



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue, Governor

Dee Freeman, Secretary

June 2, 2011

Gwendolyn Keyes Fleming  
Regional Administrator  
USEPA, Region 4  
Sam Nunn Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960

Dear Ms. Fleming:

Pursuant to the requirements of the federal Clean Air Act and on behalf of Governor Beverly E. Perdue, I am submitting to you and your colleagues at the U.S. Environmental Protection Agency (USEPA) the State of North Carolina's recommendations concerning the boundaries within our State of areas that either attain or do not attain the June 2, 2010 1-hour National Ambient Air Quality Standard (NAAQS) for sulfur dioxide (SO<sub>2</sub>).

North Carolina has one monitor violating the 2010 SO<sub>2</sub> NAAQS located in Wilmington, North Carolina (New Hanover County). I request the USEPA consider deferring a nonattainment designation for this area until after 2012. The reason for this request is threefold. First, Southern States Chemical and WASTECH have shutdown. Southern States may resume operations, but their permit is being reopened to address the impact of the SO<sub>2</sub> emissions at the monitor. These two sources are located in very close proximity to the monitor. Second, the Progress Energy Sutton facility is working to convert from coal to natural gas with the next couple of years. Finally, since the beginning of 2011 the monitor has not observed an exceedance of the 2010 SO<sub>2</sub> standard and the 99<sup>th</sup> percentile concentration for 2011 is 48.7 parts per billion. The North Carolina Department of Environment and Natural Resources, Division of Air Quality (NCDENR) believes this clean data to date is due to the two sources that have shut down near the monitor location. It is possible for the Wilmington monitor to attain the 1-hour SO<sub>2</sub> standard by the end of 2012. Additionally, the NCDENR is proactively working with the largest SO<sub>2</sub> sources located near the monitor to determine if additional controls or permit limitations are needed to ensure continued maintenance of the 1-hour SO<sub>2</sub> standard.

If the USEPA determines that it cannot defer the nonattainment designation for the Wilmington, North Carolina area, then we are recommending the boundaries which are described in the enclosed package. We believe that the enclosed boundary recommendations are the most effective way to achieve the goals of cleaner air, healthier lives, a stronger economy, and more effective conservation of our land and water.

The federal Clean Air Act requires the USEPA to designate areas following promulgation of a new NAAQS, such as the June 2, 2010 1-hour standard for SO<sub>2</sub>. The USEPA has asked states for their recommendations for boundaries by June 3, 2011. The USEPA released its guidance for area designations for the 2010 revised primary SO<sub>2</sub> NAAQS on March 24, 2011. The guidance stated that for identifying attainment areas that the USEPA does not believe it would be appropriate to designate areas attainment without appropriate refined dispersion modeling and, where available, air quality monitoring data indicating no violations of the NAAQS.

The USEPA's boundary guidance came out very late in the process and did not allow sufficient time for the states to implement the suggested methodology for determining designation recommendations by the submittal date of June 3, 2011. Additionally, the NCDENR does not agree with the USEPA's guidance methodology for determining attainment areas. The guidance states that only dispersion modeling can determine if an area is attaining the standard and that the dispersion modeling must use allowable emissions instead of actual emissions. The use of allowable emissions with the dispersion models would demonstrate areas that may potentially violate the standard but does not indicate if a standard has been actually violated. The NCDENR does not believe it is appropriate to determine if an area should be designated as attainment solely based on dispersion models using allowable emissions. Since the designation process historically has been based on actual ambient air quality data and not potential air quality data, the USEPA should consider if an area would have had a violation based on what emissions were actually emitted into the air. Additionally, there are cases where it could be assumed an area was in attainment of the standard based upon the actual emissions data for a county, i. e., a county with no sources of SO<sub>2</sub> or very small sources of SO<sub>2</sub>.

Development and submittal of the State's recommendations on appropriate boundaries are the first steps in the process of addressing the revised SO<sub>2</sub> NAAQS. We understand that if the USEPA intends to designate areas that differ from the State's recommendations, the USEPA is required to notify the State by no later than 120 days prior to the final designations. In addition, it is our understanding that the USEPA plans to provide a 30-day public comment period immediately following issuance of its response letters to the states in order to consider public input in the designation process. The USEPA is requesting States provide additional information within 60 days of receiving the USEPA response letters. At that time, my staff anticipates providing supplemental information including consideration of the 2011 SO<sub>2</sub> monitoring data and modeling data which may indicate a revised boundary recommendation.

In developing the recommendations, staff in the NCDENR consulted with staff from the Department of Commerce, conducted meetings with elected officials and the general public in the Wilmington area on the draft staff recommendations and the USEPA's presumptive boundary. Through this process, staff sought comments from local officials, environmental organizations, business, industry, and the general public. The recommendations prepared for your review include consideration of the comments received.

Based on our public discussions and analysis, we are recommending that part of New Hanover County be designated as nonattainment for the 1-hour SO<sub>2</sub> standard, four counties be designated attainment due to clean monitoring data, 32 counties be designated attainment due to

having no sources or only small SO<sub>2</sub> sources, and the remaining 63 counties be designated unclassifiable/attainment.

The NCDENR recognizes the health impacts of SO<sub>2</sub>. Historically, North Carolina has demonstrated its commitment to clean air. In 2002, the North Carolina's General Assembly enacted the landmark multi-pollutant legislation known as the Clean Smokestacks Act which continues to result in significant SO<sub>2</sub> and nitrogen oxides emissions reductions. In 2002, the SO<sub>2</sub> emissions from the sources subject to the Clean Smokestacks Act were 459,643 tons per year. In 2010, these sources are emitted 116,517 tons of SO<sub>2</sub> per year. This is a 75% reduction in SO<sub>2</sub> emissions to date. The NCDENR has been actively working with the sources located in the Wilmington region since the promulgation of the new 1-hour SO<sub>2</sub> standard to determine which sources may be causing or contributing to the violation of this standard. The State has and will continue to use its statutory authority to implement controls in the State as warranted, regardless of whether the emission sources are located within the boundary of a nonattainment area.

North Carolina is committed to protecting the health of our citizens, our environment, and our economy. Solving our SO<sub>2</sub> and other air quality problems is critical to achieving those goals. Improving air quality is critical to the health of our citizens, our future growth, prosperity and quality of life. We look forward to discussing these boundary recommendations with you after the USEPA has had the opportunity to review and comment on them. More detailed information and supporting data are included in the enclosed recommendation package. Thank you for your consideration of these recommendations.

Sincerely,

A handwritten signature in black ink that reads "Dee Freeman". The signature is written in a cursive, flowing style with a long horizontal flourish at the end.

Dee Freeman

DF:lab

Enclosure

cc: The Honorable Beverly E. Perdue  
The Honorable Steve Troxler  
The Honorable Gene Conti  
The Honorable J. Keith Crisco  
Air Quality Director Sheila C. Holman