctions and/or Federal implementation plan implementation that could result from failure to meet SIP submittal or implemention requirements.

a. Section 110 Requirements

Section 110(a)(2) contains general requirements for nonattainment plans, Most of the provisions Of this section are the same as those contained in the pre-amended Act. We will provide guidance on these requirements as needed.

b. Part D Requirements

Part D consists of general requirements applicable to all areas which are designated nonattainment based on a violation of the NAAQS. The general requirements are followed by a series of subparts specific to each pollutant. The general requirements appear in subpart 1. The requirements relating to 0_3, CO, PM-10, SO_2, NO_2, and Pb appear in subparts 2 through 5. In those instances where an area is subject to both the general nonattainment provisions in subpart 1 as well as one of the pollutant-specific subparts, the general provisions may be subsumed within, or superseded by, the more specific requirements of subparts 2 through 5.

If an area was not classified under section 181 for 0_3, or section 186 for CO, then that area is only subject to the provisions of subpart 1, "Nonattainment Areas in General." In addition to relevant provisions in 1 subpart subpart 1, an 0_3 and CO area, which is classified, must meet all applicable requirements in subpart 2, "Additional Provisions for Ozone Nonattainment Areas," and subpart 3, "Additional provisions for Carbon Monoxide"

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[4]General guidance regarding the requirements for SIP's may be found in the "General Preamble to Title I of the Clean Air Act Amendments," 57 FR 13498 (April 16, 1992).

Nonattainment Areas," respectively, before the area may be redesignated to attainment. All PM-10 nonattainment areas (whether classified as moderate or serious) must similarly meet the applicable general provisions of subpart 1 and the specific PM-10 provisions in subpart 4, "Additional Provisions for Particulate Matter Nonattainment Areas." Likewise, SO_2, NO_2, and Pb nonattainment areas are subject to the applicable general nonattainment provisions in subpart 1 well as the more specific requirements in subpart 5, "Additional Provisions for Areas Designated Nonattainment for sulfur Oxides, Nitrogen Dioxide, and Lead."

i Section 172(c) Requirements

This section contains general requirements for nonattainment plans. A thorough discussion of these requirements may be found in the General Preamble to Title I [57 FR 13498 (April 16, 1992)]. The EPA anticipates that areas will already have met most or all of these requirements to the extent that they are not superseded by more specific Part D requirements. The requirements for reasonable further progress, identification of certain missions increases, and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the the standard. The requirements for an emission inventory will be satisfied by the inventory requirements of the maintenance plan. The requireme of the Part D new source review program will be replaced by the prevention of significant deterioration (PSD) program once the area has been redesignated. However, in order to ensure that the PSD program will become fully effective immediately upon redesignation, either the State must be delegated the Federal PSD program or the State must make any needed modifications to its rules to have the approved PSD program apply to the affected area upon redesignation.

ii. Conformity

The State must work with EPA to show that its SIP provisions are consistent with section 176(c)(4) conformity requirements. The redesignation request should include conformity procedures, if the State already has these procedure in place Additionally, we currently interpret the conformity requirement to apply to attainment areas. However, EPA has not yet issued its conformity regulations specifying what areas are subject to the conformity requirement. Therefore, if a State does not have conformity procedures in place at the time that of submits a redesignation request, the state must commit to follow EPA's conformity regulation upon issuance, as applicable. If the State submits the redesignation request subsequent to EPA's issuance of the conformity regulations, and the conformity requirement became applicable to the area prior to submission,

the State must adopt the applicable conformity requirements before EPA can redesignate the area.

5. Maintenance Plans

Section 107(d)(3)(E) of the amended Act stipulates that for an area to be redesigned, EPA must fully approve a maintenance plan which meets the requirements of section 175A. A State may submit both the redesignation request and the maintenance plan at the same time and rulemaking or both may proceed on a parallel track. Maintenance plans may, of course, be submitted and approved by EPA before a redesignation is requested. However, according to section 175A(c) pending approval of the maintenance plan and redesignation request, all applicable nonattainment area requirements shall remain in place.

Section 175A defines the general framework of a maintenance plan. The maintenance plan will constitute a SIP revision and must provide far maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. Section 175A further states that the plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance. Because the Act requires a demonstration of maintenance for 10 years after an area is redesignated (not 10 years after submittal of a redesignation request), the State should plan for some lead time for EPA action on the request. In other words, the maintenance demonstration should project maintenance for 10 years, beginning from a data which factors in the time necessary for EPA review and approval action on the redesignation request. In determining the amount of lead time to allow, states should consider that section 107(d)(3)(D) grants the Administrator up to 18 months from receipt of a complete submittal to process a redesignation request. The statute also requires the State to submit a revision of the SIP 8 years after the original redesignation request is approved to provide for maintenance of the NAAQS for an additional 10 years following the first IO-year period [see section 175A(b)].

In addition, the maintenance plan shall contain such contingency measures as the Administrator deems necessary to ensure prompt correction of any violation of the NAAQS [see section 175A(d)]. The Act provides that, at a minimum, the contingency measures must include a requirement that the state will implement all measures contained in the nonattainment SIP prior to redesignation. Failure to maintain the NAAQS and triggering of the contingency plan will not necessitate a revision of the SIP unless required by the Administrator, as stated in section 175A(d).

The following is a list of core provisions that we anticipate will be necessary to ensure maintenance of the relevant NAAQS in an area seeking redesignation from

nonattainment to attainment. We therefore recommend that States seeking redesignation of a nonattainment area consider these provisions. However, any final EPA determination regarding the adequacy of a maintenance plan will be made following review of the plan submittal in light of the particular circumstances facing the area proposed for redesignation and based on all relevant information available at the time.

a. Attainment Inventory

The State should develop an attainment emissions inventory to identify the level of emissions in the area which is sufficient to attain the NAAQS.[5] This inventory should be consistent with EPA's most recent guidance on emission inventories for nonattainment areas available at the time and should include the emissions during the time period associated with the monitoring data showing attainment.[6]

Source size thresholds are 100 tons/year for SO_2, NO_2, and PM-10 areas, and 5 tons/year for Pb based upon 40 CFR 51.100(k) and 51.322, as well as established practice for AIRS data. The source size threshold for serious PM-10 areas is 70 tons/year

[5]Where the State has made an adequate demonstration that air quality has improved as a result of the SIP (as discussed previously), the attainment inventory will generally be the actual inventory at the time the area attained the standard.

[6]The EPA's current guidance on the preparation of emission inventories for O_3 and CO nonattainment areas is contained in the following documents: "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume I "(E P A -450/4-91-016), "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone Volume II" (EPA-450/4-91-014), "Emission Inventory Requirements for Ozone State Implementation Plans" (E P A -450/4-9 1-010) "Emission Inventory Requirements for Carbon Monoxide Implementation Plans" (EPA-450/4-91-01l), "Guideline for Regulatory Application of the Urban Airshed Model" (EPA-450/4-91-013), "Procedures for Emission Inventory Preparation: Volume IV Mobile Sources" (EPA-450/4-8l-026d), and "Procedures for Preparing Emission Inventory Projections" (EPA-450/4-91-019). The EPA does not currently have specific guidance on attainment emissions inventories for SO_2. In lieu thereof, States are referred to the guidance on emissions data to be used as input to modeling demonstrations, contained in Table 9.1 of EPA'S "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R) July 1987, which is generally applicable to all criteria pollutants. Emission inventory procedures and requirements documents are currently being prepared by OAQPS for PM-10 and Pb; these documents are due for release by summer 1992.

according to Clean Air Act section 189(b)(3). However, the inventory should include sources below these size thresholds if these smaller sources were included in the SIP attainment demonstration. Where sources below the 100, 70, and 5 tons/year-size thresholds (e.g., areas with smaller source size definitions) are subject to a State's minor source permit program, these sources need only be addressed in the aggregate to the extent that they result in areawide growth.

For O_3 nonattainment areas, the inventory should be based on actual "typical summer day" emissions of O_3 precursors (volatile organic compounds and nitrogen oxides) during the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas to reconcile milestones. For CO nonattainment areas, the inventory should be based on actual "typical CO season day" emissions for the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas.

b. Maintenance Demonstration

A State may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. Under the Clean Air Act, many areas are required to submit modeled attainment demonstration to show that proposed reductions in emissions will be sufficient to attain the applicable NAAQS. For these areas, the maintenance demonstration should be based upon the same level of modeling. In areas where no such modeling was required, the State should be able to rely on the attainment inventory approach. In both instances, the demonstration should be for a period of 10 years following the redesignation.

Where modeling is relied upon to demonstrate maintenance, each plan should contain a summary of the air quality concentrations expected to result from application of the control strategy. In the process, the plan should identify and describe the dispersion model or other air quality model used to project ambient concentrations (see 40 CFR 51.46).

In either case, to satisfy the demonstration requirement the State should project emissions for the 10-year period following redesignation, either for the purpose of showing that emissions will not increase over the attainment inventory or for conducting modeling.[7] The projected inventory should consider future growth, including population and industry, should be consistent

[7]Guidance for projecting emissions may be found in the emissions inventory guidance cited in footnote 6.

with the attainment inventory, and should document data inputs and assumptions. All elements of the demonstration (e.g., emission projections, new source growth, and modeling) should be consistent with current EPA modeling guidance.[8] For 0_3 and CO, the projected emissions should reflect the expected actual emissions based on enforceable emission rates and typical production rates.

For CO, a State should address the areawide component of the maintenance demonstration either by showing that future CO emissions will not increase or by conducting areawide modeling. Preferably, the State shou1d carry out hot-spot modeling that is consistent with the Guideline on Air Quality Models (Revised), if order to demonstrate maintenance of the NAAQS. In particular, if the nonattainment problem is related to a pattern of hot-spots then hot-spot modeling should generally be conducted. However hot-spot modeling is not automatically required. For example, if the nonattainment problem was related solely to stationary point sources, or if highway improvements have been implemented and the associated emission reductions and travel characteristics can be qualitatively documented, then hot-spot modeling is not required In such cases, adaquate docmentation as well as the concurrence of Headquarters is needed.

Any assumptions concerning emission rates must reflect permanent, enforceable measures. In other words, a State generally cannot take credit in the maintenance demonstration for reductions unless there are regulations in place requiring those reductions or the reductions are otherwise shown to be permanent. Therefore, the State will be expected to maintain its implemented control strategy despite redesignation to attainment, unless such measures are shown to be unnecessary for maintenance or are replaced with measures that achieve equivalent reductions (see additional discussion under “Contingency Plan”). Emission reductions from source shutdowns can be considered permanent and enforceable to the extent that those shutdowns have been reflected in the SIP and all applicable permits have been modified accordingly.

Modeling used to demonstrate how attainment may be relied upon in the maintenance demonstration where the modeling conforms to current EPA guidance and where the State has projected no significant changes in the modeling inputs during the intervening time. Where the original attainment demonstration may no longer be relied upon, States will be expected to remodel using current

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[8]The EPA-approved modeling guidance may be found in the following documents: “Guideline on Air Quality Models (Revised)” OAQPS, RTP, NC (EPA-450/2-78-027R), July 1986; and “PM-10 SIP Development Guideline,” OAQPS, RTP, NC (EPA-450/2-86 001) June 1987.

EPA referenced techniques.[9] This may be necessary where, for example, there has been a change in emissions or a change in the siting of new sources or modifications such that air quality may no longer be accurately represented by the existing modeling.

c. Monitoring Network

Once an area has been redesignated, the State should continue to operate an appropriate air quality monitoring network, in accordance with 40 CFR Part 58, to verify the attainment status of the area. The maintenance plan should contain provisions for continued operation of air quality monitors that will provide such varification. In cases where measured mobile source parameters (e.g., vehicle miles traveled congestion) have changed over time, the State may also need to perform a saturation monitoring study to determine the need for, and location of, additional permanent monitors.

d. Verification of Continued Attainment

Each State should ensure that it has the legal authority to implement and enforce all measures necessary to attain and to maintain the NAAQs. Sections 110(a)(2)(B) and (F) of the Clean Air Air Act, as amended, and regulations promulgated at 40 CFR 51.110(k), suggest that one such measure is the acquisition of ambient and source emission data to demonstrate attainment and maintenance.

Regardless of whether the maintenance demonstration is base on a showing that future emission inventories will not exceed the attainment inventory or on modeling, the State submittal should indicate how the state will track the progress of the maintenance plan. This is necessary due to the fact that the emission projections made for the maintenance demonstration depend on assumptions of point and area source growth.

One option for tracking the progress of the maintenance demonstration, provided here as an example, would be for the State to periodically update the emissions inventory. In this case, the maintenance plan should specify the frequency of any planned inventory updates. Such an update could be based, in part, on the annual AIRS update and could indicate new source growth and other changes from the attainment inventory (e.g., changes in vehicle miles traveled or in traffic patterns). As an alternative to a complete update of the inventory, the State may choose to do a comprehensive review of the factors that were used in developing the attainment inventory to show no significant change. If this review does show a significant change, the State should then perform an update of the inventory.

[9]See references for modeling guidance cited in footnote 8.

Where the demonstration is based on modeling, an option for tracking progress would be for the State to Periodically (typically every 3 years) reevaluate the modeling assumptions and input data. In any event, the State should monitor the indicators for triggering contingency measures (as discussed below).

e. Contingency Plan

Section 175A of the Act also requires that a maintenance plan include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of the area. These contingency measures are distinguished from those generally required for nonattainment areas under section 172(c)(9) and those specifically required for O_3 and CO nonattainment areas under sections 182(c)(9) and 187(a)(3), respectively. For the purposes of section 175A, a State is not required to have fully adopted contingency measure that will take effect without further action by the State in[1] order for the maintenance plan to be approved. However, the contingency plan is considered to be an enforceable part of the SIP andshould ensure that the contingency measures are adopted expediently once they are triggered. The plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific time limit for action by the State. As a necessary part of the plan, the State should also identify specific indicators, or triggers, which will be used to determine when the contingency measure need to be implemented.

Where the maintenance demonstration is based on the inventory, the State may, for example, identify an “action level" of emissions as the indicator. If later inventory updates show that the inventory has exceeded the action level, the State would take the necessary sups to implement the contingency measures. The indicators would allow a State to take early action to address potential violations of the NAAQS before they occur. By taking early action, States may be able to prevent any actual violations of the NAAQS and, therefore, eliminate the need on the part of EPA to redesignate an area to nonattainment.

Other indicators to consider include monitored or modeled violations of the NAAQS (due to the inadequacy of monitoring data in some situations). It is important to note that air quality data in excess of the NAAQS will not automatically necessitate a revision of the SIP where implementation of contingency measures is adequate to address the cause of the violation. The need for a SIP revision is subject to the Administrator’s discretion.

The EPA will review what constitutes a contingency plan on a case-by-case basis. At a minimum, it must require that the State will implement all measures contained in the Part D nonattainment

plan for the area prior to redesignation [see section 175A(d)]. This language suggests that a State may submit a SIP revision at the time of its redesignation request to remove or reduce the stringency of control measures. Such a revision can be approved by EPA if it provides for compensating equivalent reductions. A demonstration that measures are equivalent would have to include appropriate modeling or an adequate justification. Alternatively, a State might be able to demonstrate (through EPA-approved modeling) that the measures are not necessary maintenance of the standard. In either case, the contingency plan would have to provide for implementation of any measures that were reduced or removed after redesignation of the area.

Summary

As stated previously, this memorandum consolidates EPA's redesignation and maintenance plan guidance and Regions should rely upon it as a general framework in drafting Federal Register notices. It is strongly suggested that the Regional Office give the States a better understanding of what is expected from a redesignation request and maintenance plan under existing policy. Any necessary changes to existing Agency policy will be made through our action on specific redesignation requests and the review of section 175A maintenance plans for these particular areas, both of which are subject to notice and comment rulemaking procedures. Thus, in applying this memorandum to specific circumstances in a rulemaking, Regions should consider the applicability of the underlying policies to the particular facts and to comments submitted by any person. If your staff members have questions which require clarification, they may contact Sharon Reinders at (919) 541-5284 for O_3 and CO-related issues, and Eric Ginsburq at (919) 541-0877 for SO_2, PM-10, and Pb-related issues.

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