



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

BETSY L. CHILD
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 10, 2004

Mr. James I. Palmer, Jr.
Regional Administrator
US EPA, Region IV
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303

RE: TDEC's Request for Reconsideration of EPA's Proposed
PM_{2.5} Non-Attainment Designations

Dear Mr. Palmer ,

Tennessee Department of Environment and Conservation (TDEC) requests that EPA reconsider recommending the following counties as non-attainment for PM_{2.5}: Anderson, Blount, Loudon, Sevier, Roane, McMinn, and Marion. TDEC is committed to achieving the federal PM_{2.5} standards, and we feel that these standards will be achieved with the formal listing of only Knox and Hamilton Counties as non-attainment. TDEC objects to the process, methodology and science utilized by EPA in its proposed non-attainment designations.

TDEC believes EPA used guidance documents as invalidly promulgated regulations in its determination of proposed non-attainment designations for PM_{2.5}. For example, EPA's guidance document dated April 1, 2003 states that metropolitan area boundaries will be used as presumptive boundaries for designation of PM_{2.5} non-attainment areas. Although not formally promulgated as a regulation by EPA, this guidance provides key interpretation of a central concept in the statute relating to the "contribution" of emissions from sources in counties surrounding an urban core area to non-attainment in that urban core. Under the reasoning in *Appalachian Power v. EPA*, 208 F 3d 1015 (DC Cir. 2000), EPA's April 1, 2003 guidance document is an invalidly promulgated regulation. Using the concept of emissions "contribution", this guidance illegally extends a presumption of non-attainment to counties surrounding an urban core area that is in non-attainment. EPA is exceeding its authority by applying this presumption to the detriment of Tennessee counties that are in attainment based on actual monitoring. This unfairly applies the stigma and cost of non-attainment to areas in attainment, including new source offsets and transportation conformity.

TDEC believes EPA has chosen to interpret the 9-Factor Analysis in a capricious manner due to the lack of systematic criteria, thresholds or enforcement to clearly define what qualifies as significant contribution to non-attainment. Without quantitative modeling to support these determinations, TDEC feels EPA is not making scientifically based decisions. EPA must set clear and quantifiable standards including implementation guidance that ultimately determines which counties will be formally listed as attainment or non-attainment.

The existing science provides overwhelming justification for Anderson, Blount, Loudon, Sevier, Roane, McMinn, and Marion Counties to be listed as attainment. TDEC has prepared the following justifications giving merit to our request that each of the seven aforementioned counties be formally designated attainment/unclassified for PM_{2.5}.

Anderson County

- Factor 1: TVA's Bull Run fossil plant is a major source of PM_{2.5} and PM_{2.5} precursor compound emissions in Anderson County. TVA has conducted independent modeling demonstrating that emissions from the Bull Run Fossil Plant are not significantly contributing to non-attainment in Knox County. While TDEC has not extensively reviewed this model, we believe that the results warrant further investigation from EPA.
- Factor 2: No monitoring is being conducted in Anderson County to designate it non-attainment. In addition to this, EPA has no modeling results indicating that Anderson County is in fact contributing to non-attainment in Knox County.
- Factor 3: As of 2002, the Anderson County population is only 10% of the total Knoxville MSA population. TDEC maintains that 10% is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 4: Anderson County constitutes only 4% of commuters traveling to Knox County for work. TDEC maintains that 4% is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 9: EPA did not consider Factor 9 in recommending Anderson County as non-attainment. TDEC, on the other hand, believes that the control measures that have already been implemented and are planned at TVA's Bull Run fossil plant should be considered. TVA's Bull Run plant currently burns higher cost low-sulfur coal, a Selective Catalytic Reduction (SCR) system is operational, and a limestone sulfur dioxide scrubbing system is planned. These factors should be considered by EPA in its designation of Anderson County.

Blount County

- Factor 1: The majority of PM_{2.5} emissions in Blount County are from Alcoa's North and South plants, and as such the entire county should not be designated as non-attainment.
- Factor 2: Blount County air monitoring measures attainment for PM_{2.5}, and EPA has no modeling to prove that it is contributing to non-attainment in Knox County.

- Factor 3: The population of Blount County is only 15.6% of the total Knoxville MSA population. EPA has not defined a level of significance regarding contributing counties' population sizes. TDEC maintains that this fraction of the population is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 4: Blount County contributes to only 7% of the Knoxville MSA's commuters traveling to Knox County for work. This small percentage is not a significant factor.
- Factor 5: Blount County's growth is less than one fifth of the total Knoxville MSA growth, which TDEC believes is not significant to warrant contribution to Knox County's non-attainment status.

Loudon County

- Factor 1: Loudon County contributed to less than 8% of the entire Knoxville MSA PM_{2.5} emissions in 2001. Many other counties in the state and country were designated as attainment by EPA even though their emissions were higher than in Loudon County. This exemplifies the lack of consistency in the application of EPA's 9-Factor Analysis.
- Factor 2: There is insufficient PM_{2.5} monitoring data in Loudon County to designate it non-attainment. In addition to this, EPA has no modeling to prove that Loudon County is contributing to non-attainment in Knox County.
- Factor 3: Loudon County's population is the second lowest in the Knoxville MSA, contributing to less than 6% of the entire MSA population. Six percent does not constitute a significant portion of the population to warrant contribution to Knox County's non-attainment status.
- Factor 4: Loudon County contributes to only 3% of the Knoxville MSA's commuters traveling to Knox County for work. TDEC maintains that 3% is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 5: The percent change in population between 1990 and 2000 in Loudon County is misleadingly high at 25% due to the county's low initial population. US Census Bureau data show that from 2000 to 2003 this rate was only 6.5%. Also, using the numbers given in the 9-Factor Analysis, the total population growth in Loudon County is less than 8% of the entire MSA between 1990 and 2000, which TDEC believes is not significant enough to warrant contribution to non-attainment in Knox County.

Sevier County

- Factor 1: PM_{2.5} emissions in Sevier County are the second lowest for the Knoxville MSA, constituting less than 7% of the MSA's total. TDEC maintains that 7% is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 2: No monitoring has determined that Sevier County is measuring non-attainment. In addition to this, EPA has no modeling to prove that Sevier County is in fact contributing to non-attainment in Knox County.

- Factor 3: Sevier County is not part of the current Knoxville MSA. Sevier County's population density is only 126 people per square mile, which is considerably rural. It contributes to less than 11% of the entire Knoxville MSA population. Eleven percent does not constitute a significant portion of the population to warrant contribution to non-attainment in Knox County.
- Factor 4: Sevier County contributes to only 3% of the Knoxville MSA commuters. TDEC maintains that 3% is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 5: The percent change in population between 1990 and 2000 in Sevier County is misleadingly high at 39% due to the county's low initial population. US Census Bureau data shows that from 2000 to 2003 this rate was only 6.1%. Sevier County is still predominately rural, lacking major industry and commuters.

Roane County

- Factor 1: TVA's Kingston Plant is the major point source of PM_{2.5} emissions in Roane County. The data that EPA used from 2001 is no longer representative of the current emissions coming from the TVA's Kingston Plant. More recent data would show significant reductions in emissions for the entire county.
- Factor 2: Roane County air monitoring measures attainment for PM_{2.5}, and EPA has no modeling that proves it is contributing to non-attainment in Knox County.
- Factor 3: Roane County is not part of the Knoxville MSA, and its low population density indicates that it is largely rural.
- Factor 4: Roane County is not a part of the Knoxville MSA, and it contributes less than 9% of the total Knoxville MSA VMT. TDEC maintains that 9% is not significant enough to warrant contribution to non-attainment in Knox County.
- Factor 5: US Census Bureau data indicates that between April 1, 2000 and July 1, 2003, the population growth in Roane County was 1.0%, which is only one third that of the state average. Therefore, population growth should not be considered a significant factor for Roane County.
- Factor 9: EPA did not consider Factor 9 in recommending Roane County as non-attainment. TDEC, on the other hand, believes that the control measures that have already been implemented and are planned at Kingston should be considered. NO_x control in the form of low NO_x burners and SCR units will be operational for 8 of the 9 units for the 2005 ozone season. Low-sulfur coal is being used in the interim, and ultimately scrubbers will be installed. These factors should be considered by EPA in its designation of Roane County since the facility will have controls for SO_x and NO_x that far exceed the requirements of RACT.

McMinn County

- Factor 1: Bowater is a major point source of emissions in McMinn County; its previous emission figures have been revised significantly from the emission levels upon which EPA made its initial non-attainment assumptions. EPA should consider these reduced emission figures when reviewing its recommendation for McMinn County.

- Factor 2: McMinn County air monitoring measures attainment for PM_{2.5}, and EPA has no modeling that confirms contribution to non-attainment in either Knox or Hamilton Counties.
- Factor 3: McMinn County is not part of the Knoxville or Chattanooga MSA; nor is it geographically adjacent to either county. Given the relatively distant geographic proximity and low population density, this factor does not support classifying McMinn County as non-attainment.
- Factor 4: McMinn County contributes to less than 9% of the total Knoxville MSA VMT which is not significant enough to warrant contribution to non-attainment in the Knoxville MSA.
- Factor 5: McMinn County has the second lowest population of the counties being considered for non-attainment in the Knoxville MSA area. US Census Bureau data indicates that between April 1, 2000 and July 1, 2003, the population growth in McMinn County was only 3.3%, which is a substantially lower than the figure of 16.0% used by EPA in their analysis.

Marion County

- Factor 1: Marion County has no major point sources of emissions, and the low emissions reported by EPA in its designation are largely due to transient vehicles on Interstate 24. EPA should not consider Marion County's low emissions as significantly contributing to non-attainment in Hamilton County.
- Factor 2: No monitoring has determined that Marion County is measuring non-attainment. In addition to this, EPA has no modeling proving that Marion County is in fact contributing to non-attainment in Hamilton County. TDEC is concerned that EPA is unjustifiably using Marion County as a means to connect Jackson County, Alabama, home to TVA's Widow's Creek facility, to the Chattanooga MSA.
- Factor 3: Marion County has the lowest population density in the Chattanooga MSA and constitutes less than 6% of the MSA total population. These statistics are not sufficient enough to warrant a significant contribution to non-attainment in Hamilton County.
- Factor 4: Marion County contributes to only 10% of the Chattanooga MSA VMT. TDEC maintains that 10% is not significant enough to warrant contribution to non-attainment in Hamilton County.
- Factor 5: US Census Bureau data indicates that between April 1, 2000 and July 1, 2003, the population growth in Marion County was only 0.4%, an extremely low rate by any standard. Therefore population growth should not be considered a significant factor in designating Marion County.

TDEC is confident that EPA will favorably review the request for Anderson, Blount, Loudon, Sevier, Roane, McMinn, and Marion Counties to be designated attainment for PM_{2.5}. The above justifications clearly indicate that these counties are not significantly contributing to the non-attainment status of Knox or Hamilton County.

Mr. James I. Palmer, Jr.
November 10, 2004
Page 6

TDEC also requests a regional meeting with EPA to enhance communication amongst EPA and the states on this issue. We urge you to take our comments into consideration when making the final designations for PM_{2.5} non-attainment. If you have any questions, please feel free to contact me at (615) 532-0106 or Barry Stephens at (615) 532-0554.

Sincerely,



Betsy L. Child

BLC:EJ

cc: Mayor Rex Lynch, Anderson County
Mayor Beverly Woodruff, Blount County
Mayor Claude Ramsey, Hamilton County
Mayor Mike Ragsdale, Knox County
Mayor George Miller, Loudon County
Mayor Howell Moss, Marion County
Mayor John Gentry, McMinn County
Mayor Ken Yager, Roane County
Mayor Larry Waters, Sevier County
Mayor Bill Haslam, City of Knoxville
Mayor Bob Corker, City of Chattanooga
TDEC Air Pollution Control Board Members