Appendix A

Correspondence and Guidance Documents

(This page intentionally left blank)

Table of Contents

(This page intentionally left blank)

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

4 SEP 1992

MEMORANDUM

SUBJECT: Procedures for Processing Requests to Redesignate Areas to Attainment

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

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 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 (O_3), carbon monoxide (CO), particulate matter (PM-10), sulfur dioxide (SO_2), nitrogen dioxide (NO_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

Section 107(d)(3)(E) of the Clean Air Act, as amended, states that an 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 more 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 on 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 the 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 O_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 O_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, based 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 O_3 nonattainment areas seeking redesignation. Modeling may be necessary to determine 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-10 (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 concentrations 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.

---

[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 emission 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 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. This 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]

---

[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 states 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 with OAQPS before relying on these aspects, e.g. those relating to required years of air quality data.]

[3]Under section 175A(c), however, the requirements 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 implementation 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.[4]

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 O_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 O_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 subpart 1, an O_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

---

[4]General guidance regarding the requirements for SIP's may be found in the "General Preamble to Title I of the 1990 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 as 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 emissions increases, and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard. The requirements for an emission inventory will be satisfied by the inventory requirements of the maintenance plan. The requirements 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 procedures 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 it 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 redesignated, 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 on 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 for 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 date 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 10-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" (EPA-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" (EPA-450/4-91-010), "Emission Inventory Requirements for Carbon Monoxide Implementation Plans" (EPA-450/4-91-011), "Guideline for Regulatory Application of the Urban Airshed Model" (EPA-450/4-91-013), "Procedures for Emission Inventory Preparation: Volume IV, Mobile Sources" (EPA-450/4-81-026d), 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 demonstrations 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 O_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 should carry out hot-spot modeling that is consistent with the Guideline on Air Quality Models (Revised), in 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, adequate documentation 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 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

---

[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 verification. 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 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 based 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 travelled 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 measures that will take effect without further action by the State in order for the maintenance plan to be approved. However, the contingency plan is considered to be an enforceable part of the SIP and should 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 measures 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 steps 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 for 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 Offices share this document with the appropriate States. This should 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 Ginsburg at (919) 541-0877 for SO_2-, PM-10-, and Pb-related issues.

cc: Chief, Air Branch, Regions I-X
John Cabaniss, OMS
Denise Devoe, OAQPS
Bill Laxton, TSD
Rich Ossias, OGC
John Rasnic, SSCD
John Seitz, OAQPS
Mike Shapiro, OAR
Lydia Wegman, OAQPS

March 28, 2000

MEMORANDUM

SUBJECT: Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards (NAAQS or Standard)

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Air Directors, Regions I-X

The purpose of this memorandum is to provide guidance to State and local air pollution control agencies and Tribes (States and Tribes) on designating areas as attainment/unclassifiable[1] or nonattainment and the Environmental Protection Agency's (EPA's) views on the boundaries for nonattainment areas for the 8-hour ground-level ozone NAAQS.

Area designations to attainment/unclassifiable or nonattainment are required after promulgation of a new or revised NAAQS. The EPA promulgated a new 8-hour ozone NAAQS in July 1997 and is, therefore, obligated to designate all areas by July 2000 as established by the Clean Air Act (CAA or Act) and the Transportation Equity Act for the 21 Century (TEA-21).[2] On May 14, 1999, the U.S. Court of Appeals for the District of Columbia Circuit issued a decision remanding, but not vacating, the 8-hour ozone standard. The court noted that EPA is required to designate areas for any new or revised NAAQS in accordance with §107(d)(1) of the Act. American Trucking Assoc. v. EPA, 175 F.3d 1027, 1047-48, on rehearing 195 F.3d 4 (D.C. Cir. 1999).

The process for designations following promulgation of a NAAQS is contained in §107(d)(1) of the Act. This section provides each State Governor an opportunity to recommend attainment/unclassifiable or nonattainment designations including appropriate boundaries to EPA and for EPA to make modifications to these designations and boundaries as it deems necessary. In June 1999, EPA requested that each State forward (or complete entering into the Aerometric Information Retrieval System data base) air quality data through 1998 and identify which monitors were exceeding the 8-hour standard during the 1996-1998 time frame. The EPA is now requesting that each State Governor submit their designation recommendations and supporting

[1]A designation to attainment/unclassifiable means that the area has sufficient data to determine that the area is meeting the 8-hour ozone NAAQS or that due to no data or insufficient data, EPA cannot make a determination.

[2]CAA §107(d)(1); TEA-21§6103(a).

documentation to the appropriate EPA Regional Office, to the attention of the Regional Administrator, by June 30, 2000. These recommendations should generally be based on States' 1997-1999 quality-assured, Federal reference or equivalent air quality monitoring data.

In accordance with the CAA, EPA will review the recommended designations and may make modifications as deemed necessary to a State's recommendation. If EPA determines that a modification to the recommendation is necessary, EPA will notify the State no later than 120 days prior to promulgating a designation, which will provide an opportunity for the State to demonstrate why EPA's modification is not appropriate. In the case where a State does not submit recommendations, EPA will promulgate the designation it deems appropriate. As described in the attachment, Tribal designation activities are covered under a different legal authority.

This memorandum provides EPA's current views on how boundaries should be determined for designations. This guidance is not binding on States, Tribes, the public, or EPA. Issues concerning nonattainment area boundaries will be addressed in actions to designate nonattainment and attainment/unclassifiable areas under §107 of the CAA. When EPA promulgates designations, those determinations will be binding on States, Tribes, the public, and EPA as a matter of law.

The attachment contains the guidance on determining boundaries. Questions on this guidance may be directed to Sharon Reinders at 919-541-5284. The Regional Offices should make this guidance available to their States and Tribes and, where appropriate, work closely with them to ensure they submit their area recommendations by June 30, 2000.

Attachment

cc: Deputy Regional Administrators, Regions I-X
Margo Oge, OTAQ

Attachment

8-HOUR OZONE NAAQS
GUIDANCE ON NONATTAINMENT DESIGNATIONS

1. Why is EPA issuing this guidance on 8-hour ozone NAAQS nonattainment designations?

States have requested that EPA provide guidance on the appropriate boundaries for areas that will be designated nonattainment for the 8-hour standard. The EPA provided initial guidance on designations in a June 1999 memorandum.[1] That memorandum noted that EPA would provide additional information on designations at a future date. This guidance on how to determine the appropriate boundaries for areas that will be designated nonattainment for the current 8-hour ozone NAAQS is intended to meet that commitment. In addition, in light of the court decision remanding the 8-hour standard to EPA, States have asked what the implications are if EPA issues a revised ozone standard in response to the court's remand.

On July 18, 1997, EPA issued the revised NAAQS for ozone (62 FR 38856). The new standard is 0.08 parts per million (ppm) averaged over 8-hours; this compares to the pre-existing NAAQS of 0.12 ppm averaged over 1 hour. This action triggered the requirement under §107 of the Act and §6103 of TEA-21 for EPA to designate areas as attainment/unclassifiable or nonattainment for the revised NAAQS. Under these statutory provisions, EPA is required to designate areas for the revised standard by July 2000.

On May 14, 1999, the U.S. Court of Appeals for the District of Columbia Circuit issued a decision remanding, but not vacating, the 8-hour ozone standard. The court noted that EPA is required to designate areas for any new or revised NAAQS in accordance with §107(d)(1) of the Act. American Trucking Assoc. v. EPA, 175 F.3d 1027, 1047-48, on rehearing 195 F.3d 4 (D.C. Cir. 1999).

As provided in this guidance, EPA is planning to designate areas for the 8-hour ozone NAAQS promulgated in July 1997. If EPA promulgates a revised ozone NAAQS in response to a final unappealable court decision regarding the validity of the 8-hour standard, EPA would then be required to begin the designation process under §107 of the CAA for that revised ozone NAAQS. In such a case, EPA would issue guidance regarding designations for that revised NAAQS. At the time of promulgation of that revised NAAQS, EPA would establish, after an opportunity for public review, an appropriate transition scheme from the current 8-hour NAAQS to any revised NAAQS promulgated in response to the court's decision. Although this memorandum is not establishing the transition scheme, EPA does not anticipate requiring States or Tribes to comply with the statutory redesignation requirements to modify the designations for the replaced NAAQS.

2. What are the underlying requirements for designating areas for the 8-hour ozone NAAQS?

---

[1]Memorandum of June 25, 1999, from John S. Seitz, "Designations for the 8-Hour Ozone National Ambient Air Quality Standard."

There are two relevant statutory provisions governing designations for the 8-hour ozone NAAQS. Section 107(d)(1) of the Act establishes the requirements for making designations for areas when a NAAQS is promulgated or revised. These are designations of nonattainment or attainment/unclassifiable. The provision provides an opportunity for each State to make a recommendation to EPA concerning the designation of areas in the State within 1 year after promulgation of a new or revised NAAQS. The EPA is required to designate areas across the country no later than 2 years following the promulgation of the NAAQS. The TEA-21 §6103 essentially extends by 1 year the 2-year designation process. Thus, States were provided 2 years to make their recommendations and EPA is required to designate areas 1 year after the State designation recommendations are due.

As authorized by the Tribal Authority Rule (TAR), Tribes may request an opportunity to submit designation recommendations to EPA. In cases where Tribes do not make their own recommendations, then EPA, in consultation with the Tribes, will promulgate the designation it deems appropriate on their behalf.[2]

In issuing the final designations, EPA is authorized to make such modifications it deems necessary to the recommended designations of the areas or portions thereof including the

---

[2]The CAA, §301(d), authorizes EPA to treat eligible Indian Tribes in the same manner as States. Pursuant to §301(d)(2), EPA promulgated regulations known as the "Tribal Authority Rule" on February 12, 1999 that specifies those provisions of the Act for which it is appropriate to treat Tribes as States. 63 FR 7254, codified at 40 Code of Federal Regulations (CFR) §49 (1999). Under the TAR, Tribes may choose to develop and implement their own CAA programs, but are not required to do so. The TAR also establishes procedures and criteria by which Tribes may request from EPA a determination of eligibility for such treatment. The designations process contained in §107(d)(1) of the Act is included among those provisions determined appropriate by EPA for treatment of Tribes in the same manner as States. Therefore, EPA Regional Offices will work with the Tribes in their Regions that request an opportunity to submit designation recommendations. Eligible Tribes may choose to submit their own recommendations and supporting documentation. Since, currently, there is a lack of air quality monitoring data nationally throughout Indian country, the factors identified in this guidance should be considered in recommending designations for the 8-hour ozone standard. The EPA will review the recommendations made by Tribes and may, in consultation with the Tribes, make modifications as deemed necessary. Under the TAR, Tribes generally are not subject to the same submission schedules imposed by the CAA on States. Therefore, EPA Regional Offices will work with their Tribes in scheduling interim activities and final designation actions, insofar as practicable, within the time frames outlined in this memorandum.

Finally, certain aspects of this guidance may not be particularly suited for application to Tribes due to circumstances that presently exist throughout Indian country. Consequently, EPA intends to issue additional guidance in the near future to further address designation issues pertaining to Tribes.

boundaries of the areas or portions thereof. If EPA modifies a designation or boundary, it must notify the State or Tribe at least 120 days in advance of such action in order to give the State or Tribe an opportunity to demonstrate why the proposed modification is inappropriate. The EPA's designation of areas for the 8-hour ozone NAAQS will be based on the most recent 3 consecutive years of air quality data from Federal reference or equivalent method monitors.[3]

Tribes are not required to recommend designations; however, they may choose to make recommended designations for land under their jurisdiction. The EPA will review the Tribe's recommendation, and may, in consultation with the Tribe, make modifications to the Tribe's recommendation. In cases where Tribes do not make their own recommendations, then EPA, upon consultation with the respective Tribe(s), will make designations for them.

3. How should boundaries of nonattainment areas be drawn and what process must be followed?

Section 107(d)(1) of the CAA addresses the determination of whether an area is to be designated nonattainment. With respect to a specific NAAQS, such as the 8-hour ozone NAAQS, this provision requires all areas to be designated nonattainment if they do not meet the standard or contribute to ambient air quality in a nearby area that does not meet the standard.

The EPA believes that any county with an ozone monitor showing a violation of the NAAQS and any nearby contributing area needs to be designated as nonattainment. In reducing ozone concentrations above the NAAQS, EPA believes it is best to consider controls on sources over a larger area due to the pervasive nature of ground level ozone and transport of ozone and its precursors. Thus, EPA recommends that the Metropolitan Statistical Area or the Consolidated Metropolitan Statistical Area (C/MSA) serve as the presumptive boundary for 8-hour NAAQS nonattainment areas.[4] We believe this approach will best ensure public health protection from the adverse effects of ozone pollution caused by population density, traffic and commuting patterns, commercial development, and area growth. In the past, areas within C/MSAs have generally experienced higher levels of ozone concentrations and ozone precursor emissions than areas not in C/MSAs. In addition, the 1990 Amendments to the CAA established the C/MSA as the presumptive boundary for ozone nonattainment areas classified as serious, severe and extreme.

4. How should designation recommendations, including boundaries, be addressed when more than one State and/or Tribe might be affected?

---

[3]For the 8-hour ozone NAAQS, it is 3 consecutive years of data in accordance with 40 CFR part 50, Appendix I; data used will be quality-assured and meet 40 CFR part 58 requirements (e.g., for monitor siting). Designations should generally be made based on 1997-1999 air quality, considering data availability.

[4]C/MSAs are identified by the U.S. Bureau of the Census and can be found at the following website: http://www.census.gov/population/www/estimates/aboutmetro.html.

Where more than one State is involved with respect to an area, close coordination is needed among the affected States and Tribes prior to the time the recommendation is made. In addition, the EPA Regional Office should coordinate where an area may be located in States or tribal lands located in two or more regions. There is a strong presumption that interstate areas making up one C/MSA will be designated as one nonattainment area. The EPA believes that it is important that consistent and coordinated boundary recommendations be made for the area from each State and Tribe.

5. What factors should a State or Tribe consider in determining whether to recommend area boundaries that are larger or smaller than a C/MSA or tribal land?

In some cases, the most appropriate nonattainment area boundary may be larger than the C/MSA. For example, if sources located in a county or on Indian lands outside the C/MSA contribute to violations within the C/MSA, States or Tribes should consider whether it would be appropriate to expand the nonattainment area to include the area in which those sources are located. In other cases, a smaller nonattainment area may be more appropriate. For example, one C/MSA may cover multiple air basins, or include counties or portions of counties which are rural in nature.

A State or Tribe wishing to propose larger or smaller nonattainment area boundaries (including partial counties or portions of areas on tribal lands) than those matching the C/MSA or boundary of the tribal land should address how each of the following factors affect the drawing of nonattainment area boundaries and how the resulting recommendation is consistent with the definition of nonattainment in §107(d)(1) of the Act. Additional information is provided below under question number 12 on documentation.

- Emissions and air quality in adjacent areas (including adjacent C/MSAs)
- Population density and degree of urbanization including commercial development (significant difference from surrounding areas)
- Monitoring data representing ozone concentrations in local areas and larger areas (urban or regional scale)
- Location of emission sources (emission sources and nearby receptors should generally be included in the same nonattainment area)
- Traffic and commuting patterns
- Expected growth (including extent, pattern and rate of growth)
- Meteorology (weather/transport patterns)
- Geography/topography (mountain ranges or other air basin boundaries)
- Jurisdictional boundaries (e.g., counties, air districts, existing 1-hour nonattainment areas, Reservations, etc.)
- Level of control of emission sources
- Regional emission reductions (e.g., NOx SIP call or other enforceable regional strategies)

A State or Tribe choosing to propose area boundaries smaller than a C/MSA or tribal land should consult with its EPA Regional Office. The EPA will consider alternative boundary recommendations on a case-by-case basis to assess whether the recommendation is consistent with §107(d)(1) of the Act.

The EPA will issue guidance on factors for Tribes to consider when submitting designation recommendations. Some of the factors, particularly for areas throughout Indian country that may not have adequate or any air quality ozone monitors, are geographic location of the land, proximity to the nearest C/MSA, prevailing meteorology, location of nearby ozone monitors, available ozone air quality data, and location of nearby emission sources both inside and outside of such areas.

6. What are the key timing activities for and implications of designation as nonattainment under the 8-hour ozone standard particularly for States?

The designation process has several steps. On June 25, 1999, EPA issued a guidance memorandum requesting that States submit the most recent, complete, quality-assured ozone monitoring data identifying the monitors where exceedances of the 8-hour standard have occurred. The EPA, with this memorandum, is providing guidance describing the criteria for drawing boundaries for nonattainment areas and setting deadlines for the steps in the designation process. States will then have several months to work with local governments and other stakeholders and submit their recommendations and supporting documentation to EPA for area designations and boundaries by June 30, 2000. The EPA will then review and respond to the State designations including boundaries by late summer. The EPA will not make final designations prior to late December because it cannot make them until at least 4 months (120 days) after responding to the States, pursuant to a CAA requirement. Given this process, designations could not become effective prior to early 200l at the earliest, nor would conformity or other requirements. Conformity and other planning requirements would be triggered on the effective date of designations. The EPA Regional Offices should immediately begin to work with their States and Tribes on boundary recommendations to ensure that they have maximum input prior to the June 30, 2000 recommendation date and encourage States to coordinate with appropriate transportation planning agencies.

After EPA makes the final designations, it will publish them in the Federal Register and set a date on which they become effective. Historically, the effective date of a rule is usually 30 to 60 days after publication, but can be later. In the process of determining when to finalize the proposed designations and make them effective, EPA will carefully consider the time needed to prepare for any applicable requirements, as well as the status of ongoing litigation and administrative proceedings. The EPA is committed to ensuring that all State and local officials have ample time to comply with requirements that are applicable when designations become effective.

The EPA believes that the Court decision affirms the serious health risk posed by ozone. Thus, notwithstanding the schedule described above, EPA believes that it is important to issue a final action on designations to provide the public with information regarding the air quality in areas in which they live and work. In addition, areas can continue to take certain actions with respect to the 8-hour standard, such as operating monitoring sites, analyzing monitoring data, implementing public education and communications efforts regarding health impacts and potential solutions, collecting emissions inventory data, examining potential control measures such as major source Reasonably Available Control Technology and other Reasonably Available Control Measures, considering voluntary emission reduction measures and considering the integration of strategies for the attainment and maintenance of all NAAQS.

7. How should long-range transport be addressed in the boundary recommendation?

In addition to nearby areas with sources contributing to nonattainment, ozone concentrations are affected by long-range transport of ozone and its precursors (notably NOx). Thus, in certain parts of the country, such as the eastern U.S., ozone is a widespread problem. Where this is the case, the Act does not require that all contributing areas be designated nonattainment, only the nearby areas. Regional strategies, such as those employed in the Ozone Transport Region in the Northeast U.S., and in the EPA NOx SIP call, are needed to address the long-range transport component of ozone nonattainment, while the local component must be addressed through more local planning in and around the designated nonattainment area. Tribal areas may also be affected by transport.[5]

8. How should designation recommendations be handled for 8-hour ozone nonattainment areas that cover some of the same area as 1-hour ozone nonattainment areas?

In areas where the 1-hour NAAQS still applies, EPA's presumption is that the designated 8-hour nonattainment area boundary will be the C/MSA or the 1-hour nonattainment area boundary, whichever is larger.

9. What will happen if EPA does not receive a designation recommendation from a State or Tribe?

In the absence of a Governor's recommendation by June 30, 2000, EPA will determine the designation. The EPA plans to follow this guidance in designating areas. In cases where Tribes do not make their own recommendations, then EPA, upon consultation with the respective Tribe(s), will promulgate the designation it deems appropriate.

10. Must States recommend a classification for, or will EPA classify, nonattainment areas under the 8-hour ozone NAAQS?

---

[5]The prohibitions and authority contained in sections 110(a)(2)(D)(i) and 126 of the Act apply to Tribes in the same manner as States.

The EPA will not classify nonattainment areas at this time; thus, States and Tribes should not submit recommendations for classifications. If EPA determines to classify areas in the future, it will provide an opportunity for State and Tribal involvement.

11. What technical information should a State consider in its designation recommendations?

To assist States and Tribes with their recommendations, the EPA is providing technical reports and maps showing locations where air quality was violating the 8-hour NAAQS based on 1997-1999 monitored data that States and Tribes may find useful in defining the boundaries of nonattainment areas. The information will be posted on EPA's web site in the immediate future.

12. What documentation should a State or Tribal government submit concerning the nonattainment area recommendations?

In addition to technical information documenting the recommendation for area boundaries noted in question number 5 above, the EPA is requesting that each State or Tribe in its submission provide certain air quality data and geographic information to support its nonattainment area recommendation. The EPA is asking for the following information:

For nonattainment areas:

a. Design value[6] for the area.
b. Period of time represented by the design value, e.g., 1997-1999.
c. Design value monitoring site location and identification number.

For attainment/unclassifiable and nonattainment areas:

d. Names of counties and tribal lands included, and
e. If partial counties or portions of tribal lands are included, the boundary definition/description as outlined below.

If the recommended nonattainment area boundary is less than a C/MSA, the State or Tribe should document its rationale for selecting the nonattainment area boundary. The documentation should address how the items in question number 5 affect the drawing of boundaries for each county or Reservation not included in the recommended nonattainment area such as population, traffic and commuting patterns, commercial development, projected growth, prevailing meteorology, nearby sources and air quality, and any other relevant or technical justification factors. In particular, where the recommended area boundary consists of parts of counties, C/MSAs, or Reservations, the State or Tribe must provide a technical analysis for its recommendation, explaining how the boundary is consistent with §107 (d)(1) of the Act.

If there is less than a full county or Reservation, the EPA is requesting a legal definition of the area, a detailed hard copy map, and, because EPA plans to map the definition, a digitized

[6]The ozone air quality design value for a site is defined as the 3-year average annual fourth-highest daily maximum 8-hour average ozone concentration.

latitude and longitude description for mapping purposes if available. Regional Offices and States should include the names of contacts from their respective offices for this information. The EPA requests that each State and Tribe submit its attainment/unclassifiable and nonattainment area designation recommendation and boundary information to EPA in both a detailed written form and in electronic form in a format consistent with how designations are identified in Part 81 of the CFR. In addition to the formal letter making the recommendation, EPA requests the States provide an electronic record in a usable file which will be merged with all other States' and Tribes' recommendations for a final complete product. An example is shown below.

Format of Recommendations for Designations

State Name
Nonattainment Areas:
    Area Name
        County or Tribal Land Names
    Area Name
        County or Tribal Land Names
Attainment/Unclassifiable Areas:
    Rest of State or County or Tribal Land Names

This is how it would appear in the Code of Federal Regulations:

81.xxx [STATE NAME].

* * * * *

[STATE NAME]-OZONE (8-HOUR STANDARD)

Designated Area	Designation	Classification
	Type	Type
[NAME] Area: [NAME] County..... [NAME] Area: [NAME] County..... [NAME] County..... [NAME] County..... [Name] Tribal Land [Name] County..... Rest of State..... Rest of Tribal Land.....	 Nonattainment Nonattainment Attainment/ Unclassifiable Attainment/ Unclassifiable	 LEAVE BLANK

* * * * *

13. When should the recommendations be submitted?

The Governor should submit all recommendations and supporting documentation for designations for nonattainment and attainment/unclassifiable areas, boundaries, and boundary descriptions described above to the EPA Regional Office by June 30, 2000. The eligible Tribal governing body, with the assistance of the appropriate EPA Regional Office, should submit all recommendations and supporting documentation consistent with the statements in question

number 2 of this memorandum. The EPA will notify the State or Tribe no later than 120 days prior to the designation action where EPA plans to modify a recommendation.

14. Is there any special process for attainment/unclassifiable areas?

The EPA will not distinguish between attainment and unclassifiable areas. The State or Tribe should indicate if its preference is that EPA list each attainment/unclassifiable area individually (e.g., by county); otherwise, EPA will indicate that the "rest of State" or "rest of tribal land" is attainment/unclassifiable.

NCDENR
North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

July 15, 2003

J.I. Palmer, Jr., Esq.
Regional Administrator
USEPA Region 4
Sam Nunn Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

Dear Mr. Palmer:

Pursuant to the requirements of the federal Clean Air Act and on behalf of Governor Michael F. Easley, I am submitting to you and your colleagues at the U.S. Environmental Protection Agency (EPA) the State of North Carolina's recommendations concerning the boundaries within our State of areas that either attain or do not attain the 8-hour standard for ozone. We are recommending the boundaries which are described in the attached package because we believe that they are the most effective way to achieve the goals of cleaner air, healthier lives, a stronger economy, and more effective conservation of our land and water. We look forward to discussing these recommendations with you after EPA has had the opportunity to review and comment on them.

The federal Clean Air Act requires EPA to designate areas as attainment or nonattainment following promulgation of a new national ambient air quality standard, such as the 8-hour standard. EPA has asked the states for their recommendations for nonattainment boundaries by July 15, 2003.

We understand that EPA will review the recommendations and comment back to each state by October, 2003. Receipt of EPA's comments will trigger a 120-day period during which each state and EPA will have an opportunity to work out any unresolved issues about the boundaries for that state.

We also understand that, during this process, EPA will allow each state to respond to newly available information. For North Carolina, such information will likely include data from the 2003 ozone season, the modifications that have just been made to Metropolitan Statistical Area boundaries, the EPA rule on what states are required to include in their implementation plans, and a report on the steps South Carolina is taking in the SC counties which lie just south of Charlotte and Mecklenburg County, NC, and which are contributing to ambient air quality in the nearby Charlotte/Mecklenburg area. North Carolina intends to evaluate such new information, and we reserve the right to make changes to the boundary recommendations based upon that evaluation. The final decision on boundaries belongs to EPA, and we understand that EPA will make it April 15, 2004.

In developing these recommendations, staff in the Division of Air Quality, NC Department of Environment and Natural Resources (DENR) conducted public meetings in May of this year and sought comments from local officials, metropolitan planning organizations, environmental organizations, and business and industry. DENR also consulted with our Departments of Agriculture and Consumer Services (Agriculture), Commerce (Commerce) and Transportation (DOT) to gather input from these agencies whose programs will be impacted by the nonattainment designations.

Based on our extensive public discussions and research, we are recommending that 11 entire counties and parts of 24 counties be designated as nonattainment for the 8-hour ozone standard. All remaining areas should be

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: www.enr.state.nc.us/ENR

designated as attainment. Our proposal reflects a regional approach that, we believe, will target areas that need our best efforts in order to achieve the goals listed above.

Ozone pollution is a serious problem in North Carolina and one that we are working hard to solve. When litigation stalled the federal eight-hour ozone standard, our State fought to maintain and defend our own state eight-hour standard because, among other things, we believed that a tighter ozone standard was needed to protect public health. While the federal courts reviewed the national 8-hour standard, DOT, Commerce, DENR and others worked together to implement the N.C. Clean Air Act Amendments of 1999, including on-board diagnostic (OBD) testing of vehicle emissions. As a result of the legislation, the program that tests emissions from vehicles is expanding from 9 to 48 counties over the next three years. North Carolina adopted rules to implement the NOx SIP Call, and is implementing those rules now. Last year, our State enacted the landmark Clean Smokestacks Act. Under the new law, NOx emissions from North Carolina's coal-fired power plants will be cut by approximately189,000 tons, or 77 percent, by 2009, and SO_2 emissions, by approximately 359,000 tons, or 73 percent, by 2013. We also anticipate important reductions in mercury emissions. All these reductions will play a key role in helping our State meet the tighter ozone standard, reduce pollution from tiny particles, improve visibility and scenic vistas, and otherwise protect public health and the environment.

Our municipal and county governments are working with us and EPA to reduce air pollution. As you know, we have four Early Action Compact areas in the State: Fayetteville, Mountain, Triad, and Unifour. The communities involved in these EACs are currently evaluating the measures they want to consider to ensure that they take appropriate action, reduce emissions and attain the eight-hour ozone standard early. Another important regional initiative is the Charlotte regional air quality project known as Sustainable Environment for Quality of Life, or SEQL. SEQL encompasses 15 counties and includes a like number of major municipalities in North Carolina and South Carolina. Although the currently designated Charlotte maintenance area is not eligible for an Early Action Compact because of monitored exceedances of the 1-hour ozone standard in 2002, SEQL will involve implementation of a comprehensive regional environmental action plan. Both the SC Department of Health and Environmental Control and the NC Department of Environment and Natural Resources have participated, and have agreed to continue to participate, fully and actively, in SEQL. Also, Charlotte and Mecklenburg County are making major investments in transit, and the Triangle and Triad are planning regional transit systems.

Although they lie outside our State and therefore outside the geographic area with respect to which the Clean Air Act calls on our State to make recommendations, the South Carolina counties of York, Lancaster, and Chester, which are located just south of Charlotte and Gastonia, North Carolina, contribute to ambient air quality in the nearby Charlotte region. While York County's ozone monitor has registered just under the threshold that would trigger a nonattainment designation if the county were considered alone, air quality modeling and other evidence demonstrate that York County and its residents "contribute to ambient air quality in a nearby area that does not meet the standard," in this case, the Charlotte/Mecklenburg nonattainment area.

What happens in those South Carolina counties will have an important impact on the ambient air quality in Charlotte and the region around it. South Carolina's view is that cleaner air sooner can best be achieved in the region if York and three other SC counties are allowed to remain in an EAC and if South Carolina carries out its commitments to implement appropriate controls needed for attainment in the Charlotte region. The City of Charlotte and other governmental organizations in the vicinity have urged me to comment to you that Charlotte's ability to meet the more stringent air quality standards will be dependent on ensuring that at least a portion of

York County is held to the same mandatory requirements for action and coordination that nonattainment designation will bring on the rest of the Charlotte region. Furthermore, they are concerned that excluding York County from nonattainment designation will negatively impact Charlotte's ability to competitively attract and retain new economic development.

North Carolina does not wish to undercut the ability of South Carolina and counties like York to participate in a process with the potential to yield regional air quality improvements ahead of EPA's deadlines. We support cooperative and voluntary efforts to resolve interstate transport problems if those efforts are effective. We urge EPA to perform a careful evaluation of the effectiveness of the steps that South Carolina and the SC counties that affect the Charlotte region's air quality are taking to achieve more rapid progress in emissions reductions than would result under the requirements that follow from nonattainment designation. We will be happy to support that process in any way we can. At the same time, because of the significant and direct impact of York County pollution on the Charlotte region's air, it is vital that EPA's designation process require appropriate pollution reductions in the event that South Carolina's and York County's other efforts and commitments do not meet their intended goals.

North Carolina is committed to protecting the health of our citizens, our environment, and our economy. Solving our ozone and other air quality problems is critical to achieving those goals. We believe that improving air quality is critical to the health of our citizens and that our future growth, prosperity and quality of life will be threatened if we do not remain diligent. We look forward to continuing to work with EPA and others to attain the eight-hour ozone standard and to establish appropriate boundaries for nonattainment areas.

I have attached more detailed information and supporting data. Also included are background documents relevant to the Charlotte/York County issue. Thank you for consideration of these recommendations.

Sincerely,

William G. Ross, Jr.

WGR:np

attachments

cc: The Honorable Michael F. Easley
The Honorable Lewis Shaw
The Honorable W. Britt Cobb, Jr.
The Honorable James Fain, III
The Honorable Lyndo Tippett

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

DEC - 3 2003

4APT-APB

William G. Ross, Jr., Secretary
North Carolina Department of
Environment & Natural Resources
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

Dear Secretary Ross:

Thank you for making recommendations on 8-hour ozone air quality designations. Your letter is an important step in providing citizens of North Carolina with information on air pollution levels where they live and work. Levels of ground-level ozone have improved significantly since the Clean Air Act (CAA) was amended in 1990 at which time 135 areas were designated as not attaining the 1-hour ozone standard. Since that time nearly half those areas (67) have cleaned up their air to meet the 1-hour ozone standard and have been redesignated as attaining that standard. However, many areas have still not met the less stringent 1-hour ozone standard, and in 1997 the U.S. Environmental Protection Agency (EPA) promulgated a more stringent 8-hour ozone national ambient air quality standard. Thus, much work remains to be done. Under the CAA, EPA is required to promulgate designations for new or revised standards, such as the 8-hour ozone standard. Earlier this year, after several public interest groups filed a lawsuit claiming EPA had not met the statutory deadline for designating areas for the 8-hour ozone standard, we entered into a consent decree that requires us to promulgate designations by April 15, 2004.

The CAA defines a nonattainment area as any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant. EPA guidance indicates that North Carolina should use the larger of the Consolidated Metropolitan Statistical Area (CMSA), Metropolitan Statistical Area (MSA), or the 1-hour ozone nonattainment area as the presumptive boundary for 8-hour ozone nonattainment areas. The guidance provides 11 factors that North Carolina should consider in determining whether to modify the presumptive boundaries. We have reviewed your July 15, 2003, letter submitting North Carolina's recommendations on air quality designations for the 8-hour ozone standard. We have also reviewed the extensive justification information you have submitted to support your recommendations for areas that differed from the presumptive boundaries. We appreciate the effort the State has made to develop this supporting information. Consistent with section 107(d)(1) of the CAA, this letter is to inform you that, based upon the information contained in your submittal, EPA intends to make modifications to North Carolina's recommended designations and boundaries.

We recognize that you have considered the eleven factors identified in EPA's National designation guidance as you developed your recommendations. However, based on a review of

your submittal, the EPA Headquarters' Office of Air and Radiation believes the information you provided is not sufficient to justify the conclusion that the partial counties identified below should be excluded from the applicable nonattainment area. Equally important, the way in which the these factors were evaluated is not consistent with the manner in which other states and EPA regions have applied these same factors. A nationally consistent view of the eleven factors is essential to ensuring the fair and equitable National implementation of the 8-hour ozone standard and achievement of public health protection for all citizens.

Additionally, the EPA Headquarters' Office of Air and Radiation believes that all MSA counties that are part of an Early Action Compact (EAC) area that contains a violating ozone monitor should be included as part of one area that would be designated as nonattainment. EPA is issuing a proposed rule to defer the effective date for these areas for so long as they continues to meet the milestones required for EAC areas. In North Carolina, we intend to modify the State's recommendation to include: Stokes and Yadkin Counties in the Greensboro-Winston Salem-High Point area. EPA will work with the State over the next few months to determine whether any information the State submits by February 6, 2004, justify drawing different boundaries for the nonattainment area.

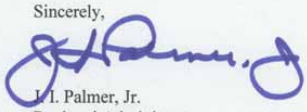
EPA has been tracking preliminary 2003 ozone monitoring data and its impact on areas' preliminary 2001-2003 design values. Based on preliminary data from the 2003 ozone season, it appears that the Asheville area as well as the Blue Ridge, Black, Great Craggy, and Great Balsam Mountains may be in attainment. It is critical for North Carolina to expedite submittal of 2003 monitoring data to EPA so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality. To advance this process, please submit your final 2003 monitoring data into the Air Quality System as quickly as possible, if that has not already been done. In addition, please submit the 8-hour and 1-hour ozone design values and the average expected 1-hour exceedance rate to Beverly Banister, Director, Air Pesticides and Toxics Management Division, by December 17, 2003.

The enclosures to this letter provide tables in which EPA identifies the counties that should be included in each nonattainment area. Enclosure 1 contains a description of areas where EPA intends to modify North Carolina's recommendations, and the basis for such modification. Enclosure 2 provides information on those areas/counties which do not require modification, but which differ from EPA's presumptive boundaries.

We look forward to a continued dialogue with North Carolina as we work to finalize the designations for the 8-hour ozone standard. We appreciate your efforts and will review any future supporting information the State wishes to submit on these recommendations. If you have

any questions, please do not hesitate to contact Beverly Banister at (404) 562-9326 or Kay Prince, Chief, Air Planning Branch, at (404) 562-9026.

Sincerely,



J. I. Palmer, Jr.
Regional Administrator

Enclosure

cc: Keith Overcash, NCDENR

Enclosure 1

The following table identifies the individual areas and counties comprising those areas within North Carolina that EPA intends to designate as nonattainment. Following the table is a description of areas where EPA intends to modify the North Carolina recommendation and the basis for such modification. EPA intends to designate as attainment/unclassifiable all counties not identified in the table below.

Nonattainment Areas		
Area	**North Carolina Recommended Nonattainment Counties**	**EPA Recommended Nonattainment Counties**
Plott Balsam Mountains, NC	Area above 4000 feet in Haywood	Area above 4000 feet in Haywood.
Great Smoky Mountains National Park, NC*	Park area in Haywood, Swain	Park area in Haywood, Swain
Charlotte-Gastonia-Rock Hill, NC-SC*	Gaston, Mecklenburg, Cabarrus except for the northeastern corner (Rimertown, Gold Hill and Mount Pleasant Townships), Portion of Lincoln east of the South Fork of the Catawba River, Rowan County except the northwestern corner (Cleveland, Mount Ulla, Scotch Irish, Steele, and Unity Townships), Portion of Union County covered by the MPO (western portion of county), Portion of Iredell (adjacent county) including Coddle Creek and Davidson Townships.	Gaston, Mecklenburg, Cabarrus, Lincoln, Rowan, Union, and Iredell
Fayetteville, NC	Cumberland	Cumberland

1

Nonattainment Areas		
Greensboro-Winston-Salem-High Point, NC	Alamance, Davidson, Forsyth, Guilford, Jerusalem Township portion of Davie, Portion of Randolph north of Highway 64 and the Asheboro municipal boundary, Stoney Creek Township portion of Caswell (adjacent), New Bethel Township portion of Rockingham (adjacent)	Alamance, Davidson, Forsyth, Guilford, Davie, Randolph, Stokes, Yadkin, Caswell and Rockingham
Hickory-Morganton-Lenoir, NC	MPO portions of Burke, Caldwell, and Catawba and the municipality of Taylorsville in Alexander	Burke, Caldwell, Catawba, and Alexander
Raleigh-Durham-Chapel Hill, NC	Durham, Orange, Wake, eastern portion of Chatham (Baldwin, Center, New Hope, and Williams Townships), southern portion of Franklin (Franklinton and Youngsville Townships), western portion of Johnston (west of I-95), Dutchville Township in Granville (adjacent), Bushy Fork Township in Person (adjacent)	Durham, Orange, Wake, Chatham, Franklin, Johnston, Granville and Person.
Rocky Mount, NC	Municipality of Leggett portion of Edgecomb	Edgecomb and Nash

** Interstate areas: The Tennessee portion of the Great Smoky Mountains National Park will be addressed in the Tennessee letter; The South Carolina portion of the Charlotte-Gastonia-Rock Hill area will be addressed in the SC letter.*

Modifications to North Carolina's Recommendations

Charlotte-Gastonia-Rock Hill, NC-SC

Modification of MSA Counties with Violating Monitors

The State recommended Gaston and Mecklenburg Counties, and portions of Cabarrus, Iredell, Lincoln, Rowan and Union Counties. EPA intends to modify the State's recommendation to include the whole counties of Lincoln, Rowan, and Union counties in the Charlotte-Gastonia-Rock Hill, NC-SC nonattainment area. This was done because these counties are within the presumptive nonattainment area, contain violating monitors, and the State's justification based on

justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these three counties. The State proposed to exclude portions of Lincoln (portion east of the South Fork of the Catawba River), Rowan (Cleveland, Mount Ulla, Scotch Irish, Steele, and Unity Townships), and Union (MPO boundary (western portion of county)) counties.

Lincoln County:

There is a violating monitor in Lincoln County, located near the center of the county and just east of the proposed boundary. The State provided information related to the 11 factors, including that Lincoln County does not have any large sources of NOx or VOC, 1.4 percent of the daily vehicle miles traveled (VMT) is from people living in Lincoln County and commuting to Mecklenburg County to work, and 4.7 percent of the CMSA population live in Lincoln County. However, there was not a compelling argument that the proposed partial boundary for Lincoln County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Rowan County:

Rowan County contains two violating monitors. There are two large sources of NOx, the Buck Steam Station and the Transcontinental Gas Pipeline pumping station which are included in the area recommended by the State as part of the nonattainment area. The State provided information related to the 11 factors, including that 1.0 percent of the people that commute to Mecklenburg County to work live in Rowan County and 7.5 percent of the county population live in the area being excluding from the nonattainment area. However, there was not a compelling argument that the proposed partial boundary for Rowan County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Union County:

Union County contains a violating monitor located near the center of the county. The State provided information related to the 11 factors with respect to Lincoln, including that the county has no large sources and the excluded portion has low population density. However, there was not compelling evidence that the boundary should be drawn equivalent to the MPO boundary, particularly considering the projected growth.

Modification of MSA Counties without Violating Monitors

The State recommended a portion of Cabarrus County. The EPA intends to modify the State's recommendation to include the whole county of Cabarrus County in the Charlotte-Gastonia-Rock Hill nonattainment area. This county is within the presumptive area and State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for this county. The State proposed to designate Cabarrus County as nonattainment with the exception of Rimertown, Gold Hill and Mount Pleasant Townships.

Cabarrus County:

Although Cabarrus County does not contain a violating monitor, this county is in the presumptive nonattainment area and is surrounded by counties with violating monitors. The State provided information related to the 11 factors, including that the county does not have any large sources of NOx , 4.8 percent of the people living in Cabarrus County commute to Mecklenburg County to work, 6.5 percent of the county population live in the area being excluding from the nonattainment area. However, there was not a compelling argument that the proposed partial boundary for Cabarrus County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Modification of Adjacent Counties without Violating Monitors

The State recommended that the Coddle Creek and Davidson Townships in southern Iredell County (adjacent to the CMSA) be included in the Charlotte-Gastonia-Rock Hill nonattainment area. The EPA intends to modify the State's recommendation to include the whole county of Iredell County in the Charlotte-Gastonia-Rock Hill nonattainment area. This county is adjacent to the presumptive area and the State's information based on the 11 factors did not a compelling argument to exclude a portion of this County.

Iredell County:

Iredell County does not contain an ozone monitor, however, the bordering counties to the east, west and south have violating monitors. The State provided information related to the 11 factors, including that the portion of Iredell County that the State recommended as attainment has a low population density, the county population is approximately eight percent of the population of the MSA plus Iredell County, and Iredell contributes two percent of the commuters into Mecklenburg County, 9,604 people. However, there was not a compelling argument that the proposed partial boundary for Iredell County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Greensboro-Winston-Salem-High Point, NC

Excluding Counties within the CMSA

The State recommended that Alamance, Davidson, Forsyth, and Guilford Counties, and portions of Caswell, Davie, Randolph and Rockingham Counties be included in the Greensboro-Winston-Salem-High Point nonattainment area. The State recommended omitting the counties of Stokes and Yadkin based on an analysis using the 11 factors.

Modification of MSA Counties with Violating Monitors

The State recommended portions of Davie and Randolph Counties, which are within the CMSA. EPA intends to modify the State's recommendation to include the whole counties of Davie and Randolph Counties in the Greensboro-Winston-Salem-Highpoint nonattainment area. This was done because these counties are within the presumptive nonattainment area and these counties contain violating monitors and the State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these two counties. The State proposed to omit all of Davie County except Jerusalem Township and the portion of Randolph County south of Highway 64 and the Asheboro municipal boundary.

Davie County:

Davie County contains a violating monitor and is within the CMSA. The State provided information related to the 11 factors, including that there are no large sources of NOx or VOC, and that the county contributes 3.1 percent of the workforce in Forsyth County and 0.2 percent of the workforce in Guilford, that this county has the smallest population of any of the counties in the CMSA, and the recommended area is the same as the 1-hour ozone boundary. However, there was not a compelling argument that the proposed partial boundary for Davie County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Randolph County:

Randolph County contains a violating monitor and is within the CMSA. The State provided information related to the 11 factors, including that the county does not have any large sources of NOx or VOC, approximately 7.5 percent of the people living in Randolph County commute to Guilford County to work, 70 percent of the county population lives in the area included in the nonattainment area, and the population density in the southern portion of the county is less than 100 people per square mile. However, there was not a compelling argument that the proposed partial boundary for Randolph County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Modification of Adjacent Counties with Violating Monitors

The State recommended portions of the adjacent counties of Caswell and Rockingham. EPA intends to modify the State's recommendation to add the Stoney Creek Township in Caswell County (adjacent) and New Bethel Township in Rockingham County (adjacent) to the Greensboro-Winston-Salem-Highpoint nonattainment area. While these counties are outside of the presumptive boundary, both contain a violating monitor. Although, the State submitted a justification based on the 11 factors to include only the referenced townships in these two adjacent counties, there was not a compelling argument for the area recommended. Therefore, EPA will modify the State's recommendation to include both counties in their entirety.

Caswell County:

Caswell County contains a violating monitor. The State provided information related to the 11 factors, including that there are no large point sources, low population, and low population density. However, there was not a compelling argument that the proposed partial boundary for Caswell County is the appropriate one for the nonattainment area.

Rockingham County:

Rockingham County contains a violating monitor and has two large point sources of NOx, the Dan River Power Plant that emits about 14 tons per day and the Transcontinental Gas Pipeline pumping station, emitting approximately 15 tons per day. The State provided information related to the 11 factors, including that both of these sources are installing NOx controls to meet the NOx SIP Call, the county has low population, and has low population density. However, there was not a compelling argument that the proposed partial boundary for Rockingham County is the appropriate one for the nonattainment area.

Modification of Early Action Compact Counties in a Violating CMSA

Stokes and Yadkin Counties:

EPA is modifying the State's recommendation to include Stokes and Yadkin Counties in the Stokes and Yadkin, NC nonattainment area because they are within the Greensboro-Winston-Salem-Highpoint CMSA, which has a violating monitor and these counties are participants in the Greensboro-Winston-Salem-Highpoint Early Action Compact (EAC). Stokes and Yadkin Counties, as well as other Greensboro-Winston-Salem-Highpoint CMSA counties in the EAC, will be designated nonattainment with a deferred effective date so long as the Greensboro-Winston-Salem-Highpoint EAC meets all of the required milestones.

Hickory-Morganton-Lenoir, NC

The State recommended portions of Alexander, Burke, Caldwell and Catawba Counties which includes the Metropolitan Planning Organization boundary . EPA intends to modify the State's recommendation to include the whole counties of Alexander, Burke, Caldwell, and Catawba Counties in the Hickory-Newton-Conover nonattainment area. These counties are within the presumptive area and two of them contain violating monitors.

The State's submittal indicated that the proposed boundary encompasses 75 percent of the population and the areas left out of the recommended boundary have a population density less than 250 people per square mile with much of the outlying areas at less than 50 people per square mile. However, the municipal boundary of Taylorsville is noncontiguous with the rest of the nonattainment area and the State did not provide adequate justification to support a noncontiguous area. Additionally, the recommended area does not include the Marshall Steam

Station located in southwestern Catawba County. Although the source will install controls to meet the NOx SIP Call and the Clean Smokestacks Legislation, the emission reduction is only 50 percent of the current NOx Levels. The State provided information related to the 11 factors, however, there was not a compelling argument to exclude the recommended portion of these counties. We do acknowledge that the Caldwell County monitor appears to be in attainment based on preliminary 2001-2003 data; however the Alexander County monitor in Taylorsville continues to violate.

Raleigh-Durham-Chapel Hill, NC

Modification of MSA Counties with Violating Monitors

For the counties within the CMSA, the State recommended Durham, Orange and Wake Counties, and recommended portions of Chatham, Franklin and Johnston Counties. EPA intends to modify the State's recommendation to include the whole counties of Franklin and Johnston in the Raleigh-Durham-Chapel Hill nonattainment area. This was done because these counties are within the presumptive nonattainment area, each has a violating monitor, and the State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these two counties. The State proposed to include only the southern portion of Franklin (Franklinton and Youngsville Townships) County and the portion of Johnston County west of I-95.

Franklin County:

There is a violating monitor is located in Franklinton Township and Franklin County is in the CMSA. The State provided information related to the 11 factors, including that Franklin County does not have any large point sources, has very low NOx and VOC emissions, and the excluded area has low population density. However, there was not a compelling argument to exclude the recommended portion of Franklin County, particularly considering the projected growth.

Johnston County:

Johnston County contains a violating monitor and is in the CMSA. The State provided information related to the 11 factors, including that Johnston County does not have any large point sources and most (76 percent) of the total NOx emissions in the County come from mobile sources. However, there was not a compelling argument that the proposed partial boundary for Johnston County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Modification of MSA Counties without Violating Monitors

The State recommended a portion of Chatham County. EPA also intends to modify the State's recommendation to include the whole County of Chatham in the Raleigh-Durham-Chapel

Hill nonattainment area. This County is within the presumptive area and the State's justification based on the 11 factors did not provide a compelling argument to exclude the proposed portion of this county.

Chatham County:

Chatham County has one large point source of NOx, the Cape Fear Steam Station which emits 19.67 tons per day. This source is not included in the portion of the County recommended by the State to be included in the nonattainment area. The source is installing controls to meet the NOx SIP Call, but not SCR. Although the County is monitoring attainment, the State did not provide a compelling argument that the portion of the County excluded from the nonattainment area is not contributing to violations within the CMSA, particularly considering the projected growth.

Modification of Counties Adjacent to MSA with Violating Monitors

The State recommended portions of Granville and Person Counties which are adjacent to the CMSA to be included in the nonattainment area. EPA intends to modify the States recommendation to include the whole counties of Granville and Person in the Raleigh-Durham-Chapel Hill nonattainment area. The State recommended adding Dutchville Township in Granville (adjacent) and Bushy Fork Township in Person (adjacent) to the Raleigh-Durham-Chapel Hill nonattainment area. While these counties are outside of the presumptive boundary, they both contain a violating monitor the State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these two counties.

Granville County:

Granville County contains a violating monitor. The State provided information related to the 11 factors, including that the county has no large point sources, has low NOx and VOC emissions, and the northern portion of Granville County is largely rural. Additionally, the proposed area is the same as the 1-hour ozone boundary. However, there was not a compelling argument that the proposed partial boundary for Granville County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Person County:

Person County contains a violating monitor and has two large point sources of NOx, the Roxboro and Mayo Power Plants that together emit about 217.72 tons per day. The State provided information related to the 11 factors, including that the large sources are installing SCR controls on all units to meet the NOx SIP Call and the Clean Smokestacks Legislation which will reduce their combined emissions to 29 tons per day, the county has low population and population density. However, there was not a compelling argument that the proposed partial boundary for Person County is the appropriate one for the nonattainment area.

Rocky Mount, NC

The State recommended portions of Nash and Edgecombe Counties as nonattainment. EPA intends to modify the State's recommendation to include both of these entire counties.

Nash County:

We intend to modify the State's recommendation to include Nash County in the Rocky Mount nonattainment area. This was done because this county is within the presumptive nonattainment area and the State did not submit information based on the 11 factors to exclude this County.

Edgecombe County:

The State recommended the municipality boundary of Leggett in Edgecombe County as the Rocky Mount nonattainment area. We intend to modify the State's recommendation to include all of Edgecombe County in the Rocky Mount nonattainment area. This county is within the presumptive area and contains a monitor violating the 8-hour ozone NAAQS and there was not a compelling argument to exclude this county. The State submitted information based on the 11 factors that this county is largely rural in nature, had declining population, and low VOC and NOx emissions, they did not make a compelling argument as to why the nonattainment area should encompass only the municipality containing the violating monitor.

The following table identifies the individual areas and counties comprising those areas within North Carolina that EPA intends to designate as nonattainment because the State's recommendation was made to designate the area as nonattainment based on 2000-2002 monitoring data where current preliminary 2001-2003 data show that the area may not be violating the 8-hour standard.

Recommended Nonattainment Areas		
Area	**North Carolina Recommended Nonattainment Counties**	**EPA Recommended Nonattainment Counties**
Asheville, NC	Buncombe	Buncombe
Blue Ridge, Black and Great Craggy Mountains, NC	Area above 4000 feet in Buncombe, McDowell, and Yancey	Area above 4000 feet in Buncombe, McDowell, and Yancey
Great Balsam Mountains, NC	Area above 4000 feet in Haywood, Jackson, and Transylvania	Area above 4000 feet in Haywood, Jackson, and Transylvania

Asheville, NC

While the recommendation was made to designate Buncombe County as the Asheville, NC, nonattainment area based on 2000-2002 monitoring data, more current preliminary 2001-2003 data show that the area is not currently violating the 8-hour standard. While EPA will consider modifying the recommendation to designate this area to attainment, we will retain North Carolina's recommendation of nonattainment while we continue to evaluate the monitoring data to conclude whether it supports such a modification. It is critical for North Carolina to expedite submittal of 2003 monitoring data so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality.

Blue Ridge, Black and Great Craggy Mountains, NC

While the recommendation was made to designate these mountain tops as a nonattainment area based on 2000-2002 monitoring data, more current preliminary 2001-2003 data show that the area is not currently violating the 8-hour standard. While EPA will consider modifying the recommendation to designate this area to attainment, we will retain North Carolina's recommendation of nonattainment while we continue to evaluate the monitoring data to conclude whether it supports such a modification. It is critical for North Carolina to expedite submittal of 2003 monitoring data so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality.

Great Balsam Mountains, NC

While the recommendation was made to designate these mountain tops as a nonattainment area based on 2000-2002 monitoring data, more current preliminary 2001-2003 data show that the area is not currently violating the 8-hour standard. While EPA will consider modifying the recommendation to designate this area to attainment, we will retain North Carolina's recommendation of nonattainment while we continue to evaluate the monitoring data to conclude whether it supports such a modification. It is critical for North Carolina to expedite submittal of 2003 monitoring data so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality.

Enclosure 2

Justification for areas where EPA is not modifying the State's recommendation.

Fayetteville, NC

The State recommended the presumptive boundary, i.e., the entire CMSA. Therefore, the Agency agrees with the State's recommendation.

Plott Balsam Mountains, NC

The State recommended the area above 4000 feet as the nonattainment area. The State submitted information indicating that the violations of the 8-hour ozone standard at the monitors located at the high elevations were due to long range transport and the area was not generating emissions that caused the violations. Therefore, the Agency agrees with the State's recommendation.

Great Smoky Mountains National Park, NC

The State recommended that the entire Great Smoky Mountains National Park be designated as nonattainment. The State consulted with the National Park Service. Therefore, the Agency agrees with the State's recommendation.

NCDENR
North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

December 19, 2003

Mr. J. I. Palmer, Jr.
Regional Administrator
US Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Re: 8-Hour Ozone Air Quality Designations and Boundaries

Dear Mr. Palmer

In your Dec. 3, 2003 letter, you provided North Carolina with EPA's response to our state's 8-hour ozone non-attainment boundary recommendations. In the letter, EPA proposes to dismiss North Carolina's partial county designations in favor of presumptive boundaries that are asserted to be more consistent with EPA's national approach. We found EPA's response to North Carolina's recommendations very disappointing. I am writing to request a dialogue between EPA and North Carolina on the details of North Carolina's proposal. I hope that, working together, we can craft boundaries that are more suitable to our state's unique circumstances and that satisfy EPA's interests at the same time.

We believe that North Carolina's recommendations are consistent with EPA's Boundary Guidance. The Guidance states "a smaller non-attainment area (than the presumptive C/MSA) may be more appropriate. For example, one C/MSA may cover multiple air basins or include counties or portions of counties which are rural in nature." (See Boundary Guidance, p. 4.) Under these circumstances, EPA's policy is to allow states to consider alternate boundaries which meet 11 criteria. North Carolina did so. For EPA now to claim that a standard evaluation technique should be used seems arbitrary and unreasonable.

For example, North Carolina has recommended a partial county boundary for Davie County. Davie County contains a monitor that indicated violation and that is located in the southeastern corner of the county. Davie County has no large sources of NOx or VOC and has the smallest population of all the MSA counties in the Triad area. Davie County contributes 3.1 percent of the workforce in Forsyth County and 0.2 percent of the workforce in Guilford County. North Carolina concluded that the partial designation (i.e., the township in which the monitor is located) met the intent of Section 107(d)(1) of the Clean Air Act, on grounds of the lack of emissions in Davie County and their limited impact on the Triad's air quality. North Carolina reached this conclusion using the EPA Boundary Guidance. We provided a technical analysis of our recommendations and an explanation of how the boundary is consistent with Section 107(d)(1). EPA dismissed the Davie County recommendations and our other partial county designations as well.

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: www.enr.state.nc.us/ENR

EPA defends this position by arguing that a "nationally consistent view of the eleven factors is essential to ensuring the fair and equitable National implementation of the 8-hour ozone standard and achievement of public health protection for all citizens." We believe that this drive for consistency ignores the fact that all states are not at the same stage of implementation of the new standards. North Carolina is unique in many ways that were pointed out in our documentation. Here are some of the key steps that North Carolina has taken to assure expeditious attainment of not only the 8-hour ozone standard, but also the fine particulate and regional haze standards.

First, North Carolina adopted the 8-hour ozone standard on April 1, 1999, and has fully supported the standard.

Second, North Carolina has the most extensive 8-hour ozone-forecasting program in the country, covering six areas in our state. Our citizens are alerted on a daily basis as to the predicted quality of the air so that they can take action to protect their health. North Carolina is expending significant resources to provide this service to our citizens. This daily forecast is a much better indication to the public of when they need to act to avoid exposure to high ozone levels than a non-attainment designation.

Third, the North Carolina General Assembly adopted the Clean Air Bill of 1999 that changes our vehicle inspection and maintenance (I/M) program to an on-board diagnostic program, and expands the program to 48 counties. This I/M program is one of the most expansive and progressive in the country.

Fourth, in addition to adopting the NOx SIP call, the North Carolina legislature enacted into state law an aggressive multi-pollutant bill that will result in significant reductions in sulfur dioxide, as well as year round reductions in nitrogen oxides from our utilities.

Fifth, North Carolina has invested significant resources to conduct an 8-hour ozone modeling analysis over the last several years. That work culminated in a 2007 analysis that shows all but five monitors will attain the 8-hour ozone standard by 2007. It should be noted that four of the five monitors are in the Charlotte region and are not required to attain until at least 2010. Modeling runs are underway to understand how close to attainment the Charlotte region will be in 2010. Those results will be shared with you as soon as they are available, as the 2007 results were.

Finally, North Carolina has the statutory authority to adopt controls on any source in the state if that source is contributing to non-attainment. We do not need a broad non-attainment designation in order to regulate our sources. Further, our recent legislative actions show a state that is not only able to, but has demonstrated it will, do what is necessary to protect the public's health. Following EPA's guidance, we have designated reasonable, rational and necessary boundary designations, with due deliberations.

North Carolina cares about the health of its citizens. We have dedicated the resources necessary to understand our air quality problems, and then worked to adopt the necessary legislation and rules to fix those problems. We believe strongly that EPA's proposed full-county designations unnecessarily penalize predominantly rural parts of our state that do not – and will not – contribute substantially to air quality problems.

We look forward to discussing ways to resolve these differing views. Thank you for your attention to this important matter.

Sincerely,

William G. Ross, Jr.

WGR.ap

cc: Mr. Steve Page
Mr. Keith Overcash

NCDENR
North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

February 6, 2004

J. I. Palmer, Jr., Esq.
Regional Administrator
US EPA Region 4
Sam Nunn Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

Subject: 8-Hour Ozone Non-Attainment Boundaries

Dear Mr. Palmer:

We have reviewed EPA's letter of December 3, 2003 commenting on North Carolina's recommendations for 8-hour ozone non-attainment boundaries. The purpose of this letter is to respond to EPA's comments and to address changes in our recommendations based on consideration of the 2003 ozone data.

After careful consideration of EPA's views and comments, we continue to believe that our original recommendations for the non-attainment areas of Charlotte-Gastonia-Rock Hill, Fayetteville, Greensboro-Winston-Salem- High Point, Hickory-Newton-Conover, Raleigh-Durham-Chapel Hill and Rocky Mount are appropriate, effective and consistent with applicable law, regulation and guidance.

It is our view that, by presuming that the boundaries of Metropolitan Statistical Areas should be the boundaries of non-attainment areas and by further ignoring its own guidance, EPA has given an arbitrary and unreasonable amount of deference to the Metropolitan Statistical Areas boundaries. EPA has proceeded despite Office of Management and Budget's (OMB) caution not to do so when implementing nonstatistical programs. OMB makes this point clearly in the December 27, 2000 Federal Register notice, in which the OMB states:

> "The general concept of a Metropolitan Statistical Area or a Micropolitan Statistical Area is that of an area containing a recognized population nucleus and adjacent communities that have a high degree of integration with that nucleus. The purpose of the Standards for Defining Metropolitan and Micropolitan Statistical Areas is to provide nationally consistent definitions for collecting, tabulating and publishing Federal statistics for a set of geographic areas. To this end, the Metropolitan Area concept has been successful as a statistical representation of the social and economic linkages between urban cores and outlying, integrated areas. This success is evident in the continued use and application of metropolitan area definitions across broad

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: www.enr.state.nc.us/ENR

> areas of data collection, presentation and analysis. This success is also evident in the use of statistics for metropolitan areas to inform the debate and development of public policies and in the use of metropolitan area definitions to implement and administer a variety of nonstatistical Federal programs. These last uses, however, raise concerns about the distinction between appropriate uses – collecting, tabulating and publishing statistics as well as informing policy – and inappropriate uses – implementing nonstatistical programs and determining program eligibility. OMB establishes and maintains these areas solely for statistical purposes.
> In order to preserve the integrity of its decision making with respect to reviewing and revising the standards for designating areas, OMB believes that it should not attempt to take into account or anticipate any public or private sector nonstatistical uses that may be made of the definitions. It cautions that Metropolitan Statistical Area and Micropolitan Statistical Area definitions should not be used to develop and implement Federal, state and local nonstatistical programs and policies without full consideration of the effects of using these definitions for such purposes." (Emphasis added.)

The implementation of the 8-hour ozone standard is clearly a nonstatistical program for a number of reasons, including the influences of the weather and predominant wind flows. North Carolina believes that we adequately addressed this issue in the recommendations by evaluating wind flows on high ozone days at the rural monitors located downwind from the major urban areas. North Carolina also continues to believe that the evaluation of such data is critical to identifying appropriate boundaries. Indeed, it is one of the eleven criteria cutlined in the EPA guidance on setting boundaries larger or smaller than the MSA.

We have conscientiously used EPA's eleven-point guidance to define reasonable, rational and necessary boundary designations. We clearly addressed how those factors affected the drawing of our lines, e.g., population densities, traffic and commuting patterns, meteorology, and level of control of emission sources. Please also consider these additional or expanded points along with the information we have previously submitted:

1. North Carolina has vigorously supported the 8-hour ozone standard, including the adoption of the new standard on April 1, 1999, and has implemented an extensive 8-hour ozone-forecasting program, covering six areas in our state. Our citizens are alerted on a daily basis as to the predicted quality of the air so that they can take action to protect their health. North Carolina has expended and continues to expend significant resources to provide this service to our citizens. This daily forecast

provides an efficient and effective indication to the public of when they need to act to avoid exposure to high ozone levels.

2. North Carolina has taken a proactive approach to addressing the new 8-hour ozone standard. For example, we enacted the Clean Air Bill of 1999, which changes our vehicle inspection and maintenance (I/M) program to an on-board diagnostic program and expands the program from 9 to 48 counties. This I/M program is one of the most expansive and progressive in the country. The North Carolina General Assembly passed this legislation during the time that the new standard was in the middle of litigation.

3. Another example of our State's proactive approach is North Carolina's passage of an aggressive multi-pollutant bill that will result in significant reductions in sulfur dioxide and year-round reductions in nitrogen oxides from our utilities.

4. North Carolina has invested significant resources to conduct an 8-hour ozone modeling analysis over the last several years. That work culminated in a 2007 analysis that shows all but five monitors in the state will attain the 8-hour ozone standard by 2007. It should be noted that four of the five monitors that will not attain the standard by 2007 are in the Charlotte region and are not required to attain until at least 2010. Modeling runs are now complete that show the Charlotte region in attainment by 2010. Thanks to our early modeling work, we were able to understand more clearly what controls were needed and how legislative initiatives might help to attain this new standard.

5. A key statutory authority in North Carolina is the state's ability to adopt controls on any source in the state if that source is contributing to violations of the ozone standard. Thus, we can take necessary steps to regulate our sources without a broad non-attainment designation. Further, our recent legislative actions show that our state is not only able to, but will, do what is necessary to protect the public's health.

6. North Carolina has successfully implemented, with EPA's approval, partial designations under the 1-hour ozone standard in both Granville and Davie Counties.

We have amended a few recommendations based on consideration of 2003 data. The Mount Mitchell monitor in Yancey County, the Bent Creek monitor in Buncombe County and the Frying Pan monitor in Haywood County are now measuring attainment. Therefore, the following areas are now recommended to be attainment based on the latest air quality data. Blue Ridge, Black and Great Craggy Mountains above 4000 feet in Buncombe, McDowell and Yancey Counties (Mt. Mitchell monitor); Buncombe County (Bent Creek monitor); Great Balsam Mountains above 4000 feet in Haywood and

Jackson Counties (Frying Pan monitor). Otherwise, North Carolina's recommendations remain as presented in my July 15, 2003 letter to you.

In closing, we will appreciate your careful consideration of these comments, as well as the additional technical evidence that will be provided to you next week regarding North Carolina's application of the eleven criteria. Please call me if you have questions. Thank you.

Sincerely,

William G. Ross, Jr.

WGB:np

cc: The Honorable Mike Easley, Governor, State of North Carolina
The Honorable Jim Fain, Secretary, NC Department of Commerce
The Honorable Lyndo Tippett, Secretary, NC Department of Transportation
The Honorable Britt Cobb, Commissioner, NC Department of Agriculture and Consumer Services
Mr. Steve Page, Director, Office of Air Quality Planning and Standards, US EPA
Mr. Keith Overcash, Director, Division of Air Quality, NC DENR

NCDENR
North Carolina Department of Environment and Natural Resources
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary
B. Keith Overcash, P.E., Director

February 12, 2004

J.I. Palmer, Jr., Esq.
Regional Administrator
US EPA, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

RE: Recommendations for 8-hour Ozone Nonattainment Designations

Dear Mr. Palmer:

On February 6, 2004, Secretary Ross submitted a letter on behalf of North Carolina in response to EPA's comments on our 8-hour ozone nonattainment boundaries recommendations. As indicated in our letter, we are recommending areas that are less than the MSA boundary. In addition to the reasons stated in the letter, we are submitting with this letter additional technical background information that was used to determine the recommendations.

Each area is described separately in the attached document and satisfies the criteria as set in EPA's March 28, 2000 memorandum entitled "Boundary Guidance on Air Quality Designations for the 8-hour Ozone National Ambient Air Quality Standard (NAAQS)". In setting the boundaries, we are confident that we have captured the main sources of influence to the surrounding areas that will result in successfully protecting the health of all citizens within North Carolina. By recommending the full and partial counties indicated, we are certain that once the federal and state regulations cited in the February 6, 2004 letter are fully implemented, there will continue to be a downward trend of emissions. We anticipate attainment in all areas except the Charlotte area by 2007 as indicated by our air quality modeling. Attainment is anticipated in the Charlotte MSA by 2010.

It is our duty to protect the air quality of North Carolina to the full extent granted to us. We believe that the attached information presents a compelling argument against full county designations in our State.

Sincerely,

B. Keith Overcash, P.E.

BKO/lg/at

attachment

cc: Secretary Bill Ross

1641 Mail Service Center Raleigh, North Carolina 27699-1641
2728 Capital Blvd., Raleigh, North Carolina 27604
Phone: 919-715-7670 / FAX 919-715-7476 / Internet: www.ncair.org

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 15, 2004

THE ADMINISTRATOR

Honorable Michael Easley
Governor of North Carolina
20301 Mail Service Center
Raleigh, North Carolina 27699-0301

Dear Governor Easley:

Today, we enter a new chapter in our country's clean air commitment. President Bush outlined this chapter when he directed the Environmental Protection Agency (EPA) to implement a national Clean Air strategy committing us to make the years ahead one of the most productive periods of air quality improvement in our nation's history.

The last 35 years have seen a growing commitment to clean air and a progression of science and technology that has informed our decision-making and guided our actions. I often think of our clean air history as a relay where a baton is passed from generation to generation and from Administration to Administration. It is a relay in which we must all be involved and a relay where our participation is never done. This Administration has made a commitment to accelerate our clean air progress so that all Americans live healthier, longer, more productive and prosperous lives. It is a commitment to no turning around or backsliding in air quality improvement.

Part of our nation's commitment to clean, healthy air deals with reducing levels of ozone. That effort began in the1970s with a 1-hour standard for ozone — now, in 2004, the more protective, health-based 8-hour ozone standard is ready for implementation.

Today, I fulfill my legal obligation under the Clean Air Act to issue final designations for all areas of the country for the 8-hour ozone standard. The enclosed table identifies the areas in your state that are designated as nonattainment, meaning that some areas of your state do not meet the more protective, health-based 8-hour ozone standard. I am also today deferring the designation date for the areas in your state participating in Early Action Compacts. I am confident that your commitment and the actions you are taking in these areas will result in achieving clean air faster.

Having been through this process as a governor myself, I recognize that having parts of your state designated as being in nonattainment will require more actions on your part to achieve cleaner, healthier air. This ozone standard is strong medicine, and we need to work together to

make certain your state can, as others have in the past, clean the air while sustaining economic growth. That is why the President has asked EPA to develop tools that reduce the transport of pollution across state boundaries.

During 2004, we are issuing a suite of national Clean Air Rules as part of the President's strategy that will specifically address the transport of pollution. These national rules and other clean air actions will bring the vast majority of areas of the country into attainment with this standard over the next 15 years. The Clean Air Rules, when fully implemented, will cut power plant emissions of sulfur dioxides, nitrogen oxides and mercury by nearly 70 percent, and will also reduce emissions from off-road diesel fuels, vehicles and engines by over 90 percent — those black puffs of smoke are going to be a thing of the past. Together, these Clean Air Rules will build on the tremendous progress made over the last 30 years, and do it in record time.

We have a national strategy and tools to provide people with cleaner, healthier air now and in the future. The result is more protection, faster and ensures that clean air and a prosperous economy will be this generation's contribution to our children and grandchildren.

Sincerely,

/s/

Michael O. Leavitt

Enclosure

cc (w/enclosure):
Ms. Robin Smith, Assistant Secretary for Environmental Protection
North Carolina Environment and Natural Resources Department

Enclosure

Boundary Designations for 8-hour Ozone Standards for North Carolina

(P) - Partial Counties
(EAC) - Early Action Compacts

Nonattainment Area Name	**Counties**	**Classification**	**Maximum Attainment Date (from June 15, 2004)**
Charlotte-Gastonia-Rock Hill, NC-SC	Gaston Mecklenburg Cabarrus Iredell (P) Lincoln Rowan Union	Moderate	June 2010
Greensboro-Winston-Salem-High Point, NC (EAC)	Davidson Davie Forsyth Guilford Alamance Caswell Randolph Rockingham	Moderate	Dec 2007
Raleigh-Durham-Chapel Hill, NC	Durham Granville Wake Chatham (P) Franklin Johnston Orange Person	Basic	June 2009
Hickory-Morganton-Lenoir, NC (EAC)	Alexander Burke (P) Caldwell (P) Catawba	Basic	Dec 2007
Haywood and Swain Cos (Great Smoky Mountains National Park), NC	Haywood (P) Swain (P)	Basic	June 2009
Fayetteville, NC (EAC)	Cumberland	Basic	Dec 2007
Rocky Mount, NC	Edgecomb Nash	Basic	June 2009

Note: Remainder of state is attainment