

**Notice of General Public Interest, Published February 26, 2010,  
in the South Carolina *State Register***

**Comments Received and Response**

## DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

## PUBLIC NOTICE

ATTAINMENT PLAN FOR THE RFATS MPO, S. C.  
8-HOUR OZONE NAAQS NONATTAINMENT AREA  
CHAPTER 61

Statutory Authority: 1976 Code Sections 48-1-10 et seq.

## South Carolina Air Quality Implementation Plan:

The Department of Health and Environmental Control (Department) proposes to amend the the South Carolina Air Quality Implementation Plan (SIP) in association with the Rock Hill Fort Mill Area Transportation Study (RFATS) Metropolitan Planning Organization (MPO) 8-hour ozone nonattainment area. Interested persons are invited to present their views in writing to Andrew O. Hollis; Division of Air Planning, Development and Outreach; Bureau of Air Quality; 2600 Bull Street; Columbia, SC 29201. Comments may also be submitted via email to [hollisao@dhec.sc.gov](mailto:hollisao@dhec.sc.gov). To be considered, comments must be received no later than 5:00 p.m. on March 29, 2010, the close of the drafting comment period. The Department is also providing the public with the opportunity to request a public hearing on the issue. As such, a public hearing has been planned for April 5, 2010, at 10 a.m. in the Wallace Room (3141), 2600 Bull Street, Columbia, South Carolina. The public is invited to attend. However, pursuant to 40 CFR 51.102, if no request for a public hearing is received by the close of the comment period (March 29, 2010), the hearing will be cancelled. If a public hearing has been cancelled, the Department will notify the public at least one week prior to the scheduled hearing via the "Public Involvement" or "Scheduled Public Hearings" link on the Regulation Development webpage at <http://www.scdhec.gov/environment/baq/regulatory.aspx>. Interested parties are also encouraged to contact Andrew Hollis at (803)-898-4196 for more information or to determine whether a public hearing has been cancelled. If no adverse comments and no request for a public hearing have been received by the close of the comment period, the SIP revision is effective on the date of publication of this notice in the *State Register*.

## Synopsis:

In a *Federal Register* (FR) notice published on July 18, 1997 (62 FR 38856), the United States Environmental Protection Agency (EPA) promulgated amendments to the National Ambient Air Quality Standards (NAAQS) for ozone. Based on its review of available scientific evidence linking exposures to ambient ozone to adverse health and welfare effects at levels allowed by the 1-hour ozone standard, the EPA replaced the 1-hour primary standard with an 8-hour standard at a level of 0.08 ppm based on the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area. The 1-hour secondary standard was also replaced by an 8-hour secondary standard identical to the 8-hour primary standard.

Because of monitor readings in North Carolina indicating violation of the 1997 ozone standard, on April 30, 2004 (69 FR 23858), the EPA designated and classified that portion of York County, South Carolina within the RFATS MPO as a moderate nonattainment area for the 8-hour ozone NAAQS as part of the Charlotte-Gastonia-Rock Hill nonattainment area. As a result of this designation, the Department was required to amend the SIP, in accordance with the requirements of Title I, Part D - Plan Requirements for Nonattainment Areas, Subpart 1, Section 172, and Subpart 2, Section 182 of the *Clean Air Act* (CAA), as amended (42 U.S.C. 7401, et seq.).

On August 31, 2007, the Department submitted its required attainment plan for the RFATS MPO 8-hour ozone NAAQS nonattainment area.

On November 17, 2008, the EPA sent letters to North Carolina and South Carolina, explaining its intention to propose disapproval of the attainment demonstrations for the Charlotte-Gastonia-Rock Hill area for the 1997 8-hour ozone standard by January 9, 2009. Within these letters, the EPA indicated this decision was based on its

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belief that the area was unlikely to attain the 1997 ozone standard by June 15, 2010, or meet the requirements for a one-year extension of the attainment date. As a result, the Department withdrew its attainment demonstration on December 22, 2008, and committed to re-submit an amended attainment demonstration by November 30, 2009. EPA then made a finding of failure to submit State Implementation Plan revisions required for the 1997 8-hour ozone NAAQS to South Carolina and North Carolina for the Charlotte-Gastonia-Rock Hill nonattainment area [*Federal Register* notice published on May 8, 2009 (74 FR 21550)].

EPA presented as an option the resubmittal of the original attainment demonstration submitted in 2007 and then supplement this demonstration with additional information including the 2011 modeling and actual air quality data from 2009. The Department chose this option and we are now placing these documents on public notice.

In response to the Department's decision, the EPA is requiring additional information to include: nitrogen oxide and volatile organic compound (VOC) motor vehicle emissions budgets (MVEB) (a NO<sub>x</sub> budget has already been submitted in the previous attainment demonstration), additional modeling showing 1997 ozone standard compliance in the 2011 ozone season, updates to the air quality data analysis which include the 2009 ambient data, a 2008 VOC MVEB for the Reasonable Further Progress (RFP) appendix, and updated information on emissions and controls that may affect air quality during the 2010 ozone season. In conjunction with these additions the Department will also submit an update to the 2009 NO<sub>x</sub> MVEB.

These draft submittals and further information is available via the Department's website at [http://www.scdhec.gov/environment/baq/Metrolina-SC\\_Nonattainment/](http://www.scdhec.gov/environment/baq/Metrolina-SC_Nonattainment/).

### DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

#### PUBLIC NOTICE

In accordance with Section 44-7-200(C), Code of Laws of South Carolina, the public is hereby notified that a Certificate of Need application has been accepted for filing and publication February 26, 2010, for the following project(s). After the application is deemed complete, affected persons will be notified that the review cycle has begun. For further information, please contact Mrs. Sarah "Sallie" C. Harrell, Division of Planning and Certification of Need, 2600 Bull St., Columbia, SC 29201 at (803) 545-4200.

#### Affecting Aiken County

Renovation for the replacement of the existing extremity Magnetic Resonance Imaging (MRI) unit with a 1.5 Tesla MRI unit  
Carolina Musculoskeletal Institute, P.A.  
Aiken, South Carolina  
Project Cost: \$1,195,200

#### Affecting Beaufort County

Construction of a psychiatric hospital to include twenty-two (22) psychiatric beds  
Beacon Harbor Geriatric Psychiatric Hospital  
Bluffton, South Carolina  
Project Cost: \$9,079,397

#### Affecting Florence County

Construction of a new patient tower located between the Main Tower and the Pavilion Tower; upfit of the eighth (8<sup>th</sup>) floor of the Pavilion Tower to be used for inpatient rooms and support space; and renovation of the Main Tower. There will be no change in the licensed bed capacity



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

MAR 17 2010

Robert J. Brown, Jr., Director  
Division Air Planning, Development and Outreach  
Bureau of Air Quality  
South Carolina Department of  
Environment and Control  
2600 Bull Street  
Columbia, South Carolina 29201

Dear Mr. Brown:

Thank you for your letter dated February 26, 2010, transmitting a prehearing package with the submittal regarding the attainment demonstration and the associated supplement for the South Carolina portion of the Charlotte-Gastonia-Rock Hill, North Carolina-South Carolina 1997 8-hour ozone nonattainment area. Also provided in this prehearing package was a submission with an update to the reasonable further progress plan which was provided to EPA for processing on August 31, 2007. These submissions are the subject of a public hearing scheduled for April 5, 2010 (provided a hearing is requested), with written comments due by the close of business on the March 29, 2010. We have completed our review of the submittal and offer no comments at this time.

We appreciate your efforts regarding these submissions and look forward to the review of the final submissions. If you have any questions, please contact Ms. Lynorae Benjamin, Chief, Regulatory Development Section at (404) 562-9040, or have your staff contact Mr. Zuri Farnago at (404) 562-9152.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard A. Schutt".

Richard A. Schutt  
Chief  
Air Planning Branch

The Department had no response to the United States Environmental Protection Agency's letter dated March 17, 2010, since the letter contained no comments.

# SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 919-967-1450

200 WEST FRANKLIN STREET, SUITE 330  
CHAPEL HILL, NC 27516-2559

Facsimile 919-929-9421

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March 29, 2010

Andrew O. Hollis  
Division of Air Planning, Development and Outreach  
Bureau of Air Quality  
2600 Bull Street  
Columbia, SC 29201  
(hollisao@dhec.sc.gov)

VIA EMAIL AND US MAIL

Re: Supplement to the South Carolina 8-Hour Ozone Attainment Demonstration for the Charlotte-Gastonia-Rock Hill, NC-SC Nonattainment Area

Dear Mr. Hollis,

The Southern Environmental Law Center (SELC) submits these comments in response to the invitation of the South Carolina Bureau of Air Quality (BAQ) to comment on the proposed supplement to the South Carolina Revised 8-Hour Ozone Attainment Demonstration (the "SIP Supplement") for the Charlotte-Gastonia-Rock Hill, NC-SC ("Metrolina") Nonattainment Area. These comments incorporate by reference previous SELC comments on BAQ's proposed attainment demonstration revision, as well as North Carolina officials' proposed Reasonable Further Progress State Implementation Plan (the "RFP-SIP") for the Metrolina area, and the various Metrolina Metropolitan Planning Organizations' Draft Conformity Analysis and Determination Report based on that RFP-SIP. (See attached Exhibits 1-3).

As we explained in our previous comments, the anomalous 2009 ozone season notwithstanding, the proposed plans are inadequate to demonstrate attainment and the Metrolina area should be reclassified to "serious" nonattainment status. Instead of resubmitting outdated plans to meet targets retroactively, BAQ should develop prospective strategies for controlling emissions, particularly from motor vehicles, and for ensuring both short-term and long-term attainment of health-based air quality standards.

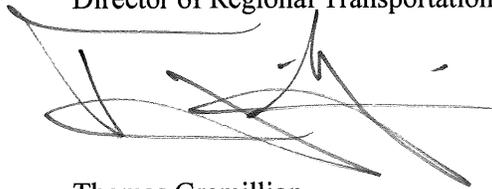
This SIP Supplement and its accompanying revisions and resubmissions are inconsistent with the Clean Air Act's statutory scheme and its emphasis on attainment deadlines. From a policy perspective, the plans will make attainment under the anticipated more stringent standard much more difficult, uncertain, and expensive. South Carolina officials should prepare a new SIP revision consistent with the Metrolina area's legally required bump-up to "serious" status, and focus efforts on control strategies that will attain the current standard, as well

as get a head start on achieving the tough new standards on the horizon. Clean air will require increased regional coordination and integration of land use, transportation and air quality planning. Development of these solutions will take time that the Metrolina area cannot afford to waste with delays based on one atypical ozone season.

Sincerely,



J. David Farren,  
Senior Attorney,  
Director of Regional Transportation Initiative



Thomas Gremillion  
Associate Attorney

Enclosures

Cc: Myra Reece, SCDHEC  
June Blotnick, Clean Air Carolina  
Rick Roti, Sierra Club  
Carol Kemker, EPA  
Keith Overcash, DAQ

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October 26, 2009

Andrew O. Hollis  
Division of Air Planning  
Development and Outreach  
Bureau of Air Quality  
2600 Bull Street  
Columbia, SC 29201  
([hollisao@dhec.sc.gov](mailto:hollisao@dhec.sc.gov))

*VIA EMAIL AND US MAIL*

Re: Amendment of the South Carolina Air Quality Implementation Plan as Referenced in the South Carolina State Register Vol. 33, Issue 9 (September 25, 2009)

Dear Mr. Hollis:

On behalf of Clean Air Carolina and the Central Piedmont Group of the Sierra Club, the Southern Environmental Law Center (SELC) submits these comments in response to the invitation of the South Carolina Department of Health and Environmental Control (DHEC) to comment on the proposed revision to the Metrolina-Gastonia-Rock Hill, North Carolina-South Carolina (Metrolina) State Implementation Plan (SIP) for ozone, as referenced in the South Carolina State Register Vol. 33, Issue 9 (September 25, 2009). Instead of submitting the proposed ozone SIP for EPA approval, state officials should develop a new proposed SIP revision that reflects the legally required reclassification or "bump-up" of the Metrolina area to "serious" nonattainment status. As our comments explain, bump-up will usher in needed control measures to clean up the Metrolina area's unhealthy air, including strategies to better integrate land use, transportation, and air quality planning in the region. Because the law requires bump-up, the proposed SIP revision will only delay the inevitable and waste limited state resources that could be focused on achieving air quality standards.

The current seven county bi-state Metrolina nonattainment area's ozone problem is chronic and significant. The American Lung Association's 2009 "State of the Air" report ranks Charlotte as the 8th most ozone polluted city in the country, an even lower ranking than the year before, and the worst in the Southeast. Metrolina air quality showed improvement during the most recent ozone season, but the past summer's extraordinary weather and depressed economic conditions will not likely repeat themselves in 2010. To effectively safeguard residents' health and welfare, state officials must better control motor vehicle emissions, the primary source of the

Metrolina area's smog. This will require coordination with local and federal transportation officials on a regional basis, development of more realistic travel and land use modeling, and revisiting the area's recent flawed transportation conformity determinations.

The Metrolina area has now conclusively failed to meet the attainment deadline for the effective 1997 ozone air quality standard of 84 parts per billion (ppb). Federal authorities are now considering rescission and strengthening of the recently adopted standard of 75 ppb, assessing whether a lower threshold is needed to adequately protect public health. Even at levels well below the current standard, studies have shown that ozone exposure causes asthma attacks, lung cancer, heart disease, and even death.<sup>1</sup> An expert advisory panel to the EPA has unanimously agreed that a standard between 60 and 70 ppb is necessary to protect human health, and the World Health Organization has endorsed a standard of 51 ppb.<sup>2</sup> The Metrolina area's three-year average ozone "design value" currently exceeds 86 ppb.<sup>3</sup> Thus, the region has a long way to go towards cleaning up its air. The proposed SIP revision and deadline extension would not only violate federal law, as discussed in detail below, but also would delay efforts to attain the even stronger anticipated standard, which will be a major challenge for the Metrolina region.

### The Metrolina Area's History of Non-Attainment

EPA first designated the Metrolina area as nonattainment for ozone in 1980, almost three decades ago.<sup>4</sup> In response, North Carolina authorities pledged to undertake controls on stationary sources of more than 100 tons per year of VOC and NO<sub>x</sub> emissions. The state implementation plan largely ignored motor vehicle emissions.<sup>5</sup> Not surprisingly, during the 1980's, air quality remained poor, with monitors in the Metrolina metropolitan area regularly recording design values in excess of one hundred ppb.<sup>6</sup>

When the 1990 Clean Air Act Amendments were passed, including the revised transportation conformity provisions in Section 176(c), Metrolina was classified as a "moderate" nonattainment area, the same designation that applies to it today. By 1995, air quality had improved enough to qualify the Metrolina area for re-designation to attainment under the old "one-hour" ozone standard. But when EPA revised the ozone standard in 1997 to 80 ppb,<sup>7</sup> Metrolina once again faced a nonattainment designation. The area's lack of progress in

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<sup>1</sup> See, e.g., Chan C-C, Wu T-H. Effects of Ambient Ozone Exposure on Mail Carriers' Peak Expiratory Flow Rates. *Environ Health Perspect* 2005; 113:735-738. Tager IB, Balmes J, Lurmann F, Ngo L, Alcorn S, and Kitenzli N. Chronic Exposure to Ambient Ozone and Lung Function in Young Adults. *Epidemiology* 2005; 16:751-759. Ruidavets J-B, Cournot M, Cassadou S, Giroux M, Meybeck M, Ferrières J. Ozone Air Pollution is Associated with Acute Myocardial Infarction. *Circulation* 2005; 111:563-569.

<sup>2</sup> See Bob Weinhold. "Ozone Nation: EPA Standard Panned by the People" *Environ. Health Perspect.* 2008 July; 116(7): A302-A305.

<sup>3</sup> Even with the past summer's favorable weather conditions and the worst economic slump in recent history, the three-year average of the 4<sup>th</sup> highest readings at the "County Line" monitor in Mecklenburg County, from 2007 to 2009, was 86.7 ppb.

<sup>4</sup> See 45 FR 26038 (April 17, 1980); 45 FR 59578 (September 10, 1980).

<sup>5</sup> See *id.*

<sup>6</sup> According to the latest tally, 65% of NO<sub>x</sub> emissions in Mecklenburg County in 2002 came from "mobile" sources. NCDQA, "Emissions Inventory Summary," Preliminary Draft SIP, Appendix E-2 (Table 1) (August 14, 2009).

<sup>7</sup> In practice, the standard is 84 ppb by virtue of the rounding convention.

achieving healthy air quality is largely explained by comparing its propitious forecasts of motor vehicle emissions to later observation-based estimates. For example, North Carolina's 1995 maintenance plan prescribed no more than 33.5 tons of NO<sub>x</sub> to be emitted each day in Mecklenburg County in 1999, and no more than 33.0 tons per day in 2005.<sup>8</sup> By 2002, however, mobile source emissions of NO<sub>x</sub> had reached 78.7 tons per day, roughly two and a half times the level prescribed by the maintenance plan budget for 1999. The same story held in outlying areas. Gaston County's mobile source NO<sub>x</sub> emissions were projected in the Motor Vehicle Emissions Budget ("MVEB") to drop from 9.3 tons per day in 1999 to 8.7 tons per day by 2005, but actual emissions reported to be 20 tons per day in 2002, the "baseline inventory year" for the proposed SIP revision.

When EPA again designated the Metrolina area as nonattainment in 2004, the ozone design value was at one hundred ppb. Following its designation as a moderate nonattainment area, state officials had to submit a SIP to "provide for attainment of the national primary ambient air quality standards." 42 U.S.C. § 7502(c)(1). North and South Carolina made the required submissions in 2007 but that very same year the ozone design value spiked to 96 ppb, casting doubt on the adequacy of the SIPs. North Carolina air quality officials notified EPA that they were considering a SIP revision in order to adequately address emissions from the transportation sector: new data showed that motor vehicle emissions in Mecklenburg County would exceed the NO<sub>x</sub> motor vehicle emissions budget amount by 2.82 tons per day.<sup>9</sup> This prompted the federal agency to suspend its review of the submitted plan.<sup>10</sup>

But on May 15, 2008, the North Carolina Department of Air Quality notified area transportation officials that it would not submit a SIP revision.<sup>11</sup> State officials decided to "request that the USEPA continue with the approval process of the plan already submitted on June 15, 2007," in part due to "concern whether such a change to the SIP would be able to be approved by the USEPA given the current state of air quality," and anticipation that "all areas in the Metrolina nonattainment area would be able to demonstrate conformity by the end of [a one-year transportation conformity lapse grace period]." In other words, rather than potentially impact local transportation planning, state officials apparently decided to take the status quo approach of hoping that nationwide automobile efficiency trends would eventually reduce ozone concentrations enough to barely meet the current standard.<sup>12</sup>

Almost a year and a half after the states submitted their SIPs, on November 17, 2008, EPA wrote to notify North and South Carolina that it intended to disapprove their plans. The agency advised the states to adopt a voluntary bump-up to "serious" nonattainment status for the Metrolina area. "Bump-up" or reclassification, would extend the attainment deadline for the Metrolina area for two years to June 2012, but impose more stringent controls on sources of ozone precursor emissions, including mobile sources. As EPA explained in its letter, the Metrolina area had run out of time to meet the attainment standard: "The Clean Air Act and EPA

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<sup>8</sup> See 60 FR 34859 (July, 5 1995).

<sup>9</sup> Laura A. Boothe. N.C. Division of Air Quality. Letter to Metrolina Transportation Partners (May 15, 2008).

<sup>10</sup> See Eldewyns Haynes. "Information Items: Effects on Transportation of State Implementation Plan for Ozone" (July 9, 2008) available at: [www.charmeck.org](http://www.charmeck.org)

<sup>11</sup> *Supra* note 9.

<sup>12</sup> *Id.*

rules for implementation of the 1997 ozone standard require that . . . the area will achieve ozone levels consistent with the ozone standard by the end of the 2009 ozone season.” EPA pointed out, correctly, that in the Metrolina region “attainment will not be achieved by the required moderate area deadline.”<sup>13</sup> EPA also advised state officials that “the area will not meet the requirements for a one-year extension of the attainment date.” Accordingly, the agency recommended that state officials “request to reclassify the . . . Metrolina nonattainment area to a higher classification”—i.e. a voluntary bump-up—because “if we are required to take rulemaking action on the SIP, we see no alternative to proposing disapproval of the SIP’s attainment demonstration.”

By December of 2008, however, state and federal officials appear to have collaborated to find a way around the law. In December of 2008, DHEC requested “that EPA return the attainment demonstration originally submitted on June 15, 2007, so that the State may improve the demonstration and submit an updated plan.” State authorities pledged to “submit a revised attainment demonstration for the Metrolina region by November 2009.” Notably, this date falls after the conclusion of the 2009 ozone season, and therefore the SIP and related attainment demonstration cannot lay claim to any intention to “provide for attainment of the national primary ambient air quality standards” by the June 15, 2010 nonattainment date. 42 U.S.C. § 7502(c)(1).

EPA has nevertheless acquiesced to the new timeline, taking “a final action finding that North Carolina and South Carolina have failed to submit [SIP] revisions,” which they “were required to submit by June 15, 2007.” 74 FR 21550 (May 8, 2009). State officials now propose to submit a new SIP premised on a yet to be granted attainment deadline extension. As discussed below, the requested extension would violate the Clean Air Act.

### The Deadline Extension Requested by South Carolina is Illegal

The Clean Air Act grants the EPA limited authority to extend the nonattainment deadline for an area that violates air quality standards:

Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the “Extension Year”) the date specified in table 1 of paragraph (1) of this subsection if—(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and (B) no more than 1 exceedance of the national ambient air quality standard level for ozone has occurred in the area in the year preceding the Extension Year. No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area. 42 U.S.C. § 7511(a)(5).

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<sup>13</sup> Already in November of 2008, attainment was clearly impossible. The “County Line” monitor in Metrolina would have had to record a fourth highest ozone value of less than 65 ppb in 2009—a 30% decline from 2008—in order to meet the standard. Even in the mild weather and economic torpor of the 2009 ozone season, the fourth highest value on that monitor has since repeatedly exceeded 65 ppb. Proposed SIP Revision, Appendix C - Air Quality Data – DRAFT C-2 (Table 1).

The proposed SIP revision labors under the assumption that the Metrolina area will qualify for an extension because “no more than 1 exceedance” of the 84 ppb standard “has occurred in the area” in the past year. But the law requires more than a fortuitous dip in ozone levels.

In addition, states must “comply with all requirements and commitments pertaining to the area in the applicable implementation plan.” The statute’s dual conditions for an extension serve a clear objective. The possibility of an extension gives states an incentive to file a plan that meets Clean Air Act requirements—a plan which EPA can approve—and to comply with that plan’s “requirements and commitments.” By taking such deliberate actions to reduce ozone precursor emissions, states can effectively qualify for a reprieve from the law’s requirement that the three-year average ozone design value meets the current standard. *See* 42 U.S.C. § 7511(a). But states that simply take a wait-and-see approach—states that never have a viable plan approved or which do not comply with the “requirements and commitments” of the plan that is submitted—do not fit within this statutory scheme. Without a track record of planning and compliance, a state cannot credibly claim responsibility for one year of fortuitous air quality, or reliably predict that poor air quality will not return under less extraordinary economic and weather conditions.

Beyond these common sense policy rationales, no plausible reading of 42 U.S.C. § 7511(a)(5)(A)&(B) allows South Carolina to qualify for an extension. On the one hand, EPA’s finding that South Carolina failed to submit a SIP indicates that no “applicable implementation plan” has ever existed in the area. To the extent that the SIP submitted in 2007 could be interpreted to qualify as “the applicable implementation plan,” South Carolina has not complied with “requirements and commitments pertaining to the area in the applicable implementation plan.” Either way, the proposed extension fails to meet the statutory requirements.

Indeed, the plain language of the Clean Air Act indicates that the SIP submitted in 2007 should have already prompted administrative action. EPA lacks authority to accept a SIP submission and then make a finding of failure to submit more than 22 months later. South Carolina officials were required to submit a SIP by June 15, 2007. *See* 74 FR 21550 (May 8, 2009). EPA was then required to make a “completeness finding” of the plan “no later than 6 months after” the submission deadline— i.e. by December 15, 2007—or the plan would be “deemed by operation of law to meet [the] minimum criteria.” 42 USCS § 7410(k)(1)(b). After the plan was deemed complete, “EPA had 12 months to approve or disapprove it, either in whole or in part.” *Sierra Club v. Johnson*, 374 F. Supp. 2d 30, 31 (D.D.C. 2005) (citing 42 USCS § 7410(k)(2)).

As the case law makes clear, EPA had to approve or disapprove the Metrolina area SIP by December 15, 2008. At that time, 42 USCS § 7410(k)(2) mandates that “the Administrator shall act on the submission in accordance with paragraph (3).” Paragraph (3) says nothing about a third option to allow the state to withdraw a SIP and thereby extend the deadline for taking action:

In the case of any submittal on which the Administrator is required to act under paragraph (2), the Administrator shall approve such submittal as a whole if it meets all of the applicable requirements of this Act. If a portion of the plan revision meets all the

applicable requirements of this Act, the Administrator may approve the plan revision in part and disapprove the plan revision in part. The plan revision shall not be treated as meeting the requirements of this Act until the Administrator approves the entire plan revision as complying with the applicable requirements of this Act. *Id.* at 7410(k)(3).

But by allowing North and South Carolina to “withdraw” their SIP submissions, EPA is effectively treating the submissions as meeting the requirements of the Act without approving them.

When EPA disapproves a SIP, or “finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard,” it must make a call for plan revisions and establish “reasonable deadlines” for the SIP revisions “necessary to correct such inadequacies.” 42 USCS § 7410(k)(5). While the statute gives EPA authority to “adjust any dates applicable” under the Act, it carves out an exception for nonattainment deadlines, providing that the agency “may not adjust any attainment date prescribed under part D [42 USCS §§ 7501 et seq.], unless such date has elapsed.” The statute contemplates a “conditional approval,” but neither state nor federal officials have characterized the “SIP withdrawal” for the Metrolina area under this provision, and in any event, the D.C. Circuit has held that EPA is “not authorized to grant conditional approval to plans that did nothing more than promise to do tomorrow what the Act requires today.” *Sierra Club v. EPA*, 356 F.3d 296 (D.C. Cir. 2004).

Granting North and South Carolina the option to “withdraw” their SIPs furthers the same purpose of “postponing SIP deadlines” that the D.C. Circuit Court of Appeals rebuked in *Sierra Club*. Having delayed the approval decision of the SIPs in violation of the law, EPA has no basis for granting an extension under 42 U.S.C. § 7511(a)(5). The states have either submitted SIPs that must be disapproved, or they have failed to submit a SIP. The latter interpretation is most consistent with the sanctions clock that currently applies to North and South Carolina for failing to meet their SIP submission deadlines. But whichever the case, the states cannot have “complied with all requirements and commitments pertaining to the area in the applicable implementation plan,” 42 U.S.C. § 7511(a)(5)(A), because no “applicable implementation plan” exists.

#### A Deadline Extension Would Delay the Adoption of Needed Implementation Strategies

Based on the past three years of monitoring data, the Metrolina area has failed to meet the June 2010 deadline for the 1997 ozone standard. This failure to proactively address air quality has resulted in dirty air that compromises public health and also threatens to shroud the Metrolina area in legal and regulatory uncertainty for the foreseeable future.

The proposed SIP revision depends on not just one but two extensions of the attainment deadline. To arguably qualify, ozone levels must also remain below 84 ppb next summer. Historical data, however, strongly discounts the likelihood of that occurring. Ozone levels have dipped before: the fourth highest exceedances (the basis for the three year average) recorded in 1992 and 2004 were just 85 ppb, nearly meeting the standard. But these dips were followed by

peaks—100 ppb in 1993, 96 ppb in 2007—that reflect variable weather and other factors contributing to ozone formation. (See graph depicting yearly levels attached as Exhibit A). If ozone levels rise back up closer to levels experienced in the Metrolina area in recent years, EPA will have “6 months following the applicable attainment date (including any extension thereof)” to find that the Metrolina area has failed to timely attain the standard and to reclassify the area as “serious.” 42 U.S.C. § 7511(b)(2). The uncertainty of the future regulatory landscape is not beneficial from a planning standpoint for either local officials or private industry.

And this uncertainty would continue even if Charlotte manages, against all odds, to attain the 1997 standard by the requested deadline extension. Last year, EPA strengthened the ozone standard to 75 ppb, a political compromise that prompted EPA’s own scientific advisory committee to submit a unanimous protest letter. The letter reiterated the members’ agreement that maximum ozone levels should lie below 70 ppb, and possibly as low as 60 ppb, in order to be “sufficiently protective of public health.”<sup>14</sup> On September 16, 2009, EPA announced that it would reconsider its decision to set the standard at 75 ppb, which it conceded was “not as protective as recommended by EPA’s panel of science advisors.”<sup>15</sup> The agency expects to propose the new, lower standard in December of this year.<sup>16</sup> Meeting the more stringent standard for smog in the Metrolina area will be a daunting challenge, whether its 75, 70 or 65 ppb, and the challenge will only grow more difficult the longer officials delay in implementing the “serious” area control measures required by law today.

#### The “Serious” Control Strategies are Appropriate for the Metrolina Area

In its December 22, 2008 letter to EPA, the South Carolina DHEC noted that “after much consultation and discussion with stakeholders in the area and with the NC Department of Environment and Natural Resources, we have determined that it is in the best interest of all parties involved” to withdraw the previously submitted SIP rather than follow EPA’s recommendation to bump-up. South Carolina officials have not explained the state’s opposition to a voluntary bump-up. But in light of DHEC’s consultation and discussion with North Carolina officials, the North Carolina Division of Air Quality’s draft proposed SIP revision is instructive.

It indicates that bump-up of the Metrolina non-attainment area from “moderate” to “serious” status would impose what it claims to be inappropriate additional controls on the area:

Many of the control requirements in the Clean Air Act as amended for a “serious” nonattainment area focus on reducing VOC emissions. For example, stationary sources with potential annual VOC emissions greater than 50 tons per year must implement reasonable available control technology or RACT. The Metrolina region is NO<sub>x</sub> limited, so reductions in VOC emissions will not result in the reductions in ozone needed to meet the standard. North Carolina believed that in these difficult economic times, it was

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<sup>14</sup> Clean Air Scientific Advisory Committee letter to Stephen L. Johnson, EPA Administrator (April 7, 2008).

<sup>15</sup> See “EPA to Reconsider National Standards for Ground-Level Ozone: Fact Sheet” (September 16, 2009) available at: [www.epa.gov](http://www.epa.gov).

<sup>16</sup> *Id.*

unreasonable to require business and industry to go through a resource intensive and burdensome process and implement costly controls when the needed air quality results would not be achieved.

This greatly oversimplifies the control requirements for “serious” nonattainment areas. For one, the Act contemplates substitution of NO<sub>x</sub> emission controls that “would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions required.” 42 U.S.C. 7511a(c)(2). But regardless, other requirements for “serious” areas expressly target NO<sub>x</sub> emissions, including those from mobile sources, which emit over half of the Metrolina area’s ozone precursor emissions.

The Clean Air Act outlines ten general requirements for “serious” areas. 42 U.S.C. 7511a(c). Many of these build on existing requirements for “moderate” areas. The Act requires the Metrolina area to “improve monitoring” of ozone precursor emissions, *id.* at 7511a(c)(1); show deeper cuts in emissions in demonstrations of “reasonable further progress,” *compare id.* at 7511a(c)(2) *with id.* at 7511a(b)(1); conduct enhanced vehicle inspection and maintenance, *id.* at 7511a(c)(3); and adopt more stringent offset requirements to new stationary sources of emissions. *Compare id.* at 7511a(c)(10) *with id.* at 7511a(b)(5). Other “serious” area requirements are new. The Metrolina area will have to adopt “clean-fuel vehicle programs,” or substitute measures which equally “in the Administrator’s judgment will achieve long-term reductions in ozone-producing and toxic air emissions,” *id.* at 7511a(c)(4). In light of the heavy contribution of motor vehicle emissions to the area’s smog, these regulations would have significant health benefits.

The most important effects of bump-up, however, are the effects that it will have on transportation and land use planning in the Metrolina area, consistent with strengthened transportation conformity provisions of the 1990 Amendments to the Clean Air Act. The Act requires each “serious” area, based on forecasted growth in vehicle miles traveled, to periodically “submit a demonstration as to whether current aggregate vehicle mileage, aggregate vehicle emissions, congestion levels, and other relevant parameters are consistent with those used for the area’s demonstration of attainment.” *Id.* at 7511a(c)(5)(A). If the demonstration is not consistent with attainment, state officials must submit plan revisions that include transportation control measures such as “programs for improved public transit,” designation of special lanes for “passenger buses or high occupancy vehicles,” “programs for secure bicycle storage facilities and . . . bicycle lanes” and other strategies that must be considered by law to provide options to single-occupant driving. 42 U.S.C. 7408(f). These requirements will help to achieve healthy air and avoid the unrealistically optimistic MVEBs that have plagued previous SIPs for the Metrolina area. And they will encourage the effective coordination at a regional level of transportation and growth planning, as contemplated by the Act, in order to make VMT, emissions and congestion levels consistent with the air quality plans. 42 U.S.C. Sec. 7504(a); 23 U.S.C. Sec. 134.

Finally, and of particular relevance to the Metrolina area, EPA regulations require that transportation planners in “serious” nonattainment areas, use the latest procedures and methodologies that are “available and in practice” for travel models. In addition, they require that “model forecasts must be analyzed for reasonableness and compared to historical trends.” 40

CFR 93.122. As discussed below, the Metrolina area's transportation conformity-related planning efforts do not pass muster even under the most permissive "reasonableness" standard. Improved modeling in the Metrolina area as a result of "bump up" will represent a major advance in achieving healthy air quality.

### The Requested Deadline Extension is Illegal Because State and Local Officials Have Not Complied with Commitments to Reduce Mobile Source Emissions

The Metrolina area has fared poorly in its efforts to control ozone pollution primarily because it has not adequately addressed emissions from motor vehicles, the source of over half of all smog precursor emissions. In a December 22, 2008 letter to EPA, South Carolina officials intimated that repeal of the Clean Air Interstate Rule caused EPA to question the adequacy of the previously submitted SIP. The letter claims that "all of the requirements that were included in the original SIP will continue to be implemented."<sup>17</sup> But the evidence does not support this claim, certainly not as it applies to one of the most critical requirements in the original SIP: the motor vehicle emissions budget.

Motor vehicle emissions budgets ("MVEB") provide a crucial link between transportation and air quality planning. As noted above, Congress amended the Clean Air Act in 1990 to strengthen this link, mandating that "no Federal agency may approve, accept or fund any transportation plan, program or project," unless it "has been found to conform" to the applicable SIP. 42 U.S.C. 7206. The Act defines "conformity" with the SIP as:

"conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of [air quality standards] and achieving expeditious attainment of such standards; and (B) that such activities will not--(i) cause or contribute to any new violation of any standard in any area;(ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

Metropolitan Planning Organizations (MPOs) must submit an updated Transportation Improvement Program and Long Range Transportation Plan to federal officials at least every four years to demonstrate that it conforms to the SIP. 42 U.S.C. 7506(c)(4)(D).

For a SIP to be approved, it must identify how pollution from all sources will be reduced sufficiently to meet the federal air quality standards. To reduce emissions from the transportation sector, the SIP establishes MVEBs or caps for each county. Local transportation authorities can then demonstrate the "conformity" of local transportation plans by showing that the plans will not cause motor vehicle emissions to exceed the budget in the SIP. A transportation plan may demonstrate conformity even without an approved SIP, but the standard is higher, requiring that the plan actually reduce emissions, rather than simply keep motor vehicle emissions within an MVEB. EPA may approve MVEBs without approving an entire

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<sup>17</sup> Letter from Robert W. King, SCDHEC, to J.I. Palmer, US EPA (December 22, 2008) *available at*: [http://www.scdhec.gov/environment/baq/docs/YorkSIP/DHEC%20letter%20to%20EPA-RFATS%20SIP%20Withdrawal\\_12-22-2008.pdf](http://www.scdhec.gov/environment/baq/docs/YorkSIP/DHEC%20letter%20to%20EPA-RFATS%20SIP%20Withdrawal_12-22-2008.pdf)

SIP, but the budgets must meet certain requirements. EPA will not find an MVEB “adequate for transportation conformity purposes” unless it is “clearly identified and precisely quantified,” “consistent with applicable requirements for reasonable further progress, attainment, or maintenance,” and “consistent with and clearly related to the emissions inventory and the control measures” in the SIP, among other requirements. 40 CFR 93.118(e)(4).

State officials submitted MVEBs as part of their SIPs in 2007, but EPA declined to find the budgets adequate, for reasons which later became painfully obvious. By May 15, 2008, North Carolina officials had calculated that Mecklenburg County emissions would rise to 35.09 tons per day in 2009, nearly three tons over the amount budgeted in the North Carolina SIP. Similarly, the South Carolina SIP budgeted motor vehicle emissions in York County to decline to a level of 8.01 tons of NO<sub>x</sub> emissions per day by 2009, but when the Rock Hill-Fort Mill MPO (RFATS) issued its conformity determination in June 2009, it estimated that 2010 emissions, which should be lower than the previous year’s, will actually exceed the MVEB by nearly half a ton per day.

EPA regulations require that “revisions to previously submitted control strategy implementation plans or maintenance plans” must “explain and document any changes to previously submitted budgets and control measures,” and they must document “reasons for the changes (including the basis for any changes related to emission factors or estimates of vehicle miles traveled).” 40 CFR 93.118(e)(4)(vi). But no such explanation or documentation can be found in the proposed SIP revision. The revision estimates “on-road” NO<sub>x</sub> emissions in York County at 10.2 tons per day for 2009.<sup>18</sup> This estimate includes emissions from parts of York County that fall outside of the non-attainment area, and so it does not permit a precise comparison with the previously submitted motor vehicle emissions budget. But judging from the RFATS transportation conformity determination, the previously submitted budget significantly understates emissions, and by failing to address that inaccuracy, and to explain and document how the currently proposed budget will avoid the same mistake, the proposed SIP fails to comply with federal regulations.

#### Metrolina Transportation Conformity Determinations Made Without an Approved Motor Vehicle Emissions Budgets Lack a Sound Legal Basis

If EPA declines to approve a submitted plan’s MVEB, a Metropolitan Planning Organization such as RFATS may nevertheless demonstrate that its transportation program, plan or project will contribute “to an implementation plan’s purpose of eliminating or reducing the severity and number of violations” in the non-attainment area by means of the “interim emissions” test. 42 U.S.C. 7506(c); 40 CFR 93.119. To demonstrate conformity under the test, modeling must demonstrate that “the transportation plan, [improvement program], and project not from a conforming transportation plan and [improvement program] must contribute to emissions reductions.” 40 CFR 93.119(a). This requires an estimate of emissions under two scenarios: building the proposed transportation projects, or not building them. The “build” scenario emissions must be lower than the “no-build” scenario emissions. Emissions under the “action” or “build” scenario must also be “lower than 2002 emissions by any nonzero amount,”

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<sup>18</sup> BAQ. Proposed SIP Revision. DRAFT Appendix E: Emissions Inventory Summary (2009) at 89.

*Id.* at 93.119(b). Although this additional requirement has become largely superfluous because of automobile gas mileage and tailpipe improvements in recent years.

The “interim emissions” test, or as it sometimes called, the “build/no-build” test, is intended to provide some limit on the amount of additional highway capacity in a nonattainment area where no MVEB is available to demonstrate conformity. Increasing the supply of highway capacity tends to increase associated demand, as measured by vehicle miles traveled (VMT).<sup>19</sup> And more VMT generally means more emissions of ozone precursors. On the other hand, the build/no-build test should encourage so-called transportation control measures, such as carpool lanes, transit improvements, and vanpooling programs, because these measures help to reduce VMT and associated emissions. Instead, it is being applied in the Metrolina area to green-light new highway capacity under a standard that is perversely *less* stringent than for areas with an established MVEB limit.

Unfortunately, the Metrolina area’s traffic forecasting model, as currently applied, indicates that virtually any planned highway capacity addition will reduce VMT. The recent conformity determination for the Rock Hill – Fort Mill Area Transportation Study’s (RFATS’s) transportation plan illustrates the fallibility of the build/no-build test using this model. As discussed earlier, the determination estimates that emissions under the “build” scenario will exceed the previously submitted MVEB for York County. Remarkably, the determination also predicts that the RFATS long-range transportation plan—a plan that adds over fifty lane miles of new highway capacity by 2015, and over a hundred more by 2025<sup>20</sup> - will reduce VMT compared to the “no-build” scenario. In other words, these transportation plans conform to Clean Air Act requirements to reduce smog because the model predicts that building dozens of miles of new highway capacity would help to reduce driving rather than increase VMT as predictably occurs under basic laws of supply and demand.

This conclusion relies on assumptions and modeling distortions that are arbitrary and contrary to law. *See* 5 U.S.C. § 706. The determination itself, moreover, undermines a critical component of air quality regulation in the Metrolina area and is a throwback to an air quality planning era that was rejected as ineffective almost thirty years ago. The 1990 Amendments to the Clean Air Act condition transportation funding on compliance with SIP obligations because in the past, transportation conformity was “largely ignored by agencies required to apply it.”<sup>21</sup> Before the 1990 Clean Air Act Amendments, uneven efforts to reduce emissions from stationary sources alone led to predictably modest gains. Conditioning federal transportation funding on

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<sup>19</sup> A meta-analysis of over fifty traffic studies concludes: “There is no question that road improvements prompt traffic increases.” Robert Cervero, “Induced Travel Demand: Research Design, Empirical Evidence, and Normative Policies.” *Journal of Planning Literature* 17:3 (2002) at 17. *See also* Goodwin, P., C. Haas-Klua, and S. Cairns. 1998. Evidence on the effects of road capacity reduction on traffic levels. *Journal of Transportation Engineering + Control* 39, 6: 348-54 (analyzing over 100 cases of road-capacity reductions in Europe, North America, Japan and Australia, and finding that “the average overall reduction in traffic was 25 per cent of that which used to use the affected road or area.”).

<sup>20</sup> *See* “RFATS Conformity Determination Report”. at 9-10 (Appendix B: Project Description Table); *see also* FHWA/FTA 2009 Conformity Letter (June 10, 2009) available at <http://www.ci.rock-hill.sc.us/dynSubPageSub.aspx?deptID=9999&pLinkID=412&parentID=14> (finding that the MPO’s 2035 LRTP and 2009-2015 TIP “conform to the purpose of the State Implementation Plan in accordance with 40 CFR Part 93.”).

<sup>21</sup> 136 Cong. Rec. S16972 (Daily Ed. October 27, 1990) (Statement of Senator Baucus).

compliance with the Clean Air Act gives local, state, and federal authorities a mandate to coordinate planning efforts and pursue innovative strategies for reducing emissions. The essentially meaningless conformity determination conducted by RFATS threatens to break down that incentive structure, and to revive the piecemeal air quality regulation that preceded the 1990 Clean Air Act Amendments.

### The Requested Deadline Extension Would Validate Arbitrary, Illegal Planning Approvals Based on the Metrolina Regional Travel Demand Model

The RFATS conformity determination relies on the Metrolina Regional Travel Demand Model (MRM) to arrive at its conclusion that new highway capacity will cause VMT to decline.<sup>22</sup> This outcome clashes with an established body of empirical research<sup>23</sup> and underscores the need to improve on the current version of the MRM. The four MPOs and two rural planning organizations in the Metrolina nonattainment area all use the MRM to project travel patterns and prepare transportation plans. As a regional model, the MRM serves as a better planning tool than the various MPO-level travel demand models that preceded it. But serious flaws persist that distort the transportation planning process. Most importantly, the MRM assumes a single land use scenario regardless of the transportation investments made. It also assumes that highway improvements will be built as currently planned and that growth in the Metrolina region will continue to concentrate along the outer edges of existing urbanized areas—again, regardless of the nature of future transportation investments.<sup>24</sup>

With these rigid assumptions embedded in the model, the “build/no-build” test is in reality a “build/un-built” test. The modeling essentially compares the transportation planning status quo and its resulting predictable development patterns against a scenario in which the planned roads have been built, population and employment have shifted to new development along the new road capacity, and then the planned roads are closed, forcing drivers to find whatever routes remain available, however circuitous, to connect their implausible origins and destinations. Given this approach to modeling, the MRM’s prediction that the RFATS’ transportation plan will reduce VMT is unsurprising. For example, the North Carolina Turnpike Authority recently used the MRM to assert that the Monroe Connector/Bypass—a 22-mile, four

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<sup>22</sup> The determination projects, for example, that VMT under the 2025 “No Build” scenario will exceed VMT under the 2025 “Build” scenario by over 100,000 miles. “Rock Hill-Fort Mill Area Transportation Study Conformity Determination Report” at 14. It is worth noting that this decline will not occur as a result of new transit, bicycle and pedestrian, ride-share, or other projects typically associated with reduced single-occupancy vehicle travel; such projects are exempt from the emissions analysis. See 40 CFR 93.126. The reduction in emissions flows directly from the highway construction and widening projects listed in the conformity determination. See Report at 9-10.

<sup>23</sup> See Cervero, *supra* note 19.

<sup>24</sup> Land use and socio-economic projections are determined partly on the basis of census data, and partly on the basis of “local expert judgment as to rates, spatial location, and likelihood of development occurring.” This “local expert judgment” reflects anticipated roadway improvements. For example, the MRM land use data projects that the residential population will more than double and 300 new retail jobs—almost a 600% increase above current levels—will be added in the area surrounding the intersection of NC 274 and Union New Hope Road, where real estate developers have planned a subdivision and shopping mall complex along an exit planned for the Garden Parkway toll road. See Steve Harrison, “Hoyle stands to profit off parkway” *Charlotte Observer*, (Sept. 7, 2008). By contrast, the MRM projects that Gastonia’s city center will languish, growing just over 5% between 2000 and 2030.

lane freeway that extends from the metro fringe to rural Union County—will reduce VMT in the region,<sup>25</sup> a conclusion that even local transportation planning officials found lacking in credibility.<sup>26</sup>

The MRM produces these distorted forecasts because its singular vision of the region's growth permeates the model, validating investments that become a self-fulfilling prophecy. The MRM uses a four-stage process that dates back to the 1962 Highway Act.<sup>27</sup> The very first step of this process—trip generation—translates socioeconomic predictions into a fixed number of trips to and from an area smaller than a census block, designating the number of work, shopping, and other types of trips that will begin and end in that area. Although these “trips” depend at least in part on the availability of surrounding transportation infrastructure, the MRM holds them constant, regardless of the transportation network that is programmed into it.

These fixed assumptions make the model poorly equipped to evaluate alternative transportation plans and programs, including a “no-build” scenario.<sup>28</sup> The *Charlotte Observer* has pointed out that the traffic projections produced by the MRM “look just plain silly.”<sup>29</sup> And federal courts have discredited the MRM's simplistic modeling protocol, rejecting an “arbitrary and capricious” analysis of the Federal Highway Authority which “relies on only one socioeconomic forecast in examining the effect construction would have on ozone production,” and which “does not accurately depict the true ozone-producing effect” of the project. *Sierra Club v. USDOT*, 962 F.Supp. 1037, 1043 (N.D. Ill. 1997); see also *Mullin v. Skinner*, 756 F. Supp. 904, 920 (E.D.N.C. 1990)(holding that analysis of a transportation project's impacts may not ignore the “irrefutable reality that the easier it is to get somewhere, the more people will be inspired to do so.”).

Federal regulations impose more exacting requirements for travel demand models like the MRM in “serious” nonattainment areas. See 40 CFR 93.122(b)(1)-(3). “Serious” area models must incorporate the latest “procedures and methods that are available and in practice,” they “must be validated against observed counts,” and “scenarios of land development and use must be consistent with the future transportation system alternatives for which emissions are being estimated.” *Id.* at 93.122(b)(1)(i-iii). Reforming the MRM to meet these requirements would represent a significant improvement. According to a Federal Highway Administration sponsored study, scenario planning techniques, in which different transportation improvements are evaluated against different land use scenarios, “may be considered part of the state of the practice

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<sup>25</sup> See Draft Environmental Impact Statement for the Monroe Connector/Bypass, Appendix E, available at: [www.ncturnpike.org](http://www.ncturnpike.org).

<sup>26</sup> See Steve Harrison. “CDOT: Toll road would worsen ozone woes.” *Charlotte Observer* (June 28, 2009).

<sup>27</sup> See, e.g., David F. Pearson and Patricia L. Ellis. “Recommendations for Examining Texas Travel Demand Models.” (2002) available at: <ftp://ftp.dot.state.tx.us/pub/txdot-info/rli/psr/4198-s.pdf>; Keith Bartholomew. Integrating Land Use Issues into Transportation Planning: Scenario Planning, Summary Report (2005) at 7 available at the Federal Highway Administration website: [www.fhwa.dot.gov](http://www.fhwa.dot.gov).

<sup>28</sup> The MRM's proponents point out that the model's subsequent steps adjust to different assumptions about the transportation network, pairing up origins and destinations based on how accessible they are to one another, and projecting that “trips” be made via transit rather than a single-occupancy vehicle where transit is available and convenient. But these steps do not correct the foundational distortion in the model, as its recent output has made all too apparent.

<sup>29</sup> <http://www.Metrolinaobserver.com/opinion/story/939560.html>

in land use-transportation planning.”<sup>30</sup> Preliminary studies using these techniques are already being explored in the Metrolina area.<sup>31</sup> Bump-up provides an opportunity to transform the deficient MRM into an exemplar of modeling that incorporates the transportation system’s interaction with land use trends. The result will be improved transportation-related air quality results.

## Conclusion

Metrolina residents have been breathing unhealthy air – now the worst smog in the South – for far too long. This comes at great cost to public health including not only medical bills but also worker productivity, school attendance, the economy, and overall quality of life in the greater Charlotte region. Local, state and federal officials in North and South Carolina have failed to undertake the measures necessary to meet the attainment deadline for the 1997 ozone standard. The states have failed to submit a plan that merits approval, and, therefore, failed to establish a legal basis for the state’s proposed extension of the attainment deadline. The states’ belated SIP withdrawal similarly lacks any basis in the Clean Air Act. And transportation planners have evaded emissions limitations through the use of unrealistic budgets, antiquated modeling and unexamined assumptions.

State officials must recognize that federal law requires re-designation of Metrolina as a “serious” nonattainment area. As South Carolina spearheads efforts to streamline the SIP process on a regional and national level, the state should also demonstrate leadership in taking its existing SIP obligations seriously. The state should focus its efforts on the actual achievement of the tough new standards on the horizon and encourage local controls, including those necessary to address transportation ozone precursors.

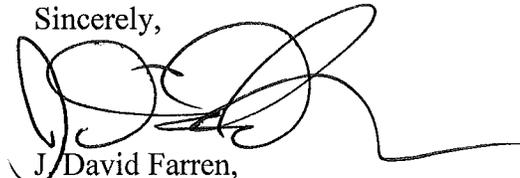
Voluntary bump-up now will avoid much unneeded legal uncertainty and greatly improve the long-term outlook of the region’s air quality. State and local officials also should begin to work together to develop scenario-based modeling and create incentives for reducing transportation emissions throughout the greater Charlotte region. Further, South Carolina should call on federal and local officials to restore credibility to the transportation conformity process by withdrawing the conformity approvals based on the “build/no build” test and reassess the RFATS Transportation Improvement Program and long-range plan in a truly regional context. Regional planning, at new levels of cooperation and integration of air quality, transportation and land use planning, will be necessary to achieve healthy air quality in the Metrolina area and avoid further potential sanctions under the Clean Air Act.

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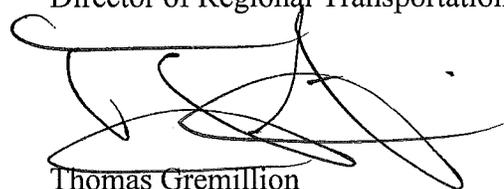
<sup>30</sup> Keith Bartholomew. Integrating Land Use Issues into Transportation Planning: Scenario Planning, Summary Report (2005) at 7 available at the Federal Highway Administration website: [www.fhwa.dot.gov](http://www.fhwa.dot.gov).

<sup>31</sup> See, e.g., Brian J. Morton, et al. “Advanced Modeling System for Forecasting Regional Development, Travel Behavior, and the Spatial Pattern of Emissions.” (July 13, 2005) available at [epastar.unc.edu/Metrolina%20July-13-2005.ppt](http://epastar.unc.edu/Metrolina%20July-13-2005.ppt)

Sincerely,



J. David Farren,  
Senior Attorney,  
Director of Regional Transportation Initiative



Thomas Gremillion  
Associate Attorney

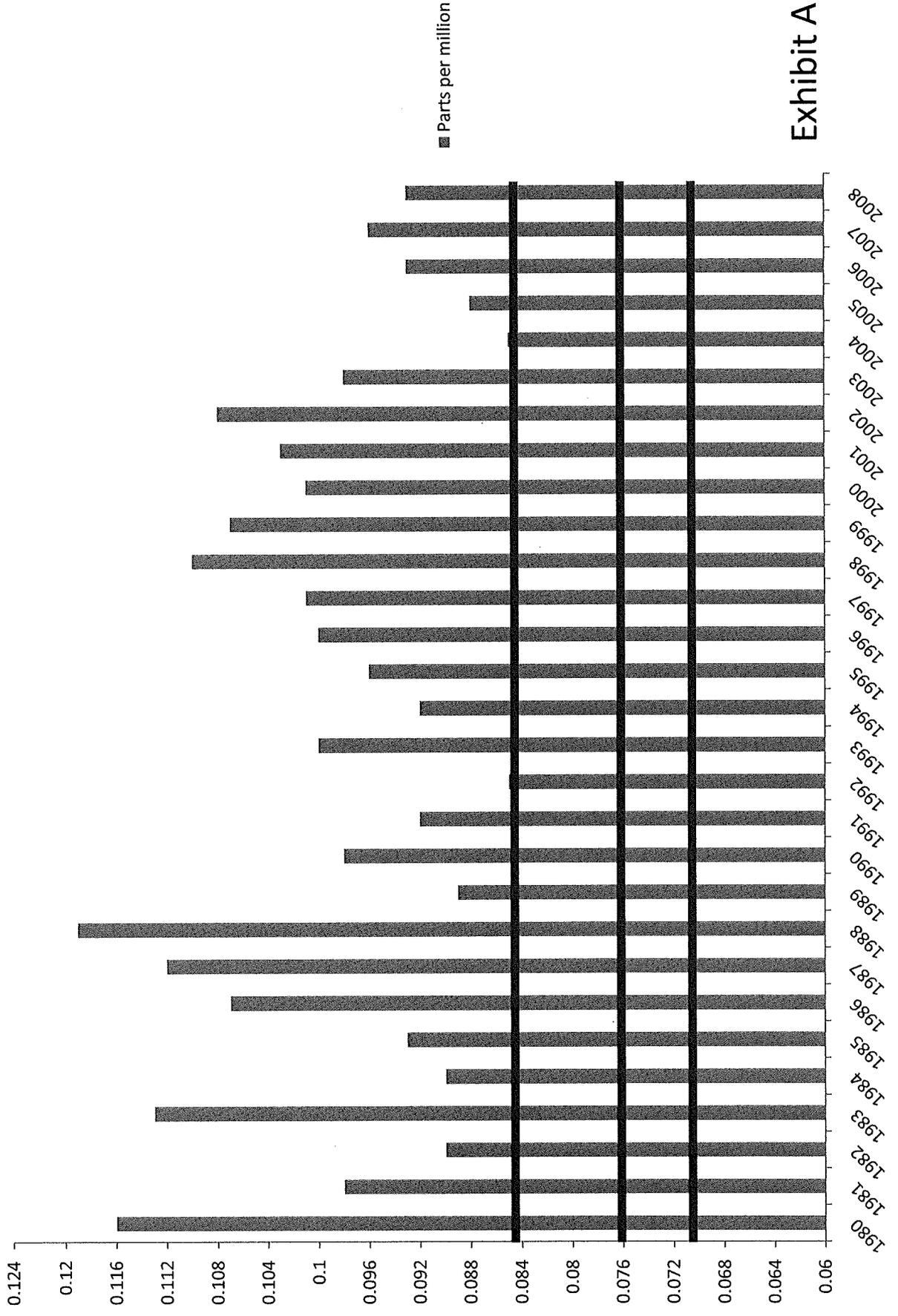
Enclosure

CC (via US Mail):

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June Blotnick, Director, Clean Air Coalition  
Laura Booth, Attainment Planning Branch Supervisor, NCDENR, Div. of Air Quality  
The Honorable Richard Boyce, Mayor of Belmont  
Ronnie Bryant, President and CEO, Charlotte Regional Partnership  
Jackie Butch, Union County Asthma Coalition  
The Honorable Becky Carney, NC House of Representatives  
Beth Clark, Sierra Club  
The Honorable Daniel G. Clodfelter, NC Senate  
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Frances Thomas, Planning Director, RFATS  
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Rebecca Yarbrough, SEQL Program Administrator, Centralina COG

# Fourth Highest 8-Hour Ozone Exceedance Values Measured in Charlotte Nonattainment Area (1980-2008)



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November 13, 2009

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(E-mail: [laura.boothe@ncdenr.gov](mailto:laura.boothe@ncdenr.gov))

*VIA EMAIL AND US MAIL*

Re: The North Carolina Reasonable Further Progress (RFP) Demonstration State Implementation Plan for the North Carolina portion of the Charlotte-Gastonia-Rock Hill, NC-SC 8 Hour Ozone Nonattainment Area

Dear Ms. Boothe:

On behalf of Clean Air Carolina and the Central Piedmont Group of the Sierra Club, the Southern Environmental Law Center (SELC) submits these comments in response to the invitation of the North Carolina Department of Air Quality (DAQ) to comment on the proposed Reasonable Further Progress State Implementation Plan (the "RFP-SIP") for the North Carolina portion of the Charlotte-Gastonia-Rock Hill ("Metrolina") Ozone Nonattainment Area. These comments incorporate by reference previous comments on the proposed SIP revision issued by South Carolina officials (see attached Exhibit 1). As we explained in our previous comments, the law requires reclassification or "bump-up" of the Metrolina area to "serious" nonattainment status. Instead of submitting the proposed RFP-SIP and continuing to prepare SIP revisions predicated on an extension of the attainment deadline, NCDAQ should voluntarily reclassify the Metrolina area to "serious" nonattainment, as EPA directed it to do almost a year ago, and take advantage of the opportunity to implement needed control measures that will clean up the Metrolina area's unhealthy air, including strategies to better integrate land use, transportation, and air quality planning in the region.

The current seven county bi-state Metrolina nonattainment area's ozone problem is chronic and significant. The American Lung Association's 2009 "State of the Air" report ranks Charlotte as the 8th most ozone polluted city in the country, an even higher ranking than the year before, and the worst in the Southeast. Metrolina air quality showed improvement during the most recent ozone season, but the past summer's extraordinary weather and depressed economic conditions will not likely repeat themselves in 2010. To effectively safeguard residents' health and welfare, state officials must build on the success of the Clean Smokestacks Act and better control motor vehicle emissions, the primary source of the Metrolina area's smog. The proposed RFP-SIP retroactively establishes motor vehicle emissions budgets (MVEBs) for the year 2008. Rather than a retrospective analysis that falls outside the regulatory scheme contemplated by the

Clean Air Act, SELC recommends refocusing air quality resources on prospective strategies to improve air quality and meet future attainment challenges.

The “purpose of ‘reasonable further progress’ is to ensure attainment by the applicable attainment date.” *Sierra Club v. United States EPA*, 99 F.3d 1551, 1557 (10th Cir. 1996) (citing 42 U.S.C. 7511a(b)(1).) But the Metrolina area has now conclusively failed to meet the applicable attainment date for the 1997 effective ozone air quality standard of 84 parts per billion (ppb). Consequently, the proposed RFP-SIP is of questionable relevance to solving the Metrolina area’s ozone problem. As we noted in our letter to South Carolina officials, air quality standards will soon become more stringent, a reflection of the devastating health consequences that high ozone levels cause. Submission of the proposed RFP-SIP would not only fail to advance the Metrolina area’s progress in meeting existing legal requirements, it would also delay efforts to attain even stronger anticipated standards, which will be a major challenge for the region.

The proposed RFP-SIP will not help the state to qualify for an extension of the attainment deadline under 42 U.S.C. § 7511(a)(5) because it is untimely. To qualify for an extension, North Carolina must show that “the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan.” *Id.* at § 7511(a)(5)(A). As we explained in our letter to South Carolina officials, the Metrolina states have failed to meet this requirement because no “applicable implementation plan” exists. And the time for creating such a plan has long since passed. The proposed RFP-SIP makes this all too apparent, reporting that “NCDAQ is setting MVEB, for transportation conformity purposes, as county budgets within the Metrolina nonattainment area for 2008.”<sup>1</sup> The Clean Air Act requires each state to demonstrate, based on the adoption of adequate control measures, including MVEBs, that it will achieve adequate emissions reductions in the future. *See generally* 42 U.S.C. § 7511a. North Carolina has failed to meet these requirements for the 1997 ozone standard.

South Carolina officials’ failure to collaborate on the proposed RFP-SIP underscores the inappropriateness of the plan as well. According to the recent SIP revision issued for public comment, South Carolina officials continue to “steadfastly believe on-road mobile VOCs are insignificant contributors to ozone formation in York County,”<sup>2</sup> and they have therefore declined to establish any VOC motor vehicle emissions budgets for the Metrolina nonattainment area within South Carolina. But EPA has rejected North Carolina’s application of that theory to the Metrolina area, in part because “historical data” now shows that VOC emissions exceeded the regulatory “significance” threshold in the 2009 attainment year.<sup>3</sup> *See* 40 CFR 93.109(k). Of

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<sup>1</sup> The Charlotte-Gastonia-Rock Hill, NC-SC 8-Hour Ozone Pre-Hearing Draft – North Carolina Reasonable Further Progress Demonstration (October 12, 2009) at 13 (emphasis added).

<sup>2</sup> “Amendment of the South Carolina Air Quality Implementation Plan” as Referenced in the South Carolina State Register Vol. 33, Issue 9 (September 25, 2009). “DRAFT Appendix F.3 On-Road Mobile Source Emissions Inventory” at 10, *available at*: <http://www.scdhec.gov> (last visited November 13, 2009).

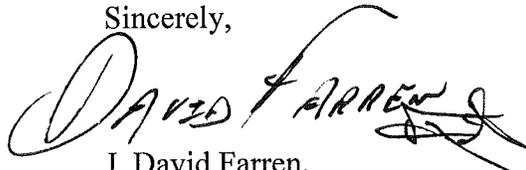
<sup>3</sup> North Carolina’s June 15, 2007 SIP submission omitted MVEBs for volatile organic compounds (VOCs) in 2008 because it reasoned that “mobile source VOC emissions are insignificant to ozone formation in the Metrolina nonattainment area.” The Charlotte-Gastonia-Rock Hill, NC-SC 8-Hour Ozone North Carolina Attainment Demonstration (June 15, 2007), p. 65. Over two years later, on September 30, 2009, EPA officials wrote to explain that the agency “does not support an on-road VOC insignificance finding for the North Carolina portion of [the Metrolina area].” E-mail. Dianna Smith, EPA to Laura Boothe, NCDAQ (September 30, 2009).

course, if South Carolina officials sought to craft a revision similar to the proposed RFP-SIP, establishing retroactive MVEB's for the year 2008 in York County, they would have to confront the awkward fact that transportation conformity determinations have already been approved there on the basis of the interim emissions test. As we explained in our letter to South Carolina officials, those transportation conformity determinations further demonstrate that the states do not qualify for an attainment deadline extension under 42 U.S.C. § 7511(a)(5)(A).

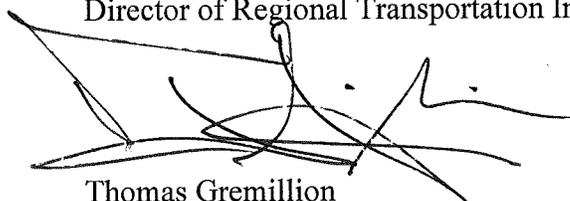
A voluntary "bump-up" to "serious" nonattainment status will allow North Carolina to come back into compliance with the law and focus on the control measures necessary to ensure that the Metrolina area does not repeat its failure to attain ozone standards in the future. As we detailed in our letter to South Carolina officials, "bump-up" will create important opportunities to integrate transportation and land use planning across the Metrolina area, consistent with the strengthened transportation conformity provisions of the 1990 Amendments to the Clean Air Act. The requirements applicable to "serious" areas will usher in better developed travel models, helping to avoid the unrealistically optimistic MVEBs that have plagued previous SIPs for the Metrolina area. *See* 40 CFR § 93.122. And the requirements will encourage the effective, regional level coordination of transportation and growth planning, as contemplated by the Act, in order to make VMT, emissions and congestion levels consistent with air quality plans. *See* 42 U.S.C. Sec. 7504(a); 23 U.S.C. § 134. Coupled with the tremendous strides that North Carolina has made in reducing emissions from stationary sources, the development of strategies to rein in mobile source emissions, consistent with the "serious" area requirements, will signify a lasting solution to the Metrolina area's ongoing ozone problem.

The proposed RFP-SIP is a distraction from the challenge of cleaning up the Metrolina area's unhealthy air – now the worst smog in the South. North Carolina officials should prepare a new SIP revision consistent with the Metrolina area's legally required bump-up to "serious" status, and the State should focus efforts on actually achieving the tough new standards on the horizon. Clean air will require increased regional coordination and integration of land use, transportation and air quality planning. Development of these solutions will take time, requiring prompt and decisive action.

Sincerely,



J. David Farren,  
Senior Attorney,  
Director of Regional Transportation Initiative



Thomas Gremillion  
Associate Attorney

Enclosure

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March 10, 2010

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*VIA EMAIL AND US MAIL*

**Re: Draft Conformity Analysis and Determination Report for the Long Range Transportation Plans and FY 2009-2015 Transportation Improvement Programs of the Cabarrus-Rowan, Mecklenburg-Union, and Gaston Urban Area MPOs and the non-MPO areas of Lincoln, Iredell, Gaston, and Union Counties.**

Dear Mr. Steinman,

On behalf of Clean Air Carolina and the Central Piedmont Group of the Sierra Club, the Southern Environmental Law Center (SELC) submits this letter in response to the Charlotte-Gastonia-Rock Hill ("Metrolina") area transportation planners' invitation to comment on the above referenced Draft Conformity Analysis and Determination Report. Instead of submitting the draft report, air quality planners should establish revised, significantly reduced motor vehicle emissions budgets that can realistically achieve current and anticipated future air quality standards by the applicable attainment deadlines. In addition, transportation planners should adopt up-to-date modeling procedures in the conformity determination process, which other major metro areas use to capture the dynamic interplay between transportation investments and travel demand, including different development pattern outcomes. This will facilitate the evaluation and promotion of policies on a regional basis to reduce per capita vehicle travel. These policies are essential to protecting public health and achieving Clean Air Act requirements in tandem with other control strategies.

The Metrolina area's ozone problem is chronic and significant. The American Lung Association's 2009 "State of the Air" report ranks Charlotte as the 8th most ozone polluted city in the country. Last summer, in part due to extraordinary weather and economic conditions, ozone levels did not exceed the 1997 standard of 84 ppb. But the area's current three-year average "design value" remains above the standard at 86 ppb, and EPA has proposed a new, stronger primary ozone air quality standard in the range of 60 to 70 ppb, which it expects to

finalize by August of this year. 75 Fed. Reg. 2938-3052 (January 19, 2010). To keep from falling further behind, state and local officials must adopt strategies to reduce motor vehicle emissions, which account for a majority of the area's ozone problem.

Federal law requires that transportation plans "conform" to air quality plans and do not "delay timely attainment" of air quality standards. 42 U.S.C. § 7506. But this requirement has been undermined in the Charlotte area by conformity determinations that have consistently underestimated future emissions. The draft report continues this flawed approach, predicting that motor vehicle emissions will fall precipitously over the next five years to less than half of the record high motor vehicle emissions budgets used in the draft report. Setting budgets and modeling conformity in a fashion to always allow an aggressive program of highway expansions that facilitates low density, auto dependent development on the metro fringe is inconsistent with achieving health based air quality standards under the Clean Air Act deadline driven statutory scheme.

In reality, this approach to transportation conformity in the Metrolina area has resulted in relatively static or even increased motor vehicle emissions, with vehicle performance gains offset by more and more driving, a direct consequence of area transportation plans' focus on highway capacity expansions. State and local officials should use the conformity process to realistically assess anticipated emissions and develop strategies to reduce ozone. At a minimum, these should include updating the region's antiquated travel demand model, addressing the region's fragmented planning structure, and refocusing a greater share of transportation funding throughout the region on strategies to reduce per capita vehicle usage.

#### The Metrolina Area's Prolonged Periods of Non-Attainment Result Primarily From a Failure to Control Motor Vehicle Emissions

EPA first designated the Metrolina area as nonattainment for ozone in 1980, almost three decades ago.<sup>1</sup> Since the adoption of the current air quality standard in 1997, the region's smog levels have varied considerably, but at no point has the area's air quality been good enough to bring the three-year average design value into attainment. The Metrolina area's failure to overcome its smog problem is largely explained by a failure to control motor vehicle emissions. As the attached graph shows, motor vehicle NO<sub>x</sub> emissions in Mecklenburg County have been capped at around 30 tons per day over the past decade, with the exception of the budget presented in the draft conformity report, which raises the cap to over 38 tons per day. *See Attachment A.*

Previous conformity determinations predicted that motor vehicle emissions would have fallen significantly by now, but the draft report's estimates indicate otherwise. In 2002, a conformity determination for the area predicted that Mecklenburg County mobile source emissions of NO<sub>x</sub> would drop to 21.6 tons (19,582 kilograms) per day by 2010. The 2005

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<sup>1</sup> See 45 FR 26038 (April 17, 1980); 45 FR 59578 (September 10, 1980).

conformity report predicted that these emissions would not exceed 19.5 tons per day (17,690 kilograms). Now, the draft report reveals that emissions will in fact continue to hover around 30.4 tons per day (27,581 kilograms), over fifty percent more than forecasted. The imprecision of these estimates reflects both unrealistic assumptions about future vehicle performance and a failure to acknowledge the effect of new highway plans on driving habits. For example, the 2005 conformity determination report predicted that Mecklenburg County drivers would log a total of 23 million vehicle miles traveled during 2010.<sup>2</sup> But the current draft report revises this estimate to over 32 million miles traveled.<sup>3</sup>

This history of optimistic forecasting helps to explain why, not long after NCDAQ submitted an attainment demonstration plan for the Metrolina area in 2007, newly available NCDOT data showed that expected motor vehicle emissions in Mecklenburg County would exceed the plan's NO<sub>x</sub> motor vehicle emissions budget by 2.82 tons per day.<sup>4</sup> Later that year, EPA notified state officials that it intended to disapprove the plan submission and requested a voluntary "bump-up" of the area to "serious" nonattainment status. "Bump-up" or reclassification, would extend the attainment deadline for the Metrolina area for two years, but impose more stringent controls on sources of ozone precursor emissions, including motor vehicle travel.

By December of 2008, however, state and federal officials settled on an alternative course of action. State authorities pledged to "submit a revised attainment demonstration for the Metrolina region by November 2009." The formal attainment deadline is June 15, 2010, but because attainment is defined as the three-year average of smog levels recorded over the course of an entire ozone season, the deadline for actually attaining the standard was the end of the 2009 ozone season. Therefore, NCDAQ's SIP submission after the conclusion of the 2009 ozone season cannot claim to provide for "attainment of the national primary ambient air quality standards by the applicable attainment date." 42 U.S.C. § 7502(c)(4) (emphasis added); 40 C.F.R. 50, App. I. Because NCDAQ never had an "applicable implementation plan" approved for the Metrolina area, it does not qualify for an extension and approval of any plan that is not premised on "bump-up" of the area to "serious" status is not authorized under the Act.

Nevertheless, on November 12, 2009, NCDAQ "resubmitted," without soliciting public comment, the very same 2007 plan that it had withdrawn. The agency reasoned that improved air quality alone during the summer of 2009 extended the attainment deadline. Notably, the resubmitted plan contains the same (comparatively) restrictive motor vehicle emissions budgets

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<sup>2</sup> 2005 Conformity Determination Report, Table H-2.

<sup>3</sup> Draft Report, App. F.

<sup>4</sup> NCDAQ's modeling predicted that the 2009 budget, set at 32.27 tons per day in Mecklenburg County, would not be strong enough to provide for attainment by the deadline, but the agency concluded otherwise based on a "weight of the evidence" analysis. That analysis cites factors such as higher than expected observed use of the I-77 HOV lane and the fact that "a number of the communities [in the area] are creating walkways and bikeways in order to provide safe pathways for pedestrians and bicyclists to move about busy traffic areas." NCDAQ. June 2007 / November 2009 - Attainment Demonstration, Appendix L, p. 16.

that local transportation planners had sought to revise. On November 30, 2009, however, NCDAQ submitted a “reasonable further progress” plan that established more permissive budgets—which the draft conformity report has incorporated—that will accommodate all of the planned highway projects in the area.

The Draft Conformity Report Relies on Inflated Motor Vehicle Emissions Budgets that are Inconsistent with Clean Air Act Requirements

The “purpose of ‘reasonable further progress’ is to ensure attainment by the applicable attainment date.” *Sierra Club v. United States EPA*, 99 F.3d 1551, 1557 (10th Cir. 1996) *citing* 42 U.S.C. § 7511a(b)(1). Consistent with this purpose, NCDAQ was required to submit its plan for “reasonable further progress” back in 2007. The plan should have shown how air quality would improve by 2008, and should have established mandatory “contingency measures” in case it did not.<sup>5</sup> Instead, NCDAQ determined that such a reasonable further progress demonstration was unnecessary in its 2007 plan submission. Then, at the end of 2009, after it was no longer possible to meet the attainment date, NCDAQ retroactively set progress targets for 2008, a year in which the fourth highest exceedance was 93 ppb.

Despite the historic reality of high Metrolina smog levels in 2008, NCDAQ’s “reasonable further progress” submission concludes that it has “demonstrated that reasonable further progress has been made from the base year 2002 to the milestone year 2008.”<sup>6</sup> NCDAQ also contends that voluntarily establishing more permissive motor vehicle emissions budgets than those included in the attainment demonstration plan will somehow serve “purposes of SIP strengthening.”<sup>7</sup> As the table on the following page indicates, NCDAQ’s “SIP strengthening” efforts allow for an overall increase in levels of NO<sub>x</sub> emissions from motor vehicles across the region, and particularly in Mecklenburg County, where air quality is the poorest.

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<sup>5</sup> The sole “contingency measure” included in NCDAQ’s plan would apply only if EPA reclassifies the Metrolina area to “serious” status, a condition which expressly departs from the legal requirement that when the deadline for demonstrating attainment or reasonable further progress has passed, such measures take effect “without further action by the State or the Administrator.” 42 U.S.C. § 7502(c)(9).

<sup>6</sup> November 2009 Reasonable Further Progress State Implementation Plan Narrative at 14.

<sup>7</sup> *Id.*

NO <sub>x</sub> (tons/day)			
Counties	Attainment SIP <sup>8</sup>	RFP SIP <sup>9</sup>	Difference
Cabarrus	8.57	8.07	-.50
Gaston	9.48	8.43	-1.05
Iredell	5.61	6.21	+.60
Lincoln	3.65	3.25	-.40
Mecklenburg	32.27	38.06	+5.79
Rowan	8.45	7.93	+.52
Union	5.57	6.24	+.67
<b>Total</b>	<b>73.09</b>	<b>78.19</b>	<b>+5.1</b>

EPA has found these budgets “adequate for transportation conformity purposes,”<sup>10</sup> without offering any explanation as to how they meet the statutory mandate that plans provide for attainment by the applicable deadline. 42 U.S.C. § 7502(c). Because it is too late to meet the statutory attainment deadline, and the proposed conformity determination would authorize transportation plans for years beyond the attainment deadline, the EPA approval operates as a *de facto* extension. This extension of the statutory deadline has no legal basis.

The draft report nevertheless compares the emissions expected to accompany 2009-2015 transportation plans with revisionist plans to make “reasonable further progress” towards past, unmet air quality goals in 2008. At the same time, the draft report demonstrates that the area’s transportation plans will generate emissions that exceed the 2009 budgets established in NCDAQ’s attainment demonstration plan. For example, in Union County, site of the planned Monroe Connector-Bypass toll road, the attainment demonstration budget limits mobile source emissions of NO<sub>x</sub> to 5.57 tons per day (5053 kilograms per day) in 2009 and any year thereafter. The draft conformity report, however, estimates that Union County’s transportation plan—“LRTP Emissions”—will generate 5.58 tons per day (5058 kilograms per day) of NO<sub>x</sub> mobile source emissions. Thus, Union County’s LRTP and TIP do not “conform” to the state’s plan for attainment even in the most basic sense.

In order to demonstrate conformity, Union County could have amended its long range transportation program in some way to shave off five kilograms per day from the 2010 emissions estimates. But instead of transportation officials modifying plans in order to reduce emissions, state air quality officials have changed the county’s emissions budget. This accommodation is emblematic of the approach to transportation and air quality planning in the Metrolina region, one that is inconsistent with the 1990 Clean Air Act Amendments’ purpose of directing MPOs

<sup>8</sup> June 2007 / November 2009 - Attainment Demonstration State Implementation Plan Narrative at 17. Target year is 2009.

<sup>9</sup> November 2009 Reasonable Further Progress State Implementation Plan Narrative at 14. Target year is 2008.

<sup>10</sup> 75 Fed. Reg. 7474 (Feb. 19, 2010).

“to develop transportation plans and programs that also serve as part of the pollution control strategy for the metropolitan area.”<sup>11</sup>

The draft report’s reliance on the higher 2008 budgets is also inconsistent with federal regulations governing transportation conformity. According to the federal rules, conforming transportation plans “must be consistent with the motor vehicle emissions budget(s) . . . for each year for which the applicable (and/or submitted) implementation plan specifically establishes motor vehicle emissions budget(s),” and “emissions in years for which no motor vehicle emissions budget(s) are specifically established must be less than or equal to the motor vehicle emissions budget(s) established for the most recent prior year.” 40 CFR 93.118 (b)(2). NCDQAQ has submitted budgets for 2009, but the draft report does not use these “most recent prior year” budgets to assess expected 2010 emissions.

Such anomalies in the draft report indicate the degree to which transportation planning has proceeded on a separate track from air quality strategies for the Metrolina area. Even if the draft report incorporated the 2009 budgets, however, it would still be inconsistent with the Clean Air Act, because it would be incapable of showing that transportation plans will not “delay timely attainment” of air quality standards. 42 U.S.C. § 7506. This is because the three year measuring period for establishing “timely attainment” has passed, without a plan for attainment having ever been approved. *See* 42 U.S.C. § 7511(a)(5); 40 C.F.R. 50, App. I. To comply with the law, state officials must reclassify or “bump up” the Metrolina area to “serious” nonattainment status, and develop new motor vehicle emissions budgets. In addition to helping to ensure that the region’s air pollution eventually meets the current standard, and providing greater legal and regulatory certainty, “bump up” would help the region to meet the stronger ozone standard that is expected to be in place by 2011.

#### A Revised Conformity Determination Should Incorporate Improved Policies and Procedures

Travel demand and air quality modeling have evolved over the years, and some discrepancies between past predictions and more contemporaneous ones are to be expected. But the modeling in the draft conformity report continues to predict that emissions will be cut in half five years from now, despite plans to add significant new highway capacity to the transportation network. Repeatedly making such optimistic projections belies the large contribution of mobile source emissions to the region’s nonattainment, and underscores the need for reform.

Reclassification or “bump up” of the Metrolina area will result in more stringent motor vehicle emissions budgets, and ensure the use of more rigorous standards that are now within the “state of the practice” for demonstrating conformity. In order to meet these requirements and ensure continued federal transportation funding, planners should integrate alternative land use

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<sup>11</sup> Clean Air Conference Report, presented by Senator Baucus, chair of the Clean Air conference committee, reprinted in Environment and Natural Resources Policy Division of the Congressional Research Service, Legislative History of the Clean Air Act Amendments of 1990 731, 1009-1011 (1993).

scenarios into the travel demand modeling used for conformity determinations. They should also encourage the establishment of a unified MPO to allow comprehensive regional planning that includes refocusing transportation funding priorities to reflect regional needs.

The current Metrolina travel demand model incorporates a fixed assumption that future land use will follow sprawl growth patterns. These assumptions make the model poorly equipped to evaluate alternative transportation plans and programs that might actually reduce VMT and mobile source emissions, and address the region's nonattainment problem, rather than just put it off for five years. The Charlotte News and Observer has pointed out that the traffic projections produced by the MRM "look just plain silly."<sup>12</sup> And federal courts have discredited the MRM's simplistic modeling protocol, rejecting as "arbitrary and capricious" an analysis by the Federal Highway Authority which "relies on only one socioeconomic forecast in examining the effect [highway] construction would have on ozone production." *Sierra Club v. USDOT*, 962 F.Supp. 1037, 1043 (N.D. Ill. 1997).

Federal regulations explicitly impose more exacting requirements for travel demand modeling in serious nonattainment areas. 42 U.S.C. § 7511a(c)(5); 40 CFR 93.122(b)(1)-(3). Moreover, according to a Federal Highway Administration sponsored study, scenario planning techniques, in which different transportation improvements are evaluated against different land use scenarios, have been widely adopted and "may be considered part of the state of the practice in land use-transportation planning."<sup>13</sup> Some preliminary land use scenario modeling studies of the Metrolina area already exist.<sup>14</sup> The Metrolina area MPOs should build on these studies to develop a model that can guide transportation decisions to support land use and air quality goals, rather than merely provide *post hoc* approval to existing plans.

Establishing a single MPO for the entire Metrolina area would greatly facilitate the development of a better model, as well as help to ensure that transportation plans reflect regional needs. Unlike most other major metropolitan areas across the country, the Metrolina area divides transportation planning authority between four MPOs. This fragmented planning structure results in a patchwork of local project wish lists rather than an integrated, region-wide transportation plan. It also complicates transit service, frustrating efforts to build on the recent success of Charlotte's light rail line and to extend transit and commuter rail to other areas of the region.

Finally, Metrolina transportation planners must recognize that motor vehicle emissions budgets cannot continue to grow, and that cleaner cars and trucks will not be sufficient to offset

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<sup>12</sup> <http://www.Metrolinaobserver.com/opinion/story/939560.html>

<sup>13</sup> Keith Bartholomew. Integrating Land Use Issues into Transportation Planning: Scenario Planning, Summary Report (2005) at 7 available at the Federal Highway Administration website: [www.fhwa.dot.gov](http://www.fhwa.dot.gov).

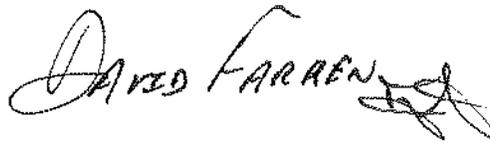
<sup>14</sup> See, e.g., Brian J. Morton, et al. "Advanced Modeling System for Forecasting Regional Development, Travel Behavior, and the Spatial Pattern of Emissions." (July 13, 2005) available at [epastar.unc.edu/Metrolina%20July-13-2005.ppt](http://epastar.unc.edu/Metrolina%20July-13-2005.ppt)

the driving induced by unrestrained highway construction. Strategies to reduce vehicle miles traveled are essential to shedding the stigma of nonattainment in the future, yet massive highway capacity increases targeted to the metro fringe, such as the proposed Garden Parkway and Monroe Connector-Bypass toll roads, would lock in significant VMT increases for years to come. Indeed, the financial viability of these projects depends on drivers making 20 and 30 mile commutes into Charlotte.

Conclusion

Soon, the Metrolina area will have to undertake even more significant reductions in motor vehicle emissions in order to meet increasingly stringent air quality standards. Yet the draft conformity determination report incorporates higher motor vehicle emissions budgets than ever before established under the 1997 air quality standards, and actually demonstrates that transportation plans do not conform to NCDAQ's attainment demonstration plan for meeting the current standard. These evasions of Clean Air Act obligations will also make meeting future air quality standards more difficult. State and local authorities should revise air and transportation plans in order to demonstrate conformity with meaningful emissions budgets that provide some reasonable assurance of attaining air quality standards, and they should take steps to address long-term planning, modeling, and transportation funding issues to help address the largest source of air pollution in the Metrolina area.

Sincerely,



J. David Farren,  
Senior Attorney,  
Director, Regional Transportation Initiative



Thomas Gremillion  
Associate Attorney

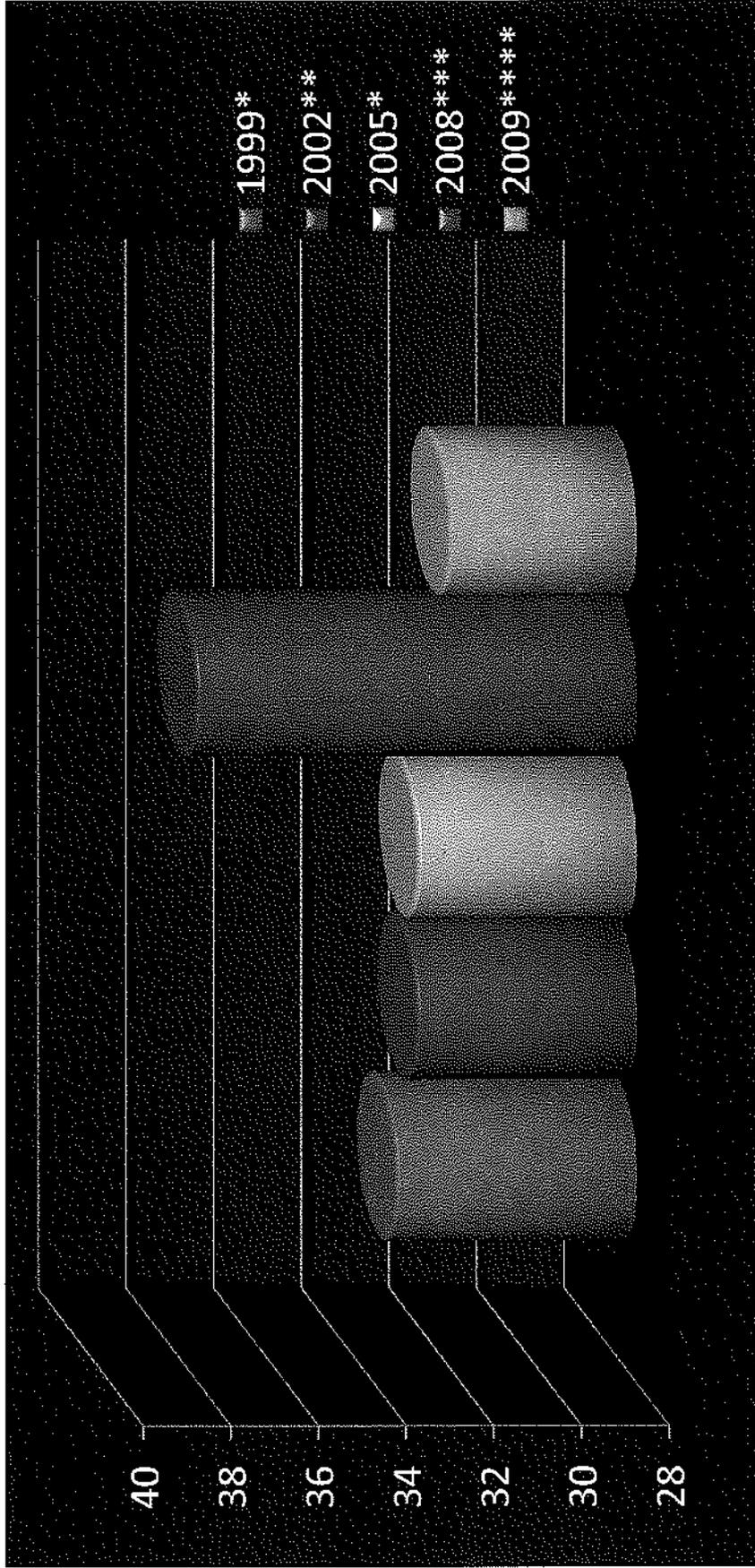
Enclosure

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Myra Reece, SCDHEC Bureau of Air Quality  
Carol Kemker, USEPA

# Mecklenburg County Motor Vehicle Emissions Budgets for NOx by Target Year



\* Source: Metrolina/Gastonia, North Carolina Ozone Attainment Maintenance Plan, 60 FR 34859 (July 5, 1995)

\*\* Source: Conformity Analysis and Determination Report: Demonstrating Conformance of the Mecklenburg-Union Metropolitan Planning Organization 2025 Long Range Transportation Plan with the provisions of the North Carolina State Implementation Plan and the Transportation Equity Act for the 21<sup>st</sup> Century (April 3, 2002)

\*\*\* Source: November 2009 Reasonable Further Progress State Implementation Plan Narrative at 14.

\*\*\*\* Source: June 2007/November 2009 – Attainment Demonstration State Implementation Plan Narrative at 17.

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April 27, 2010

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Southern Environmental Law Center  
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**Re: Response to the Supplement to the South Carolina 8-Hour Ozone Attainment Demonstration for the Charlotte-Gastonia Rock Hill NC-SC (Metrolina) Nonattainment Area**

Dear Mr. Farren:

Thank you for your comments. In your March 29, 2010, letter you stated South Carolina should focus on developing strategies for controlling emissions and ensuring attainment of the health-based air quality standards. We agree. The original attainment demonstration has been supplemented to demonstrate that the Metrolina area is expected to attain the 1997 8-hour ozone standard with a one-year extension of the attainment date. The South Carolina Department of Health and Environmental Control Bureau of Air Quality (the Department) has worked, with guidance provided by the United States Environmental Protection Agency (EPA), to ensure that the attainment demonstration and supplement fulfill the requirements of the Clean Air Act.

We disagree with the Southern Environmental Law Center's position that the law requires that the Metrolina area be reclassified to a "Serious" nonattainment status. No monitors in the Metrolina region exceeded the level of the 1997 8-hour ozone standard during the 2009 ozone season.

Focusing more of our limited state resources on State Implementation Plan (SIP) redevelopment for the less stringent 1997 ozone standard, for which an approvable attainment demonstration was first submitted almost two years ago, would not produce meaningful results. As EPA has determined that the 1997 ozone standard is obsolete and finalized a more stringent, protective ozone standard in 2008, and is on track to further strengthen this standard in August 2010, focusing limited resources on developing control measures to meet the more restrictive standard rather than on a process for the sake of process is a more prudent use of state resources. We believe our efforts toward improving air quality and protecting the health of South Carolinians are better served by focusing on achieving the more protective current and future ozone standards.

Sincerely,

Robert J. Brown, Jr., Director  
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SCDHEC Bureau of Air Quality

ec Carol Kemker, Deputy Director, Air Pesticides, Toxics Management, Region 4 EPA  
Keith Overcash, Director, North Carolina Department of Environment and Natural Resources,  
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