October 24, 2003

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

Re: Designation of South Carolina Nonattainment Areas under the Revised 8-hour Ozone Standard

Dear Mr. Palmer:

The Southern Environmental Law Center ("SELC") submits these comments on behalf of the Southern Alliance for Clean Energy and Environmental Defense in response to the July 14, 2003 submission of South Carolina to the U.S. Environmental Protection Agency ("EPA") concerning the proposed boundaries for areas within the State to be designated as nonattainment under the revised 8-hour standard for ozone. These organizations and SELC, a non-profit regional environmental organization dedicated to the protection of natural resources in South Carolina and throughout the Southeast, have worked extensively on air quality issues in South Carolina and are committed to ensuring that nonattainment boundaries for the revised 8-hour standard are set in a manner that is consistent with the requirements and intent of the Clean Air Act ("CAA") to protect public health with an adequate margin of safety. For this reason, we strongly support EPA's presumptive boundaries for nonattainment areas as set out in its 2000 guidance document, "Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards," over the limited and insufficiently protective boundaries proposed by South Carolina. The policy and legal reasons for our position are set out below.

Introduction

Pursuant to the CAA, EPA is required to set National Ambient Air Quality Standards ("NAAQS") sufficient to protect the public health with an adequate margin of safety. 42 U.S.C. § 7409 (a) & (b). In 1997, EPA revised the NAAQS for ozone from .12 parts per million ("ppm") measured over 1-hour intervals ("the 1-hour standard") to .08 ppm measured over 8-hour intervals ("the 8-hour standard") in order to reflect the best scientific evidence available on the public health effects of ozone. Implementation of the 8-hour standard was delayed, however, by several years of litigation, culminating in the Supreme Court ruling in Whitman v. American Trucking Associations, 531 U.S. 457 (2001), which upheld the 8-hour standard and determined that the CAA allows only consideration of public health effects, and not cost, in setting the NAAQS.

Along with many areas of the country, South Carolina has a serious problem with ozone pollution that is threatening the health and well being of its citizens, and damaging its environment. According to information from DHEC, 300,000 South Carolina citizens suffer from the debilitating effects of asthma. Furthermore, in the recently released American Lung Association 2003 State of the Air Report,[1] South Carolina received failing air quality grades for 10 of 19 counties studied. The Charlotte-Gastonia-Rock Hill metro area, including York County, South Carolina, was listed as the 10th most ozone polluted city in the country. Thus, while all areas of the State have been in attainment of the 1-hour ozone standard, this gives a false sense of security, obscuring the fact that under the best scientific knowledge available, much of South Carolina's population is breathing air that is damaging to its health.

Nonattainment designations provide areas with important tools to help bring themselves into compliance with the federal health-based air quality standards. For stationary sources, these tools include additional pollution control technology requirements for existing and new sources of pollution and pollution offset requirements for new sources of pollution. For mobile sources, the primary source of ozone pollution in South Carolina, including its largest metro areas, a nonattainment designation brings with it the powerful tool of transportation conformity.

Particularly for those citizens living in nonattainment areas, the State should use all measures at its disposal to reduce ozone pollution to safe levels. It is EPA's role to ensure that South Carolina take all appropriate steps to demonstrate the State's commitment to cleaning the air in these areas to the level of the health-based standard by establishing an appropriate designation of nonattainment areas for the eight-hour ozone standard. For the following reasons, we urge EPA to apply its presumptive boundaries to define South Carolina's nonattainment areas for the 8-hour standard. By doing so, you will greatly enhance the State's ability to fulfill its responsibility to address the serious problem of ozone pollution and implement the standards as intended by Congress.

[1] Available at http://lungaction.org/reports/stateoftheair2003.html.

I. The Clean Air Act Requires Nonattainment Designations to Include Areas Surrounding Violating Monitors, Plus Nearby Areas That Contribute to Violations of the Eight-Hour Standard.

Pursuant to § 107(d)(1)(A) of the CAA, governors are required to submit to EPA proposed designations of all areas of the state as attainment, nonattainment, or unclassifiable following the promulgation of new or revised NAAQS. Governors are required to designate as nonattainment "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." 42 U.S.C. § 7407(d)(1)(A)(i) (emphasis added). EPA may then "make such modifications as the Administrator deems necessary" in promulgating the final nonattainment boundary designations. Id. § 7407(d)(1)(B)(ii). In its report on the 1990 Amendments, the United States Senate highlighted Congress' intent that nonattainment areas be defined broadly, noting that "[t]he bill explicitly provides that EPA may include within the boundary [of a nonattainment area] an area that may cause or contribute to nonattainment in another area, regardless of whether pollutant concentrations in the first area exceed the standard." S. Rep. No.228, 101 st. Cong., 2nd Sess. 15, reprinted in 1990 CAA Legislative History 8338, 8353.

Even prior to the 1990 Amendments, which made explicit the breadth of EPA's duty to designate nonattainment areas, EPA designated and courts upheld broad nonattainment boundaries in order to fulfill the basic purposes of the Act. In Western Oil and Gas Ass'n v. United States Environmental Protection Agency, 767 F.2d 603 (9th Cir. 1985), for example, the Ninth Circuit rejected an industry challenge to the inclusion of counties without violating monitors in a designated nonattainment area. The EPA included the disputed counties because they contributed significantly to the monitored violations of the ozone and carbon monoxide standards in neighboring counties. In upholding EPA's decision, the court agreed with the agency's reasoning that a nonattainment area should be large enough to allow for the imposition of needed control measures on the sources that are contributing to the violation of an air quality standard. The court also agreed that the alternative – narrowly defined boundaries – risked over-control of sources within the nonattainment area and probable under-control of sources outside of the area. This, in turn, could result in an economically and technically unreasonable pollution control strategy.

Likewise, in State of Ohio v. Ruckelshaus, 776 F.2d 1333, 1340 (6th Cir. 1985), Ohio petitioned EPA for the redesignation of a portion of the Cleveland ozone nonattainment area to attainment because air quality monitors there did not show violations. In upholding EPA's denial of the petition, the court reasoned:

> It appears a permissible exercise of [its] authority for EPA to deny redesignation with respect to a component of a nonattainment area which produces a substantial portion of the area's pollution even though the air within that component tests at an acceptable level. If it were otherwise, the fortuitous circumstance that pollutants and precursors emitted within a county are moved by prevailing winds to a neighboring county would deprive EPA of the tools Congress

> provided for attacking pollution in the area of which the county is logically a part.

776 F. 2d at 1340. See also, United States Steel Corp. v. United States Environmental Protection Agency, 605 F.2d 283 (7th Cir. 1979), cert. denied, 444 U.S. 1035 (1980), (upholding EPA's designation of a broad nonattainment area based on monitoring and modeling results showing air quality violations in the area).

II. EPA Should Follow its Own Guidance and Designate the Metropolitan Statistical Area, or County in Non-MSA Areas, Surrounding Violating Monitors as the Boundaries of Nonattainment Areas.

EPA's 2000 guidance for implementation of the eight-hour ozone standard closely follows the statutory requirements and legislative intent in calling for broadly drawn nonattainment boundaries:

> 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. 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.

2000 Guidance at 3 (emphasis added). In addition, "[i]n areas where the 1-hour NAAQS still applies, EPA's presumption is that the designated 8-hour nonattainment boundary will be the C/MSA or the 1-hour nonattainment area, whichever is larger." Id. at 6.

Thus, in order to "best ensure public health protection from the adverse effects of ozone pollution," EPA's guidance applies the following presumptions:

- Any MSA with a violating monitor will be designated nonattainment in its entirety.
- Any non-MSA county with a violating monitor will be designated nonattainment in its entirety.
- Any area in violation of the 1-hour standard with a violating monitor will be designated nonattainment in its entirety unless the C/MSA is larger.

- Any county contributing to a violation will be designated nonattainment in its entirety, even if the contributing area shows attainment.

EPA *may* allow a state to deviate from these presumptive boundaries if the state addresses each of eleven factors identified in the guidance and demonstrates that "the resulting recommendation is consistent with § 107(d)(1) of the Act." Id. at 4. To the degree that South Carolina seeks to depart from EPA's guidance, any recommendation to exclude parts of an MSA or county surrounding a violating monitor from the designated nonattainment area should be supported by air quality modeling that demonstrates that sources within the excluded portions of the MSA or county do not contribute to ozone formation in the nonattainment area under any weather conditions. Analysis of the data provided by South Carolina in its July 14, 2003 submission, however, demonstrates that it has provided minimal justification for its substantial departure from EPA's presumptive use of full counties and MSAs. In fact, the most important factors identified in EPA's 2000 guidance, including population density, commuting patterns, monitoring data, locations of emissions sources, expected growth, jurisdictional boundaries and meteorology, reinforce rather than refute the use of EPA's presumptive boundaries.

With respect to mobile emissions in South Carolina, growth in vehicle miles traveled ("VMT") growth has far outstripped population growth. While the State's population has grown about 18 percent in the last 15 years, VMT has increased over 45 percent, almost three times the rate of population growth. As a result, the largest single source of NOx emissions in the Columbia area (41%) and Greenville/Spartanburg (57%), the two South Carolina metro areas with the most significant ozone problems, is on-road mobile emissions. This factor alone would indicate that full MSAs for these areas should be included within the nonattainment boundary in full in order to reap the benefits of coordinated land-use planning through the federal tool of transportation conformity. Closely related to these high VMT and NOx statistics, Greenville/Spartanburg was ranked the United States' fifth most sprawling metro area in a recent report by researchers at Rutgers and Cornell Universities.[2] Nonattainment designations and transportation conformity should be seen as an opportunity to cure this problem rather than simply shift it further into outlying areas.

As illustrated by these examples, using the boundaries of MSAs to delineate nonattainment areas is not only consistent with EPA's 2000 Guidance, but it also promotes both air quality benefits and economic fairness. The general concept of an MSA "is that of a core area containing a large population nucleus, together with adjacent communities having a high degree of economic and social integration with that core." U.S. Bureau of the Census, Population Estimates Program, Population Division (1997). Given the high degree of economic and social integration of communities within an MSA, there is an equally high degree of probability that sources throughout the MSA, including the cars of commuters traveling to the population nucleus, contribute to air quality violations within particular portions of the MSA. As mentioned in the Greenville-Spartanburg example above, it is also likely that these areas will share recruiting for key industries. It would produce absurd air quality results, as well as

[2] See Ewing, Pendall & Cheng, "Measuring Sprawl and its Impact" (available at http://www.smartgrowthamerica.com/sprawlindex/MeasuringSprawl.PDF).

inequitable distribution of economic costs and benefits, if industries were more encouraged to locate in the narrow strip of attainment in Anderson County proposed by South Carolina, but not a couple of miles away in the surrounding non-attainment areas of Anderson or Greenville counties. Under EPA's broader designations, such bizarre attainment area "cutouts" would not exist.

Furthermore, under the Early Action Compact program currently being undertaken on a state-wide basis in South Carolina, counties have entered into cooperative agreements to work together to control air pollution in order to avoid the consequences of nonattainment designation under the 8-hour standard. In order to maintain the cooperation and integration encouraged by this program, we believe that nonattainment areas should be set at the county or MSA level rather than broken down into smaller components.

III. South Carolina Must Also Include In Its Proposal Areas That Contribute to Ambient Air Quality In a Nearby Area That Does Not Meet The 8-Hour Standard

The materials made available by South Carolina provide no information about sources outside of counties with nonattaining monitors that may contribute to nonattainment areas, and hence, by the terms of the statute, must be included in the nonattainment boundaries. Such information must be made available to EPA and be considered during the nonattainment boundary recommendation process.

As stated previously, under 42 U.S.C. § 7407(d)(1)(A) and EPA guidance, if South Carolina has reason to believe that sources contribute to ozone violations in nearby areas, it must draw the nonattainment boundaries to capture these sources. It is inadequate for South Carolina simply to promise that appropriate control strategies and regulations will be developed for such sources in the event that they are excluded from the nonattainment area.

The purpose of giving EPA the authority to broadly define nonattainment areas is to better equip the state and EPA with tools necessary to clean up sources contributing to violations of air quality standards. As the Sixth Circuit noted in rejecting a scheme identical to that now being proposed by South Carolina, "were [it] otherwise, the fortuitous circumstance that pollutants and precursors emitted within a county are moved by prevailing winds to a neighboring county would deprive EPA of the tools Congress provided for attacking pollution in the area of which the county is logically a part." State of Ohio v. Ruckelshaus, 776 F.2d at 1340.

IV. An Area By Area Analysis of South Carolina's Proposed Restrictive Boundaries Demonstrates That They Are Not Supported by the Factors in EPA's Guidance.

There are two major deficiencies with South Carolina's proposed nonattainment designations. The first is the failure to designate multi-county urban areas, which comprise single MSAs, as single nonattainment areas. The most glaring example is South Carolina's absurd proposal that Greenville and Spartanburg be designated as separate nonattainment areas. The Greenville/ Spartanburg area clearly functions as a single metropolitan area, illustrated by

the fact that it shares a major airport and main transportation corridor (Interstate 85). South Carolina has failed to offer any justification for failing to treat the Greenville/ Spartanburg/ Anderson MSA as a single nonattainment area.

Likewise, MSAs which cross state lines should be treated as single nonattainment areas to allow coordinated air quality planning. Thus, the entire Augusta/Aiken MSA should be classified as a single nonattainment area. In addition, York County should be included in the Charlotte/ Gastonia/ Rock Hill nonattainment area as recommended by North Carolina. Surprisingly, South Carolina does not propose that any portion of York County be treated as nonattainment, despite the fact that the Arrowood monitor just across the county line in North Carolina has a design value of 89 ppb.

The second major deficiency in South Carolina's proposed designations is the locations of the boundaries to exclude significant portions of nonattainment counties. South Carolina attempts to deviate from EPA's presumptive boundaries through an area-by-area discussion of the eleven factors in the EPA Guidance to justify deviation for all of its proposed 8-hour nonattainment areas. In all cases, the proposed nonattainment area boundaries have been artificially circumscribed by ignoring important data, which actually supports EPA's presumptive boundaries. For the reasons set out below, proper application of the factors to each area would result in significant expansion of the proposed boundaries for each of the nonattainment areas.

South Carolina's repeated recommendation that only existing MPO areas be used as the nonattainment boundary does not capture major point sources in many of the counties and does not take into account anticipated growth in its many rapidly developing counties, which will result in additional transportation emissions. South Carolina only weakly surmises that future growth "will be located inside, or at least near," the proposed nonattainment areas. This cavalier approach fails to satisfy the intent of the Clean Air Act that boundaries be drawn expansively to capture all anticipated contributing sources. Further, as noted above, all but one of South Carolina's counties have elected to participate in the Early Action Compact program to attempt to attain the 8-hour standard by 2007 without following the CAA requirements for designated nonattainment areas. Thus, the State and EPA have recognized that full counties are the appropriate unit for purposes of developing strategies to attain clean air. This approach is no less appropriate as to boundary designations for purposes of complying with the requirements for 8-hour areas under the Act if the EAC program proves unworkable.

An area by area analysis follows:

A. Aiken Nonattainment Area

The entire county of Aiken, as well as the four other Georgia and South Carolina MSA counties, should be included in the Augusta/Aiken nonattainment area, rather than the area proposed by South Carolina, which is barely larger than the existing MPO jurisdiction. South Carolina attempts to limit the designation by drawing an arbitrary boundary line at the location of a violating monitor. It makes no sense to assume that the area across the street from the violating monitor is in attainment and does not contribute to nonattainment.

In addition, this example illustrates how South Carolina's proposed MPO boundary approach is insufficient since the violating monitor here is outside of the MPO area. The

inadequacy of this proposed area is also illustrated by the fact that it fails to include all NO_x point sources, fails to capture over 30% of the mobile emissions in Aiken County, which is its largest source of NO_x emissions, and includes only 44% of the manufacturing employees' places of work. The existence of Interstate 20 and four major U.S. highways in the area suggests that much future growth will occur outside the proposed nonattainment area. Finally, a broader designation is indicated because the monitoring site in the eastern part of Aiken County at Wagoner barely meets the 8-hour standard and has registered several readings above .094 parts per million over the last few years.

B. Anderson Nonattainment Area

South Carolina suggests a designation consisting of a portion of Anderson County and a small portion of Pickens County coinciding with the MPO boundary. The proposed area includes only 40% of Anderson County and 15% of Pickens County. As indicated above, however, these two counties in their entirely should be designated as part of the Greenville/ Spartanburg/ Anderson nonattainment area. Also, Pickens County should be included in its entirety because it has a violating monitor. Instead, South Carolina proposed to include a small area surrounding the monitor.

As South Carolina admits, this proposal does not even include all of the current urbanized areas of the two counties. In fact, it captures only 20% of the daily VMT in the two counties. As to raw population, it includes less than 20% of the population in Pickens County and only 21% of the employees' workplaces. Further, the small Pickens designation includes only one of fourteen NO_x sources in the County.

C. Columbia Nonattainment area

South Carolina recommends only the MPO area of Richland and Lexington Counties rather than EPA's presumptive boundaries, which would include both counties as a whole. The fallacy of South Carolina's proposal is well-illustrated by the fact that it picks up only 28% of the NO_x sources and omits the two largest polluters in the metropolitan area. Also, the designation fails to include future growth areas in this sprawling metro area where three major interstates converge, I-20, I-26 and I-77.

D. Due West Nonattainment area

South Carolina proposes to designate only 4.6 square miles containing 236 people, an entirely impracticable and unworkable designation. Instead, this entire county should be designated along with the adjoining counties in the Greenville/ Spartanburg/ Anderson nonattainment area.

E. Florence Nonattainment area

South Carolina recommends only the MPO area rather than the entire two-county area of Florence and Darlington Counties. Only a very small section of Darlington County is proposed, which includes the violating monitor. In fact, the designation does not even include the downtown area of the town of Darlington. The designation includes only 43% of the population

in the two-county area and only 47% of the VMT. Only two-thirds of the manufacturers in Florence County are captured and none of the manufacturers in Darlington County. As to major stationary sources of NO_x, the two major sources in Darlington County are excluded, which have a combined 2004 ozone season budget of 1,181 tons. Major NO_x sources in Florence County are also excluded, including one with a 2004 budget of 1,366 tons of NO_x.

F. Greenville Nonattainment area

South Carolina recommends only the MPO portion of Greenville County, which consists of 60% of its land area. Instead, the entire county should be designated as part of a 5-county MSA nonattainment area. The proposed designation leaves out three of the major NO_x sources in South Carolina's second largest metro area. Also, the Greenville area is rapidly growing and expects to add over 50,000 additional people in the next fifty years. Residential growth and industrial siting is likely outside the MPO boundary, given that the area is rapidly growing and supported by a major road network, including a new southern beltway.

G. Spartanburg Nonattainment area

South Carolina recommends the Spartanburg MPO area and small additional portions of Spartanburg and Cherokee Counties, which contain violating monitors. The proposed designation, however, contains only 58% of the population of Spartanburg and Cherokee Counties. In fact, only 535 people are included in Cherokee County. In addition, the designation captures only 60% of existing VMT in the two-county area. In addition, 15% of the point sources in the two-county area are excluded, and none of the employees of manufacturing facilities in Cherokee County are included. A broader MSA designation is supported by the fact that the Cherokee site has had readings as high as .102 parts per million. Like Greenville, Spartanburg will add another 50,000 residents over the next two decades and growth is likely to be disbursed throughout the county, facilitated by its three interstates and three major U.S. highways.

V. Conclusion

South Carolina has failed to justify its circumscribed boundaries for nonattainment areas based on either the language and intent of Section 107(d) of the Clean Air Act or the eleven factors in EPA's 2000 guidance. To the contrary, the intent of the law is to favor expansive boundaries. It is imperative that EPA ensure that South Carolina continue to act decisively to protect our health and natural resources from ozone pollution. It can do so by insisting on appropriate designations for the State's many nonattainment areas for the 8-hour ozone standard. For all the foregoing reasons, we urge EPA to adhere to its presumptive boundaries in designating each of these areas.

We thank you for the opportunity to submit these comments. In addition, we request a meeting with you and your staff at your earliest convenience to discuss our grave concerns with South Carolina's submission.

Respectfully submitted,

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