



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross, Jr., Secretary

February 17, 2004

James I. Palmer, Jr., Esq.  
Regional Administrator  
U.S EPA, Region IV  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-3104

RE: Recommendations for PM<sub>2.5</sub> Non-attainment Designations

Dear Mr. Palmer:

Pursuant to the requirements of the federal Clean Air Act and on behalf of Governor Michael F. Easley, I am submitting to you and your colleagues at EPA the State of North Carolina's recommendations for PM<sub>2.5</sub> designations.

The attached table presents North Carolina's recommendations for the designation status of each county within the State. These recommendations are based on the most recent three years of data (2001-2003). During this period, violations of the PM<sub>2.5</sub> standard occurred at only two monitors within the State. There is one violating monitor each in Davidson and Catawba counties.

Davidson County is located in the Greensboro-Winston-Salem-High Point metropolitan statistical area (MSA). All other monitors within the MSA have measured attainment of the standard, thus we recommend that only Davidson County be designated non-attainment.

Catawba County is located in the Unifour MSA. To be consistent with our 8-hour ozone designation, we are recommending that only the MPO planning boundary of Catawba County be designated non-attainment. The MPO planning boundary within this county captures eighty percent of the population. The remainder of the county is rural with an average township population density ranging from less than 100 to just over 200 persons/square mile. A more detailed technical discussion of the PM<sub>2.5</sub> boundary recommendations from our Division of Air Quality (DAQ) Director, Keith Overcash, will follow this letter by February 20, 2004.

With respect to these two counties, our PM<sub>2.5</sub> boundary recommendations are the same as our recommendations for 8-hour ozone boundaries. Also, as we did with the 8-hour ozone recommendations, we followed EPA's published guidance concerning the circumstances under which States may vary from the presumptive MSA boundary. Before the guidance was published, EPA accepted and approved in 1990 an approach that had partial MSA's and partial

Mr. J. I. Palmer, Jr.  
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counties for the one-hour ozone designations.

As I stated in my February 6, 2004 8-hr ozone boundary recommendation letter, I believe that the presumptive use of MSA boundaries in a case like this fails to take into account the fact that MSAs are established for statistical data purposes which are different from air pollution control concerns. In the December 27, 2000 Federal Register notice, the Office of Management and Budget states:

"In order to preserve the integrity of its decision making with respect to reviewing and revising the standards for designating areas, OMB believes that it should not attempt to take into account or anticipate any public or private sector non-statistical uses that may be made of the definitions. It cautions that Metropolitan Statistical Area and Micropolitan Statistical Area definitions should not be used to develop and implement Federal, state and local nonstatistical programs and policies without full consideration of the effects of using these definitions for such purposes."

An example of an air quality designation consequence that goes well beyond merely a "statistical" data purpose is the requirement that new or modified major sources of pollution must install the "lowest achievable emission rate" (LAER) level of control and must offset all emissions increases upon designation of non-attainment.

North Carolina is committed to conserving and protecting our natural resources and maintaining a high quality environment for the health, well-being and benefit of all. We believe that improving air quality is critical to the health of our citizens and that our future growth, prosperity and quality of life will be threatened if we do not remain diligent. We look forward to continuing to work with EPA and others to attain the PM<sub>2.5</sub> standard everywhere in North Carolina and to establish appropriate boundaries for PM<sub>2.5</sub> non-attainment areas.

Sincerely,



William G. Ross, Jr.

WGR/ko

attachment

cc: The Honorable Michael F. Easley, Governor, State of North Carolina  
The Honorable Jim Fain, Secretary, NC Department of Commerce  
The Honorable Lyndo Tippet, Secretary, NC Department of Transportation  
The Honorable Britt Cobb, Commissioner, NC Department of Agriculture and Consumer Services  
Beverly Banister, US EPA  
Keith Overcash, Director, Division of Air Quality, NC DENR

**North Carolina's Recommendations on Boundaries for PM<sub>2.5</sub> Non-attainment Areas**

Designated Area	Designation Type
<b>Greensboro-Winston-Salem-High Point Area:</b> Alamance County Davidson County Forsyth County Guilford County Caswell County Davie County Randolph County Rockingham County	Attainment Non-attainment Attainment Attainment Attainment Attainment Attainment Attainment
<b>Hickory-Newton-Conover Area:</b> Alexander County Burke County Caldwell County Catawba County Unifour MPO Boundary	Attainment Attainment Attainment Non-attainment
<b>Rest of State</b>	Attainment





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

Michael F. Easley, Governor

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

February 26, 2004

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

Subject: Technical Documentation for Recommendations on PM<sub>2.5</sub> Non-attainment Designations

Dear Mr. Palmer:

On February 17, 2004, Department of Environment and Natural Resources Secretary Bill Ross submitted North Carolina's recommendation for PM<sub>2.5</sub> non-attainment boundary designations. Pursuant to that letter, I am submitting to you and your colleagues at EPA the State of North Carolina's technical analysis supporting the recommendations for PM<sub>2.5</sub> designations.

Each area is described separately in the attached document and satisfies the criteria as set forth in EPA's April 1, 2003 memorandum entitled, "Designations for the Fine Particle National Ambient Air Quality Standards". North Carolina has two monitors that violate the fine particle standard, one in Hickory (Catawba County) with a 15.5 microgram per cubic meter 3-year annual average for 2001-2003, and one in Lexington (Davidson County) with a 15.8 microgram per cubic meter 3-year annual average for 2001-2003. All other monitors in the state have measured attainment of the standard.

There is a significant portion of fine particle pollution due to regional emissions sources. The upcoming state and federal controls on the major sources of fine particle pollution will result in significant emission reductions of this regional component in the coming years. The Clean Smokestacks Act will result in considerable reductions of both SO<sub>2</sub> and NO<sub>x</sub> from North Carolina utilities between now and 2009, and further reductions of SO<sub>2</sub> between 2009 and 2013. If finalized, the Interstate Air Quality rule will result in similar reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions from utilities in the surrounding states. The heavy-duty engine standards and the low sulfur diesel standards will begin to reduce pollution from the motor vehicle sector beginning in 2006.

North Carolina believes there also may be a more local component to the particle pollution observed at these two sites. We will be further evaluating these potential local source emissions and will be addressing these emissions in the fine particle State Implementation Plan. In addition, North Carolina will be forecasting for high particle days for these two areas beginning on May 1, 2004. The general public will then have information on how to better protect their health during high particle events. Due to the reasons stated above, and due to the marginal nature of these violations, North Carolina believes smaller than MSA boundaries are appropriate for our two non-attainment areas.

We remain committed to protecting the air quality in our state. We believe that the recommended fine particle non-attainment boundaries are appropriate to allow us to fulfill that goal.

Sincerely,

B. Keith Overcash, P.E.

BKO/sh/lg

attachment

cc: Secretary Bill Ross  
Beverly Banister  
Brock Nicholson  
Sheila Holman