



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 5 2005

THE ADMINISTRATOR

Jonathan V. Maxwell, Esq.
Guilford County Attorney
301 West Market Street
P.O. Box 3247
Greensboro, NC 27402

Dear Mr. Maxwell:

Thank you for your letter of February 22, 2005, concerning fine particulate matter (PM_{2.5}) designations and Guilford County, North Carolina. In your letter, you submitted 2004 air quality data for Guilford County and requested that the Environmental Protection Agency (EPA) reconsider the nonattainment designation for Guilford County for the PM_{2.5} National Ambient Air Quality Standard (NAAQS). Specifically, you requested that EPA withdraw its nonattainment designation for Guilford County and issue an attainment designation. For the reasons set forth herein, EPA denies your request.

2002-2004 Data

In EPA's January 5, 2005, Final Designation Notice, we invited states to submit, by February 22, 2005, complete, quality assured, certified 2004 data that suggests a change in designation of an entire nonattainment area is appropriate for any Area within the State. EPA stated that it would change an area's designation if inclusion of 2004 data showed that every county in an area was neither monitoring a violation of the standards nor contributing to a violation of the standards of a nearby area. We stated this because so long as there is a continuing violation of the standards, those areas that are contributing to the violation need to be part of the nonattainment area for consideration of local controls designed to achieve the standard.

On February 22, 2005, North Carolina and Guilford County submitted complete, quality assured, certified 2004 data for Guilford County and asked EPA to change only Guilford County's designation. These letters did not conform to EPA's January 5 offer to revisit designations based on 2004 data and were not addressed in EPA's April 5, 2005, Supplemental Notice. Instead, EPA has evaluated your letter and is responding to it separately here as a petition for reconsideration.

The 2004 data provided in your letter, while being new in the sense that it was not available to be considered in EPA's final designation of Guilford County, does not provide any new information that would compel EPA to reach a different conclusion

regarding Guilford County's nonattainment status based upon its contribution to nonattainment in the nearby area. While you are correct to point out that the 2004 data show a decrease in Guilford County's design value, this demonstrates the continuation of a trend already in existence at the time EPA made its final designations. We are pleased that this monitor continues to show decreasing design values; however, nothing about the 2004 monitor data changes EPA's determination that Guilford County contributes to Davidson County's ambient air quality.

Contribution

In your letter, you state that EPA did not reach a "common sense conclusion" in finding that Guilford County contributes to the violating monitor in Davidson County. Further, you state that EPA's conclusion is unsupported by data and its analysis was unreasonable. We understand Guilford County's concern over having an attaining monitor and, nevertheless, being designated as nonattainment. Rest assured that Guilford County is not alone in this situation. EPA designated many counties across the United States as nonattainment, despite having monitors reading attainment because they contribute to nonattainment nearby. In determining an area's designation, EPA must rely on the Clean Air Act (CAA) definition of a nonattainment area in section 107(d)(1)(A)(i): "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant." If an area meets this definition, EPA is required to designate the area as nonattainment.

On April 1, 2003, EPA issued guidance for states and tribes to use in identifying areas that meet or do not meet EPA's national air quality standards for PM_{2.5}. In making designations, we used the most recent 3 years of monitoring data. Once we determined that a monitor was recording a violation, the next step was to determine if there were any nearby areas that were contributing to the violation and include them in the designated nonattainment area. In making this determination, we reviewed all available technical data related to nine factors set out in the April 1, 2003, guidance such as air quality, source locations and emissions, meteorology, terrain, population, commuting, and growth in the area. The technical support analyses for all nonattainment areas are located on EPA's web site at <http://epa.gov/pmdesignations/documents/final/TSD/Ch6.pdf>.

Based on the analysis of all factors for the Greensboro area, EPA determined that Guilford County was contributing to the violating monitor in adjacent Davidson County. Our analysis showed that Guilford County had sufficient emissions and emission sources to contribute to the ambient air quality in Davidson County. Guilford County has the largest population of any county in the area, accounting for over one third of the metropolitan statistical area's (MSA's) total population, as well as significant population growth--two factors indicating that the County contains significant emission sources. Additionally, EPA found that Guilford County has sufficient emissions of PM_{2.5} and precursor pollutants sulfur dioxide (SO₂), nitrogen oxides (NO_x), and volatile organic

compounds (VOC) to contribute to the ambient air quality in Davidson County. While you were correct in pointing out that the percentage of commuters from Guilford County to Davidson County is low, EPA found that that the largest number of commuters in the area originates from Guilford County, and the County's commuters have the highest vehicle miles traveled in the area--facts which also indicate the County has significant emission sources.

You disagree with EPA's conclusion that an area with an attaining monitor could contribute to a neighboring area's violating monitor. While the "air quality" factor in EPA's 9-factor analysis is one component our designation decision, the fact that Guilford County is monitoring attainment is not the end of the analysis. You assert that EPA may only find contribution where there is material evidence that a county's emissions "materially affects" the adjoining county's air quality. The Clean Air Act sets out no such evidentiary standard for a finding of contribution. In addition, the fact that the monitored ambient PM 2.5 level in Guilford County meets the NAAQS does not mean that the County's emissions cannot contribute to Davidson County's violating monitor. Despite its attaining monitor, Guilford County still has significant emissions of PM2.5 and precursor pollutants, and the evidence indicates that such emissions contribute to violations of the standard in Davidson County.

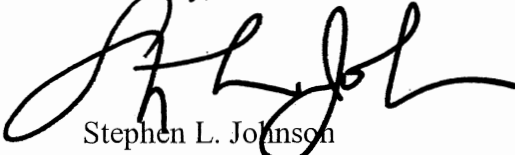
It is important to remember that PM2.5 is a regional pollutant and can be transported by prevailing wind. EPA analyzed the wind patterns in the Area and found that there is influence on the Davidson County monitor from varying directions, including from the direction of Guilford County. You stated in your letter that the prevailing wind patterns show that PM2.5 and its precursors are generally transported from Guilford County away from Davidson County. While this is true during the summer months, EPA's analysis of year-round wind patterns found that the second strongest contribution to Davidson County is from the northeast, the direction of Guilford County. Attachment 1 is a pollution rose diagram for the violating monitor located in Davidson county. Each dot in the diagram represents a daily PM2.5 concentration (from the 2001-3 period) and the average wind direction and wind speed for that day. It shows that there were a number of days in the period when PM2.5 contributions toward the Davidson county monitor came from the northeast (the direction of Guilford county).

North Carolina submitted information prior to EPA making the final determination of the nonattainment boundary for the Greensboro area which included a discussion of wind patterns and other meteorology. EPA concluded that the State's analysis was insufficient to provide a compelling argument to exclude Guilford County based on prevailing winds. Specifically, the State's analysis showed wind direction varied based on season, with influence coming from different directions at different times of year.

EPA understands Guilford County's preference for not being included in the Greensboro-Winston Salem-High Point nonattainment area. However, your letter did not

provide information that persuades EPA to reconsider its decision. Therefore, your petition for reconsideration is denied.

Sincerely,



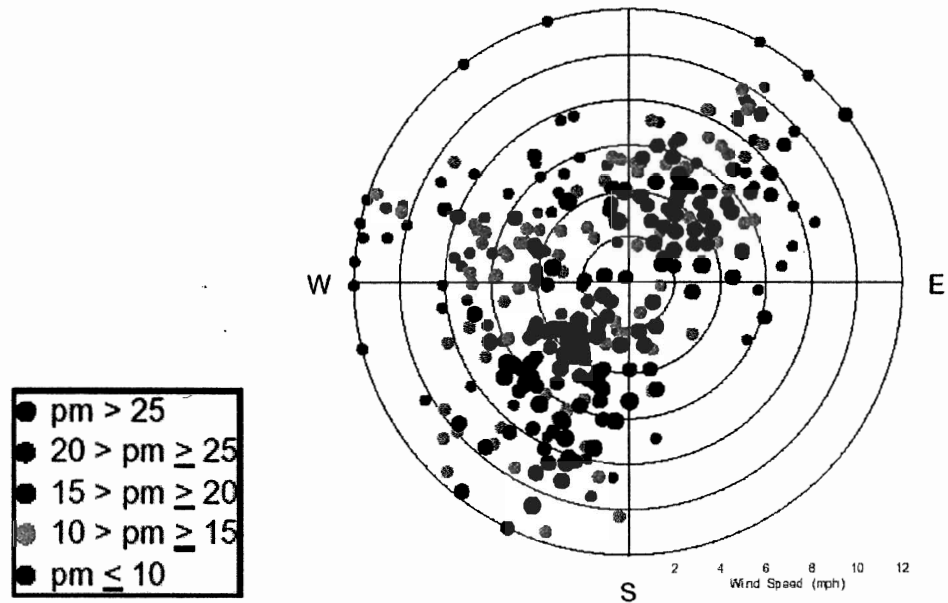
Stephen L. Johnson

cc: William G. Ross, Jr., Secretary
North Carolina Department of
Environment and Natural Resources
2728 Capital Boulevard
Raleigh, NC 27604

Mr. J.I. Palmer, Jr.
Regional Administrator
EPA Region 4

Attachment 1
Pollution Rose for Davidson County, NC Monitor

Area= Greensboro, NC; Site= 370570002



Plot indicates PM2.5 concentration, wind direction, and wind speed for days in 2001-2003 with PM2.5 monitoring data.