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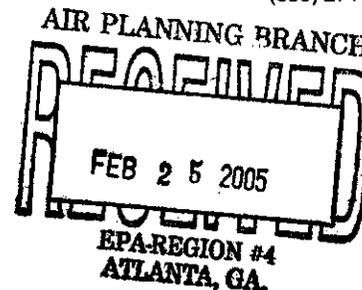
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February 22, 2005



*SENT VIA FACSIMILE (404-562-9066) AND OVERNIGHT FEDERAL EXPRESS*

Mr. James I. Palmer, Jr.  
Regional Administrator  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303-3104

Dear Mr. Palmer:

In a final rule published on January 5, 2005, EPA established initial air quality designations and classifications for the fine particles (PM<sub>2.5</sub>) National Ambient Air Quality Standards (NAAQS). 70 FED. REG. 944 (January 5, 2005). With respect to North Carolina, EPA's final rule designated Guilford County as "Nonattainment." 70 FED. REG. at 992.

EPA issued its designations for the PM<sub>2.5</sub> NAAQS based upon air quality monitoring data from Federal reference method monitors for calendar years 2001-03. 70 FED. REG. at 946, 948. Nevertheless, EPA acknowledged it should use calendar year 2004 monitoring data in its designation process where the 2004 data are complete, quality assured, and certified. 70 FED. REG. at 948.

The purpose of this letter is to submit to EPA the 2004 air quality data for the Guilford County, North Carolina, PM<sub>2.5</sub> monitor and seek EPA's reconsideration of its nonattainment designation for Guilford County. The data for Guilford County are complete, have been quality assured, and have been submitted to the EPA Air Quality Systems (AQS) database. The data confirm that EPA's nonattainment designation for Guilford County was unwarranted and technically unjustified. Based on the 2004 data and the other data and information in its docket for the final rule (Docket ID No. OAR-2003-0061), Guilford County requests that EPA:

1. withdraw its nonattainment designation for Guilford County for the PM<sub>2.5</sub> NAAQS, as announced in the January 5, 2005 final rule, and
2. issue an attainment designation for Guilford County for the PM<sub>2.5</sub> NAAQS.

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## BACKGROUND

On February 17, 2004, the State of North Carolina submitted its recommendations for designation of nonattainment areas for the PM<sub>2.5</sub> NAAQS. Docket ID OAR-2003-0061-0153. The State recommended that all areas in North Carolina be designated as attainment except for two counties: Davidson County (entire county designation) and Catawba County (partial county). The State recommended that Guilford County be designated as an attainment area. The State submitted technical data and analysis supporting its recommendations on February 26, 2004. Docket ID OAR-2003-0061-0152 and -0154.

The State's recommendations were based on monitoring data for calendar years 2001 through 2003. Those data indicate that all air quality monitors in North Carolina show attainment of the PM<sub>2.5</sub> NAAQS (based on the three-year average of the averaged annual mean concentrations), except for two monitors – one in Hickory, Catawba County (15.5 µg/m<sup>3</sup>) and the other in Lexington, Davidson County (15.8 µg/m<sup>3</sup>). The State's technical analysis showed there was a "more local component to the particle pollution observed at these two sites." Docket ID OAR-2003-0061-0152 at 2. Specifically with respect to Davidson County, the technical analysis pointed out that the Lexington monitor is located "in close proximity to Interstate 85 and Highway 52 and could be influenced by heavy-duty diesel vehicles (HDDV) that use these corridors." Docket ID OAR-2003-0061-0154 at 5.

Guilford County has a PM<sub>2.5</sub> air quality monitor located in Greensboro. The data from the Guilford County monitor show attainment of the PM<sub>2.5</sub> NAAQS based on monitoring data for calendar years 2001 through 2003. The three-year average of the averaged annual mean concentrations of PM<sub>2.5</sub> for Guilford County – known as the "design value" – for calendar years 2001-03 is 14.0 µg/m<sup>3</sup>. (We understand that the State Division of Air Quality calculates the design value for the calendar years 2001-03 to be 14.0 µg/m<sup>3</sup>, and we understand EPA agrees this is the correct design value for 2001-2003. In any event, the design value for these three calendar years for Guilford County is at least 6% below the PM<sub>2.5</sub> NAAQS of 15.0 µg/m<sup>3</sup>.)

On June 29, 2004, EPA sent a letter to North Carolina indicating its intent to modify the State's recommended non-attainment designations for PM<sub>2.5</sub>. Docket ID OAR-2003-0061-0266 and -0591. EPA agreed that Davidson County should be designated as nonattainment because of its violating PM<sub>2.5</sub> monitor; but EPA also recommended that the MSA counties of Stokes, Guilford, Forsyth, and Randolph – counties that neighbor Davidson County – also be designated as nonattainment. EPA summarized, "Guilford, Forsyth and Randolph counties are adjacent to Davidson County and have large populations and large emissions." Docket ID OAR-2003-0061-0266, Enclosure at 3.

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On September 8, 2004, the State of North Carolina responded to EPA's recommendations. The State submitted additional data which confirmed its original recommendations that only Davidson County (full county) and Catawba County (partial county) should be designated as nonattainment. Docket ID OAR-2003-0061-0414 through -0418; Docket ID OAR-2003-0061-0588 and -0595. With respect to Guilford County, the State's analysis showed that: (a) the county is located northeast of Davidson County and, thus, Guilford County is predominately downwind of Davidson County during the summer months when  $PM_{2.5}$  concentrations are highest, and (b) the majority of emissions from Guilford County are from mobile sources, yet there is very little commuting from Guilford County into Davidson County. The State also reported:

North Carolina has an analysis that shows  $PM_{2.5}$  concentration and its relationship to population density in the Triad area. The Lexington monitor does not behave the same as surrounding monitors when considering the population around the monitoring site. The analysis suggests that the higher concentrations of  $PM_{2.5}$  in Davidson County are the result of local factors rather than broader population-related regional influences....

Docket ID OAR-2003-0061-0588 at 2, and attached Technical Support Document at 8, and attached App. C; Docket ID OAR-2003-0061-0417.

In its September 8, 2004 letter, the State of North Carolina specifically objected to EPA's then-recent introduction of its emissions-weighted approach for nonattainment boundary designations. The State pointed out that EPA's analysis failed to account for prevailing wind direction, incorrectly assumed that  $PM_{2.5}$  emissions impact a monitor equally throughout the year, failed to consider distance between  $PM_{2.5}$  emissions and monitors, and arbitrarily resulted in designations of counties (such as Guilford) as nonattainment even though monitors in those counties showed that the counties were in compliance with the  $PM_{2.5}$  NAAQS. The State also objected to the late introduction of EPA's emission-weighted analysis, which meant that this analysis could not be addressed by the Governors in their initial recommendations and conflicted with the state-federal interactive process prescribed by the Clean Air Act. Docket ID OAR-2003-0061-0588 at 4. *See also* Docket ID OAR-2003-0061-0595 (second document at 4); Docket ID OAR-2003-0061-0581.

On December 17, 2004, EPA transmitted its designations of  $PM_{2.5}$  nonattainment to the State of North Carolina, "identifying the areas in [our] state that do not meet the fine particle standards" and that "will require more actions to achieve a common goal of cleaner, healthier air..." Docket ID OAR-2003-0061-0534. Guilford County was one of the counties designated by EPA as nonattainment. Docket ID OAR-2003-0061-0534, Attachment. The designation was not based on the air quality monitor in Guilford County – that monitor showed and continues to show that Guilford County's air complies with the  $PM_{2.5}$  NAAQS. Instead, the designation was based on supposed

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contributions that Guilford County's population or sources make to Davidson County's violating monitor for PM<sub>2.5</sub>. Docket ID OAR-2003-0061-0615 at 6-219 through 6-226.

#### **SUBMISSION OF 2004 AIR QUALITY DATA**

The State of North Carolina recently submitted to EPA the Guilford County data for the fourth quarter of 2004, and we understand EPA now has the air quality data for the Guilford County, North Carolina, PM<sub>2.5</sub> monitor for the entire calendar year 2004. The data show a reduction in the PM<sub>2.5</sub> design value for Guilford County from 14.0 µg/m<sup>3</sup> (for calendar years 2001-03 data) to 13.7 µg/m<sup>3</sup> (for calendar years 2002-04 data). As shown by the enclosed letter from Hoke P. Kimball, Chief of Ambient Monitoring Section of our Division of Air Quality, these 2004 data for Guilford County are complete and have been quality assured and certified in accordance with EPA's requirements. *See* Letter dated February 21, 2005 from Hoke P. Kimball, Chief, Ambient Monitoring Section, Division of Air Quality, to Beverly Banister, Director of Air, Pesticides and Toxics Management Division, EPA Region IV (copy attached).

#### **ANALYSIS**

Guilford County believes (and we understand the State of North Carolina continues to believe) that there is no technical data or other evidence supporting EPA's designation of Guilford County as nonattainment for the pollutant PM<sub>2.5</sub>. The air quality data for the calendar year 2004 confirm our belief.

The basis of EPA's designation of Guilford County as nonattainment appears to be solely that Guilford County is a more urbanized area and has a larger population and somewhat higher emissions than other counties that border Davidson County. Docket ID OAR-2003-0061-0615 at 6-220 through 6-221. We believe this analysis is unreasonable; it ignores other, more important factors that should have been considered by EPA in its designation determination for Guilford County.

EPA's determination must mean it has concluded that one area with cleaner air (Guilford County) is contributing to a violation in a neighboring area (Davidson County). This is not a common sense conclusion. It would be logical to reach such a conclusion only if there were some material evidence showing that Guilford County air or sources are being transported to Davidson County in a way that materially affects Davidson's County's air quality. But there is no such evidence.

EPA's guidance suggests an analysis of nine factors in making nonattainment determinations for the pollutant PM<sub>2.5</sub>. Docket ID OAR-2003-0061-0002. EPA's review of the nine factors in the case of Guilford County (Docket ID OAR-2003-0061-0266, Enclosure; Docket ID OAR-2003-0061-

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0615 at 6-219 through 6-226) unreasonably considers the factors in isolation and fails to consider the significance of certain key factors, leading EPA to a conclusion that is contradicted by the evidence and common sense. A more reasonable, integrated approach shows:

*Factor 2 (air quality):* Guilford County is in compliance with EPA's PM<sub>2.5</sub> NAAQS; indeed, based on the 2004 air quality data, Guilford County's PM<sub>2.5</sub> concentrations are falling. In our view, this is the key factor. To designate Guilford County as nonattainment, in the face of this factor, demands a rational explanation.

*Factors 1, 3, and 5 (emissions and population):* Population, population density and growth, and emissions of PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors certainly are relevant factors in determining nonattainment boundaries for PM<sub>2.5</sub>. These appear to be determining factors for EPA's designation of Guilford County as nonattainment; indeed, population appears to be counted twice in EPA's guidance, for some reason. Docket ID OAR-2003-0061-0615 at 6-219 through 6-223 (*see* Factors 3 and 5). But the existence of sources, alone, cannot support EPA's nonattainment conclusion. Since Guilford County's air quality meets EPA's PM<sub>2.5</sub> standard, EPA must show air or sources in Guilford County are transported to Davidson County in a manner and amount that materially impacts the quality of Davidson County's air.

*Factors 4 and 6 (commuting and meteorology):* The two basic methods of transport are movement of mobile sources and wind. But neither factor supports EPA's conclusion that sources in Guilford County detrimentally impact Davidson County's air quality to a significant degree. To the contrary:

*Air flow.* The predominant air flow direction is more from the southwest – that is, from Davidson County toward Guilford County. Docket ID OAR-2003-0061-0154 at 8. As the State of North Carolina has pointed out previously, Guilford County is “predominately downwind of Davidson County during the summer months when PM<sub>2.5</sub> is the highest.” Docket ID OAR-2003-0061-0595 (second document at 2); Docket ID OAR-2003-0061-0588, Technical Support Document at 4 and 6-7. EPA has asserted, “It is important to remember that PM<sub>2.5</sub> is a regional pollutant and can be transported by prevailing wind.” Docket ID OAR-2003-0061-0597 (second document at 1); Docket ID OAR-2003-0061-0550 (third document at 1). Yet the prevailing wind patterns in Guilford County show that PM<sub>2.5</sub> and its precursors are generally transported from Guilford County *away* from Davidson County, not *toward* Davidson County.

*Commuting.* There are no power plant sources in Guilford County. Docket ID OAR-2003-0061-0633 at 7-21 (Figure 7.20). Instead, a large majority of the sources of PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors in Guilford County are mobile sources. Docket ID OAR-2003-0061-0154, Appendix B at 4-6 (Table 2 and subsequent bar charts); Docket ID OAR-2003-0061-0595 (second document at

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2); Docket ID OAR-2003-0061-0588, Technical Support Document at 6-7. These are low level emissions that “would be expected to impact a local area monitor more than a monitor in another county.” Docket ID OAR-2003-0061-0588, Technical Support Document at 6. Yet there is very little commuting from Guilford County into Davidson County. Approximately 90% of Guilford County’s commuters stay in Guilford County; only 1% of Guilford County’s commuters – less than 3,000 – travel from Guilford County to Davidson County. This is even less than the number of commuters from Forsyth County (Davidson County’s nearest neighbor to the north) to Davidson County. Docket ID OAR-2003-0061-0266, Enclosure at 6; Docket ID OAR-2003-0061-0588, Technical Support Document at 6-8.

EPA recognizes these data, but does not reasonably consider them or their significance. *See* Docket ID OAR-2003-0061-0266, Enclosure at 6 and 8 (Factors 4 and 6); Docket ID OAR-2003-0061-0615 at 6-221 through 6-226. This is a flaw in EPA’s analysis. EPA’s conclusion concerning Guilford County is unreasonable, in light of the lack of evidence in the record that air or mobile sources are being transported from Guilford County to Davidson County in a manner or amount that would materially affect Davidson County’s air quality.

*Factor 9 (level of emissions control):* Guilford County’s ambient air meets the PM<sub>2.5</sub> NAAQS, and Guilford County and the State of North Carolina already have taken a number of measures to ensure that the PM<sub>2.5</sub> levels in Guilford County will continue to fall. *See* Docket ID OAR-2003-0061-0154 at 5 (Criterion 9) and Appendix D (Federal and state control strategies); Docket ID OAR-2003-0061-0588 at 1-2 and Technical Support Document at 1 and 6; Docket ID OAR-2003-0061-0615 at 6-224 through 6-225. There is no reasonable justification for seeking to impose even more regulatory controls on an area whose ambient air already meets the PM<sub>2.5</sub> NAAQS, whose PM<sub>2.5</sub> levels have been decreasing, and whose controls already in place are working and improving air quality in Guilford County.

## CONCLUSION

EPA states that “the CAA requires EPA to make nonattainment designations based on current data.” 70 FED. REG. at 948. The most current data show that Guilford County’s ambient PM<sub>2.5</sub> levels not only meet EPA’s PM<sub>2.5</sub> NAAQS, but that those levels are decreasing. For calendar years 2002-04, the data show that the design value for Guilford County dropped from 14.0 µg/m<sup>3</sup> (according to EPA’s numbers for calendar years 2001-2003) to 13.7 µg/m<sup>3</sup> – nearly 9% below the standard of 15.0 µg/m<sup>3</sup>. These current data support North Carolina’s contention that Guilford County should not be designated “nonattainment” for the pollutant PM<sub>2.5</sub>.

Yet EPA has determined that one county with relatively cleaner air is contributing to an air quality violation in another, predominantly upwind county to the southwest. EPA’s analysis does not

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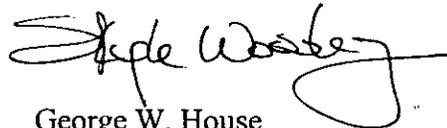
support its determination. EPA's analysis relies primarily on the fact that Guilford County has a relatively larger and more urban population and produces relatively larger quantities of PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors. But its analysis unreasonably fails to account for other, more important factors:

- Guilford County's air quality complies with the PM<sub>2.5</sub> NAAQS and, indeed, is improving with respect to the pollutant PM<sub>2.5</sub>; and,
- There is no rational explanation for the transport of Guilford County's air (even assuming it did not meet the PM<sub>2.5</sub> NAAQS) or Guilford County's sources to Davidson County; and,
- The only evidence is that federal, state, and local controls already in place are controlling and continuing to reduce PM<sub>2.5</sub> concentrations in Guilford County and surrounding counties.

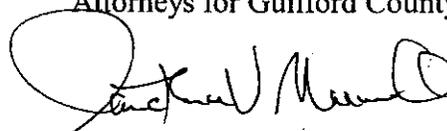
The simpler explanation – and the only explanation supported by the evidence in the administrative record – is that Davidson County's PM<sub>2.5</sub> violation is the result of local conditions and, perhaps, contributions from the west or southwest. There is no reasonable justification supporting a designation of nonattainment for Guilford County for the pollutant PM<sub>2.5</sub>. In our view, EPA's determination to designate Guilford County as nonattainment is arbitrary and unreasonable.

Based on the information and data in the administrative record and the recently submitted PM<sub>2.5</sub> monitoring data for calendar year 2004, we request that EPA: (1) withdraw its nonattainment designation for Guilford County for the PM<sub>2.5</sub> NAAQS, as announced in the January 5, 2005 final rule, and (2) issue an attainment designation for Guilford County for the PM<sub>2.5</sub> NAAQS.

Sincerely,



George W. House  
S. Kyle Woosley  
Attorneys for Guilford County



Jonathan V. Maxwell  
Guilford County Attorney

GWH/wjc

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Enc. (Hoke P. Kimball letter dated February 21, 2005)

- cc: ✓ Ms. Kay Prince, Chief, Air Planning Branch, EPA Region IV *(w/enc)*  
*(sent via facsimile [404-562-9119] and Overnight Federal Express)*
- cc: William G. Ross, Jr., Secretary, NC Dept. of Environment and Natural Resources *(w/enc)*  
Dan Oakley, General Counsel, NC Dept. of Environment and Natural Resources  
Congressman Howard Coble *(w/enc)*  
Congressman Brad Miller *(w/enc)*  
Congressman Mel Watt *(w/enc)*