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November 22, 2004

Ms. Heather Preston
Bureau of Air Quality
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, SC 29201

VIA E-MAIL (PRESTOHS@dhec.sc.gov) AND U.S. MAIL

Re: Draft Early Action Compact SIP

Dear Ms. Preston:

The Southern Environmental Law Center ("SELC") submits these comments on South Carolina's Draft Early Action Compact SIP dated October 22, 2004 (the "Draft SIP"). We recognize that the State of South Carolina has been working to improve its SIP and the local control measures in the individual EACs. We acknowledge this effort and have included in this letter recommendations to further strengthen the EACs and the SIP to improve air quality in South Carolina. Specifically, our comments address five key facets of the Draft SIP: the legal status of the Early Action Compact ("EAC") program, the sufficiency of local control measures, enforceability of the statewide "Control of Oxides of Nitrogen" regulation, the proposed Smart Highways Checklist, and maintenance planning for EAC areas.

The Early Action Compact Program is Illegal Under the Clean Air Act

As you know, we believe that the Early Action Compact program is illegal because it exists wholly outside the structure and requirements of the Clean Air Act (the "Act"). Moreover, many aspects of the EAC approach directly conflict with important requirements of the Act, including statutory deadlines and consequences. For example, the EAC program conflicts with mandatory Clean Air Act requirements regarding designation of nonattainment areas for criteria air pollutants, inclusion of specified nonattainment measures in the SIP (including new source review and transportation conformity), and submission of approvable maintenance plans.

Such avoidance of the Act's mandatory requirements has been routinely struck down by the courts. *See, e.g., Sierra Club v. EPA*, 294 F.3d 155 (D.C. Cir. 2002) (invalidating attainment deadline extension based on interstate pollution transport); *EDF v. EPA*, 167 F.3d 641 (D.C. Cir.

1999) (invalidating “grandfathering” exception to transportation conformity requirements); *Sierra Club v. EPA*, 129 F.3d 137 (D.C. Cir. 1997) (invalidating one-year grace period for nonattainment areas to meet Act’s transportation conformity requirements). In 2001, the United States Supreme Court spoke directly to the provisions governing implementation of the revised 8-hour ozone standard, holding that the Act’s provisions governing ozone nonattainment areas “eliminate[] regulatory discretion” that other areas of the Act may allow. Accordingly, “EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.” *Whitman v. American Trucking Ass’n*s, 531 U.S. 457, 484-85 (2001) (holding that Clean Air Act provisions governing ozone nonattainment areas were meant to limit EPA discretion).

Based on this consistent legal precedent, it is clear that the EAC program is highly vulnerable to judicial invalidation. Nevertheless, over the past several months SELC has worked with EPA and South Carolina Department of Health and Environmental Control Bureau of Air Quality (“BAQ”) staff to improve existing EAC measures and include new measures as appropriate to make the EAC program an acceptable substitute for Clean Air Act requirements. It is our hope that if the EACs can be strengthened so that they will create cleaner air sooner and maintain good air quality over time, the impetus to seek a judicial ruling on the validity of the entire EAC program can be eliminated.

The Local Control Measures for the EAC Nonattainment Areas as Presented in the Attainment Demonstration Need Additional Strengthening

Since the inception of the EAC program, SELC has worked with EPA and BAQ to ensure that the EAC control measures are as robust as possible. We submitted several sets of written comments to EPA and BAQ on the EAC program overall and as applied to the Greenville/Spartanburg and Columbia areas, which are the two nonattainment areas in South Carolina that are covered by EACs. See SELC comment letters dated May 15, 2003, January 14, 2004, July 30, 2004 and September 7, 2004, attached hereto as Exhibits 1-4. We also held meetings and telephone calls with EPA and BAQ and submitted extensive documentation, including recommendations for improving specific EAC control measures for the nonattainment areas. See “General Recommendations for All South Carolina EACs,” Exhibit 5, and “Specific Recommendations – South Carolina Early Action Compacts,” Exhibit 6. These recommendations were forwarded to the Greenville/Spartanburg and Columbia-area EAC groups, and we offered to meet with these groups to discuss our concerns.

It is our understanding that the local control measures contained in the Draft SIP consist essentially of those local control measures submitted to EPA at the last milestone – March 31, 2004 – plus an “Air Quality Awareness and Improvement Policy” adopted by the county manager or county council of each nonattainment EAC jurisdiction. As a threshold issue, as we have previously stated, the March 31, 2004 version of the local control measures do not satisfy EPA guidance. See Exhibit 6. Specifically, the control measures must be specific, quantifiable, permanent, and enforceable, and must result in cleaner air sooner than the Clean Air Act would otherwise require. Unless the control measures are substantially revised as described in our written comments, they will not present an adequate substitute for full Clean Air Act compliance. Moreover, EPA has recently released a guidance document that suggests that the proposed local

control measures are inadequate in their current form. *See* EPA Memorandum, State Implementation Plan (SIP) Submittals for Early Action Compact Areas (EACs), Oct. 14, 2004, attached as Exhibit 7. We understand that the local EAC groups are still working to revise their local control measures. Because the EAC groups have not yet finalized their control measures, we cannot comment substantively on how effective those control measures will be in their final revised form. We look forward to reviewing the control measures when they are finalized and at that time we will analyze whether the control measures meet the requirements of EPA guidance, including the October 14, 2003 Memorandum, and are an adequate substitute for compliance with the express requirements and deadlines of the Clean Air Act.

The “Air Quality Awareness and Improvement” policies adopted by the five nonattainment EAC counties each contain several local control measures. Some of the control measures are similar to those contained in the March 31, 2004 submittal, while some are new measures. We applaud the counties for adding some control measures and for taking steps to document their commitment to carrying out the policies. The additional control measures are relatively modest, however, and as written do not include adequate specificity or enforceability. We urge the local counties to go further to firm up their commitment to carrying out the policies and clarify how the control measures contained in the policies will be implemented. First, we urge all the counties to incorporate the control measures into their regulations and ordinances, after public notice and hearing. We realize this will take several months so, as an initial step, we urge the counties to obtain formal County Council approval of their “Air Quality Awareness and Improvement” policy. Only the Lexington County policy recites that it was adopted by the County Council. Unless the other policies are adopted by County Council, they lack enforceability and generally can be changed at any time without public hearing. Second, the wording of the control measures should be tightened to include more specificity so it is clear what commitments each county is making with respect to each control measure. We have previously made recommendations on how to word control measures to provide adequate specificity. *See* Exhibits 1-4. Third, the policies should be included as part of the SIP. Although the Draft SIP states that “[l]ocal strategies that are enforceable will be enforced by the local government,” EPA guidance clearly states that the control measures must be *federally* enforceable. Thus, the “Air Quality Awareness and Improvement” policies must be made part of the SIP and must be enforceable by the State as well as the federal government.

Unless the Statewide “Control of Oxides of Nitrogen” Regulation is Included in the Regulatory SIP, It is Not Federally Enforceable and Could be Changed at Any Time

South Carolina has adopted a new statewide regulation entitled “Control of Oxides of Nitrogen,” which applies to new and existing stationary sources. However, the Draft SIP states that the Control of Oxides of Nitrogen regulation will not be included in the regulatory SIP, *see* Draft SIP p. 5. Unless the regulation is included in the regulatory SIP, it is not federally enforceable and therefore does not meet minimum EPA standards for EAC control measures. It is inconsistent for South Carolina to point to this regulation as a method for reducing ozone precursors but then refuse to include it as part of the regulatory SIP. South Carolina should add the Control of Oxides of Nitrogen regulation as a federally enforceable measure in the regulatory SIP.

The Smart Highways Checklist

If EPA did not “defer” the nonattainment designation for EAC areas, the EAC nonattainment areas would be subject to transportation conformity. Although EPA is not requiring conformity in EAC nonattainment areas, DHEC, SCDOT, USDOT, EPA, and the local MPOs have developed a “Smart Highways Checklist” to guide review of Long Range Transportation Plans and Transportation Improvement Plans with respect to EAC nonattainment areas. These agencies have agreed to use the checklist as “an informational guideline” in reviewing transportation plans. *See* Draft SIP p. 32. The checklist is only a procedural document and does not require that transportation plans serve air quality goals, as they would be required to do if the EAC areas’ nonattainment status were not deferred. The checklist will, however, inject consideration of air quality goals into transportation planning within the EAC areas, which is critical for attaining and maintaining good air quality in these areas and throughout South Carolina. We applaud the efforts of DHEC and the other agencies to create and implement this process and we urge that the checklist be made part of the regulatory SIP.

The Draft SIP Should Include Requirements for 20-Year Maintenance Planning for EAC Areas

If the Clean Air Act were faithfully applied, South Carolina would be required to submit a maintenance plan for all EAC nonattainment areas along with the Attainment Demonstration. While EPA does not require EAC areas to submit a maintenance plan, as a legal matter we believe the maintenance planning requirements of Clean Air Act §175A do apply to EAC nonattainment areas. Furthermore, we believe that commitment to such a plan is essential to ensure that the EAC nonattainment areas maintain the NAAQSs over time. Thus, we urge DHEC to incorporate a requirement for 20-year maintenance planning in its SIP. In Exhibit 7 to this letter, we present model language for such a requirement. This language is taken from the North Carolina Draft SIP. *See* Exhibit 8, “North Carolina’s 8-Hour Ozone Attainment Demonstration,” pp. 102-106. We recommend certain revisions to the North Carolina Language, as described in Exhibit 9 to this letter. *See* Exhibit 9, “Improvements to North Carolina Maintenance Language.”

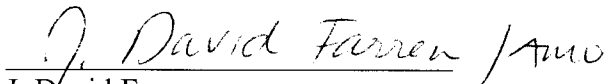
Conclusion

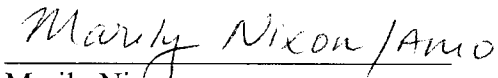
While we continue to believe the Early Action Compact program is unauthorized under the Clean Air Act, in an effort to strengthen the program to the extent possible, we have worked to improve local and state EAC control measures. The control measures included in the Draft SIP consist of the March 31, 2004 measures plus a few additional controls. The March 31, 2004 measures standing alone do not meet EPA guidance and are not an acceptable substitute for Clean Air Act compliance. Until revisions are made to the control measures per our communications with EPA and the State, we cannot comment on the sufficiency of the measures. We welcome the additional controls proposed as part of the EAC nonattainment counties’ “Air Quality Awareness and Improvement” policies and we recommend that they be strengthened and implemented as enforceable regulations or ordinances by the individual counties and included in the regulatory SIP. We urge the State to include its new “Control of Oxides of Nitrogen”

regulation as part of its regulatory SIP. We applaud DHEC and cooperating agencies for creating the "Smart Highways Checklist" and we urge that the checklist be included as part of the regulatory SIP. Finally, we urge the State to add a commitment to the SIP for 20-year maintenance planning for EAC areas.

We thank you for the opportunity to submit these comments.

Very truly yours,


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May 15, 2003

James A. Joy, III, PE, Chief
Bureau of Air Quality
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RE: Ozone Early Action Compact in South Carolina

Dear Mr. Joy,

The Southern Environmental Law Center is writing on behalf of the South Carolina Coastal Conservation League regarding the effort of the State of South Carolina to develop a state-wide Early Action Compact ("EAC") with the U.S. Environmental Protection Agency ("EPA") as a substitute to Clean Air Act requirements regarding the implementation of the 8-hour ozone standard adopted by EPA in 1997.

As you know, the EAC program is designed to allow areas to avoid the consequences of forthcoming nonattainment designations under the revised 8-hour air quality standard for ozone in exchange for their participation in an experimental effort to bring these areas into attainment through local air pollution control measures. Under this program, EPA has established a series of required milestones each compact signatory must meet in order to remain eligible for the deferred effective date of the nonattainment designation. An important upcoming deadline requires the State and local governments in potential nonattainment areas to submit lists of proposed local air quality improvement measures to EPA no later than June 16, 2003. We also understand that DHEC has adopted its own deadline of August 31, 2003, for draft local early action plans to be submitted for inclusion in the statewide early action plan.

We applaud the goal of proactively addressing the serious public health threat that ozone pollution poses to residents of South Carolina, including its 300,000 citizens DHEC admits suffer from asthma and those who live in the 10 South Carolina counties that received failing grades in the American Lung Association's 2003 State of the Air report.¹ We have serious concerns, however, about the potential effectiveness of an EAC approach that would fail to

¹ Available at <http://www2.lungusa.org>.

provide strategies and safeguards equivalent to the statutory scheme established by Congress. In particular, it is essential that any EAC in South Carolina address the primary source of the key ozone precursor nitrogen oxides ("NOx") in its largest metropolitan areas, which is on-road mobile emissions resulting from vehicle travel. Thus, to be effective, the EAC must include binding commitments by the State and local governments to address vehicle miles traveled ("VMT") through transportation and land use strategies that have been demonstrated to be effective in reducing NOx emissions. The basis for our recommendation is discussed in detail below.

I. BACKGROUND TO EAC PROGRAM

As an initial matter, it is important for all involved communities to understand that the EAC program exists outside the structure of the federal Clean Air Act ("CAA" or "the Act") and allows unauthorized exemptions from some of the Act's fundamental requirements. EPA, however, has presented this program as a way to achieve "clean air sooner," and that is certainly a goal we share. Our hope is that communities will take this opportunity to adopt meaningful, enforceable, and permanent measures that will clean the air their residents breathe, regardless of their involvement with the EAC program. Equally important, we believe that it will be necessary for communities to make an exceptionally compelling showing of effective air quality improvement strategies to avoid future controversy and potential litigation over the adoption of an EAC.

Under the EAC program, EPA has proposed that an area which currently meets the 1-hour standard for ozone but will likely fail to meet the 8-hour standard may avoid the legal ramifications of a nonattainment designation by meeting certain requirements. As presented by EPA, these requirements include affirming an intent to participate in a compact by December 31, 2002, submitting a local plan to EPA by March 2004, adopting the local measures into the State Implementation Plan ("SIP") and submitting the revised SIP to EPA by December 2004, implementing the local controls and providing progress reports to EPA through 2005-06, and attaining the air quality standard for ozone by December 2007. If an area complies with these milestones, EPA asserts that the area will be reclassified as attainment without ever facing the statutory obligations of a nonattainment area. If an area misses one of the milestones, the area will automatically reenter the normal CAA process applicable to 8-hour nonattainment areas. Also, if the EAC fails to result in attainment of the 8-hour standard by the end of 2007, a revised SIP meeting all the requirements of the CAA would be due in December 2008, one year later than the SIP deadline for nonattainment areas that do not participate in the EAC program.

The primary statutory obligations EPA has advertised as avoidable under the EAC program are the "New Source Review," "Transportation Conformity," and "Maintenance Plan" requirements contained in the CAA. "New Source Review" and "Conformity" are two of the most important tools in the Act for reaching attainment of the health based pollution standards, addressing stationary and mobile sources respectively. The "Maintenance Plan" requirement is designed to ensure that an area does not fall back into nonattainment over time.

New Source Review

Under “New Source Review,” new or expanding major stationary sources in nonattainment areas are subject to a series of controls. First, the class of “major” sources which must receive a CAA permit from the state in order to operate is expanded from those that emit at least 250 tons of a criteria pollutant per year to sources that emit at least 50 tons of pollution per year.² Second, new and modified major sources within the nonattainment area are required to secure offsets of emissions from existing sources.³ Finally, sources subject to “New Source Review” are required to install what is known as “lowest achievable emissions reductions” or “LAER” technology, rather than the “best available control technology” or “BACT” that is required of sources located in attainment areas.

As evidenced by this brief description, each of the “New Source Review” requirements is designed to ensure that growth in stationary sources does not mean growth in pollution. These provisions are essential to ensuring that emissions from stationary sources do not exacerbate a nonattainment area’s air pollution problems. According to information from the DHEC website (Attachment 1), South Carolina stationary sources emitted 137,975 tons of NOx per year as of January 2003, second only to motor vehicle emissions as a contributor to ozone pollution. Any area that is serious about cleaning its air, yet seeking to avoid this important requirement in the CAA, must make meaningful efforts through other means.

Under the EAC approach, nonattainment areas avoid the near-immediate imposition of New Source Review, which would otherwise take effect in 2004. If the EAC proves to be ineffective to meet the 8-hour standard by December 2007, New Source Review would not take effect until 2008, resulting in a four-year delay of this important requirement.

Transportation Conformity

Nonattainment areas are also required by the Act to conduct “conformity” analyses to ensure that transportation plans and highway projects conform to the State Implementation Plan for achievement of the 8-hour standard and that federal funds are not used in a way that would adversely impact air quality.⁴ In larger metropolitan areas, where emissions from motor vehicles typically constitute the largest portion of total NOx emissions, transportation conformity is a powerful tool designed to control the portion of emissions contributed by mobile sources due to ever-increasing VMT. In South Carolina on-road mobile emissions are the largest source of NOx, the key ozone precursor, contributing 162,324 tons per year. See Attachment 1. Regions that are unable to demonstrate conformity enter what is known as a “conformity lapse,” where new capacity-expanding highway projects are halted in favor of “transportation control

² CAA § 175(c)(5), 42 U.S.C. § 7502(c)(5); CAA § 182(a)(2)(C)(i), 42 U.S.C. § 7511(a)(2)(C)(i).

³ CAA § 182(a)(4), 42 U.S.C. § 7511(a)(4).

⁴ CAA § 176(c), 42 U.S.C. § 7506(c).

measures” and “exempt projects” which will not exacerbate air quality violations.⁵ For example, the Atlanta metropolitan area experienced a conformity lapse in the late 1990s, resulting in a significant redirection of transportation funds from highways to transit and other projects that help to improve air quality.

With an EAC, nonattainment areas avoid this important conformity requirement which would otherwise take effect in 2005. If the EAC fails to produce the necessary reductions by the end of 2007, conformity would come into effect the following year, yielding a three-year delay in this important requirement.

As discussed in detail below, transportation and land use strategies are readily available to local governments and can help them make significant strides in cleaning their air, reducing congestion, preserving open space, addressing non-point water pollution, and generally improving the quality of life for their residents. Although the “conformity” mechanism contained within the Act presents an important federal incentive for ensuring that transportation investments and related land use development patterns do not hinder the attainment of the health based air quality standards, local commitment to addressing VMT growth through transportation and land use policies and initiatives can also play a significant role in an area’s air pollution control strategy. Indeed, as discussed below, transportation and land use controls that focus on reducing per-capita VMT should be the primary strategy for controlling NOx emissions in South Carolina.

Maintenance Plans

EPA Region 4 has suggested that if a participating area demonstrates attainment by December 2007, the twenty-year maintenance plan required under Section 175A of the CAA also would be inapplicable. Instead, the compact signatories would replace the twenty-year maintenance period with a 5-year, or perhaps 10-year, monitoring program.

In order to redesignate an area as attainment, which EPA asserts it will do if the area attains the ozone standard by December 2007, the CAA requires EPA to make several statutorily prescribed determinations. One required determination is whether “the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A.”⁶ To comply with Section 175A, a maintenance plan must “provide for the maintenance of the national primary ambient air quality standard for [ozone] in the area concerned for at least 10 years after the redesignation.”⁷ The Act further requires that the applicable SIP be revised to ensure the maintenance of the standard for an additional ten years thereafter.⁸

⁵ 42 U.S.C. § 7506(c)(4)(B)(ii) and 40 C.F.R. § 93.104(b)(3) & (c)(4) (EPA conformity regulations). See also 42 U.S.C. § 7408(f) (identifying approvable transportation control measures) and 40 C.F.R. §§ 93.114(b), 93.115(d) & 93.126 (EPA regulations on projects eligible for funding during conformity lapse).

⁶ CAA § 107(d)(3)(E)(iv), 42 U.S.C. § 7407(d)(3)(E)(iv).

⁷ CAA § 175(a), 42 U.S.C. § 7505a(a).

⁸ CAA § 175(b), 42 U.S.C. § 7505a(b).

In addition to the unauthorized administrative waiver of the two key nonattainment obligations concerning stationary and mobile sources, it remains unclear how EPA will be able to avoid the continuing procedural and substantive obligations under the Act to both plan for maintenance of the 8-hour standard and actually to achieve that goal. Indeed, with local governments taking experimental steps that have not been proven successful – unlike those contained within the Act itself – monitoring for the long run becomes even more important. A first step to ensuring that areas do not fall back into nonattainment would be to extend the prescribed monitoring program for 20 years, rather than the 5 or 10 suggested by EPA. Areas should also consider other long-term efforts to meet the maintenance goals and requirements of the Act, especially given that VMT is projected to continue to increase over the next 20 years.

II. POTENTIAL LEGAL PROBLEMS WITH THE EAC APPROACH.

The product of decades of intense legislative effort and political compromise, the CAA is an exceedingly broad, complex, and sophisticated statute aimed not only at improving local air quality but also at addressing national issues such as the interstate transport of pollution. The 1990 Amendments to the Act were the most recent strengthening of this important law, intended to require states to take potentially difficult actions found necessary to clean the air. The 1990 Amendments introduced both a strict deadline structure for the strengthened version of the Act and important consequences for failing to comply with those deadlines. Under this scheme, EPA's deferral of the effective date for the nonattainment status of EAC participants is a contrivance that lacks any legal basis. That schedule is at the center of the Act's strategy for bringing nonattainment areas into attainment and triggers a schedule under which SIPs are due, control measures must be implemented, and air quality standards must be attained.

The EAC program exists wholly outside the structure and requirements of the Clean Air Act. Moreover, many aspects of the EAC approach directly conflict with important requirements of the Act, including statutory deadlines and consequences. As such, this illegal EPA "authorization" of states and local governments to substitute their preferred approaches to pollution control for the specific requirements of the Clean Air Act may face legal challenge. Indeed, the Agency's failure to effectively designate nonattainment areas, its failure to timely require the nonattainment SIP measures specified in the Act, including new source review and transportation conformity, and its failure to require approvable maintenance plans would all be actionable.

Such avoidance of the Act's mandatory requirements has been routinely struck down by the courts. See, e.g., Sierra Club v. EPA, 294 F.3d 155 (D.C. Cir. 2002) (invalidating attainment deadline extension based on interstate pollution transport); EDF v. EPA, 167 F.3d 641 (D.C. Cir. 1999) (invalidating "grandfathering" exception to transportation conformity requirements); Sierra Club v. EPA, 129 F.3d 137 (D.C. Cir. 1997) (invalidating one-year grace period for nonattainment areas to meet Act's transportation conformity requirements). In 2001, the Supreme Court spoke directly to the provisions governing implementation of the revised 8-hour ozone standard, holding that the Act's provisions governing ozone nonattainment areas "eliminate[] regulatory discretion" that other areas of the Act may allow. Accordingly, "EPA may not construe the statute in a way that completely nullifies textually applicable provisions

meant to limit its discretion.” Whitman v. American Trucking Ass’ns, 531 U.S. 457, 484-85 (2001)(holding that CAA provisions governing ozone nonattainment areas were meant to limit EPA discretion).

Based on this consistent legal precedent, it is clear that the deferral of the effectiveness of nonattainment designations, the waiver of the Act’s mandatory control measures, and the waiver of the Act’s maintenance requirements are all highly vulnerable to potential invalidation. The appropriateness of prompt voluntary local measures, however, does not hinge on the validity of the EAC program. Thus, rather than undermine local governments’ commitment to finding local measures to control air pollution, potential threats to the validity of the program should energize local governments to work even harder toward significant air quality improvements. Such efforts also should be spurred by the unfortunate national history of missed mandatory deadlines to reduce pollution previously established under the Act. We believe the measures discussed below, and other measures like them can bring about such benefits.

III. POSITIVE MEASURES LOCAL GOVERNMENTS SHOULD TAKE TO CLEAN THEIR AIR.

With the avoidance of the key CAA measures just discussed, the responsibility for making up for the emissions reductions that would result from these measures largely falls to the localities. This means that while EAC areas are allowed under the program to avoid, or at least delay, compliance with what they may consider to be painful control measures, they are not free to sit back and do nothing. They are left without the requirements of the Act to design their own strategies for bringing them into attainment with the health based standard for ozone by December 2007 or as expeditiously as practicable before that deadline. This is both a great opportunity and a great responsibility to take actions that will clean the air to the health-based standard and make sure it stays at a healthy level.

As stated at the outset, it is essential that any EAC in South Carolina include transportation and land use strategies to control VMT to effectively address the state’s largest source of ozone pollution, emissions from the transportation network. As DHEC is aware, VMT growth has far outstripped population growth in South Carolina. While the State’s population has grown about 18 percent in the last 15 years, VMT has increased over 45 percent, almost three times the rate of population growth. As a result, the largest single source of NOx emissions in the Columbia area (41%) and Greenville/Spartanburg (57%), the two South Carolina metro areas with the most significant ozone problems, is on-road mobile emissions. Closely related to these high VMT and NOx statistics, Greenville/Spartanburg was ranked the United States’ fifth most sprawling metro area in a recent report by researchers at Rutgers and Cornell Universities.⁹

While some transportation and land use measures will take several years or more to produce air quality benefits, they are still essential to ensure that clean air is attained and maintained in the following decades. To date, reductions in mobile source pollution has been

⁹ See Ewing, Pendall & Cheng, "Measuring Sprawl and its Impact" (available at <http://www.smartgrowthamerica.com/sprawlindeX/MeasuringSprawl.PDF>).

due to improved vehicle technology concerning tailpipe emissions and fuel efficiency as the result of past federal mandates. Such improvements are projected to level off in the next few years as the "fleet" of vehicles on the road continues to modernize, resulting in a greater percentage of vehicles with the latest federal emissions requirements. Later this decade and continuing into the next decade, however, these tailpipe improvements are expected to be outstripped by ever-increasing VMT caused by more frequent and longer distance driving.¹⁰ By taking a long-term approach and beginning now to implement a mix of short-term and long-term transportation and land use strategies to reduce VMT growth, areas will be able to demonstrate that the 8-hour standard will be maintained well into the future after the attainment deadline as required under the Act.

Attachment 2 to this letter lists and explains six primary measures we believe the EAC signatories should consider in their stakeholder processes and include in their June 16th submissions to EPA:

- Mixed Use Development
- Infill, Densification, and Downtown Revitalization
- Interconnected Street Networks
- Pedestrian and Bicycle Facilities
- Community Schools
- Public Transportation

In general, these actions would serve to reduce auto trips by making transit, biking, and walking safer and more convenient. These suggestions are consistent with the list of approved Transportation Control Measures set out in 42 U.S.C. § 7408(f) of the Act (Attachment 3) and the recommendations in the February 2003 Quality of Life Task Force Report produced for South Carolina Governor Mark Sanford (Attachment 4). Further tools for implementing air quality improvements through transportation and land use planning can also be found in a DHEC document entitled "Air Quality Improvement Tools For Local Governments" (Attachment 5) and an EPA guidance document entitled "Improving Air Quality Through Land Use Activities."¹¹ Appendix A to EPA's guidance document (Attachment 6) contains an excellent list of potential strategies.

IV. CONCLUSION

Aggressive coordinated action by local, state, and federal governments is necessary to address the significant air quality problems in South Carolina reflected in the impending 8-hour designation. For that reason, we support the initial planning attempts that localities are beginning to undertake in order to find effective ways to locally control pollution. Indeed, voluntary discretionary measures such as those urged through EACs can be implemented at any

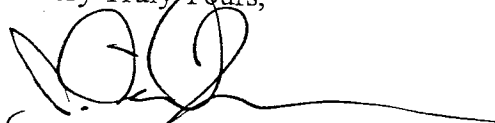
¹⁰ See "EPA Guidance: Improving Air Quality Through Land Use Activities," January 2001, at 10, Figure 1 (available at <http://www.epa.gov/otaq/transp/landguid.htm>).

¹¹ "Improving Air Quality Through Land Use Activities," (EPA, Air and Radiation Office of Transportation and Air Quality, January 2001) (available at <http://www.epa.gov/otaq/transp/landguid.htm>). See also <http://www.epa.gov/otaq/transp/publicat.htm>.

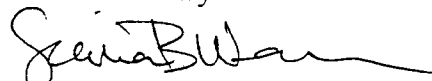
time and can play a big role in achieving "clean air sooner." We urge South Carolina and its local governments to take all actions necessary, including the important transportation and land use strategies discussed above, to bring the air into compliance with and maintain the standard set to protect public health.

Please add us to your notification list for this matter, including any proposed amendments to R. 61-62 pursuant to the notice in the South Carolina Register, Vol. 27, Issue 4 (April 25, 2003). Do not hesitate to contact us if you have any questions concerning this letter or if we can be of further assistance in helping to craft effective solutions to South Carolina's air quality challenges.

Very Truly Yours,



J. David Farren
Senior Attorney



Sierra B. Weaver
Associate Attorney

Cc:

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- Alan Powell, EPA Region IV
- Robert M. Strother, Appalachian COG
- Ron Mitchum, Berkeley-Charleston-Dorchester COG
- Harold Shapiro, Catawba Region COG
- Doug Phillips, Central Midlands COG
- Chris Bickley, Lowcountry COG
- Eric Thompson, Lower Savannah COG
- Johnny Brown, Pee Dee Regional COG
- Jim Darby, Santee-Lynches Regional COG
- Patricia Edmonds, Upper Savannah COG
- Ken Thompson, Waccamas Regional Planning and Development Council
- Jim D'Amato, SPATS
- John Owings, GRATS
- Michelle Ransom, COATS
- Dana Beach, SCCCL

- Attachments:
1. VOC and NOx Emissions in SC (January 2003)
 2. Suggested Transportation and Land Use Strategies and Policies
 3. Transportation Control Measures, § 7408(f) of the CAA
 4. February 2003 Quality of Life Task Force Report
 5. Air Quality Improvement Tools for Local Governments
 6. Appendix A to EPA's guidance document "Improving Air Quality Through Land Use Activities"

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January 14, 2004

David Cole
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
109 TW Alexander Drive
Research Triangle Park, NC 27709

Air and Radiation Docket
U.S. Environmental Protection Agency
1301 Constitution Avenue, NW
Room B102
Washington, D.C. 20004
Attention: Docket ID No. OAR 2003-0090

VIA OVERNIGHT MAIL AND EPA ELECTRONIC DOCKET

RE: Early Action Compacts Rulemaking; Docket ID No. OAR-2003-0090.

Dear Mr. Cole:

The Southern Environmental Law Center (200 W. Franklin St., Ste. 330, Chapel Hill, NC 27516; dfarren@selcnc.org) submits these comments concerning the proposal of the U.S. Environmental Protection Agency ("EPA") to defer the effective date of nonattainment designations for the 8-Hour ozone National Ambient Air Quality Standards for so called "Early Action Compact" ("EAC") areas as a substitute to Clean Air Act ("CAA" or "the Act") requirements regarding the implementation of the 8-Hour ozone standard. As you know, the EAC program is designed to allow areas to avoid the consequences of forthcoming nonattainment designations on April 15, 2004 under the revised 8-Hour air quality standard for ozone in exchange for their participation in an experimental effort to bring these areas into attainment through local air pollution control measures. Under the EAC program, EPA has established a series of required milestones each compact signatory must meet in order to remain eligible for the deferred effective date of the nonattainment designation.

While we applaud the goal of proactively addressing the serious public health threat of ozone pollution, we have serious concerns about the legality and potential effectiveness of the EAC program because it fails to ensure strategies and safeguards equivalent to the statutory scheme established by Congress. In particular, the program lacks any requirement that participants address transportation emissions, the largest source of ozone precursors in most larger metro areas in Region IV, which is where most EACs are located. Our overall concerns about the program are heightened by the lack of specificity in EPA's pending rulemaking proposal, which fails to provide sufficient detail about the program and fails to include any proposed regulatory language.

I. BACKGROUND TO EAC PROGRAM

As an initial matter, it is important to note that the EAC program exists outside the structure of the federal Clean Air Act and allows unauthorized exemptions from some of the Act's fundamental requirements. EPA, however, has presented this program as a way to achieve "clean air sooner," and that is certainly a goal we share. Our hope is that communities will adopt meaningful, enforceable, and permanent measures that will clean the air their residents breathe, regardless of their involvement with the EAC program. Equally important, we believe that it will be necessary for communities to make an exceptionally compelling showing of effective air quality improvement strategies to avoid future controversy over the adoption of an EAC.

Under the EAC program, EPA has proposed that an area which currently meets the 1-Hour standard for ozone but will fail to meet the 8-Hour standard may avoid the legal ramifications of a nonattainment designation by meeting certain requirements. As presented by EPA, these requirements include affirming an intent to participate in a compact by December 31, 2002, submitting a local plan to EPA by March 2004, adopting the local measures into the State Implementation Plan ("SIP") and submitting the revised SIP to EPA by December 2004, implementing the local controls and providing progress reports to EPA through 2005-06, and attaining the air quality standard for ozone by December 2007. If an area complies with these milestones, EPA asserts that the area will be reclassified as attainment without ever facing the statutory obligations of a nonattainment area. If an area misses one of the milestones, the area will automatically reenter the normal CAA process applicable to 8-Hour nonattainment areas. Also, if the EAC fails to achieve attainment of the 8-Hour standard by the end of 2007, a revised SIP meeting all the requirements of the CAA would be due in December 2008, *one year later than the SIP deadline for nonattainment areas that do not participate in the EAC program.*

The primary statutory obligations EPA has advertised as avoidable under the EAC program are the "New Source Review," "Transportation Conformity," and "Maintenance Plan" requirements contained in the CAA. "New Source Review" and "Conformity" are two of the most important tools in the Act for reaching attainment of the health based pollution standards, addressing stationary and mobile sources respectively. The "Maintenance Plan" requirement is designed to ensure that an area does not fall back into nonattainment over time.

New Source Review

Under “New Source Review,” new or expanding major stationary sources in nonattainment areas are subject to a series of controls. First, the class of “major” sources which must receive a CAA permit from the state in order to operate is expanded from those that emit at least 250 tons of a criteria pollutant per year to sources that emit at least 50 tons of pollution per year.¹ Second, new and modified major sources within the nonattainment area are required to secure offsets of emissions from existing sources.² Finally, sources subject to “New Source Review” are required to install what is known as “lowest achievable emissions reductions” or “LAER” technology, rather than the “best available control technology” or “BACT” that is required of sources located in attainment areas.

As evidenced by this brief description, each of the “New Source Review” requirements is designed to ensure that growth in stationary sources does not mean growth in pollution. These provisions are essential to ensuring that emissions from stationary sources do not exacerbate a nonattainment area’s air pollution problems. Under the EAC approach, nonattainment areas avoid the near-immediate imposition of New Source Review, which would otherwise take effect in 2004. If the EAC proves to be ineffective to meet the 8-Hour standard by December 2007, New Source Review would not take effect until 2008, *resulting in a four-year delay of this important requirement.*

Transportation Conformity

Nonattainment areas are also required by the Act to conduct “conformity” analyses to ensure that transportation plans and highway projects conform to the State Implementation Plan for achievement of the 8-Hour standard and that federal funds are not used in a way that would adversely impact air quality.³ In larger metropolitan areas, where emissions from motor vehicles often constitute the largest portion of total anthropogenic NOx and VOC emissions, transportation conformity is a powerful tool designed to control the portion of emissions contributed by mobile sources due to ever-increasing vehicle miles traveled (“VMT”). Areas that are unable to demonstrate conformity enter what is known as a “conformity lapse,” where new capacity-expanding highway projects are halted in favor of “transportation control measures” and “exempt projects” that will not exacerbate air quality violations.⁴ For example, in Region IV, the Atlanta metropolitan area experienced a conformity lapse in the late 1990s, resulting in a significant redirection of transportation funds from highways to transit and other projects that help to improve air quality.

¹ CAA § 175(c)(5), 42 U.S.C. § 7502(c)(5); CAA § 182(a)(2)(C)(i), 42 U.S.C. § 7511(a)(2)(C)(i).

² CAA § 182(a)(4), 42 U.S.C. § 7511(a)(4).

³ CAA § 176(c), 42 U.S.C. § 7506(c).

⁴ 42 U.S.C. § 7506(c)(4)(B)(ii) and 40 C.F.R. § 93.104(b)(3) and (c)(4) (EPA conformity regulations); see 42 U.S.C. § 7408(f) (identifying approvable transportation control measures) and 40 C.F.R. §§ 93.114(b), 93.115(d) and 93.126 (EPA regulations on projects eligible for funding during conformity lapse).

With an EAC, nonattainment areas avoid this important conformity requirement which would otherwise take effect in 2005. If the EAC fails to produce the necessary reductions by the end of 2007, conformity would come into affect the following year, *yielding a three-year delay in this important requirement.*

Maintenance Plans

EPA has suggested that if a participating area demonstrates attainment by December 2007, the twenty-year maintenance plan required under Section 175A of the CAA also would be inapplicable. *Instead, the compact signatories would replace the twenty-year maintenance period with a 5-year monitoring program.*

In order to redesignate an area as attainment, which EPA asserts it will do if the area attains the ozone standard by December 2007, the CAA requires EPA to make several statutorily prescribed determinations. One required determination is whether “the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A.”⁵ To comply with Section 175A, a maintenance plan must “provide for the maintenance of the national primary ambient air quality standard for [ozone] in the area concerned for at least 10 years after the redesignation.”⁶ The Act further requires that the applicable SIP be revised to ensure the maintenance of the standard for an additional ten years thereafter.⁷

In addition to the unauthorized administrative waiver of the two key nonattainment obligations concerning statutory and mobile sources, it remains unclear how EPA will be able to avoid the continuing procedural and substantive obligations under the Act to both plan for maintenance of the 8-Hour standard and actually to achieve that goal. Indeed, with local governments taking experimental steps that have not been proven successful – unlike those contained within the Act itself – monitoring for the long run becomes even more important. A first step to ensuring that areas do not fall back into nonattainment would be to extend the prescribed monitoring program for 20 years, rather than the 5 years suggested by EPA. All areas should consider a wide-range of long-term efforts to meet the maintenance goals and requirements of the Act, especially given that VMT is projected to continue to increase over the next 20 years.

II. LEGAL PROBLEMS WITH THE EAC APPROACH

The product of decades of intense legislative effort and political compromise, the CAA is an exceedingly broad, complex, and sophisticated statute aimed not only at improving local air quality but also at addressing national issues such as the interstate transport of pollution. The 1990 Amendments to the Act were the most recent strengthening of this important law, intended to require states to take potentially difficult actions found necessary to clean the air. The 1990

⁵ CAA § 107(d)(3)(E)(iv), 42 U.S.C. § 7407(d)(3)(E)(iv).

⁶ CAA § 175(a), 42 U.S.C. § 7505a(a).

⁷ CAA § 175(b), 42 U.S.C. § 7505a(b).

Amendments introduced both a strict deadline structure for the strengthened version of the Act and important consequences for failing to comply with those deadlines. Under this scheme, EPA's deferral of the effective date for the nonattainment status of EAC participants is simply a contrivance that lacks any legal basis. The deadline provisions are at the center of the Act's strategy for bringing nonattainment areas into attainment and trigger a schedule under which SIPs are due, control measures must be implemented, and air quality standards must be attained.

The EAC program exists wholly outside the structure and requirements of the Clean Air Act. Moreover, many aspects of the EAC approach directly conflict with important requirements of the Act, including statutory deadlines and consequences. Indeed, the Agency's failure to effectively designate nonattainment areas, its failure to timely require the nonattainment SIP measures specified in the Act, including new source review and transportation conformity, and its failure to require approvable maintenance plans are all counter to specific requirements under the Act.

Such avoidance of the Act's mandatory requirements has been routinely struck down by the courts. See, e.g., Sierra Club v. EPA, 294 F.3d 155 (D.C. Cir. 2002) (invalidating attainment deadline extension based on interstate pollution transport); EDF v. EPA, 167 F.3d 641 (D.C. Cir. 1999) (invalidating "grandfathering" exception to transportation conformity requirements); Sierra Club v. EPA, 129 F.3d 137 (D.C. Cir. 1997) (invalidating one-year grace period for nonattainment areas to meet Act's transportation conformity requirements). In 2001, the Supreme Court spoke directly to the provisions governing implementation of the revised 8-Hour ozone standard, holding that the Act's provisions governing ozone nonattainment areas "eliminate[] regulatory discretion" that other areas of the Act may allow. Accordingly, "EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion." Whitman v. American Trucking Ass'ns, 531 U.S. 457, 484-85 (2001) (holding that CAA provisions governing ozone nonattainment areas were meant to limit EPA discretion).

Based on this consistent legal precedent, it is clear that the deferral of the effectiveness of nonattainment designations, the waiver of the Act's mandatory control measures, and the waiver of the Act's maintenance requirements are all highly vulnerable to invalidation. The appropriateness of prompt voluntary local measures, however, does not hinge on the validity of the EAC program. Thus, rather than undermine local governments' commitment to finding local measures to control air pollution, concerns about the validity of the program should energize local governments to work even harder toward significant air quality improvements. Such efforts also should be spurred by the unfortunate national history of missed mandatory deadlines to reduce pollution previously established under the Act.

III. CONCERNS REGARDING TRANSPORTATION EMISSIONS IN REGION IV

The central deficiencies in the EAC program, set out above, raise two closely related particular concerns about implementation of the program in Region IV with regard to transportation emissions. The first concern is the high percentage of ozone precursors resulting

from transportation emissions in metro areas in the region coupled with the lack of any requirement that EAC areas develop any strategies that would provide equivalent protections to the Clean Air Act's transportation conformity requirements. Indeed, the deferred 8-Hour designations will further hinder the voluntary adoption of transportation strategies because such areas will not be eligible for federal funding under the Congestion Mitigation and Air Quality ("CMAQ") program. The second is the concern that the EAC's truncated maintenance plan requirements will fail to ensure that the 8-Hour standard is maintained over the next two decades as these areas continue to grow and produce even greater VMT-related emissions. By failing to address these issues, it is likely that in Region IV the EAC program will fall far short of its goal of expediting the attainment and maintenance of the 8-Hour standard.

Because EPA is proposing that transportation conformity be waived, it is important that EACs in Region IV metro areas include transportation and land use strategies to control VMT to be effective in controlling ozone pollution, both in the near term and over the next twenty years. Mobile source emissions, exacerbated by sprawling land use patterns and ineffective public transit systems, are responsible for significant amounts of NOx and VOCs, and in our region's urban areas, often represent the primary source of these emissions. For example, a review of air quality data from EPA⁸ shows that in 1999 on-highway mobile emissions were responsible for 60 percent of NOx emissions, the key ozone precursor, in 10 of the 11 North Carolina Triad EAC counties.⁹ On-highway mobile emissions in 1999 were also responsible for an even higher 72 percent of NOx emissions in the Fayetteville EAC area, and contribute 51 percent throughout all four of the state's EAC regions. Similarly, in South Carolina on-road mobile emissions are the largest source of NOx, contributing 162,324 tons per year. Thus, the largest single source of NOx emissions in the Columbia area (41%) and Greenville/Spartanburg (57%), the two South Carolina metro areas with the most significant ozone problems and which are both part of the state's EAC program, is on-road mobile emissions.

The need for such mobile-source focused action also is evidenced by the ranking of the Triad in North Carolina, Greenville-Spartanburg, South Carolina and Knoxville, Tennessee, all EAC areas, as the United States' second, fifth and eighth most sprawling metro areas in a recent report by researchers at Rutgers and Cornell Universities.¹⁰ These areas, along with the other EAC areas throughout Region IV, couple extremely dispersed housing, employment, services, and other land uses with poor public transportation systems, requiring residents to drive substantial distances multiple times per day, simply to go about their daily lives. In the Triad area, this amounts to an average of 33.8 vehicle miles traveled per person per day, the same as in

⁸ Available at <http://www.epa.gov/air/data>.

⁹ See Attachment 1, EPA's 1999 Annual NOx Emissions for EAC Regions in North Carolina. For this and the following NOx calculations, we have excluded Stokes County, which is responsible for an abnormally high level of point source emissions. Point sources are responsible for 97 percent of NOx emissions in Stokes County and 44 percent of total NOx emissions for the entire Triad EAC region. Stokes County is considered such an outlier that DAQ also has excluded it in presentations about emissions contributions in the Triad area. Furthermore, DAQ statistics have shown that overall point source emissions in the Triad EAC region, including Stokes County, will be reduced 87 percent between 1997 and 2007, with emissions from the utility sector reduced 91 percent. See Attachment 2, Triad EAC Region 1997 and 2007 NOx Emission Estimates, from NC DENR presentation (2002).

¹⁰ See Ewing, Pendall & Cheng, "Measuring Sprawl and its Impact" (available at <http://www.smartgrowthamerica.com/sprawindex/MeasuringSprawl.PDF>).

Atlanta, with less than one percent of commuters using transit to get to work. Although Region IV cities are growing rapidly, VMT growth has far outstripped population growth. For example, in South Carolina the population has grown about 18 percent in the last 15 years, but VMT has increased over 45 percent, almost three times the rate of population growth.

While some transportation and land use measures will take several years or more to produce major air quality benefits, they are nevertheless essential to ensure that clean air is attained and maintained in the following decades. To date, reduction in mobile source pollution has been due to improved vehicle technology concerning tailpipe emissions and fuel efficiency as the result of past federal mandates. Such improvements are projected to level off in the next few years as the “fleet” of vehicles on the road continues to modernize, resulting in a greater percentage of vehicles with the latest federal emissions requirements. Later this decade and continuing into the next decade, however, these tailpipe improvements are expected to be offset by ever-increasing VMT caused by more frequent and longer distance driving.¹¹ By taking a long-term approach, and beginning now to implement a mix of short-term and long-term transportation and land use strategies to reduce VMT growth, areas will be able to demonstrate that the 8-Hour standard will be maintained well into the future after the attainment deadline as required under the Act.

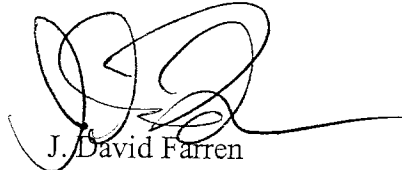
Unfortunately, the EAC program fails to address this critical aspect of the ozone pollution in Region IV and very few of these EAC areas on their own have proposed meaningful strategies to address transportation emissions, particularly measures to discourage growth in per capita VMT. Transportation and land use strategies, however, are readily available to local governments and can help them make significant strides in cleaning their air, reducing congestion, preserving open space, addressing non-point water pollution, and generally improving the quality of life for their residents. Although the “conformity” mechanism contained within the Act presents an important federal incentive for ensuring that transportation investments and related land use development patterns do not hinder the attainment of the health based air quality standards, local commitment to halting the growth of VMT through transportation and land use policies and initiatives can also play a significant role in an area’s air pollution control strategy. Indeed, transportation and land use controls that focus on reducing per-capita VMT should be a primary strategy for controlling NOx emissions in Region IV metropolitan areas.

CONCLUSION

Proactive efforts to address ozone pollution in Region IV should be encouraged by EPA. Whether the EAC program, which lacks any legal basis in the Clean Air Act, ultimately will provide equivalent public health protections is far from certain. Thus, EPA should require a very strong showing, including strategies to address transportation emissions and a showing that the standard will be maintained over the next twenty years, from any Region IV EAC area seeking approval from EPA for a deferred designation as nonattainment.

¹¹ See EPA Guidance: Improving Air Quality Through Land Use Activities, January 2001, at 10, Figure 1 (available at <http://www.epa.gov/otaq/transp/landguid.htm>).

Very Truly Yours,



J. David Farren
Senior Attorney

Cc: Stanley Meiburg, EPA Region 4
Kay Prince, EPA Region 4
Karen Borel, EPA Region 4
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Henry Phillips
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Re: Improvements to South Carolina Early Action Compacts

Dear Ms. Shealy and Mr. Phillips:

Thank you for meeting with us on July 14 regarding the Southern Environmental Law Center's (SELC) ongoing concerns about South Carolina's Early Action Compacts (EACs). As you know from our meeting and our previous communications with DHEC, from a legal perspective we do not believe the EAC program is authorized under the Clean Air Act, and from a practical perspective we do not believe the state's EACs contain adequate measures to effectively address the ozone pollution problem in the state's nonattainment areas. However, we want to work with you in an effort to strengthen the EAC program to the extent possible and, to that end, we have put into writing our recommendations for improving the South Carolina EACs.

At our meeting, we distributed a document setting out SELC's general recommendations for improving all of the state's EACs. We have attached a copy of that document to this letter. See Attachment 1, "General Recommendations for All South Carolina EACs." We urge that all EACs be revised to meet our general recommendations.

One recommendation we made in our May 2003 comment letter on South Carolina's EAC program (see Attachment 2) and repeated in our general recommendations is to include in

each EAC strong provisions related to land use and vehicle miles traveled (VMT). We were disappointed to find that many EACs fail to include *any* land use or VMT-related provisions. Moreover, the few such provisions that were included in EACs have been weakened to the extent that they are unlikely to have any significant effect on air quality. We continue to believe that strong provisions addressing mobile source emissions are critical to improving and maintaining air quality throughout South Carolina. See EPA Guidance, "Improving Air Quality Through Land Use Activities," Jan. 2001. Thus, we urge each EAC to incorporate at least one strong land use measure and one strong VMT-reducing measure. We have listed examples of these measures in Attachment 3 to this letter. See Attachment 3, "Examples of VMT and Land Use-Related Measures." For many EACs, this will mean adding a new provision. For others, one or more existing provisions could be revised to track the examples. For all EACs the measures must be *specific, quantified, and permanent, and if approved by EPA will be federally enforceable SIP revisions*. See Attachment 4, EPA's Memorandum, "Schedule for 8-Hour Ozone Designations and its Effect on Early Action Compacts," November 14, 2002.

Additionally, as promised, we have conducted a detailed analysis of individual EAC provisions with recommendations for improving problematic provisions. While we believe all of the South Carolina EACs need substantial improvement, we are focusing on the Columbia and Greenville/Spartanburg areas because these cities have the worst existing air pollution problem in the state and these problems likely will worsen in future due to the cities' high rates of population growth and VMT. See Attachment 5, "Specific Recommendations – South Carolina Early Action Compacts – Columbia and Greenville/Spartanburg Areas." We urge that the Columbia area EACs (Richland and Lexington Counties) and the Greenville/Spartanburg area EACs (Greenville, Spartanburg, and Anderson Counties) be revised per our detailed recommendations.

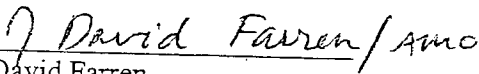
Another issue we discussed at the July 14 is SELC's concern that the 10-year maintenance plan for EAC areas is too short in duration. As we told you at the meeting, we are working with the North Carolina Division of Air Quality ("DAQ") to craft language extending the maintenance period to 20 years and adding needed detail to the plan. We are now finalizing language with DAQ and will get that language to you as soon as possible. You indicated that you would not object to extending the maintenance period to 20 years for South Carolina EACs as well. We urge you to do so by including in the South Carolina SIP language identical to the language proposed for incorporation in North Carolina's SIP.

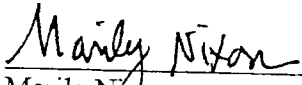
Finally, at the meeting we requested two types of documentation from DHEC. First, we raised concerns about South Carolina's modeling and whether it now shows that all areas will meet attainment dates for the 8-hour ozone standard. You assured us that it does make this showing. Our analysis of the state's EACs is based on the assumption that the modeling does show attainment. You agreed to send us detailed modeling information; we look forward to reviewing that information. Second, we discussed the commitments DHEC is negotiating for emissions reductions from eight point sources. These sound like promising negotiations. We requested that you identify the point sources, quantify the expected emissions reductions and the equipment/methods for obtaining those reductions, and send us copies of MOAs or permit revisions showing those reductions have become enforceable commitments. We look forward to receiving that documentation from you.

In summary, we urge that all South Carolina EACs be revised to meet our general recommendations; that each EAC incorporate at least one strong land use measure and one strong VMT-reducing measure; and that the Columbia and Greenville/Spartanburg area EACs be revised according to our specific analysis of their provisions. We further urge that DHEC include in the state's SIP a provision extending the maintenance period for EAC areas consistent with the language North Carolina plans to include in its SIP. Also, we look forward to receiving the modeling and point source information from DHEC.

Thank you for the opportunity to present these recommendations to you. We look forward to continuing to work with you to improve the South Carolina's EAC program and to achieve clean air as soon as possible for the citizens of South Carolina.

Sincerely yours,


J. David Farren
Senior Attorney


Marily Nixon
Staff Attorney

cc: South Carolina Sierra Club (Eric Thompson)
South Carolina Coastal Conservation League (Nancy Vincent)

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September 7, 2004

Richard Schutt
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Sam Nunn Atlanta Federal Center
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Atlanta, GA 30303-3104

Re: Improvements to Early Action Compacts in North and South Carolina

Dear Mr. Schutt:

This letter is to update you on the efforts the Southern Environmental Law Center ("SELC") and others are making to improve the Early Action Compacts ("EACs") in North and South Carolina and to solicit your participation in continuing this work.

As you know, after the March 31, 2004 milestone, when EAC groups were required to submit final control measures to the Environmental Protection Agency ("EPA"), a group of environmental and public health organizations, including SELC, worked with EPA to identify EACs that did not meet the minimum requirements of the EAC program. As a result, two EACs from Tennessee were eliminated from the program. While SELC in particular raised serious concerns about the North and South Carolina EACs, ultimately we did not ask EPA to eliminate them from the program at that time, instead choosing to work with the EAC groups to try to improve the EAC documents prior to the December 2004 deadline for incorporating the EAC control measures into each state's State Implementation Plan ("SIP").

During our several conference calls in April 2004, EPA acknowledged that many of the EAC documents were not yet in final form and that their control measures would need to be revised to meet the requirement that the measures be specific, quantifiable, permanent, and enforceable when incorporated into the SIP. While SELC believed at the time, and continues to believe, that the EACs were required to be in final form as of March 15, 2004, we nonetheless agreed to work with the EAC groups in our state to improve the EACs to the extent possible by the December 2004 deadline. EPA expressed support for our efforts, assuring us that if the EACs fail to improve sufficiently by the December 2004 deadline, EPA will consider eliminating additional EACs from the program.

Since the last EAC milestone in April, SELC has worked closely with North Carolina Department of Environment and Natural Resources, Division of Air Quality ("DAQ"), staff to improve existing EAC measures and include new measures as appropriate to make the EAC

program more robust. We have held several meetings and conference calls with DAQ and have submitted extensive documentation, including recommendations for improving specific EAC control measures. In addition, we met with the TRIAD EAC group and held a telephone conference with the Unifour EAC group; we expect to meet with the Fayetteville EAC group in September. We have already scheduled additional meetings with the TRIAD EAC group and will continue to make ourselves available to work with them and the other EAC groups to improve the EAC documents. Similarly, we have met with South Carolina Department of Health and Environmental Control, Bureau of Air Quality ("BAQ"), staff, submitted written recommendations for improving control measures contained in the key South Carolina EACs, and have made ourselves available for meetings or telephone calls with the key South Carolina EAC groups.

We believe there is an opportunity to improve North and South Carolina's EACs by the December deadline. However, the EAC documents all need substantial improvement to meet the minimum standards and it is unclear whether the political will can be generated to make the necessary improvements. Unless all parties actively engage in improving the EACs, SELC will be forced to consider recommending that EPA eliminate some or all of the North and South Carolina EACs from the program. As you are aware, a facial challenge to the EAC program has been filed in the D.C. Circuit Court of Appeals by a coalition of environmental and public health groups, but with the desire to have this issue "stayed" pending a review of the EACs at the December 2004 milestone. It is our hope that all EACs that do not meet minimum standards will be eliminated to avoid the need to seek a judicial ruling on the validity of the EAC program.

We welcome EPA's participation in our efforts on the North and South Carolina EACs to maximize our chance of improving the documents to an acceptable level. Please let us know how EPA plans to address this issue between now and the EAC milestone in December.

Sincerely yours,



J. David Farren
Senior Attorney



Marily Nixon
Staff Attorney

Cc: Stan Meiburg, EPA Region IV
Kay Prince, EPA Region IV
David Cole, EPA
Brock Nicholson and Sheila Holman, NCDAQ
Henry Phillips, SC DHEC
Renee Shealy, SC DHEC

GENERAL RECOMMENDATIONS FOR ALL SOUTH CAROLINA EACs

- Revise measures to ensure they *can* happen. Revise assumptions that are too aggressive. Where there is a cost associated with a control measure, quantify the cost, identify the source of funds, and commit to expend them.
- Revise measures to ensure they *will* happen. Include specific, quantified commitments. Rather than “consider” a control or a “possible” strategy, commit to implementing it and give details of what agency or jurisdiction will implement the strategy, when, and how. Include commitment to actual, realistic implementation dates and specific results. Document the necessary commitment by agencies and/or EAC jurisdictions. Demonstrate that the measures will be permanent.
- Revise measures to ensure they will *make a change*.
 - Distinguish controls that are already being implemented from new controls that are being used to justify deferral of the nonattainment designation. Strengthen the latter.
 - Design local controls to provide a safety margin for attainment, rather than to barely avoid violating the 8-hour ozone standard.
 - Adopt and implement land use controls with “teeth.” Use of aspirational statements like “remove local barriers to densification” or “integrate transportation planning with land use planning” falls far short of adequate commitments by EAC jurisdictions that will achieve substantive change in development patterns. EPA’s guidance document, “Improving Air Quality Through Land Use Activities” (Jan. 2001), gives examples of land use controls, including increasing development density near transit stations and transit corridors, limiting parking supply, reserving parking close to buildings for carpools and vanpools, use of transferable development rights, setting minimum densities in central areas and around transit facilities, granting financial and non-monetary incentives for development that focuses on existing urban areas and infill, granting incentives for development that locates transit- or pedestrian-oriented amenities like housing or childcare near commercial uses and pedestrian facilities, requiring mixed uses in target areas and/or granting financial incentives for mixed uses, and requiring pedestrian-friendly design elements in new development.
 - Similarly, identify and use financial incentives (e.g., bus subsidies), financial disincentives (e.g., parking fees), and parking management (e.g., limit parking supply) tools to increase transit use.
 - Include measures that ensure development and transportation plans and projects do not worsen air quality (“conformity-type” measures). For example, EAC jurisdictions could amend their transportation plans to include only those projects that will not degrade air quality, or to require that any project that will degrade air quality is

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JULY 30, 2004

preceded by a project that will improve air quality. Additionally, EAC jurisdictions could amend their development codes to prohibit approval of zoning and/or subdivision applications unless the applicant demonstrates that the project, along with related and projected traffic impacts, will not harm air quality.

- Include measures that ensure new stationary sources will not exacerbate the nonattainment problem (New Source Review-type measures).

SPECIFIC RECOMMENDATIONS - SOUTH CAROLINA EARLY ACTION COMPACTS - COLUMBIA AND GREENVILLE/SPARTANBURG AREAS

COLUMBIA AREA (Richland and Lexington Counties)

Richland County

This EAC contains some good ideas, but all need to be strengthened to ensure they will produce real air quality impacts.

- Identification of county air quality contact will not result in direct air impacts.
- Gas can exchange project. Good project. Should show commitment to annual event, establish goal for number of cans exchanged.
- Support state regulation changes. This does not add to existing state efforts.
- Promote land use planning. This measure states that Richland County is rewriting its land use code. This is an important measure, and the proposed code changes are substantial. However, the EAC should specify key air quality-related provisions the county will include in the code. Key provisions are those that reduce vehicle miles traveled and/or provide requirements and strong incentives to achieve a real reduction in sprawl-type development patterns. Without detail on air-related improvements it is impossible to gauge how much impact the proposed code revision will have on air quality in the Columbia area. Also, the landscaping standards have been held up at the Planning Commission level. Finally, how will this provision be included as an enforceable measure in the SIP?
- Join the Clean Cities program. Laudable, but will not result in direct air impacts.
- Formation of industry advisory panel. Will not result in direct air impacts. Should include public interest and science representatives on the panel. Should establish quantifiable goals for the panel and commit to them in the EAC.
- Replacement of gas golf carts with electric. The name of the measure "under consideration" is "Require replacement" of carts; however, the county has simply "recommended" future purchase of electric carts in future, and the EAC states that "emphasis will be placed" the next time a golf cart is purchased. This is not a powerful measure, but the county should commit at a minimum to replacing all gas-powered carts with electric and should establish a schedule for doing so.
- Use of alternative fuels for public fleets. This measure states that the county "is looking" to purchase "around" 15 CNG vehicles in FY 2004-05. This is a good measure, but the

county should commit to purchasing 15 vehicles in FY 2004-05 and should commit the funds to do so. The county should also make specific commitments to replace all practical vehicles with alternative fuels vehicles within a specified time period.

- Ozone awareness education. Laudable, but will not result in direct air impacts.
- Meet with other local governments about their programs. Laudable, but will not result in direct air impacts. Should identify specific measures used by other local governments, analyze how they can be effectively implemented in Richland county, and commit to implementing them.
- Use compressed work weeks and flex hours. Laudable, but should do more than “hope to expand” the program. How many other departments will make it available to how many additional employees? When?
- Encourage car- and vanpooling. Need information about how carpooling will be encouraged. Should set aside close-in parking spaces for car- and vanpoolers and require businesses to do so as well as part of the development code. Should offer other concrete incentives to ensure better participation.
- Develop city and county energy plan. The county commits to nothing here; it simply states that it currently promotes recycling and that it will remind employees to turn off lights and computers. However, an energy plan is a much more aggressive step that the county should commit to take. The county should complete an energy plan that includes an energy audit for all county buildings and should commit to implementing all measures identified in the energy audit. The county should also require energy efficiency as a component of its development code.
- Encourage mass transit. The county says use of transit is “encouraged.” However, the county should identify specific ways in which it will increase transit use, including such mechanisms as reduced or free fares, employer-provided or subsidized passes, and/or additional transit lines or improved schedules.
- Encourage the public not to overfill fuel tanks. This is fine, but a fairly minor provision.
- Restrict mowing times, especially during ozone season; promote the use of electric and propane mowers. The county commits to nothing in this measure, simply stating that “ozone action days will be a factor in scheduling county activities.” The county also states that it seeks cooperation from large landscaping firms in refraining from using gas-powered equipment on ozone action days. The county should commit not to do any mowing on ozone action days and to switch over to use of all non-gas powered equipment by a specified date. The county should prohibit any use of gas mowers by citizens, contractors, or government on ozone action days and should provide real incentives to landscaping companies to switch to non gas-powered equipment.

- Landscaping standards in development code. These have stalled at the Planning Commission. There is no assurance that they will be passed or that, as passed, they will be aggressive enough.
- Reductions of emissions at International Paper and SCE&G facilities. This measure describes mostly controls that are already required or controls that are being evaluated but for which the facility has made no commitment. All commitments should be quantified and fully documented and any promised emissions reductions should be required by the facility's Title V air permit.
- Open burning ban during ozone days. This "measure" is just an attempt to cobble together minor restrictions that don't address the issue substantively. At a minimum, the county should ban all burning throughout the county, except in emergency/public safety situations, from May through September.

Lexington County

Overall, this EAC identifies some potentially effective tools, but fails to give details or proof of commitment to the tools or results to be achieved. The existing provisions should be strengthened and the county should include additional measures that will demonstrably reduce vehicle miles traveled.

- Identification of a county Ozone Action Coordinator and industry/municipality Ozone Action Contacts will not result in real air impacts.
- Park and ride facilities: staff "will be contacting" churches, shopping centers, etc., with large parking lots to "discuss" program. This is a good idea, but there needs to be demonstrable commitment. For example, the EAC should pinpoint specific locations for park and ride lots, documentation should be supplied showing agreement by the site owner for specific number of spaces allotted, and commitment by the transit provider to serve the lots.
- Alternate work schedule: "discuss" with companies and municipalities. This is too vague. Should have commitments from participating entities and/or firm incentives in place.
- Bio-diesel/alternate fuels: "investigate" feasibility of these methods. There needs to be specificity about what program is proposed – early replacement of old vehicles with AF vehicles at a specified rate per year – and commitment from entities participating in the program.
- Idle reduction. This is a minimal provision, but should at least be supported with documentation of county policies.

- Landfill methane reduction. "Analyze" methane production and reduction, recycling efforts. There need to be specifics about what analysis is being conducted, by whom, the deadlines for the analysis, sources of funding, expected results, etc.

GREENVILLE/SPARTANBURG AREA (Greenville, Spartanburg, and Anderson Counties)

These three counties submitted a joint document titled "List of Possible Emission Reduction Strategies Under Consideration." These EACs contain some good ideas but they all need to be strengthened to produce real air quality impacts.

1. Support state efforts. This measure does not add to existing state efforts.
2. Designate Ozone Action Coordinator. This measure will not result in direct air impacts.
3. Seek low sulfur fuels as soon as possible. Laudable, but won't necessarily result in direct air impacts. Are there incentives the local governments or state can employ to encourage provision of fuels as soon as possible?
4. Design and implement congestion management measures. This is a good measure, but the counties need to commit to exact measures to implement and when.
5. Use of hybrid vehicles. "Encouraging" agencies and the public to purchase hybrids is not going far enough. The counties need to commit to switching their fleets over to hybrids or alternative fuel vehicles by a specific date and obtain commitments from resident businesses to do the same. The counties should also offer incentives to convince the public to switch over.
6. Use of higher efficiency engines for school buses. If the counties are committing to switch over to high efficiency engines, that commitment should be documented. Also, does this provision include a commitment to use bio-diesel/alternative fuels?
7. Transit measures:
 - Develop incentive programs for citizens to use alternative transit. Laudable, but what specific commitments are counties making to specific programs? Rather than simply describing future options for mass transit (most of which would occur, if at all, after the 2007 deadline for attainment), identify and commit to take key measures now that will affect air quality now.
 - Free or reduced transportation cost on high ozone days. Good measure, but there needs to be demonstrated commitment. Consider use of free or reduced transportation cost throughout ozone season. Also include measures to subsidize transit passes or enlist employers to do so.

- Develop use-friendly transit systems. Show how the counties are integrating transportation planning with land use planning and removing local barriers to densification. Include commitments to time frames, funding, results.
8. Update air emissions inventory. This is not a provision to improve air quality, but rather an argument why the base information is incorrect. It does not reflect real air emission reductions and should be deleted from the EAC.
 9. Support state efforts to seek reductions from major sources. This measure appears to include emissions reductions already required at the federal level (e.g., it claims 2,000-4,000 tons/year NO_x reduction from the NO_x SIP Call), emissions reductions that may be captured as a result of state initiatives, and the possibility of developing an Early Reduction Program with "Tier Two Type emission NO_x sources." The local EAC cannot take credit for emissions reductions required by the state program, for which the state is already taking credit. The only measure that looks like it might be local is the Early Reduction Program. If so, details should be presented and commitments demonstrated to support the claimed 500-1000 tons/year NO_x reductions.
 10. Program to purchase/repair smoking vehicles. These sound like good ideas. Need evidence of commitment, authority to carry them out (e.g., state and/or local regulations), details of how funding and programs will work, realistic expectations for quantifiable results (e.g., how many smoking cars will each program get off the road by the end of 2007?). Also, "consider" early vehicle retirement programs is no commitment at all. Will the programs be implemented? If so, give details. If not, "considering" the program adds nothing to the local program.
 11. Open burning ban. Has this been adopted, or is it the assumption that the statewide ban covers this issue?
 12. Incentives for purchase of high efficiency and low emissions vehicles. These sound like good ideas. Need evidence of commitment, authority to carry them out (e.g., state and/or local regulations), details of how funding and programs will work, realistic expectations for quantifiable results (e.g., how many low efficiency/high emissions cars will each program get off the road by the end of 2007?).
 13. Use land-use and transportation planning to improve air quality. Need details of which jurisdictions have "included air quality measures as a part of the land-use and transportation planning process." How have they done this? Show that code revisions have been adopted.
 14. Implement green power program. This measure refers to capturing landfill gas and implementation of a Purchase Green Power program "when available." What are the exact steps the counties are committing to in this measure? When must those steps occur, and what are the expected results? As written, this measure includes no commitment to do anything.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OCT 14 2004

MEMORANDUM

SUBJECT: State Implementation Plan (SIP) Submittals for Early Action Compact Areas (EACs)

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

FROM: G.T. Helms, Group Leader
Ozone Policy and Strategies Group

G.T. Helms

TO: Air Directors, Regions III, IV, VI and VIII

Based on conversations and meetings between the Office of Air Quality Planning and Standards (OAQPS), Regional Offices, and environmental groups, the Environmental Protection Agency (EPA) is concerned that many of the measures that were submitted by March 31, 2004 are not clearly and fully described in sufficient detail to convince the Agency that the SIP submittal will be approvable. In addition, we are concerned that the information we have received so far does not clearly document that all measures will be adopted and implemented. In some cases, there does not appear to be a strong commitment by the local area and/or the State to adopt and implement the measures that will result in meaningful reductions of nitrogen oxides (NO_x) and/or volatile organic compound (VOC) emissions.

We understand that this memorandum is coming at a time when some, perhaps many States and local areas are finalizing their SIPs for submittal. The purpose of this memorandum is to assist States in preparing their EAC SIPs for submittal to EPA by December 31, 2004. Our goal is to approve each SIP submittal, but based on the March 31 submittals, we are concerned that the information may not clearly document that all measures will be adopted and implemented. We would like to see SIP language that indicates a strong commitment by the local area and/or the State to adopt and implement these measures.

This memorandum provides clarification beyond the general and specific guidance, previously issued for SIPs and EAC areas.¹⁻³ Below are some additional guidelines that clarify what States should include in these SIPs.

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- 1 Memorandum from Jeffrey R. Holmstead, Assistant Administrator, EPA, "Schedule for 8-Hour Ozone Designations and its Effect on Early Action Compacts", November 14, 2002.
 - 2 Memorandum from Lydia N. Wegman, Director, Air Quality Strategies and Standards Division, Office of Air Quality Planning and Standards, EPA, "Early Action Compacts (EACs): The June 16, 2003 Submission and Other Clarifications", April 4, 2003.
 - 3 "Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-hour Ozone Standard", Texas Commission on Environmental Quality (Protocol), March 2002. The EPA endorsed the Protocol in a letter dated June 19, 2002, from Gregg Cooke, Administrator, EPA Region VI, to Robert Huston, TCEQ. The Protocol was revised December 11, 2002, based on comments from EPA.

1. Clearly identify and describe the measures (local and State) that the State and/or local area is committing to implement and submit as a federally-enforceable SIP revision.
2. Clearly identify and describe the measures that the local area or State are committing to implement as voluntary, non-regulatory and not intended to be federally enforceable. These measures should be included in the SIP narrative and should describe the extent to which the voluntary measures will be verified/monitored by the State, or the extent to which the area will be held accountable for implementing the measures no later than December 31, 2005.
3. In describing any measure, avoid the use of vague language, such as “encourage the adoption of...”; “support the implementation of ...”; “considering the adoption of...” These descriptions do not constitute adoption of measures.
4. Clear language and documentation that measures have been or will be implemented by the 2005 ozone season, or no later than December 31, 2005. For each measure, the submittal should include the date the measure was adopted by the State or local area, and a schedule for implementation.
5. In accordance with the November 14, 2002 memorandum from Jeffrey Holmstead, EPA, the SIP submittal shall include measures that are specific, quantified, and permanent.
6. For those measures (voluntary and regulatory) that are quantifiable, SIPs should identify and describe the quantification method, calculation procedure, and/or quantification protocol used to calculate emissions reductions. Specific references to EPA guidance should be provided if that guidance is the basis for the quantification method. If a non-EPA protocol or quantification method is used, that method should be clearly identified.
7. Where measures are not quantifiable or not easily quantifiable, these measures should be identified. The SIP submittals should document that these measures are directionally sound and describe the benefits these measures will have. For example, an EAC area may decide to adopt an ordinance requiring bike paths, but the emissions reduction benefit for this measure is not easily quantifiable. In this example, the local area/ State should clearly describe the benefits to the community (e.g., reductions in VMT; promotes healthy lifestyle and quality of life).
8. Each area should incorporate additional information based on comments on the March submittals regarding modeling protocol, the technical support document describing the modeling and interpretation of the modeling results. Please also provide any additional analyses and the rationale for how these demonstrate attainment.

Questions on this memorandum should be directed to David Cole of my staff at 919/541-5565.

6.0 MAINTENANCE PLAN

Although the EAC process does not require a maintenance plan to be submitted with the attainment demonstration, North Carolina intends to implement a maintenance plan similar to what is required in Section 175A of the Clean Air Act.

The following section describes the commitments by North Carolina for the EAC maintenance plan, its update in 2015, annual tracking of both stationary and mobile sources and a continuing planning process under the Early Action Compact. These commitments are in force unless the 8-hour ozone standard is revoked in the future. North Carolina believes that would happen only in the event that the USEPA revises or revokes the current 8-hour ozone standard of 0.08 parts per million.

6.1 Section 175A Maintenance Plan Requirement

To redesignate an area to attainment, Section 175A of the Clean Air Act requires that the State develop a maintenance plan that shows how the area will maintain the respective NAAQS for at least ten years after the redesignation. Normally, the maintenance plan is submitted after the attainment demonstration State Implementation Plan (SIP) has been submitted and implemented, typically 3 to 5 years later, depending on the actual attainment date. However, the process is different under the EAC SIP. North Carolina will prescribe that the EAC SIP covers not only the attainment demonstration through 2007, but also the first ten-year period of the maintenance plan, 2007-2017, including a mid point evaluation of 2012.

In addition to the 10-year maintenance plan requirement, Section 175A also requires an updated maintenance plan 8 years after the area is redesignated to attainment. The updated maintenance plan must cover the 10 years following the expiration of the first 10-year period of the original maintenance plan. The NCDAQ will develop the maintenance plan for the period 2017 – 2027 on the following schedule:

1. 2013: Begin emission inventory and air quality modeling work. This start date will allow NCDAQ to use the 2010 U.S. Census information in the emission inventory development.
2. 2015: Complete emission and modeling work, submit updated maintenance plan to the USEPA.

Section 175A also requires contingency provisions:

Each plan revision submitted under this section shall contain such contingency provisions as the Administrator deems necessary to assure that the State will promptly correct any violation of the Standard which occurs after the redesignation of the area as an attainment area. Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area.

North Carolina's maintenance plan does not include contingency measures in the EAC SIP since the provisions in the EAC SIP are to address both attainment and maintenance needs and will remain as part of the SIP throughout the attainment and 20-year maintenance periods. North Carolina will not remove any of the measures that are in the EAC SIP upon the USEPA's determination that the areas have attained the 8-hour ozone NAAQS. Further, the modeling analysis for 2012 and 2017 show a downward trend in emissions, as well as expected air quality values. NCDAQ believes that the contingency measure adoption approach as outlined in the following annual tracking for growth mechanisms is the most appropriate way to address the contingency provision requirements of Section 175A.

NCDAQ believes this process and schedule are consistent with the requirements and intent of Section 175A of the Clean Air Act.

6.2 Annual Tracking for Growth

The EAC requires the following elements be tracked in order to ensure that the standard is maintained:

1. An annual review of growth (especially highway mobile and stationary point source) to ensure emission reduction strategies and growth assumptions are adequate;
2. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates.

6.2.1 Stationary Point Sources

Annual Analysis

To meet the annual review of growth of stationary point sources, NCDAQ will do the following analysis. The obligation to conduct these analyses and, where indicated adopt and implement additional control measures based on the result of the analyses, lasts throughout the maintenance period (that is, through 2027).

Beginning with the December 2005 biannual progress report, every year NCDAQ will evaluate the most recent annual stationary source **emission inventory**. The stationary point source emission inventory for NO_x will be compared to the 2000 annual inventory used in the air quality modeling analyses for the attainment demonstration (e.g., For the December 2005 report, this inventory would be for 2003.) The comparison will be done on both a county-by-county basis, and a composite for the entire EAC area.

Action Trigger:

If the actual stationary source NO_x **emissions** are greater than 10 percent higher than those emissions used in the modeling analysis either for an individual county or for the entire area and

there has also been a corresponding increase in the ozone levels in the area such that the latest 3 year design value is greater than 0.080 ppm, North Carolina will identify and implement additional controls on stationary sources sufficient to offset the growth in stationary source NO_x emissions. North Carolina believes that this is an appropriate trigger since at 0.080 ppm design value is an indicator that an area is approaching the NAAQS and measures should be taken to address the increase. The analysis may involve additional modeling runs before control measures are adopted as part of the SIP. Any additional rules would be effective as soon as practicable, but no later than two years of the finding that emissions growth were exceeding those used in the air quality modeling analyses. Any voluntary measures would be effective as soon as practicable, but no later than one year of the finding that emissions growth or growth rates were exceeding those used in the air quality modeling analyses.

6.2.2 Highway Mobile Sources

Annual Analysis

To meet the annual review of growth in highway mobile sources, NCDAQ will do the following analyses:

Beginning with the December 2005 biannual progress report, each year NCDAQ will evaluate the most recent annual VMT data available. The actual annual growth rate from 2000 will be compared to the average annual growth rate used in the modeling analysis from 2000 through 2007 (e.g., For the December 2005 report, this VMT data would be for 2004.) The comparison will be done on both a county-by-county basis, and a composite for the entire EAC area.

Action Trigger:

If the VMT **growth rate** is greater than 10 percent higher than the average annual growth rate used in modeling either for an individual county or for the entire area and there has also been a corresponding increase in the ozone levels in the area such that the latest 3 year design value is greater than 0.080 ppm, North Carolina will then estimate highway mobile emissions and evaluate whether the emissions are higher than those used in modeling. If the **highway mobile emissions** are greater than 10 percent higher than those emissions used in the modeling analysis either for an individual county or for the entire area and there has also been a corresponding increase in the ozone levels in the area such that the latest 3 year design value is greater than 0.080 ppm, North Carolina will identify and implement additional controls on highway mobile sources sufficient to offset the growth in emissions. North Carolina believes that this is an appropriate trigger since at 0.080 ppm design value is an indicator that an area is approaching the NAAQS and measures should be taken to address the increase. Additionally, the current long range transportation plans and transportation improvement programs will be evaluated to determine what changes might be needed to offset the growth in VMT and corresponding degradation in air quality. The analysis may involve additional modeling runs before control measures are adopted as part of the SIP. Any additional rules would be effective as soon as practicable, but no later than two years of the finding that emissions growth or growth rates were exceeding those used in the air quality modeling analyses. Any voluntary measures would be

effective as soon as practicable, but no later than one year of the finding that emissions growth or growth rates were exceeding those used in the air quality modeling analyses.

6.3 Air Quality Analysis

For purposes of determining if an area has a corresponding increase in ozone, North Carolina will review as part of the biannual December reports

- Design Value Trends – Most recent design values (3 year average of the 4th highest 8-hour ozone average), compared to the trend in design values from the 1994-1996 timeframe to present.
- 8-Hour Ozone Exceedances – Number of exceedances of the 8-hour ozone standard at each monitor in the EAC areas for the most recent ozone season, compared to the number of exceedances at each monitor from 1994 to present.
- 1-Hour Ozone Design Value Trends – Most recent 1-hour ozone design values compared to the trend in 1-hour ozone design values from the 1994-1996 timeframe to present.
- 4th Highest Value Trends – 4th Highest 1-hour ozone value compared to the 4th highest 1-hour ozone value from 1994 to present.
- 1-Hour Ozone Exceedances – Number of exceedances of the 1-hour ozone standard at each monitor in the EAC areas for the most recent ozone season, compared to the number of exceedances at each monitor from 1994 to present.
- Weather Patterns – Discussion of weather patterns and climatology in most recent ozone season.

6.4 Continuing Planning Process

In addition, the EAC protocol also requires a continuing planning process, including modeling updates and modeling assumption verification. Since the larger source sectors for NO_x emissions will be covered in the annual stationary point source and highway mobile source evaluation discussed above, NCDAQ proposes to evaluate in 2008 whether a full modeling update is needed for the EAC areas. At this point, DAQ will use the full emission inventories submitted as part of the CERR process. All emissions will have been inventoried in 2007 for calendar year 2005. These emissions will be used to evaluate whether a full modeling update is needed. These emissions can also be used to determine if a particular source sector is growing a higher growth rate than previously forecast, and if so, whether contingency measures should be adopted to be implemented in the event the sector began causing 8-hour ozone standard violations. The State may conduct any of the above analyses and reviews on a combined area basis as appropriate to utilize resources more effectively.

6.5 General Timeline

- December 2004 – DAQ submits EAC SIP, covering both attainment date of 2007 and first 10-year maintenance period through 2017
- December 2005 – DAQ and EAC areas implement EAC measures
- December 2005 – First annual tracking report is submitted for each EAC area
- December 2006 – Second annual tracking report is submitted for each EAC area
- December 2007 – Attainment date
- December 2007 – Third annual tracking report is submitted for each EAC area
- April 2008 – EPA designates area for the 8-hour ozone standard
- December 2008 – DAQ completes evaluation of new emissions data and determines whether revised modeling analysis is required
- December 2008 – Fourth annual tracking report is submitted for each EAC area and continues for each year thereafter through the end of the maintenance period.
- January 2013 – DAQ begins work on 10-year maintenance plan update
- December 2015 – DAQ submits 10-year maintenance plan update
- December 2027 – 20 year maintenance plan and annual tracking for growth concludes

Improvements to North Carolina Maintenance Language

If the Clean Air Act were faithfully applied, North Carolina would be required to submit a maintenance plan for all nonattainment areas (which would include all areas now covered by an EAC other than the Mountain Area EAC Area, which now monitors attainment for the 8-hour ozone NAAQS) along with the Attainment Demonstration. However, EPA does not require states to submit a maintenance plan for EAC areas. Nevertheless, North Carolina has proposed a 20-year maintenance plan for EAC areas that includes annual tracking of stationary and mobile sources and a continuing planning process. *See* Attainment Demonstration, Section 6.0, pp. 102-106. Inclusion of a 20-year maintenance plan for EAC areas brings the EAC program closer to meeting Clean Air Act requirements with respect to maintenance of the NAAQS. We applaud North Carolina for including the maintenance plan, but urge the State to revise the plan to provide more certainty that it will be effective in helping the EAC areas maintain the NAAQS over time.

The maintenance plan should be revised in three respects. First, the maintenance plan should expressly state that if an EAC area violates the NAAQS during the maintenance period, Transportation Conformity and New Source Review will be automatically triggered for that area. Under Section 175A of the Clean Air Act, which North Carolina cites as its model for the 20-year maintenance period, all control measures included in the attainment plan, which for a nonattainment area not subject to an EAC would include Transportation Conformity and New Source Review, must be included in the maintenance plan as contingency measures. The contingency measures would be triggered if the area subsequently violates the NAAQS during the maintenance period. As a legal matter, we believe Section 175A of the Clean Air Act *does* apply to the EAC areas despite EPA's device of "deferring" the nonattainment designation for these areas. Thus, all requirements of Section 175A apply, including the requirement to identify Transportation Conformity and New Source Review as contingency measures in the maintenance plan. This is the correct approach from a policy perspective, as well. While the EAC areas may avoid Transportation Conformity and New Source Review during the three-year attainment period in exchange for implementing other state and local measures that theoretically will help bring the areas into attainment, there is no justification for continuing to allow these areas to avoid Transportation Conformity and New Source Review if the EAC measures are unsuccessful and the area later violates the NAAQS. Thus, North Carolina should add Transportation Conformity and New Source Review to its maintenance plan as contingency measures that will be triggered if the area violates the NAAQS during the maintenance period.

Second, North Carolina's obligations to address higher than expected stationary and mobile source emissions are not triggered unless there is a "corresponding" increase in "the ozone levels in the area such that the latest 3 year design value is greater than 0.080 ppm...." *See* Attainment Demonstration, Section 6.2.1, 6.2.2. The term "corresponding" is vague and will invite unnecessary argument over when the State's obligations are triggered. One interpretation of the term, one that we do not believe is intended by the State, is that a design value of more than 0.080 parts per million will not trigger any State action unless the elevated readings can be demonstrated to have been *caused* by an increase in stationary source emissions or mobile source emissions. It would be difficult, if not impossible, to show that an increased design value is *caused* by a particular type of emissions source. As a result, inclusion of this term could

severely undermine the State's commitment to track and address emissions growth. We thus urge North Carolina to delete the word "corresponding" from Sections 6.2.1, 6.2.2, and 6.2.3 of the maintenance plan.

Third, in Section 6.2.2, North Carolina should identify what "additional controls" it will implement for highway mobile sources to offset higher than expected mobile source emissions. As the language now reads, no controls are identified. Thus, North Carolina's promise to select additional controls provides no assurance that the additional controls will effectively offset mobile source emissions growth or provide real air quality benefits. We urge North Carolina to include a list of effective transportation-related controls in the maintenance plan from which it can select one or more additional controls if mobile source emissions rates grow faster than expected. We recommend that the State include in the list measures such as those set out in Section 108(f) of the Clean Air Act.