

Response to Comments on EPA's Designations and Classifications
Of Areas for the Particulate Matter (PM_{2.5}) National Ambient Air Quality Standards

U.S. Environmental Protection Agency
December 17, 2004

A. INTRODUCTION

This document, together with the notice of final rulemaking (NFR) “Designation and Classification of Areas for the PM_{2.5} National Ambient Air Quality Standard (NAAQS)” presents the responses to more than 160 comments received by the Environmental Protection Agency (EPA) on designations of the PM_{2.5} NAAQS.

B. BACKGROUND

The Clean Air Act (CAA) establishes a process for air quality management through the NAAQS. Area designations are required after promulgation of a new or revised NAAQS. After evaluating numerous health studies and conducting an extensive peer review process, on July 18, 1997, EPA promulgated a PM_{2.5} standard of 15 micrograms per cubic meter, based on the 3-year average of annual mean PM_{2.5} concentrations. The 24-hour standard for PM_{2.5} is 65 micrograms per cubic meter, determined by the 3-year average of the annual 98th percentile concentrations.

Several events occurred which delayed designations for the PM_{2.5} NAAQS. EPA's new standards were challenged by the American Trucking Association, the U.S. Chamber of Commerce and other state and business groups. Additionally, the Transportation Equity Act for the Twenty-first Century (TEA-21) revised the deadline to publish nonattainment designations in order to provide additional time to collect three years of air quality monitoring data.

In February 2001, the Supreme Court upheld EPA's authority under the Clean Air Act to set National Ambient Air Quality Standards that protect the American public from harmful effects of air pollution. The Supreme Court also remanded the case to the D.C. Circuit Court of Appeals to resolve several additional issues. In March 2002, the DC Circuit Court rejected all remaining legal challenges to EPA's 1997 ambient air quality standards for PM_{2.5}. These actions extended the deadlines for designating nonattainment areas under the PM_{2.5} NAAQS until December 31, 2004.

On April 1, 2003, EPA issued a memorandum outlining the schedule for designating areas under the PM_{2.5} standard and related guidance on nine factors to consider in identifying nonattainment areas. The CAA provides for states and tribes to submit designation recommendations to EPA, and it requires EPA to provide time for consultation in cases where the Administrator plans to promulgate a designation that modifies the state or tribal recommendation. (Tribes are not required to provide recommendations but are invited to do so and participate in the process.)

On June 28 and 29, 2004, the Environmental Protection Agency (EPA) sent letters to state and tribal representatives responding to their recommendations for areas meeting and not meeting the national air quality standards for fine particles (PM_{2.5}). This action started a 120-day period for the states and tribes to respond to EPA's modifications to their attainment/nonattainment area recommendations. EPA requested that states and tribes submit any responses by September 1, 2004.

C. Response to Comments on PM2.5 Designations

The following document contains responses to comment letters received on the PM2.5 designation process. Responses to “Controlled Correspondences” and comments received prior to September 1, 2004 are found in Appendix A. Summaries of the comments and EPA responses are sorted by EPA Region, by state, and by area. The comment numbers were assigned randomly to the comments.

1. Responses to Comments EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont)

Comment: 1011-1

Region: 1

State: CT

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: Commenter requests that EPA support Governor Rell's recommendation of attainment for the entire state of Connecticut. The comment letter transmits additional information as requested by EPA. These comments are as follows:

1. Recently acquired monitoring data demonstrate that the community in New Haven is not being exposed to PM_{2.5} concentrations above the NAAQS levels. Thus the city of New Haven should be designated attainment for PM_{2.5}.
2. Atmospheric transport and dispersion modeling conducted by EPA and DEP confirm that emissions from Connecticut are not contributing significantly to measured PM_{2.5} nonattainment in New York City and northern New Jersey. The Clean Air Interstate Rule (CAIR) specifically excludes Connecticut from the program because EPA concluded that Connecticut's emissions do not significantly contribute to the PM_{2.5} nonattainment measured in New York and New Jersey.

If EPA believes the data do not support an attainment designation, the commenter requests EPA to consider designating parts of southwest Connecticut as unclassifiable as provided under Section 107(d)(1)(A)(iii).

EPA Response: Comment 1: We have reviewed information provided to us by Connecticut supporting an argument that data from the Stiles Street PM_{2.5} monitor in New Haven County is not representative of area-wide population exposure in the New Haven area, and that this monitor should be considered a "hot spot." We have concluded that Connecticut presents a good case that the diesel truck traffic on the on-ramp within 30 feet of the Stiles Street monitor is contributing an added 2 to 4 $\mu\text{g}/\text{m}^3$, which, when combined with regional and urban levels of fine particles, is enough to cause the monitor to violate the NAAQS. Based on information provided to us by Connecticut and our own review of all available data and information, we have concluded that it is appropriate to consider the Stiles Street PM_{2.5} monitor a unique hot spot monitor, which is not appropriate for comparison with the annual PM_{2.5} NAAQS standard. This is consistent with section 2.8.1.2.3 of 40 CFR Part 58, Appendix D which reads:

"The health-effects data base that served as the basis for selecting the new PM_{2.5} standards relied on a spatial average approach that reflects average community-oriented area-wide PM exposure levels. Under this approach, the most effective way to reduce total population risk is by lowering the annual distributions of ambient 24-hour PM_{2.5} concentrations, as opposed to controlling peak 24-hour concentrations on individual days. The annual standard selected by EPA will generally be the controlling standard for lowering both short- and long-term PM_{2.5} concentrations on an area-wide basis and will

achieve this result. In order to be consistent with this rationale, therefore, PM_{2.5} data collected from SLAMS and special purpose monitors that are representative, not of area-wide but rather, of relatively unique population-oriented micro-scale, or localized hot spot, or unique population-oriented middle-scale impact sites are only eligible for comparison only to the 24-hour PM_{2.5} NAAQS. However, in instances where certain population-oriented micro- or middle-scale PM_{2.5} monitoring sites are determined by the EPA Regional Administrator to collectively identify a larger region of localized high ambient PM_{2.5} concentrations, data from these population-oriented sites would be eligible for comparison to the annual NAAQS.”

Comment 2: We have reviewed information provided to us by Connecticut supporting an argument that Connecticut should be separated from any PM_{2.5} nonattainment area that encompasses the violating monitors in NYC and northern New Jersey, and that the entire state of Connecticut should be designated in attainment with the PM_{2.5} NAAQS. While Connecticut makes some good arguments, we have decided to include New Haven and Fairfield Counties in the New York-N. New Jersey-Long Island, CT-NJ-NY PM_{2.5} nonattainment area. This decision is based on consideration of nine factors, including emissions, air quality, population density, traffic and commuting patterns, expected growth, meteorology, geography/topography, jurisdictional boundaries, and level of control of emission sources.

EPA compared emissions, population, and traffic levels in all counties within and adjacent to the New York-Newark-Bridgeport, NY-NJ-CT-PA Combined Statistical Area (CSA), which was delineated by the Office of Management and Budget (OMB) on June 6, 2003. New Haven and Fairfield Counties had similar, or sometimes greater levels for all these factors than other New York counties (e.g., Westchester, Nassau, Suffolk, and Orange) and New Jersey counties (e.g., Middlesex, Bergen, and Monmouth) for which EPA is designating nonattainment. In addition, EPA notes that Fairfield and New Haven Counties are a conduit for a large percentage of the truck traffic that flows throughout New England. As such, this presents an opportunity for Connecticut to work with New York and New Jersey to identify measures to help reduce diesel emissions and, thus, help monitors in the New York urban area to meet PM_{2.5} standards. Based on these considerations, EPA is including New Haven and Fairfield Counties in the New York-N. New Jersey-Long Island, CT-NJ-NY PM_{2.5} nonattainment.

Comment: 1013a-7

Region: 1

State: CT

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: The entire New York-Newark-Bridgeport, NY-NJ-CT-PA Combined Statistical Area, including Litchfield County must be designated nonattainment. EPA recommended the exclusion of Litchfield County from the nonattainment area partially due to a lack of monitored violations; however, there is no PM2.5 monitor in the county, so it is impossible to conclude that this county does not violate the standard.

EPA Response: The boundaries of the New York-Northern New Jersey-Long Island, NY-NJ-CT-PA Consolidated Metropolitan Statistical Area (CMSA), which was delineated by OMB in 1999, includes only a very small portion of Litchfield County, Connecticut (i.e., only the towns of Bethlehem, Bridgewater, New Milford, Roxbury, Thomaston, Washington, Watertown and Woodbury). In 2003, however, OMB did include Litchfield County in the New York-Newark-Bridgeport, NY-NJ-CT-PA Combined Statistical Area (CSA).

To identify candidate counties for a PM2.5 nonattainment designation, EPA considered nine factors, including emissions, air quality (as determined by PM2.5 monitors), population density, traffic and commuting patterns, expected growth, meteorology, geography/topography, jurisdictional boundaries, and level of control of emission sources. Based on these factors, Litchfield County did not qualify as a candidate for a PM2.5 nonattainment designation. In particular, emissions levels from sources in Litchfield County are low compared to other counties in the New York-Newark-Bridgeport, NY-NJ-CT-PA CSA. Moreover, although Litchfield County has no PM2.5 monitors with 3 years of complete data, there are nearby monitors in the adjacent counties of Fairfield, Hartford and New Haven that meet the PM2.5 NAAQS standards.

Furthermore, EPA and CT DEP assessed the contribution of commuters from Litchfield County to traffic levels in the New York portion of the CSA and concluded that vehicle emissions from Litchfield County do not contribute significantly to violating monitors in NYC and northern New Jersey. Based primarily on these considerations, EPA concludes that Litchfield County does not violate or contribute to violations of the PM2.5 NAAQS standard.

Comment: 1094-1

Region: 1

State: CT

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: Commenter is concerned about the use by EPA of the New Haven Stiles Street PM_{2.5} monitor as a basis for designations of nonattainment in New York State. The commenter believes that the Stiles Street monitor is a microscale monitor that is unrepresentative of community exposure and, therefore, should not be used for comparison with the annual NAAQS.

EPA Response: We have reviewed information provided to us by Connecticut supporting an argument that data from the Stiles Street PM_{2.5} monitor in New Haven County is not representative of area-wide population exposure in the New Haven area, and that this monitor should be considered a unique “hot spot.” We have concluded that Connecticut presents a good case that the diesel truck traffic on the on-ramp within 30 feet of the Stiles Street monitor is contributing an added 2 to 4 $\mu\text{g}/\text{m}^3$, which, when combined with regional and urban levels of fine particles, is enough to cause the monitor to violate the NAAQS. Based on information provided to us by Connecticut and our own review of all available data and information, we have concluded that, consistent with section 2.8.1.2.3 of 40 CFR Part 58, Appendix D, it is not appropriate to compare the data from the Stiles Street PM_{2.5} monitor to the annual PM_{2.5} NAAQS standard.

Comment: 1095-1

Region: 1

State: CT

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: Commenter supports EPA's preliminary determination that New Haven and Fairfield Counties should be included in the New York-N. New Jersey-Long Island, CT-NJ-NY PM2.5 nonattainment area, and encourages EPA to include these counties in the nonattainment area in the agency's final designation decisions.

EPA Response: We have reviewed information provided to us by Connecticut supporting an argument that Connecticut should be designated in attainment with the PM2.5 NAAQS. While Connecticut makes some good arguments, we have decided to include New Haven and Fairfield Counties in the New York-N. New Jersey-Long Island, CT-NJ-NY PM2.5 nonattainment area. This decision is based on consideration of nine factors, including emissions, air quality, population density, traffic and commuting patterns, expected growth, meteorology, geography/topography, jurisdictional boundaries, and level of control of emission sources, and on national consistency in the designation process.

EPA compared emissions, population, and traffic levels in all counties within and adjacent to the New York-Newark-Bridgeport, NY-NJ-CT-PA Combined Statistical Area (CSA), which was delineated by the Office of Management and Budget (OMB) on June 6, 2003. New Haven and Fairfield Counties had similar, or sometimes greater levels for all these factors than other New York counties (e.g., Westchester, Nassau, Suffolk, and Orange) and New Jersey counties (e.g., Middlesex, Bergen, and Monmouth) for which EPA is designating nonattainment. In addition, EPA notes that Fairfield and New Haven Counties are a conduit for a large percentage of the truck traffic that flows throughout New England. As such, this presents an opportunity for Connecticut to work with New York and New Jersey to identify measures to help reduce diesel emissions and, thus, help monitors in the New York urban area to meet PM2.5 standards. Based on these considerations, EPA is including New Haven and Fairfield Counties in the New York-N. New Jersey-Long Island, CT-NJ-NY PM2.5 nonattainment.

2. Responses to Comments EPA Region 2 (New Jersey, New York, Puerto Rico, and Virgin Islands)

Comment: 1013a-31

Region: 2

State: NJ

Area: New York –N. New Jersey-Long Island, NY-NJ-CT

Comment: Ocean and Sussex Counties are not included in EPA’s recommended nonattainment area, despite their being part of the New York CMSA. These counties must be included in the nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated CMSA/MSA as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

New Jersey had submitted an analysis showing why some of their counties should not be included in the nonattainment area. Independent of this, EPA had performed its own technical analysis which addressed each of the nine factors above. The EPA analysis demonstrated that these counties were not in violation of the PM_{2.5} standard and were not significantly contributing to a nonattainment monitor. Therefore, EPA’s analysis verified the State’s recommendation concerning Ocean and Sussex counties.

Comment: 1013a-32

Region: 2

State: NJ

Area: Philadelphia-Wilmington, PA-NJ-DE

Comment: EPA failed to include Cape May, Cumberland and Salem Counties in the Philadelphia nonattainment area. Cape May is adjacent to the CMSA, but is home to the B.L. England coal-fired power plant, which emitted over 12,000 tons of SO₂ and almost 3,000 tons of NO_x in 2002. Cumberland and Salem Counties are within the CMSA;

Salem County also contains a coal-fired power plant. In 2002, the Deepwater power plant in Salem County emitted almost 2,500 tons of SO₂ and almost 1,000 tons of NO_x. These counties must not be left out of the nonattainment area.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. EPA considered pollutant emissions in our technical analysis and our decision regarding the final set of boundaries for the nonattainment areas. EPA's explanation for not including Cape May, Cumberland, and Salem Counties in the Philadelphia nonattainment area are contained in the TSD.

Comment: 1070-1

Region: 2

State: NJ

Area: Philadelphia-Wilmington, PA-NJ-DE

Comment: Commissioner Bradley Campbell of the New Jersey Department of Environmental Protection (NJDEP) recommends that EPA designate Burlington, Camden, and Gloucester counties as attainment. He notes the following in support of this recommendation:

1. These counties are currently monitoring attainment.
2. Meteorology studies show that prevailing winds blow the three southern New Jersey counties' air pollution away from Philadelphia. Meteorology seems to have been ignored in the EPA's analysis for determining how portions of southern New Jersey should be designated.
3. EPA never announced the priority in which they would consider their original nine factors for determining nonattainment areas nor did they establish cutoffs for most of their factors. EPA also failed to establish clear relationships between monitored PM_{2.5} design values and factors such as population density and VMT. Some of these factors, like VMT and population, have a relationship to emissions. However, emissions from the counties were already one of the factors that the agency considered. Separately considering VMT and population at best amounts to double counting and at worst is irrelevant.
4. Application of the entire suite of 9 factors has led to confusing and probably incorrect results. For example, upwind sources were not proposed for the Philadelphia area and probably have a far greater impact than the three New Jersey counties.
5. The three New Jersey counties have minimal impact on Philadelphia during its high PM_{2.5} days when the health impacts would be the greatest, and on most other days throughout the year as well. An analysis of the days when high PM_{2.5} levels occurs in Philadelphia, Pennsylvania shows only 4 out of 22 days analyzed in a three-year period, when emissions from New Jersey could have possibly contributed to those high levels in Philadelphia, Pennsylvania.

6. If EPA disregards this evidence, New Jersey will face an increased risk of Federal sanctions even though actions taken in the three counties will be largely irrelevant to nonattainment in Philadelphia.

7. Direct PM_{2.5} and PM_{2.5} precursor emissions coming from the three southern New Jersey counties are not as significant as those generated within the Commonwealth of Pennsylvania. Southern New Jersey's point sources are orders of magnitude smaller than those throughout Pennsylvania, and the mobile sources (which are limited to mostly gasoline-fueled vehicles) within New Jersey predominately stay within the State's borders.

The NJDEP also believes it is most important to focus on local PM_{2.5} contributions, as opposed to regional PM_{2.5} contributions, in establishing cohesive nonattainment areas. The majority of southern New Jersey's emissions are regional precursors which take time to form particles in the atmosphere, and as such, should not be considered when determining the boundaries of a nonattainment area. Camden speciation data reveals that southern New Jersey PM_{2.5} emissions are mainly from directly emitted PM_{2.5} and SO₂ emissions, and to lesser extent, NO_x emissions. It is unreasonable to expect that regional emissions from a nearby area are significantly contributing to local violations of the standards.

A review of the NJDEP's preliminary 2002 base year inventory confirms the findings from the NJDEP's review of the 2001 NEI emissions (i.e. that southern New Jersey has relatively low levels of directly emitted PM_{2.5} emissions). Further, the 2002 preliminary numbers show less of an impact from directly emitted particles than the 2001 NEI values. The NJDEP staff found directly emitted PM_{2.5} contributions from New Jersey to Pennsylvania to be less than 1 percent of the standard.

8. The NJDEP feels that the EPA's newly developed "weighted emissions scoring process" is arbitrary and seems to expand nonattainment areas to include counties monitoring attainment solely because of their relative emissions levels without any demonstration of their impact on the violating monitors.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance

establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. In fact, the very establishment of CMSA's/MSA's by the Bureau of the Census recognizes the integral economic and sociologic connection of counties within the metropolitan areas. Nevertheless, our final set of boundaries of nonattainment areas reflects an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. EPA did not weight the nine factors because no two areas are identical. What may be important at one location may not be as important at another location. In one county a major source may be so overwhelming that it alone may set the stage for a nonattainment designation. On the other hand, another county may not be an overwhelming contributor in any one area but may be significant in several categories and thus require a nonattainment designation. Accordingly, EPA used professional judgment as opposed to a straight numerical scale (or score).

In EPA's June 29, 2004 letter to the State of New Jersey, EPA indicated that Burlington, Camden, and Gloucester counties should be nonattainment for the PM_{2.5} standard, but invited the states to submit additional justifications, based on the 9 factors, to support their original designation recommendations. The TSD fully explains EPA's rationale for including Burlington, Camden, and Gloucester counties in the Philadelphia nonattainment area.

Responses to New Jersey's specific comments are addressed below:

1. Although Burlington, Camden, and Gloucester counties do not have violating monitors, EPA's overall assessment of available technical information indicates that the counties contribute to Philadelphia metropolitan area nonattainment.
2. EPA used both an analysis of pollution and wind rose data, and 24-hour back trajectories to investigate the influence of weather patterns on observed PM_{2.5} mass contributions. Although the prevailing winds are primarily from the southwest, there are times when the wind does shift, which would allow emissions from the three New Jersey counties to impact Philadelphia. That, coupled with the fact that these three counties have large sources located along the river bordering the Philadelphia nonattainment area, causes the EPA to determine that New Jersey contributes to nonattainment.
3. The boundaries of nonattainment areas reflect an area-specific overall assessment of currently available technical information relating to the nine specific factors. EPA did not weight the nine factors, prioritize factors, or establish specific cutoffs because no two areas are identical. EPA used professional judgment as opposed to using a straight numerical scale (or score), therefore double-counting did not occur. One factor may have been more important in one area than at another location. For example, the presence of large point sources and populations in close proximity to violating monitors in the Philadelphia metropolitan area were important factors which indicate that the New Jersey counties contribute to monitored violations.

EPA recognizes that many of the 9 factors are indicative of emissions. The other factors also indicate contributions that may not be reflected in the emissions estimates for each county, and indicate whether the counties should be considered an integral part of a metropolitan area which has monitored PM_{2.5} design values above the standard.

4. Upwind counties with sources of particulate pollution were proposed for inclusion in the Philadelphia metropolitan nonattainment area (e.g., Bucks and Montgomery counties in Pennsylvania). EPA has strived for consistency in proposing areas with similar contributions to a nonattainment area.

5. Because the design value for the Philadelphia metropolitan area is based on the annual standard, EPA is concerned about contributions to the violating monitors from the three southern New Jersey counties throughout the year, on both high and low PM_{2.5} days. In addition, the trajectory analyses show back trajectories over a 24 hour period only. Since the New Jersey counties contain multiple large point sources concentrated along the border of Philadelphia and Delaware counties, an analysis of short lived trajectories (e.g., 20 minute) would be needed in order to prove that New Jersey emissions do not contribute to high PM_{2.5} levels in Philadelphia. Such data has not been presented by the State.

6. EPA is obligated to designate an area as nonattainment if the area is contributing to a nearby area that is violating the standard. The counties proposed for nonattainment have high PM direct and secondary emissions relative to the other counties in the metropolitan area. Additional reductions in the entire metropolitan area are needed in order for nearby counties with violating monitors to achieve attainment.

7. EPA recognizes that the three New Jersey counties generate less emissions than some of the counties in Pennsylvania. However, the emissions generated are not insignificant, and there is not a major difference when comparing the carbon and NO_x emissions from each of the three New Jersey counties with the other counties on the Pennsylvania side of the Philadelphia metropolitan area. For example, when comparing 2001 NEI county totals for carbon, Philadelphia, Delaware, Montgomery, Chester, and Bucks emitted 2,116 tons, 1,458 tons, 1,905 tons, 1,228 tons, and 1,443 tons, respectively, of carbon compared to 1,035 tons, 1,286 tons, and 1,326 tons, respectively, for Gloucester, Camden, and Burlington.

We do not believe that the size of the point sources in New Jersey compared to the size of the point sources in Pennsylvania is a key factor in determining whether New Jersey contributes to Philadelphia nonattainment. Additionally, although most commuters stay within New Jersey, the state has not provided sufficient evidence that the large number of motor vehicles entering Philadelphia from New Jersey do not contribute to Philadelphia nonattainment.

EPA disagrees with the State commenter that precursor emissions should not be considered. Although it is recognized that precursors do need time to form in the atmosphere, stagnation effects, variable wind conditions, and low emission releases could

result in precursor emissions impacting nearby areas. The Camden speciation data is also not relevant.

The 2002 NEI emission inventory is preliminary and has not undergone rigorous quality assurance. EPA believes that the 2001 NEI should be the basis for the PM designations. The preliminary 2002 NEI also shows an increase of emissions from Burlington County.

The NJDEP staff analysis showing 1 per cent PM contribution did not consider the impact from precursor emissions. EPA also believes that the New Jersey analysis may be underestimating the impact of PM direct emissions from the local emission sources concentrated along the Delaware River.

8. EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM_{2.5}.

It is also important to note that the PM_{2.5} (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM_{2.5} weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing

these scores, we do not intend that they should be used in a "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information, including meteorology, as we determine the collection of counties in a nonattainment area.

Comment: 1009-1

Region: 2

State: NY

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: Commenter notes that the New York State DEC staff have completed an initial review of EPA's technical analysis that serve as the basis for EPA's proposed modifications to New York's nonattainment recommendation. The commenter requests EPA to respond to questions regarding the following factors: emissions, air quality, traffic and commuting patterns, expected growth, and meteorology. Finally, the commenter requests that a 60-day review of EPA's response to their requests of information be granted given the long-term ramifications of the decisions.

EPA Response: Thank you for your July 21, 2004 letter regarding EPA's PM2.5 designation recommendations. We recognize New York's need to gain a timely understanding of the technical basis for EPA's recommendations. My staff has already begun to respond directly to some of New York's questions. They have scheduled a conference call with your staff during the week of July 26, 2004 for the purpose of fully explaining EPA's technical rationale; and they have scheduled a follow-up meeting in your offices on August 5, at which time we will undertake to answer any remaining questions.

My staff has advised me that some of the information you requested in your letter was not germane to EPA's considerations in developing its recommendations on PM2.5 designations. Nevertheless, we will attempt to provide you with responses to those requests as quickly as possible.

You asked for additional time to consider EPA's recommendations. EPA Administrator Leavitt has stated publicly that EPA intends to make its final decision by November 17, 2004. While we do not expect that we will be able to provide New York with additional time after September 1, 2004 to submit comments, I believe that this schedule provides sufficient time to consider the matter fully.

Comment: 1013a-33

Region: 2

State: NY

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: EPA has not recommended that Dutchess, Putnam and Ulster Counties be designated nonattainment. These counties are all part of the New York CMSA and must be included in the nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated CMSA/MSA as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

New York had submitted an analysis showing why some of their counties should not be included in the nonattainment area. Independent of this, EPA had performed their own technical analysis which addressed each of the nine factors above. The EPA analysis demonstrated that these counties were not in violation of the PM_{2.5} standard and were not significantly contributing to a nonattainment monitor. Therefore, EPA's analysis verified the State's recommendation concerning Dutchess, Putnam and Ulster counties.

Comment: 1071-1

Region: 2

State: NY

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: The commenter, on behalf of New York State Department of Environmental Conservation (NYSDEC), expresses concern about EPA's designation process, as EPA has not followed its own guidance. States were told that the PM implementation guidance would be released prior to making recommendations. Thus far, it has yet to be issued. Guidance which was to be issued regarding the time frame which was consistent with the

CAA has been superseded by transmittal letters, methods of analysis that are being employed have been put forth without input from the affected parties and EPA has failed to give consideration to its own published research. Specific comments are summarized below:

1. Based on the results from the single monitor in New Haven, Connecticut, EPA staff conducted an analysis which reviewed, among other things, emissions, population, traffic and commuting patterns, and pollution roses to determine that Suffolk, Nassau, Westchester, Rockland and Orange were contributors to the nonattainment levels recorded at the Stiles Street monitor in New Haven, Connecticut. This analysis contradicts a source characterization study that EPA performed by speciating the collected PM_{2.5} data from eight cities around the country. This study found that 58 percent of the total PM_{2.5} mass was consistent with regional and transported sources of this pollutant. This study would seem to indicate that the five counties are not significant contributors to the Stiles Street monitor. Proposing these counties as nonattainment would place a burden on areas in New York State that do not contribute significantly to nonattainment and cannot contribute to achieving attainment.

2. New York implements measures to control precursors to PM_{2.5} on stationary and mobile sources.

3. The commenter notes that EPA uses a meteorology analysis method with regard to the Stiles Street monitor in New Haven, Connecticut that is similar to the method employed by the NY DEC in its February 13, 2004 demonstration. That demonstration showed that emissions from the supplemental counties do not contribute to the nonattainment readings in New York and Bronx Counties.

4. To designate the supplemental counties, which are clearly in attainment, as contributing to a problem at the Stiles Street monitor, when that monitor meets the definition of a microscale monitor, is an error.

5. The commenter is concerned that EPA is ignoring existing research and analysis regarding the nature of PM_{2.5} and the unique behaviors of direct and secondary emissions over distance. EPA needs to take into consideration not only factors that can serve as indicators of relative emission volumes like VMT and populations, but also how far PM_{2.5} impact from the sources reach.

6. The "urban excess" method arbitrarily creates a relationship between urban excess in a region and the emissions from the counties near that urban area. EPA has not justified this concept and the New York DEC believes that a pure evaluation of urban excess actually provides support for the original proposal for a five county nonattainment area.

7. The urban excess method has the following limitations: the two monitoring networks- IMPROVE and STN, have different sampling and analysis methodologies; when the average concentration of a pollutant at a rural site is higher than the corresponding value

at the urban site, the urban excess is zero; and the method does not take into account prevailing meteorology.

A detailed technical nine-factor analysis is attached to the comment letter.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. In fact, the very establishment of CMSA's/MSA's by the Bureau of the Census recognizes the integral economic and sociologic connection of counties within the metropolitan areas. Nevertheless, our final set of boundaries of nonattainment areas reflects an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. EPA did not weight the nine factors because no two areas are identical. What may be important at one location may not be as important at another location. In one county a major source may be so overwhelming that it alone may set the stage for a nonattainment designation. On the other hand, another county may not be an overwhelming contributor in any one area but may be significant in several categories and thus require a nonattainment designation. Accordingly, EPA used professional judgment as opposed to a straight numerical scale (or score).

In EPA's June 29, 2004 letter to the State of New York, EPA indicated that Nassau, Suffolk, Westchester, Orange, and Rockland counties should be nonattainment for the PM_{2.5} standard, but invited the states to submit additional justifications, based on the 9 factors, to support their original designation recommendations. The TSD fully explains EPA's rationale for including Nassau, Suffolk, Orange, Rockland and Westchester counties in the New York Metropolitan nonattainment area.

Responses to New York's specific comments are addressed below:

1. The supplemental data provided by the State, including the EPA source characterization study, is indicative of a strong regional component. EPA agrees that regional transport is an important issue and is currently addressing the issue of regionally

transported emissions via the Clean Air Interstate Rule (CAIR). However, the data presented by the State does not rule out significant contributions to violating monitors in the Bronx and New York from local emission sources in Suffolk, Nassau, Orange and Rockland and Westchester Counties. Large populations, large number of commuters to New York City, and limited transportation routes (especially Long Island) for goods and service delivery, and the presence of violating monitors near those major transportation routes are indicative of a significant mobile source contribution. Although the State claims that mobile sources only contribute approximately 5 percent of total PM_{2.5} emissions, this figure is a county wide average. The impact of these emissions seem to be more pronounced near the violating monitors adjacent to the major transportation routes. The State estimate also does not take into effect mobile source precursor emissions.

2. EPA recognizes that New York is implementing measures to control precursors to PM_{2.5} on stationary and mobile sources. However, EPA is obligated to designate an area as nonattainment if the area is contributing to a nearby area that is violating the standard. The additional counties continue to have high PM direct and secondary emissions relative to the other counties in the metropolitan area. Additional reductions are needed in order for nearby counties with violating monitors to be in attainment.

3. EPA used both an analysis of pollution and wind rose data, and 24-hour back trajectories to investigate the influence of weather patterns on observed PM_{2.5} mass contributions. Analysis of the data shows that annual average PM_{2.5} concentrations in the New York City area are influenced by emissions in any direction at various times, but less likely to be influenced by emissions from Westchester, Suffolk, Nassau, Orange, and Rockland Counties.

4. EPA has reviewed additional data submitted by the State of Connecticut and concurs that the New Haven site should be classified as a microscale site and that the emissions from the supplemental counties should not be considered as contributing to a problem at the Stiles Street monitor. The supplemental counties are recommended for nonattainment designation based on their contribution to violating monitors in New York and Bronx counties.

5. EPA has not ignored existing research and analysis regarding the nature of PM_{2.5} and the unique behaviors of direct and secondary emissions over distance. EPA has found that PM_{2.5} is a pervasive pollutant and is not confined to small areas. Based on the CAA and EPA guidance, the presumptive nonattainment area is all of the counties in the 1999 OMB boundary definitions. The state has not provided an adequate technical analysis demonstrating that Nassau, Suffolk, Orange, Rockland and Westchester counties did not contribute to violations in the CMSA/MSA.

6. EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area

than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM2.5 in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM2.5 level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM2.5 component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM2.5 in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM2.5 components for an urban area and speciated components from a nearby rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM2.5. Accordingly, we are using the speciated PM2.5 data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM2.5.

It is also important to note that the PM2.5 (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they should be used in a "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information, including meteorology, as we determine the collection of counties in a nonattainment area.

7. Although they use similar sampling and analytical methods, EPA recognizes that the STN and IMPROVE networks measure different species and employ different operational protocols. EPA has taken these differences into account when calculating urban excess. Data handling protocols employed by the EPA to put aerosol composition data derived from both these networks on an as-similar-as-possible basis are referenced below.

Reference

1. Rao, V.; Frank, N.; Rush, A; Dimmick, F; Chemical Speciation of PM_{2.5} in Urban and Rural Areas. U.S. National Air Quality and Emissions Trends Report, 2003 Special Studies Edition, EPA-454/ R-03-005; Research Triangle Park, NC, September 2003.

**3. Responses to Comments EPA Region 3 (Delaware, District of Columbia,
Maryland, Pennsylvania, Virginia, and West Virginia)**

Comment: 1013a-8

Region: 3

State: DC | MD | VA

Area: Baltimore, MD | Washington, DC-MD-VA| Martinsburg, WV- Hagerstown, MD

Comment: The EPA has failed to recommend that the Washington-Baltimore CMSA be designated as one nonattainment area; this area must be designated as one nonattainment area.

EPA Response: Although large metropolitan areas such as the Washington DC CMSA may be considered as one large area in the designation process, EPA agreed with Maryland's recommendations to split them into the smaller MSAs. The smaller areas have separate air quality planning processes that EPA believes would be more practical and productive than having one large area. EPA also seeks to maximize consistency between the PM2.5 and the 8-hour ozone designations. Keeping these areas separate under PM2.5 would be consistent with the designations under 8-hour ozone.

Comment: 1013a-8

Region: 3

State: DC | MD | VA

Area: Washington, DC-MD-VA| Baltimore, MD| Martinsburg, WV- Hagerstown, MD

Comment: The EPA has failed to recommend that the Washington-Baltimore CMSA be designated as one nonattainment area; this area must be designated as one nonattainment area.

EPA Response: Although large metropolitan areas such as the Washington DC CMSA may be considered as one large area in the designation process, EPA agreed with Maryland's recommendations to split them into the smaller MSAs. The smaller areas have separate air quality planning processes that EPA believes would be more practical and productive than having one large area. EPA also seeks to maximize consistency between the PM2.5 and the 8-hour ozone designations. Keeping these areas separate under PM2.5 would be consistent with the designations under 8-hour ozone.

Comment: 1090-1

Region: 3

State: DE

Area: Philadelphia-Wilmington, PA-NJ-DE

Comment: The commenter does not agree with EPA's modification to the State of Delaware's PM2.5 nonattainment designation recommendation. The commenter requests EPA to establish the boundaries of New Castle, Delaware as the boundaries of a stand-alone annual PM2.5 nonattainment area and that New Castle County not be included as part of the Philadelphia CMSA. The commenter notes that unlike ozone, Delaware's

PM2.5 nonattainment problem is caused by local emissions, exacerbated by intra- and inter- state PM2.5 and PM2.5 precursor transport. The commenter believes that, in the case of New Castle County, Delaware, it is appropriate to address PM2.5 nonattainment as a local problem. The commenter does not minimize the significance of PM2.5 related transport, rather he indicates that there is not a relationship between transport and nonattainment boundaries, and PM2.5 and PM2.5 precursor transport must be addressed at a larger regional level similar to what has been identified in EPA's proposed CAIR. Supporting information is attached.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM2.5 standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

New Castle County is an integral part of the Philadelphia metropolitan area. Population, growth and commuting into the Philadelphia area contribute to nonattainment in the Philadelphia area.

Comment: 1013a-28

Region: 3

State: MD

Area: Baltimore, MD | Washington, DC-MD-VA

Comment: Washington-Baltimore CMSA:

EPA has failed to recommend that this CMSA be designated as one nonattainment area; this area must be designated as one nonattainment area. EPA also failed to include St. Mary's, Calvert and Queen Anne's Counties, all part of the CMSA, in the nonattainment area. Queen Anne's County has no monitor, but between 1990 and 2000 the county experienced 19% population growth and between 1996 and 2002 they experienced a 25% increase in VMT. EPA does not appear to have conducted an analysis for St. Mary's County.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in

the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. Based on weighted emissions screening and the combined factor analysis, Calvert, and Queen Anne's Counties are considered to have low contribution to the nonattainment area and were excluded from the presumptive boundaries of the nonattainment area. St. Mary's County is an adjacent county that was determined to have low contribution based on the initial screening for this area.

Also, although large metropolitan areas such as the Washington DC CMSA may be considered as one large area in the designation process, EPA agreed with Maryland's recommendations to split them into the smaller MSAs. The smaller areas have separate air quality planning processes that EPA believes would be more practical and productive than having one large area. EPA also seeks to maximize consistency between the PM2.5 and the 8-hour ozone designations. Keeping these areas separate under PM2.5 would be consistent with the designations under 8-hour ozone.

Comment: 1033-1

Region: 3

State: MD

Area: Baltimore, MD| Washington, DC-MD-VA | Martinsburg, WV- Hagerstown, MD

Comment: Commenter urges EPA to reconsider the Maryland Department of the Environment's (MDE) suggested option of designating as nonattainment only the counties that are monitoring nonattainment while requiring the remaining counties in the MSA to control their emission sources at the same level as the counties designated nonattainment. MDE comments they have worked closely with the county governments. These governments would develop and sign a MOU to commit to the reductions, which would make the controls federally enforceable. MDE notes that a hysplit model analysis for Washington County shows how transported emissions are the primary reason for their designation and MDE has looked into the role county demographics played in the EPA analysis.

EPA Response: EPA appreciates the collaboration between the counties and MDE, as well as Maryland's commitment to apply control emissions throughout the state at the same levels. However, the CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations

of the PM2.5 standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

Please see TSD for additional information on EPA's designations.

Comment: 1030-1

Region: 3

State: MD

Area: Baltimore, MD| Washington, DC-MD-VA| Martinsburg, WV- Hagerstown, MD

Comment: The commenter, speaking for Maryland Department of the Environment (MDE), requests a dialogue between MDE and EPA regarding differences in Maryland's and EPA's recommendations on the proposed PM2.5 nonattainment boundaries, specifically with regard to Carroll, Charles, Frederick, Harford, Howard, Montgomery and Washington Counties. The MDE requests that EPA consider the second option recommended earlier by MDE. In this option, only the counties that have monitors showing nonattainment would be designated as nonattainment but the remaining counties in the MSA would be required to control their emission sources at the same level as the connected nonattainment areas. MDE has worked with stakeholders and explored the possibility of establishing a MOU or some other federal enforceable mechanism to ensure that all counties within the MSA are part of the regional solution.

In addition the commenter requests that EPA complete and publish the guidance on how the PM2.5 standard will be implemented. Without the guidance it is difficult to discuss the recommended nonattainment area boundaries with various stakeholders.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas.

Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Air quality monitoring information in three of these counties do not show a violation of the standard, however, population, growth, and commuting in these six counties contribute to the monitored nonattainment. Please see the TSD for the justification for the changes in the State's recommendations.

To be consistent in applying EPA guidance across all states, the (alternate) secondary control regions as suggested by the state and its stakeholders is not endorsed.

Comment: 1013a-26

Region: 3

State: MD

Area: Martinsburg, WV - Hagerstown, MD

Comment: EPA has recommended that the Maryland portion of the MSA (Washington County) be designated nonattainment. Berkeley and Morgan Counties should also be included as nonattainment. As described in our previous letter to EPA, Allegany County may also be a significant source of emissions impacting the nonattainment problem and should be considered for inclusion in the nonattainment area. In 2001, the county emitted over 3,000 tons of PM, over 20,000 tons of SO₂ and over 12,000 tons of NO_x. It does not appear that an analysis of this county's emissions has been done.

EPA Response: Once we determine that an area is violating the standard, we looked at nearby areas to determine if they are contributing to the violation and should be included in the designated nonattainment area. Our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: (1) air quality monitoring information, (2) pollutant emissions, (3) population and growth in the area, (4) commuting, (5) vehicle miles traveled, (6) meteorology, (7) terrain, (8) jurisdictional boundaries, and (9) the existing level of control of emissions sources.

Berkeley, Morgan, and Washington Counties are part of the Hagerstown-Martinsburg CBSA. Berkeley and Washington Counties are designated as nonattainment. However, our analysis of Morgan County shows that it is low in all areas of the combined factor analysis.

Allegany County is an adjacent area that has low population, negative growth, and negligible commuting into the CBSA, and was therefore excluded.

Comment: 1013a-27

Region: 3

State: MD

Area: Philadelphia-Wilmington, PA-NJ-DE

Comment: EPA failed to recommend that Cecil County be designated nonattainment as part of the Philadelphia nonattainment area. This county is part of the CMSA and must be included in the nonattainment area. EPA's documentation shows that Cecil County's 2001-2003 design value was 13.0 $\mu\text{g}/\text{m}^3$, which is attaining, but close to the annual standard. Because the county's 1990 through 2000 growth rate was 20% and the percent VMT growth between 1996 and 2002 was 29%, emissions in this area will briskly increase in future years.

EPA Response: The EPA's April 1, 2003, boundary guidance for designations provided 9 factors for a state to consider in their February 2004 recommendations. Maryland's revised recommendation of May 28, 2004 recommended Cecil County as attainment. The monitored attainment and the combined factor analysis indicate low contribution to the monitored nonattainment in the Philadelphia area. Please see the TSD for additional information on the combined factor analysis.

Comment: 1013a-8

Region: 3

State: MD | VA | DC

Area: Washington, DC-MD-VA | Baltimore, MD | Martinsburg, WV- Hagerstown, MD

Comment: The EPA has failed to recommend that the Washington-Baltimore CMSA be designated as one nonattainment area; this area must be designated as one nonattainment area.

EPA Response: Although large metropolitan areas such as the Washington DC CMSA may be considered as one large area in the designation process, EPA agreed with Maryland's recommendations to split them into the smaller MSAs. The smaller areas have separate air quality planning processes that EPA believes would be more practical and productive than having one large area. EPA also seeks to maximize consistency between the PM_{2.5} and the 8-hour ozone designations. Keeping these areas separate under PM_{2.5} would be consistent with the designations under 8-hour ozone.

Comment: 1028-1

Region: 3

State: PA

Area:

Comment: Pennsylvania DEP urges EPA to reconsider its proposed designations for the PM_{2.5} standard.

1. Commenter is concerned with EPA's overall approach for the PM_{2.5} designations. The weighted emissions approach expands nonattainment areas to include counties monitoring attainment solely because of the emissions from certain major sources like coal-fired power plants. Pennsylvania strongly opposes this approach. Emissions from large point sources should be addressed by national or regional legislation or regulation.

EPA Response: As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM_{2.5}.

It is also important to note that the PM_{2.5} (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As

described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute to the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area. Please see TSD for additional information on EPA's designations.

Comment: 1013a-42

Region: 3

State: PA

Area: Harrisburg-Lebanon-Carlisle, PA

Comment: Both Perry County (inside the Harrisburg CMSA) and Snyder County (adjacent to the Harrisburg CMSA) were not included in EPA's recommended nonattainment area. The Sunbury coal-fired power plant, located in Snyder County, emitted over 25,000 tons of SO₂ and over 5,000 tons of NO_X in 2002. Both of these counties must be included in the nonattainment area.

EPA Response: The review of the nine factors did not support inclusion of Snyder and Perry in the Harrisburg nonattainment area. Please see the TSD for the justification for the changes in the State's recommendations.

Comment: 1028-4

Region: 3

State: PA

Area: Harrisburg-Lebanon-Carlisle, PA

Comment: Lebanon County should not be included in the Harrisburg nonattainment area. It has low emissions and will have little or no effect on design values in the nonattainment area since Lebanon County is generally downwind of Cumberland and Dauphin Counties. The proposed inclusion of Lebanon County solely to establish a contiguous nonattainment area seems more of an aesthetic exercise rather than assisting the nonattainment area to attain the annual PM_{2.5} standard.

EPA Response: EPA has reviewed the information provided by the Commonwealth. EPA disagrees. Lebanon County is part of the core metropolitan area. The population density is similar to that of Dauphin and Cumberland Counties. Twenty four percent of the population commutes within the nonattainment area. In addition, the juxtaposition of two nonattainment areas suggests Lebanon County is not only contributing to, but is estimated to have elevated air quality similar to the nonattainment counties in Eastern Pennsylvania.

Comment: 1007-1

Region: 3

State: PA

Area: Johnstown, PA | Pittsburgh-Beaver Valley, PA

Comment: Commenter disagrees with the addition of 5 counties as nonattainment beyond those proposed by Pennsylvania DEP. He believes that this addition, essentially doubling the size of the proposed nonattainment area, represents one of the worst threats to economic competitiveness of southwestern Pennsylvania in more than a decade, while having little or no air quality benefit. He notes that most of the monitors in southwestern Pennsylvania exceed the PM_{2.5} NAAQS by only a small amount. He comments that this pollution is likely due to pollution from other states. He points to a study at Carnegie Mellon University that shows that 80% of the PM_{2.5} in southwestern PA comes from sources outside the region.

EPA Response: Thank you for your July 15, 2004 letter to the U.S. Environmental Protection Agency (EPA) regarding the proposed designation of areas from the fine particulate matter (PM_{2.5}) national ambient air quality standard in Pennsylvania.

As required by statute and EPA guidance, the Agency must designate areas that include counties violating the standards, as well as nearby counties that may contribute to a violation of the standard as nonattainment. Thus, many of the counties you reference in your letter may not have monitored a problem in an adjacent area. Our analysis included many factors such as population, traffic, growth, meteorology, geography, and jurisdictional boundaries.

In EPA's letter dated June 29, 2004, we informed Governor Edward Rendell of our modification to his original nonattainment boundaries recommendations. The next step in the designation process is for Pennsylvania DEP to assess the available data and to provide additional information. We will consider any additional information provided by PADEP in our decision-making. This information is requested by September 1, 2004, but we encourage the Commonwealth to have an ongoing dialogue with EPA during the entire designation process. It is my understanding that supplemental information on many of the counties you mentioned, including the Liberty area of Allegheny County, will be provided. We will evaluate your suggestions as well as any additional information provided by PADEP as we finalize our decision on nonattainment boundaries.

It is important to note that EPA is also currently addressing fine particulate pollution with a comprehensive national clean air strategy. This strategy includes EPA's recent rule to reduce pollution from nonroad diesel engines and the proposed rule to reduce pollution from power plants in the eastern United States. These regulations will produce significant reductions in the area of transported pollution.

Comment: 1013a-43

Region: 3

State: PA

Area: New York-N. New Jersey-Long Island, NY-NJ-CT

Comment: EPA failed to include Pike County in the recommended New York nonattainment area. This county is part of the CMSA and must be included.

EPA Response: The EPA's April 1, 2003, boundary guidance for designations provided 9 factors for a state to consider in their February 2004 recommendations. The combined factor analysis indicates low contribution to the monitored nonattainment in the New York nonattainment area. Please see the TSD for additional information on the combined factor analysis.

Comment: 1013a-44

Region: 3

State: PA

Area: Philadelphia -Wilmington, PA-NJ-DE

Comment: Lehigh and Northampton Counties should be designated nonattainment due to their likely contributions to nonattaining C/MSAs. Lehigh County, adjacent to both the Philadelphia CMSA and the Reading MSA (also recommended for nonattainment) has high emissions of SO₂, NO_x and VOC, according to EPA's June 29, 2004 letter to the State. Northampton County is home to both the Martins Creek and Portland electric generating facilities, which are significant sources of SO₂ and NO_x pollution, emitting over 46,000 tons of SO₂ and over 8,000 tons of NO_x in 2002. This county is adjacent to both the New York CMSA and the Philadelphia CMSA. EPA and the State should determine which nonattainment area these counties contribute to in order to add them to the appropriate nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical

information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Please see TSD for additional information on EPA's designations.

Comment: 1028-5

Region: 3

State: PA

Area: Philadelphia -Wilmington, PA-NJ-DE

Comment: Pennsylvania DEP disagrees with EPA's recommendation to expand the Philadelphia nonattainment area to include Montgomery and Bucks Counties. These counties are monitoring attainment and are thought to be generally downwind and/or not significantly contributing to monitors exceeding the annual standard. It appears EPA did not take into consideration the level of controls implemented in the five-county Philadelphia region. Commenter's analysis indicates that the Philadelphia problem is more local in scope and expanding the area to include Bucks and Montgomery Counties will not help the region to attain the PM_{2.5} standard.

Additionally, EPA's methodology does not establish a definitive relationship between countywide emissions and the region's design value monitor.

EPA Response: As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent

speciated PM2.5 component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM2.5 in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM2.5 components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM2.5. Accordingly, we are using the speciated PM2.5 data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM2.5.

It is also important to note that the PM2.5 (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bight-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

Bucks and Montgomery Counties are part of the core metropolitan area. Both counties are among the highest population and commuting in the Philadelphia area. Bucks County has experienced a 10 percent growth rate. For these reasons, EPA has determined that Bucks and Montgomery do contribute to the nonattainment in Philadelphia and should be included in the nonattainment boundaries.

Comment: 1028-3

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA| Liberty-Clairton, PA

Comment: With regards to the Pittsburgh area, Pennsylvania DEP offers the following comments:

1. Based on further analysis, Pennsylvania DEP recommends designation of two additional nonattainment areas within the Pittsburgh nonattainment area. Additional analysis of monitoring and meteorology data supports designating two partial county nonattainment areas. The analysis shows that unique local PM2.5 problems exist in the vicinities of the Liberty Borough, Clairton, and North Braddock monitors. Bringing these areas into attainment will take longer than bringing the rest of the Pittsburgh area into attainment. The commenter believes it would be illogical to tie the attainment status of

the remainder of an extensive nonattainment area to this problem. The addition of two additional nonattainment areas within the Pittsburgh nonattainment area is necessary to address the attainment timing issues and unique needs of these two local areas.

2. Butler County has low emissions, low population density, low VMT, and scores low in EPA's weighted emissions analysis. There is no reason to conclude that this county should be nonattainment.

3. Lawrence County has historically not been a part of the Pittsburgh planning area for ozone, has relatively low emissions and a relatively low and declining population density. Furthermore, the bulk of SO₂ emissions are from the New Castle power plant and would be addressed by EPA's proposed CAIR. Attainment is the correct designation for Lawrence County.

4. Pennsylvania strongly disagrees with EPA's proposal to designate Indiana, Armstrong and Greene Counties as nonattainment solely because they have coal-fired power plants. These are rural, non-industrial counties. It is DEP's position that emissions from large point sources must be addressed by regional or national legislation.

EPA Response: EPA has reviewed the information provided by the Commonwealth. However, EPA has determined that Butler and part of Lawrence counties are contributors to the nonattainment in the Pittsburgh area.

Butler County as part of the MSA has experienced the largest growth in the Pittsburgh area.

EPA has worked with the Commonwealth to determine the portions of Indiana, Armstrong, Lawrence and Greene counties with the predominance of emissions contribution. EPA has determined that portions of these counties will be designated nonattainment.

The Commonwealth of Pennsylvania provided extensive documentation to support a recommendation that a separate, distinctively local-source impacted, nonattainment area be designated within the Pittsburgh nonattainment area. The recommended Liberty Borough area is specified as the five municipalities which comprise the area in the vicinity of the Clairton Coke Works which were previously designated nonattainment for PM-10. EPA agrees with the Commonwealth's recommendation is designating Glassport, Liberty, Lincoln and Port Vue Boroughs and the City of Clairton as the separate Liberty/Clairton nonattainment area. The remainder of Allegheny County is in the Pittsburgh nonattainment area. Please see TSD for additional information.

Comment: 1053-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA

Comment: Governor Rendell urges EPA to reconsider its proposed PM_{2.5} designation modifications, as they do not address the unique, local PM_{2.5} problem that exists in the Pittsburgh area. Commenter disagrees with EPA's designation of adjacent counties. EPA's modifications will result in more counties needlessly designated nonattainment and more complicated planning requirements, taking more time to achieve the PM_{2.5} standard, not less time.

EPA Response: Thank you for your letter of September 15, 2004, concerning the process for designating nonattainment areas for the fine particulate matter PM_{2.5} air quality standards in Pennsylvania. In your letter, you indicated that you have concerns about the modifications that we have proposed to make to your state's initial recommendations, detailed in our letter of June 29, 2004. You indicated that you are concerned over the number of areas that are currently monitoring attainment or lacking monitors that we have proposed to add to the designated PM_{2.5} nonattainment areas. In particular, you indicated that EPA's modifications to the Pittsburgh, Pennsylvania nonattainment area, do not take account of the unique, local PM-2.5, problem that exists in the area.

A nonattainment area is defined in section 107(d) of the Clean Air Act as an area that is violating an ambient air quality standard, or that is contributing to a nearby area that is violating the standard. Thus, even areas that may be monitoring even areas that may be monitoring attainment or that lack monitors can be part of a nonattainment area, if appropriate. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

As you stated in your letter, EPA issued guidance for States and Tribes to use in identifying nonattainment areas on April 1, 2003 and February 13, 2004. The guidance states that EPA intends to use the metropolitan area boundary (e.g. Consolidated Metropolitan Statistical Area or Metropolitan Statistical Area) as the presumptive boundary for an area having at least one monitor violating the PM_{2.5} standards. We believe that violations in urban areas commonly are the result of contributions from counties across the broader metropolitan area.

However, the guidance also states that in conducting an overall case-by-case assessment of each nonattainment area, EPA will consider currently available information related to nine technical factors: air quality monitoring information, pollutant emissions, population density and degree of urbanization, growth in the area, commuting and vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

EPA received recommendations from the State of Pennsylvania for PM_{2.5} designations in February 2004, and we responded to these recommendations on June 29, 2004. EPA is

required to notify States and Tribes of any intended modifications to their recommendations at least 120 days prior to promulgating the designations. The 120-day period is signed for consultation between EPA and the States and Tribes. We asked States to provide additional information that they would like to be considered in the designations process by September 1. EPA intends to promulgate final designations in November 2004.

Our June 29 letter and the related technical attachment provided to the State of Pennsylvania's Department of Environmental Protection contain a detailed discussion of the range of county contributions to violations of the PM_{2.5} standards. The attachment provides our rationale for the inclusion of additional counties that we believe contribute to violations of the standards. When EPA examined available technical formation, we identified a number of counties with relatively high pollutant emissions adjacent to urban areas with violations of the PM_{2.5} standards. We have included a number of these counties in our proposed modifications to PM_{2.5} nonattainment areas, in Pennsylvania and elsewhere, because of their contributions to the nearby air quality problems.

Additional information regarding PM_{2.5} designations, along with links to the technical support documentation, is available on the web at the following location:
<http://www.epa.gov/pmdesignations/>.

Comment: 1049-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA| Liberty-Clairton, PA

Comment: Senator Santorum asks EPA to reconsider the counties it intends to designate as nonattainment in southwestern Pennsylvania. He believes doubling the size of the nonattainment area will have a negative impact on economic competitiveness. He notes that studies done at Carnegie Mellon University show that 80% of the PM_{2.5} in southwestern Pennsylvania comes from other states. Further, the Monongahela Valley is the only area in southwestern Pennsylvania that generates enough emissions to exceed the standard on its own. He suggests a more concentrated effort in cleaning the Monongahela Valley would help reduce surrounding counties' PM_{2.5} levels.

EPA Response: EPA has reviewed the information provided by the Commonwealth. However, EPA has determined that Butler and part of Lawrence counties are contributors to the nonattainment in the Pittsburgh area.

Butler County, part of the MSA, has experienced the largest growth in the Pittsburgh area, therefore is being designated as nonattainment.

EPA has worked with the Commonwealth to determine the portions of Indiana, Armstrong, Lawrence and Greene counties with the predominance of emissions contribution. EPA has determined that portions of these counties will be designated nonattainment.

The Commonwealth of Pennsylvania provided extensive documentation to support a recommendation that a separate, distinctively local-source impacted, nonattainment area be designated within the Pittsburgh nonattainment area. The recommended Liberty Borough area is specified as the five municipalities which comprise the area in the vicinity of the Clairton Coke Works which were previously designated nonattainment for PM10. EPA agrees with the Commonwealth's recommendation and is designating Glassport, Liberty, Lincoln and Port Vue Boroughs and the City of Clairton as the separate Liberty/Clairton nonattainment area. The remainder of Allegheny County is in the Pittsburgh nonattainment area. Please see TSD for additional information.

Comment: 1051-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA | Johnstown, PA| Liberty-Clairton, PA

Comment: Commenters urge EPA to rescind the proposed designation of nine southwestern Pennsylvania counties as nonattainment. They believe EPA must first develop and implement regulations to address transport before imposing regulations based on political boundaries. The commenters believe that EPA's designation of these counties represents one of the worst economic threats to the competitiveness of southwestern Pennsylvania in more than a decade.

Commenters point to a recent report from Pennsylvania DEP that says that Butler County does not contain significant sources of emissions and does not contribute to nonattainment in the Pittsburgh MSA. The commenters propose the following recommendations:

1. EPA should create a separate nonattainment area for the southern Allegheny County where the region's very high PM2.5 levels are monitored. This should include the communities surrounding Liberty Borough and Clairton monitors and possibly the North Braddock monitor.
2. The counties of Armstrong, Butler, Greene, Indiana and Lawrence should not be designated as nonattainment since they do not have a violating monitor.
3. The counties of Beaver, Washington, and Westmoreland, and the portion of Allegheny County outside of the Monongahela Valley should not be designated as nonattainment but should be designated as overwhelming transport or transitional areas.
4. EPA should move aggressively to adopt and implement national regulations to address transport.
5. All monitors with the exception of those in local areas in southern Allegheny County are expected to reach attainment when the Interstate Air Rule is implemented, thereby

eliminating the need to designate them as nonattainment, while providing EPA with a mechanism to track progress toward attainment.

EPA Response: EPA has reviewed the information provided by the Commonwealth. However, EPA has determined that Butler and part of Lawrence counties are contributors to the nonattainment in the Pittsburgh area.

Butler County, part of the MSA, has experienced the largest growth in the Pittsburgh area, therefore is being designated as nonattainment.

EPA has worked with the Commonwealth to determine the portions of Indiana, Armstrong, Lawrence and Greene counties with the predominance of emissions contribution. EPA has determined that portions of these counties will be designated nonattainment.

The Commonwealth of Pennsylvania provided extensive documentation to support a recommendation that a separate, distinctively local-source impacted, nonattainment area be designated within the Pittsburgh nonattainment area. The recommended Liberty Borough area is specified as the five municipalities which comprise the area in the vicinity of the Clairton Coke Works which were previously designated nonattainment for PM-10. EPA agrees with the Commonwealth's recommendation is designating Glassport, Liberty, Lincoln and Port Vue Boroughs and the City of Clairton as the separate Liberty/Clairton nonattainment area. The remainder of Allegheny County is in the Pittsburgh nonattainment area. Please see TSD for additional information.

Comment: 1057-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA | Johnstown, PA | Liberty-Clairton, PA

Comment: Representative Adolph expresses concern about EPA's proposed designation of nine counties in southwestern Pennsylvania as nonattainment. He is concerned that this designation will affect the economic development of southwestern Pennsylvania while demonstrating little or no benefit. Recent studies at Carnegie Mellon University show that 80% of PM_{2.5} in southwestern Pennsylvania is coming from sources outside the region. In fact, EPA data showed that only one area in southwestern Pennsylvania is significantly exceeding the PM_{2.5} standard. This is a portion of the Monongahela Valley and is a result of a unique combination of local emissions, conditions, and monitor placement. Rep. Adolph urges EPA to:

1. Create a separate nonattainment area in southern Allegheny County where very high PM_{2.5} levels have been monitored.
2. Consideration should be given to not designating Armstrong, Butler, Greene and Indiana Counties as nonattainment given the fact there have been no monitored levels of PM_{2.5} in these area.
3. Beaver, Washington and Westmoreland Counties and a portion of Allegheny County outside of the Monongahela Valley should be designated as overwhelming transport area.
4. EPA should adopt and implement national regulations to address pollutant transport.

EPA Response: Thank you for your August 12, 2004 letter to the U.S. Environmental Protection Agency (EPA) regarding the intended designations for the fine particulate matter (PM_{2.5}) National Ambient Air Quality Standard.

As required by statute and EPA guidance, the Agency must designate areas that include counties violating the standard, as well as nearby counties that may contribute to a violation of the standard, as nonattainment. EPA has reviewed potential nonattainment areas based on many factors including population, traffic, growth, meteorology, geography and jurisdictional boundaries. Our analysis indicated that many of the counties mentioned in your letter may have monitored attainment but contribute to the nonattainment problem in an adjacent area.

In EPA's letter dated June 29, 2004, we informed Governor Edward Rendell of our modification to his original nonattainment boundaries recommendations. The Pennsylvania Department of Environmental Protection (PADEP) is currently assessing the available data. As a result of this assessment, we expect PADEP to provide additional information which will be considered in our decision making. We will continue to encourage the Commonwealth to have an ongoing dialogue with EPA during the entire designation process. We will evaluate your suggestions as well as any additional

information provided by PADEP as we finalize our decision on nonattainment boundaries.

Please note, EPA is addressing power plant emissions through a comprehensive national clean air strategy. This strategy includes EPA's proposed rule to reduce nitrogen oxides, sulfur dioxide and mercury pollution from power plants in the eastern United States. These regulations will produce significant reductions in the area of transported pollution.

Please see TSD for additional information on EPA's designations.

Comment: 1064-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA | Johnstown, PA | Liberty-Clairton, PA

Comment: Representative Murtha expresses concern over EPA's designation of five additional counties as nonattainment in southwestern Pennsylvania. Following are specific issues raised:

1. Armstrong, Butler, Greene, Indiana and Lawrence Counties have no monitor showing nonattainment but were designated using a weighted emissions scoring process. Pennsylvania DEP has called this process arbitrary and noted that this scoring process was never published for review and comment. He urges EPA to refrain from designating these counties until there is monitored evidence or the methodology has been validated.
2. Beaver, Cambria, Washington, and Westmoreland counties are within 5 to 10% of the PM_{2.5} standard even though most of the PM_{2.5} is coming from out of state sources. Recent studies at Carnegie Mellon show that 80% of PM_{2.5} in southwestern Pennsylvania comes from outside the region. He urges EPA to create a provisional category for these counties and designate them as transitional or overwhelming transport.
3. Allegheny County is the only county in western Pennsylvania with monitored violations. It appears that a small portion of the county around Liberty and Clairton has a localized problem attributed to local industrial sources. He urges EPA to designate a sub-county or localized area rather than listing the entire county as nonattainment.
4. Commenter urges EPA to move aggressively to adopt and implement transport regulations and to allow marginal or transitional areas of nonattainment additional time- after the transport issue has been addressed- to assess whether they remain in nonattainment and if so, develop strategies for reaching attainment.

EPA Response: Thank you for your August 13, 2004 letter to the U.S. Environmental Protection Agency (EPA) regarding the intended designations for the fine particulate matter (PM_{2.5}) National Ambient Air Quality Standard.

As required by statute and EPA guidance, the Agency must designate areas that include counties violating the standard, as well as nearby counties that may contribute to a violation of the standard, as nonattainment. EPA has reviewed potential nonattainment areas based on many factors including population, traffic, growth, meteorology, geography and jurisdictional boundaries. Our analysis indicated that many of the counties mentioned in your letter may have monitored attainment but contribute to the nonattainment problem in an adjacent area.

In EPA's letter dated June 29, 2004, we informed Governor Edward Rendell of our modification to his original nonattainment boundaries recommendations. The Pennsylvania Department of Environmental Protection (PADEP) is currently assessing the available data. As a result of this assessment, we expect PADEP to provide additional information which will be considered in our decision making. We will continue to encourage the Commonwealth to have an ongoing dialogue with EPA during the entire designation process. We will evaluate your suggestions as well as any additional information provided by PADEP as we finalize our decision on nonattainment boundaries.

Please note, EPA is addressing power plant emissions through a comprehensive national clean air strategy. This strategy includes EPA's proposed rule to reduce nitrogen oxides, sulfur dioxide and mercury pollution from power plants in the eastern United States. These regulations will produce significant reductions in the area of transported pollution.

Please see TSD for additional information on EPA's designations.

Comment: 1058-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA | Johnstown, PA | Liberty-Clairton, PA

Comment: Representative Hart disagrees with EPA's designation of nine counties as nonattainment in southwestern Pennsylvania and expresses concern raised by local economic development policy experts and constituents about the impact of these designations on the economic competitiveness of the area. Following are suggested changes to the PM 2.5 designations:

1. A separate nonattainment area should be created for the area of southern Allegheny County where the region's very high PM_{2.5} levels are monitored.
2. Armstrong, Butler, Greene, Indiana, and Lawrence should not be designated as nonattainment since they do not include a monitor showing nonattainment levels. Too little is known about the causes and solutions of PM_{2.5} to classify counties merely because they are close to counties with nonattaining monitors.
3. Beaver, Washington, and Westmoreland and the portion of Allegheny County outside of the Monongahela Valley should be designated as overwhelming transport.

4. EPA should move more aggressively to adopt and implement national regulations to address transport.

EPA Response: Thank you for your August 12, 2004 letter to the U.S. Environmental Protection Agency (EPA) regarding the intended designations for the fine particulate matter (PM_{2.5}) National Ambient Air Quality Standard.

As required by statute and EPA guidance, the Agency must designate areas that include counties violating the standard, as well as nearby counties that may contribute to a violation of the standard, as nonattainment. EPA has reviewed potential nonattainment areas based on many factors including population, traffic, growth, meteorology, geography and jurisdictional boundaries. Our analysis indicated that many of the counties mentioned in your letter may have monitored attainment but contribute to the nonattainment problem in an adjacent area.

In EPA's letter dated June 29, 2004, we informed Governor Edward Rendell of our modification to his original nonattainment boundaries recommendations. The Pennsylvania Department of Environmental Protection (PADEP) is currently assessing the available data. As a result of this assessment, we expect PADEP to provide additional information which will be considered in our decision making. We will continue to encourage the Commonwealth to have an ongoing dialogue with EPA during the entire designation process. We will evaluate your suggestions as well as any additional information provided by PADEP as we finalize our decision on nonattainment boundaries.

Please note, EPA is addressing power plant emissions through a comprehensive national clean air strategy. This strategy includes EPA's proposed rule to reduce nitrogen oxides, sulfur dioxide and mercury pollution from power plants in the eastern United States. These regulations will produce significant reductions in the area of transported pollution.

Please see TSD for additional information on EPA's designations.

Comment: 1066-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA | Johnstown, PA | Liberty-Clairton, PA

Comment: Commenters urge EPA to rescind the proposed designations of nine southwestern Pennsylvania counties as nonattainment. They believe that EPA must develop and implement regulations to address transport of PM_{2.5} across state boundaries before imposing regulations based arbitrarily on political boundaries. They believe EPA's designations will represent one of the worst threats to the economic competitiveness of southwestern Pennsylvania in more than a decade, while having little or no benefit. The commenters propose the following:

1. A separate nonattainment area should be created for the area of southern Allegheny County where the region's very high PM_{2.5} levels are monitored.
2. Armstrong, Butler, Greene, Indiana, and Lawrence counties should not be designated as nonattainment since they do not include a monitor showing nonattainment levels. Too little is known about the causes and solutions of PM_{2.5} to classify counties merely because they are close to counties with nonattaining monitors.
3. Beaver, Washington, and Westmoreland and the portion of Allegheny County outside of the Monongahela Valley should be designated as overwhelming transport.
4. EPA should move more aggressively to adopt and implement national regulations to address transport.
5. All monitors in southwestern Pennsylvania are expected to reach attainment when the Interstate Air Rule is implemented thereby eliminating the need for designating these areas as nonattainment, while providing EPA with a mechanism to track further progress.

EPA Response: EPA has reviewed the information provided by the Commonwealth. However, EPA has determined that Butler and part of Lawrence counties are contributors to the nonattainment in the Pittsburgh area.

Butler County, part of the MSA, has experienced the largest growth in the Pittsburgh area, therefore is being designated as nonattainment.

EPA has worked with the Commonwealth to determine the portions of Indiana, Armstrong, Lawrence and Greene counties with the predominance of emissions contribution. EPA has determined that portions of these counties will be designated nonattainment.

The Commonwealth of Pennsylvania provided extensive documentation to support a recommendation that a separate, distinctively local-source impacted, nonattainment area be designated within the Pittsburgh nonattainment area. The recommended Liberty Borough area is specified as the five municipalities which comprise the area in the vicinity of the Clairton Coke Works which were previously designated nonattainment for PM-10. EPA agrees with the Commonwealth's recommendation is designating Glassport, Liberty, Lincoln and Port Vue Boroughs and the City of Clairton as the separate Liberty/Clairton nonattainment area. The remainder of Allegheny County is in the Pittsburgh nonattainment area. Please see TSD for additional information.

Comment: 1082-1

Region: 3

State: PA

Area: Pittsburgh-Beaver Valley, PA | Johnstown, PA | Liberty-Clairton, PA

Comment: Sen. Santorum forwards a letter to EPA and asks EPA to provide information regarding comments made by Mr. Dozzi of Pittsburgh.

Mr. Dozzi urges Sen. Santorum to aggressively oppose EPA's proposed designations of nine southwestern Pennsylvania counties as nonattainment. He believes that the designations will threaten the economy of southwestern Pennsylvania with little air quality benefit. His organization supports efforts to clean up the air but notes that the monitors in southwestern Pennsylvania are exceeding the standard by only a small amount. Further, recent studies at Carnegie Mellon show that as much as 80% of the pollution in southwestern Pennsylvania comes from sources outside the region. He suggests that efforts to improve air quality be concentrated in Monongahela Valley, the only area exceeding the standard. He urges Sen. Santorum to contact EPA and demand the following:

1. A separate nonattainment area should be created for the area of southern Allegheny County where the region's very high PM2.5 levels are monitored.
2. Armstrong, Butler, Greene, Indiana, and Lawrence should not be designated as nonattainment since they do not contribute significantly to downwind exceedances nor do they include a monitor showing nonattainment levels.
3. Beaver, Washington, and Westmoreland and the portion of Allegheny County outside of the Monongahela Valley should be designated as overwhelming transport or transitional areas.
4. EPA should move more aggressively to adopt and implement national regulations to address transport.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM2.5 standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

EPA has reviewed the information provided by the Commonwealth. However, EPA has determined that Butler and part of Lawrence counties are contributors to the nonattainment in the Pittsburgh area.

Butler County, part of the MSA, has experienced the largest growth in the Pittsburgh area, therefore is being designated as nonattainment.

EPA has worked with the Commonwealth to determine the portions of Indiana, Armstrong, Lawrence and Greene counties with the predominance of emissions contribution. EPA has determined that portions of these counties will be designated nonattainment.

The Commonwealth of Pennsylvania provided extensive documentation to support a recommendation that a separate, distinctively local-source impacted, nonattainment area be designated within the Pittsburgh nonattainment area. The recommended Liberty Borough area is specified as the five municipalities which comprise the area in the vicinity of the Clairton Coke Works which were previously designated nonattainment for PM10. EPA agrees with the Commonwealth's recommendation is designating Glassport, Liberty, Lincoln and Port Vue Boroughs and the City of Clairton as the separate Liberty/Clairton nonattainment area. The remainder of Allegheny County is in the Pittsburgh nonattainment area. Please see TSD for additional information.

Comment: 1028-2

Region: 3

State: PA

Area: Youngstown-Warren-Sharon, OH-PA

Comment: Pennsylvania DEP believes Mercer County should be attainment because Mercer County:

1. Is monitoring attainment
2. Has low population density
3. Has low VMT
4. Has low emissions which are predominantly downwind of the violating monitors and would contribute very little to nonattainment in the Youngstown area.

PA DEP also contends that EPA has been inconsistent in applying MSA boundaries for nonattainment designations.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. EPA's decisions on the State's recommendations are contained in the TSD.

Comment: 1001-1
Region: 3
State: VA
Area: Washington, DC-MD-VA

Comment: Commenter writes on behalf of Governor Warner regarding EPA's proposed designations for PM2.5. He states the Commonwealth of Virginia is disappointed that EPA chose to designate 9 Virginia localities as nonattainment. For the period from 2001-2003 the three-year averages of air quality monitoring data in Northern Virginia all show attainment of the PM2.5 standards. The commenter notes Virginia is meeting with Region 3 to resolve the issues but believes that the talks would be more productive if EPA releases the implementation guidance for PM2.5 by September 1, 2004.

EPA Response: Thank you for your letter of July 19, 2004 responding to the U.S. Environmental Protection Agency (EPA) proposed designations of areas for the fine particulate matter (PM2.5) national ambient air quality standard in Virginia.

As required by statute and EPA guidance, the Agency must designate areas that include counties violating the standard, as well as nearby counties that may contribute to a violation of the standard, as nonattainment. Thus, while no counties in Virginia have monitored a violation, our analysis indicated that the counties and cities we have proposed for designation as nonattainment contribute to the nonattainment problem in Washington, D.C. area. This analysis included factors such as population, traffic, growth, meteorology, geography and jurisdictional boundaries. During our meeting on July 29, 2004 with Mr. John Daniel, Director of Virginia's Air Division, we provided a detailed explanation of the factors that led up to our proposed designations.

As noted in our letter of June 29, 2004 to Governor Mark Warner, we are interested in and will consider any additional information that you can provide to support your position. This information is requested by September 1, 2004, but we encourage the Commonwealth to have a continuing dialogue with EPA during the entire designation process.

EPA is currently working on the Implementation Guidance for PM2.5 and we will keep you informed of its status. Please see TSD for additional information on EPA's designations.

Comment: 1013a-46
Region: 3
State: VA
Area: Washington, DC-MD-VA

Comment: EPA has failed to recommend that eight Virginia counties and cities (Clarke, Fauquier, Frederick, Spotsylvania, Stafford, and Warren Counties; Fredericksburg and Winchester Cities) in this CMSA be designated as nonattainment area; the entire Washington CMSA must be designated nonattainment. None of these areas appear to

have monitors in order to prove that they are indeed attaining the PM_{2.5} standard. According to EPA's letter to the state, the Stafford, Spotsylvania, Fauquier, and Fredericksburg areas all have a majority of people commuting to another county. In addition, emissions in Fauquier, Spotsylvania, Stafford, and Warren Counties are not low and need to be taken into consideration in the SIP planning process.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Based on weighted emissions screening and the combined factor analysis, these counties are considered to have low contribution to the nonattainment area and were excluded from the presumptive boundaries of the nonattainment area. Please see the TSD for additional information on the combined factor analysis.

Comment: 1052-1

Region: 3

State: VA

Area: Washington, DC-MD-VA

Comment: Commenter believes that actual monitoring should be the basis for designations but supports the idea of calling certain areas "control areas" where EPA can demonstrate a real contribution to adjacent counties that exceed the PM_{2.5} NAAQS.

Commenter believes that EPA can make a reasonable case that Alexandria, Arlington, and Fairfax counties contribute pollutants but does not believe Prince William and Loudoun Counties contribute.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

To be consistent with our guidance and to ensure national consistency, EPA can not endorse the control areas suggested by Virginia.

Adequate technical information was not provided to demonstrate that these two counties (Prince William and Loudon) did not contribute to violations in the CMSA/MSA. See EPA analysis in the TSD to this document for our analysis concerning this area.

Comment: 1013a-8

Region: 3

State: VA | DC | MD

Area: Baltimore, MD| Washington, DC-MD-VA| Martinsburg, WV- Hagerstown, MD

Comment: The EPA has failed to recommend that the Washington-Baltimore CMSA be designated as one nonattainment area; this area must be designated as one nonattainment area.

EPA Response: Although large metropolitan areas such as the Washington DC CMSA may be considered as one large area in the designation process, EPA agreed with Maryland's recommendations to split them into the smaller MSAs. The smaller areas have separate air quality planning processes that EPA believes would be more practical and productive than having one large area. EPA also seeks to maximize consistency between the PM2.5 and the 8-hour ozone designations. Keeping these areas separate under PM2.5 would be consistent with the designations under 8-hour ozone.

Comment: 1013a-8

Region: 3

State: VA | DC | MD

Area: Washington, DC-MD-VA | Baltimore, MD| Martinsburg, WV- Hagerstown, MD

Comment: The EPA has failed to recommend that the Washington-Baltimore CMSA be designated as one nonattainment area; this area must be designated as one nonattainment area.

EPA Response: Although large metropolitan areas such as the Washington DC CMSA may be considered as one large area in the designation process, EPA agreed with Maryland's recommendations to split them into the smaller MSAs. The smaller areas have separate air quality planning processes that EPA believes would be more practical and productive than having one large area. EPA also seeks to maximize consistency between the PM_{2.5} and the 8-hour ozone designations. Keeping these areas separate under PM_{2.5} would be consistent with the designations under 8-hour ozone.

Comment: 1013a-48

Region: 3

State: WV

Area: |Martinsburg, WV- Hagerstown, MD

Comment: EPA failed to include Morgan County in the recommended nonattainment area; this county is part of the Hagerstown MSA and must be included in the nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled,

meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Evaluating the Hagerstown-Martinsburg CBSA, Morgan County has low contribution to the area based on emissions, population and commuting and therefore has not been designated as a nonattainment county.

Comment: 1013a-49

Region: 3

State: WV

Area: Marion County, WV

Comment: Fairmont CMSA counties, Doddridge and Taylor must be included in the nonattainment area. In addition, Preston County, home to the Albright coal-fired power plant that emitted over 20,000 tons of SO₂ and over 4,000 tons of NO_x in 2002, should also be included in the nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Based on low emissions, population and commuting, geography and meteorology, EPA believes there is minimal contribution to the nonattainment area from Doddridge and Taylor counties. In addition, EPA reviewed the potential contribution from Preston County with moderate emissions contribution and however, based on the geography and meteorology, EPA feels this county does not significantly contribute to the nonattainment in Marion County.

Comment: 1046-1

Region: 3

State: WV

Area: Marion County, WV

Comment: Commenter requests EPA to finalize the PM_{2.5} nonattainment area designation for Monongalia County, WV on the basis of the following:

1. The PM monitor at the Morgantown airport has recently measured just below, and in past years, above the PM_{2.5} standard.
2. A monitor is needed down in the valley where the power plants and their pollution are located. There are frequent temperature inversions in the valley and a monitor on the rim is a disservice.
3. The county north of Monongalia and the county south are both nonattainment and have been for a while.
4. The results of monitoring in Marion County (south of Monongalia) indicate nonattainment even though Marion County emissions are five times lower than in Monongalia. The CAA requires violating areas and nearby contributing areas to be designated nonattainment.
5. There are large uncontrolled sources located in Monongalia County and near the county border.
6. Monongalia has two coal burning power plants and has permitted a third. The population is being asked to bear too high of a pollution burden.

EPA Response: In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility.

EPA has determined that a portion of Monongalia County does contribute to the Marion nonattainment area. Therefore, we are designating that portion of the county as nonattainment.

Comment: 1045-1

Region: 3

State: WV

Area: Marion County, WV

Comment: Commenters express concern that EPA intends to designate Monongalia County as nonattainment. They do not believe the designation is imperative, nor in the best interest of the future development in the county.

They do not believe they have had sufficient time to digest the consequences of the designation in order to give a proper response. They note that no other counties in WV have faced this issue until now and that WV law does not allow commissions to legislate corrective measures. The commenters would like the opportunity to discuss with EPA other ways to improve air quality without being forced into a nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled,

meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility. EPA as determined that a portion of Monongalia County does contribute to the Marion nonattainment area. Therefore, we are designating that portion of the county as nonattainment.

Comment: 1050-1

Region: 3

State: WV

Area: Marion County, WV

Comment: The commenter supports West Virginia's proposed recommendation of Monongalia County as attainment for PM_{2.5}. The air quality in Monongalia County meets the EPA's standards and was only designated because of the power plants located in the county. West Virginia DEP researched the issue and found that Monongalia did not contribute to nonattainment in Marion County when the air readings were at their worst. EPA's decision to designate the county as nonattainment is a clear departure from past methods and will be a setback to the area.

EPA Response: As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to

determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM_{2.5}.

It is also important to note that the PM_{2.5} (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM_{2.5} weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute to the most to the elevated PM_{2.5} in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility. EPA has determined that a portion of Monongalia County does contribute to the Marion nonattainment area. Therefore, we are designating that portion of the county as nonattainment.

Comment: 1061-1

Region: 3

State: WV

Area: Marion County, WV

Comment: Commenter requests that EPA ignore the campaign of the West Virginia Association of Counties and designate Monongalia County nonattainment. Commenter notes the following:

1. Monitored values in Monongalia County are only slightly below the limits and this is without the emissions from an already permitted power plant.
2. Emissions from Monongalia County not only impact Marion County but also impact Greene and Fayette Counties in Pennsylvania.
3. The greatest source of pollution in Monongalia County is the grandfathered Fort Martin power plant. A nonattainment designation might force this plant to clean up its emissions.

EPA Response: In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility. EPA has determined that a portion of Monongalia County does contribute to the Marion nonattainment area. Therefore, we are designating that portion of the county as nonattainment.

Comment: 1063-1

Region: 3

State: WV

Area: Marion County, WV

Comment: Commenter expresses strong support for the designation of Monongalia County as nonattainment. He notes that this county is home to one of the most polluting power plants in the state and yet another plant has been permitted for the area. He believes designating the county nonattainment will ensure that the county starts planning now for cleaner air.

EPA Response: In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility. EPA has determined that a portion of Monongalia County does contribute to the Marion nonattainment area. Therefore, we are designating that portion of the county as nonattainment.

Comment: 1056-1

Region: 3

State: WV

Area: Martinsburg, WV- Hagerstown, MD | Charleston, WV

Comment: 1. The commenters are concerned about EPA's proposed PM_{2.5} designations in West Virginia. They note EPA's actions will have a significant adverse impact on existing business and on the prospects for economic expansion in West Virginia.

2. The commenters believe the CAIR Rule and the NO_x SIP call are the only controls needed to achieve the attainment of the PM_{2.5} standard in West Virginia.

3. EPA's inclusion of adjacent counties within the nonattainment area is without justification and undermines the Agency's emission trading programs.

a. The inclusion of adjacent counties not supported by modeling data. To the contrary, EPA has computer modeling data that demonstrates that all nonattainment areas in West Virginia will be in attainment as a result of the CAIR rule.

b. EPA lacks the authority to base PM_{2.5} designations on any considerations other than air quality monitoring data.

c. Because EPA ignores reasonable alternatives to nonattainment designations, its position on PM_{2.5} designations in West Virginia is arbitrary.

d. EPA's reliance on the level of control of emission sources in a county when determining whether to designate that county is inconsistent with the EPA trading programs.

EPA Response: Thank you for your letter of August 31, 2004 to Regional Administrator Welsh regarding the intended designations for the fine particulate matter National Ambient Air Quality Standard.

As required by statute and the U.S. Environmental Protection Agency (EPA) guidance, the Agency must designate areas that include counties violating the standard, as well as nearby counties that may contribute to a violation of the standard, as nonattainment. EPA has reviewed potential nonattainment areas based on many factors such as population, traffic, growth, meteorology, geography and jurisdictional boundaries.

In EPA's letter dated June 29, 2004, we informed Governor Bob Wise of our modification to his original nonattainment boundaries recommendations as well as provided information. The West Virginia Department of Environmental Protection (WVDEP) provided additional information for our review on August 31, 2004. We will evaluate your suggestions and the additional information provided by WVDEP as we finalize our decision on nonattainment boundaries.

Please note, EPA is addressing power plant emissions through a comprehensive national clean air strategy. This strategy includes EPA's proposed rule to reduce nitrogen oxides, sulfur dioxide and mercury pollution from power plants in the eastern United States. These regulations will produce significant reductions in the area of transported pollution.

Please see TSD for additional information on EPA's designations.

Comment: 1013a-47

Region: 3

State: WV

Area: Huntington-Ashland, WV-KY-OH

Comment: Boone, Clay and Lincoln Counties are all part of the Charleston MSA and must be included in the nonattainment area; EPA has failed to include these counties in its recommendation.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in

the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Based on low emissions, population and commuting, as well as a review of monitored data measured in Raleigh County, EPA believes there is minimal contribution to the nonattainment area from Boone, Clay and Lincoln counties.

Comment: 1044-1

Region: 3

State: WV

Area: Charleston, WV

Comment: Commenters, representing an economic development organization, believe that EPA's position with regards to Mason County is flawed both scientifically and in regards to EPA's own policies. Any nonattainment designation has serious impacts on economic development. This makes recruiting new businesses all but impossible.

1. EPA needs to reevaluate the designation of Mason County as nonattainment using facts, data, and modeling before it is adversely affects economic development for no environmental benefit.
2. EPA did not take into account the reductions that programs like the NO_x SIP call and the proposed CAIR will produce.
3. Modeling demonstrates that all of West Virginia will be in attainment due to the CAIR Rule. EPA should rely on reliable tools like modeling instead of relying on the size of an emission in an adjacent county, weighed by meteorology, as its major factor in reaching its conclusion.

EPA Response: EPA cannot base an area's designation on projected air quality or on proposed legislation. EPA agrees that it is important to have programs that address emissions on a national and regional scale. EPA is addressing power plant emissions through a comprehensive national clean air strategy. This strategy includes EPA's proposed rule to reduce nitrogen oxides, sulfur dioxide and mercury pollution from power plants in the eastern United States. These regulations will produce significant reductions in the area of transported pollution.

Comment: 1048a-1

Region: 3

State: WV

Area: Charleston, WV | Parkersburg-Marietta, WV-OH | Huntington-Ashland, WV-KY-OH | Marion County, WV

Comment: Senator Byrd requested EPA to comment on a letter he received from West Virginia DEP. The letter from West Virginia is summarized below:

1. West Virginia DEP concurs with EPA's recommendations for 12 counties but by designating four additional counties as nonattainment, EPA has made a radical departure from the approach used in the recent 8-hour ozone designations. Two of the four counties EPA added are monitoring attainment.
2. EPA changed its policy for the designation of nonattainment boundaries from federally defined MSAs and CMSAs to counties adjacent to MSAs and CMSAs with air pollutant emissions from power plants. This policy is arbitrary and will unnecessarily subject these counties to two overlapping regulatory programs- the nonattainment program and the CAIR.
3. EPA's policy is a very strong disincentive for economic development and because of transportation conformity, may delay the development and construction of the highway infrastructure.

EPA Response: Pleasants, Mason, Monongalia and Harrison do not have a monitor that is violating the PM_{2.5} standard although it is adjacent to several counties in nonattainment areas that are monitoring unhealthy air quality in excess of the national standard. The CAA defines nonattainment as an area that is violating the standard or contributing to a violation of the standard in a nearby area. The state provided technical information pertaining to the county and satisfactorily demonstrated to EPA that part of the county can be designated as attainment. Therefore large portions of the above referenced counties will be designated as attainment while small tax districts containing significant emission sources will be designated as nonattainment.

In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small "free-standing" boundaries that are considered part of the nearby nonattainment area. In this way, it

would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility.

Comment: 1048b-1

Region: 3

State: WV

Area: Charleston, WV | Parkersburg-Marietta, WV-OH| Huntington-Ashland, WV-KY-OH| Marion County, WV

Comment: Representative Alan Mollohan asked Gov. Leavitt to address the concerns of Stephanie Timmermeyer of West Virginia DEP. The letter from Ms. Timmermeyer is summarized below:

1. West Virginia DEP concurs with EPA's recommendations for 12 counties but by designating four additional counties as nonattainment, EPA has made a radical departure from the approach used in the recent 8-hour ozone designations. Two of the four counties EPA added are monitoring attainment.
2. EPA changed its policy for the designation of nonattainment boundaries from federally defined MSAs and CMSAs to counties adjacent to MSAs and CMSAs with air pollutant emissions from power plants. This policy is arbitrary and will unnecessarily subject these counties to two overlapping regulatory programs- the nonattainment program and the CAIR.
3. EPA's policy is a very strong disincentive for economic development and because of transportation conformity, may delay the development and construction of the highway infrastructure.

EPA Response: In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility.

Comment: 1062-1

Region: 3

State: WV

Area: Charleston, WV | Parkersburg-Marietta, WV-OH |Huntington-Ashland, WV-KY-OH| Marion County, WV

Comment: 1. Commenter supports EPA's decision to designate Harrison, Mason, Monongalia, and Pleasants Counties in West Virginia as nonattainment. This status should be retained until such time as large pollution sources install and operate best available pollution controls and all citizens enjoy the benefits of cleaner air.

2. EPA should require West Virginia DEP to offer a clear and convincing demonstration that counties that are currently monitoring nonattainment (such as Cabell, Kanawha, Marion, Putnam, or Wood) will be able to come into attainment without requiring clean-up of upwind sources in adjacent counties, before deleting any of the four adjacent counties (Harrison, Mason, Monongalia or Pleasants) from the nonattainment designation.

3. EPA should work with all local stakeholders to develop flexible mechanisms to encourage the fastest practical clean up of our air.

4. EPA should also finalize its fine particle implementation guidance as soon as possible, so that all parties are aware of the requirements to achieve attainment.

5. Finally, EPA's final implementation guidance should include provisions for early removal from the nonattainment status for counties that attain the health standards and implement controls on all significant pollution sources contributing to nonattainment in adjacent areas.

EPA Response: In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility.

Comment: 1018-1

Region: 3

State: WV

Area: Charleston, WV | Parkersburg-Marietta, WV-OH | Huntington-Ashland, WV-KY-OH | Marion County, WV

Comment: West Virginia DEP maintains that its original recommendations establish the appropriate PM_{2.5} nonattainment areas and boundaries. The commenter considers EPA's addition of four counties (Harrison, Mason, Monongalia, and Pleasants) unwarranted and inconsistent with previous federal guidance and the approach taken under the 8-hour ozone designations. The West Virginia DEP followed the federal boundary guidance and recommended entire MSAs as the presumptive nonattainment area. These four counties should be withdrawn from the final nonattainment designations.

EPA disregards monitoring data in Monongalia and Harrison Counties that show attainment. EPA cites that the additional counties contain large emitting facilities that allegedly contribute to violations in nonattainment areas. West Virginia observes that these sources which are adjacent to or near the primary PM_{2.5} nonattainment areas would be assessed as to their impact in any nonattainment evaluations such as modeling,

attainment demonstrations, or control strategy development. That analysis would be regional in scope and include the large emitters, which would eliminate the need to expand the boundaries to include an adjacent county. West Virginia DEP possesses the authority to regulate any source within the state that may require emission controls to achieve and maintain the NAAQS.

Regarding the weighted emissions score, the commenter has serious concerns about the data used to calculate the score. EPA has paired a rural monitor with an urban STN monitor. The principles of collection and analysis for these two monitor types and programs are distinctly different. It is impossible to reach valid conclusions about the representativeness of the data.

In an effort to further evaluate EPA's position, West Virginia DEP analyzed certain elevated PM_{2.5} days using back trajectory analyses. (The back trajectory analyses are attached) These analyses indicated that during high PM_{2.5} days, the adjacent counties were not likely contributors. Only Mason County may be an exception. As it is subjected to the meteorological influence of the Ohio River Valley, it appears to be upwind and within the trajectory vector during some of the high days evaluated in the analysis. However, culpability should not be considered conclusive. That entire sub region of the Ohio River Valley contains many large emitting sources, which could just as easily impact the violating monitor. These facilities are almost certainly going to be regulated through other programs including CAIR. Based upon these considerations, West Virginia DEP strongly encourages EPA to remove all four additional counties from the PM_{2.5} nonattainment areas. If EPA inappropriately acts contrarily to the State's recommendations, then West Virginia DEP believes that EPA should designate only portions of those counties that EPA wants to add.

Additionally, EPA continues to place the states in the untenable position of recommending designations in the absence of a final implementation rule or proposal. States can have little certainty about the consequences of nonattainment until the implementation rule is finalized.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed

violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. Please see TSD for additional information on EPA's designations.

Comment: 1016-1

Region: 3

State: WV

Area: Parkersburg-Marietta, WV-OH

Comment: The Commenter, on behalf of the Pleasants County Development Authority (PCDA), objects to EPA's proposed designation of Pleasants County as nonattainment. PCDA disagrees with EPA's plans to designate the area simply because there is an electric-generating power plant in the county. There are no data indicating nonattainment and PCDA notes that there is no evidence that Pleasants County has ever been modeled. PCDA comments that EPA's decision will stagnate economic development in the community and unfairly punish the county.

EPA Response: Thank you for your letter of August 20, 2004 expressing your concern about the U.S. Environmental Protection Agency's (EPA) intended designation of areas for the fine particulate (PM 2.5) National Ambient Air Quality Standards.

As required by statute and EPA guidance, the Agency must designate areas that include counties violating the standard, as well as nearby counties that may contribute to a violation of the standard, as nonattainment. As you stated in your correspondence, there is no monitor for PM_{2.5} in Pleasants County. However, our analysis indicates that Pleasants County may contribute to the nonattainment problem in the Parkersburg metropolitan area.

In EPA's letter dated June 29, 2004, we informed Governor Bob Wise of our modification to his original nonattainment boundaries recommendations. We will consider any additional information provided by West Virginia Department of Environmental Protection (WVDEP), including data on recent emission reductions from power plants in Pleasants County, in our decision making. This information is requested by September 1, 2004, but we encourage the state to have an ongoing dialogue with EPA during the entire designation process. We will evaluate your suggestions as well as any additional information provided by WVDEP as we finalize our decision on nonattainment boundaries.

Please note, EPA is addressing power plant emissions through a comprehensive national clean air strategy. This strategy includes EPA's proposed rule to reduce nitrogen oxides, sulfur dioxide and mercury pollution from power plants in the eastern United States.

Please see TSD for additional information on EPA's designations.

Comment: 1013a-50

Region: 3

State: WV

Area: Parkersburg-Marietta, WV-OH

Comment: EPA failed to include Wirt County, part of the Parkersburg MSA, in the recommended nonattainment area. This county should be included in the nonattainment area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Wirt County has low estimated emissions contribution to the nonattainment area. It is also the lowest population and commuting county in the surrounding area. For these reasons, EPA determined it should not be included in the nonattainment area.

Comment: 1078-1

Region: 3

State: WV

Area: Parkersburg-Marietta, WV-OH

Comment: The commenter presents the following resolution of the Mid-Ohio Valley Regional Planning and Development Council (MOVRC).

1. The Pleasants County Development Authority has been officially notified by EPA that a proposed revision to EPA rules would establish Pleasants County as a nonattainment area.

2. It is the understanding of the MOVRC Board that EPA has not performed monitoring or has any scientific basis or justification for the reclassification.

3. If the area were designated nonattainment it would impose severe restraints on the ability of Pleasants County to attract or retain industries.

4. The MOVRC Board strenuously objects to what appears to be an arbitrary decision by EPA in the reclassification of Pleasants County from attainment to nonattainment. The Board would like to dialogue with EPA with the goal being either a scientific basis for the designation or retaining the attainment status of Pleasants County.

EPA Response: In the June 2004 letters from EPA to the States responding to their designation recommendations, EPA proposed the designation of a number of counties primarily because of high pollutant emissions from power plants. Most of these plants were located in nearby counties adjacent to the metropolitan area (as defined either by the 1999 or 2003 OMB metropolitan area definitions). EPA suggested that a State could provide a partial county boundary that would extend to the relevant power plant to include it in the nonattainment area.

A number of states responded to this suggestion with a series of connected townships or other unique boundaries. Some states also suggested an alternative approach in which partial county areas for power plants in some cases could be small “free-standing” boundaries that are considered part of the nearby nonattainment area. In this way, it would not be necessary to include additional townships or other minor civil divisions comprising an odd-shaped “land connector” extending from the main part of the nonattainment area to the power plant.

After considering these comments from the States, EPA agrees that such an approach is preferable in cases where a partial county nonattainment boundary has not already been established for that source (e.g. partial county boundaries recently established for 8-hour ozone nonattainment areas). For purposes of consistency, EPA has decided that free-standing portions of nonattainment areas should be based on a pre-existing boundary for a minor civil division (such as a township or tax district) or other boundary defined for governmental use (such as a census block group or census tract). Accordingly, this kind of partial county boundary should not be defined simply as the boundary of the facility.

4. Responses to Comments EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee)

Comment: 1013a-2
Region: 4
State: AL
Area: Atlanta, GA

Comment: Atlanta CMSA:

Chambers County, Alabama is part of the Atlanta CMSA but EPA did not analyze the inclusion of this county in the nonattainment area. This county must be included in the Atlanta nonattainment area.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1013a-3
Region: 4
State: AL
Area: Birmingham, AL

Comment: In its June 29, 2004 letter to Alabama, EPA recommended the inclusion of Jefferson, Shelby and Walker Counties in the Birmingham PM_{2.5} nonattainment area; in addition to these counties, we recommend that Bibb, Blount, Chilton, Cullman, Etowah and St. Clair Counties be added to the nonattainment area. With the exception of Etowah County, these counties are all part of the Birmingham CMSA. EPA mentioned that

Walker County “is contiguous to the MSA...” and asked for the state to comment on which portion of the county should be designated nonattainment. The 2003 OMB metropolitan area list indicates that Walker County is actually part of the Birmingham CMSA and therefore, the entire county must be included in the nonattainment area. According to EPA’s letter, St. Clair and Blount Counties both experienced around 30% population growth between 1990 and 2000, suggesting that this high rate of population growth may contribute to the PM2.5 problem in the area.

EPA did not recommend that Etowah County be part of the nonattainment area despite its being adjacent to the nonattainment area and containing the Gadsden power plant. According to EPA’s 2002 Acid Rain Database, this plant has no SO₂ or NO_x controls and the 2002 SO₂ emissions were 8,741 tons per year while NO_x emissions were 1,918 tons per year. And the three-year PM_{2.5} design value for Etowah County is very close to violating the annual standard, at 14.8 µg/m³.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA’s decisions on the States’ recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1038-4
Region: 4
State: AL
Area: Birmingham, AL

Comment: ADEM disagrees with EPA including Walker County in the Birmingham nonattainment area due to the following reasons:

1. Monitors located between Walker County and the non-attaining monitors in Jefferson County measure PM_{2.5} concentrations below the NAAQS. This is an indication that Walker County is not contributing to nonattainment in Jefferson County and that nonattainment in Jefferson County may be a localized problem.
2. Limited data from a PM_{2.5} monitor in Walker County indicates attainment.
3. Walker County has a very low population density and VMT compared to Jefferson County.
4. The overwhelming majority of NO_x and SO₂ emissions in Walker County are due to the Alabama Power Company steam plant. There are few other point sources in the county. An SCR was installed on the largest unit at the power plant in 2002. SO₂ scrubbers are scheduled to be in operation on this unit and two smaller units in 2008.
5. The wind infrequently blows from the direction of Walker County towards Jefferson County on days with high PM_{2.5} concentrations.

EPA Response: Alabama's submittal in February 2004, recommended Jefferson County be designated nonattainment for the fine particulate matter (PM_{2.5}), based on 2001 - 2003 monitoring data. Based on the analysis in the TSD EPA believes that Jefferson, Shelby and Walker Counties should be included in the PM_{2.5} nonattainment area. Jefferson County has a violating monitor and the State recommended it as nonattainment. Shelby County is within the MSA, has high PM, SO_x, NO_x, and VOC emissions, approximately 52 percent of its commuters commute to Jefferson County, has relatively high population and VMT, and has a power plant within the County. Walker County has high SO_x and NO_x emissions from a power plant. We have included in our recommended nonattainment area Walker County which is contiguous to the MSA, has a violating monitor, is generally rural in character, and contains an identifiable large emitting facility or facilities (e.g., power plants) which we believe contributes to the nearby nonattainment problem. We have included this County in our initial recommendations in order to ensure that a sufficient portion of this County, including such large facilities, is included within the boundaries of the nonattainment area as part of the final designations. We invited the State to submit to us a recommendation as to what portion of Walker County, encompassing the large facility or facilities, should be designated nonattainment. Based on the following analysis, EPA agrees that Blount, St. Clair, Calhoun, Talladega, Tuscaloosa and Morgan Counties should be recommended attainment/unclassifiable for PM_{2.5}. Blount County has no major sources, has relative

low emissions and has the lowest population and VMT in the Birmingham area. St. Clair County has relatively low SOx and PM emissions and has a small population. Calhoun County has no major sources, 84 percent of its commuters commute within its County and it is adjacent to the MSA. Talladega County has a small population, an attaining monitor (14.7 DV), low VMT and it is adjacent to the MSA. Tuscaloosa County has no major sources, 89 percent of its commuters commute within its County, has an attaining monitor (11.6 DV) and it is adjacent to the MSA. Morgan County has an attaining monitor, is part of another MSA, 72 percent of its commuters commute within its County and is several Counties away from Jefferson County.

Comment: 1038-5

Region: 4

State: AL

Area: Birmingham, AL

Comment: ADEM disagrees with EPA's intention to include Shelby County in the Birmingham nonattainment area due to the following reasons:

1. The monitor in Shelby County measures attainment of the PM2.5 standard, along with 5 of the 6 Jefferson County monitors. Monitoring data collected from the monitors do not suggest that Shelby County is contributing to nonattainment in Jefferson County.
2. 71% of the MSA population resides in Jefferson County.
3. Jefferson County's VMT is 7.5 times that of Shelby County.
4. The vast majority of NOx and SO2 emissions in Shelby County are due to the Alabama Power Company Gaston Steam Plant. SCRs and scrubbers are scheduled to be installed.

EPA Response: Alabama's submittal in February 2004, recommended Jefferson County be designated nonattainment for the fine particulate matter (PM2.5), based on 2001 - 2003 monitoring data. Based on the analysis in the TSD EPA believes that Jefferson, Shelby and Walker Counties should be included in the PM2.5 nonattainment area. Jefferson County has a violating monitor and the State recommended it as nonattainment. Shelby County is within the MSA, has high PM, SOx, NOx, and VOC emissions, approximately 52 percent of its commuters commute to Jefferson County, has relatively high population and VMT, and has a power plant within the County. Walker County has high SOx and NOx emissions from a power plant. We have included in our recommended nonattainment area Walker County, which is contiguous to the MSA, has a violating monitor, is generally rural in character, and contains an identifiable large emitting facility or facilities (e.g., power plants) which we believe contributes to the nearby nonattainment problem. We have included this County in our initial recommendations in order to ensure that a sufficient portion of this County, including such large facilities, is included within the boundaries of the nonattainment area as part of the final designations. We invited the State to submit to us a recommendation as to what

portion of Walker County, encompassing the large facility or facilities, should be designated nonattainment. Based on the following analysis, EPA agrees that Blount, St. Clair, Calhoun, Talladega, Tuscaloosa and Morgan Counties should be recommended attainment/unclassifiable for PM_{2.5}. Blount County has no major sources, has relative low emissions and has the lowest population and VMT in the Birmingham area. St. Clair County has relatively low SO_x and PM emissions and has a small population. Calhoun County has no major sources, 84 percent of its commuters commute within its County and it is adjacent to the MSA. Talladega County has a small population, an attaining monitor (14.7 DV), low VMT and it is adjacent to the MSA. Tuscaloosa County has no major sources, 89 percent of its commuters commute within its County, has an attaining monitor (11.6 DV) and it is adjacent to the MSA. Morgan County has an attaining monitor, is part of another MSA, 72 percent of its commuters commute within its County and is several Counties away from Jefferson County.

Comment: 1013a-5

Region: 4

State: AL

Area: Chattanooga, TN-GA

Comment: EPA recommended that all or a portion of Jackson County be included in the Chattanooga nonattainment area due to large contributing facilities. EPA asked the state to recommend which portion(s) of this county should be included in the nonattainment area. Our analysis found that the Widows Creek power plant is located in Jackson County. This facility emits almost 44,000 tons per year of SO₂ and over 25,000 tons per year of NO_x. Jackson County in its entirety should be included in the nonattainment area.

EPA Response: Even though some rural counties are not a part of some CMSAs, these counties are being designated as nonattainment areas because they have violating monitors or because they contribute emissions to the nonattainment problem in the affected CMSAs. The CAA requires EPA to designate as nonattainment any area that is violating the standard and any area that is contributing to a violation in a nearby area. The designated nonattainment area will need to determine what local controls are appropriate for bringing the area into attainment in conjunction with national and regional control requirements.

Jackson County has high SO_x and NO_x emissions from a power plant. We have included in our recommended nonattainment area Jackson County, which is generally rural in character, and contains an identifiable large emitting facility or facilities (e.g., power plants) which we believe contributes to the nearby nonattainment problem. We have included this County in our initial recommendations in order to ensure that a sufficient portion of this County, including such large facilities, is included within the boundaries of the nonattainment area as part of the final designations. We invited the State to submit to us a recommendation as to what portion of Jackson County, encompassing the large facility or facilities, should be designated nonattainment.

Comment: 1038-3
Region: 4
State: AL
Area: Chattanooga, TN-GA

Comment: ADEM disagrees with the inclusion of Jackson County in the Chattanooga nonattainment area for the following reasons:

1. The wind blows infrequently from the direction of Jackson County towards Chattanooga on days where the PM_{2.5} concentrations are high.
2. Vehicle Miles Traveled (VMT) in Jackson County accounts for less than 11% of the total VMT for the nonattainment counties proposed by EPA.
3. Jackson County has a small population and population density compared to Hamilton County, Tennessee (Chattanooga).
4. The vast majority of NO_x and SO₂ emissions in Jackson County are due to the TVA Widows Creek Steam Plant. ADEM has legal authority to require emission reductions from this utility and other sources to correct air quality problems regardless of the county's attainment designation.
5. SCR and SO₂ scrubbers are installed on the two largest units at the TVA Widows Creek facility.

EPA Response: Jackson County has high SO_x and NO_x emissions from a power plant. We have included in our recommended nonattainment area Jackson County, which is generally rural in character, and contains an identifiable large emitting facility or facilities (e.g., power plants) which we believe contributes to the nearby nonattainment problem. We included this County in our initial recommendations in order to ensure that a sufficient portion of this County, including such large facilities, is included within the boundaries of the nonattainment area as part of the final designations. We invited the State to submit to us a recommendation as to what portion of Jackson County, encompassing the large facility or facilities, should be designated nonattainment. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1038-2
Region: 4
State: AL
Area: Columbus, GA-AL

Comment: ADEM disagrees with the inclusion of Lee County in Phenix/Columbus Georgia nonattainment area for the following reasons:

1. There are few significant point sources in Lee County.

2. NOx and VOC emissions account for the vast majority (78%) of total emissions in Lee County. The majority of NOx emissions come from mobile sources and half of the VOC emissions are from mobile sources. About 68% of all Lee County commuters stay or work in Lee County. Only 5% work in Russell County where the standard is exceeded.

3. The wind infrequently blows from the direction of Lee County towards Phenix City on days with high PM2.5 concentrations.

4. Alabama counties are much larger than Georgia counties, which result in higher "composite emission scores". Russell County alone is almost as large as the two Georgia counties (Muscoogie and Harris) which EPA proposed for nonattainment.

EPA Response: Alabama's submittal in February 2004, recommended that Russell County be designated nonattainment for the fine particulate matter (PM2.5), based on 2001 - 2003 monitoring data. Georgia's submittal in June 2004, recommended that Harris, Muscoogie and Chattahoochee Counties be designated attainment for PM2.5. Based on the analysis in the TSD, EPA recommends that Russell County in Alabama, and Muscoogie County in Georgia should be included in the PM2.5 nonattainment area. Russell County has a violating monitor and the State recommended it as nonattainment. Muscoogie County has high NOx and VOC emissions, high VMT and a large population. Based on the analysis in the TSD, EPA agrees with the recommendation that Barbour, Chambers, Lee, Montgomery, Elmore and Tallapoosa Counties in Alabama, and Chattahoochee, Harris, Troup, Stewart, Meriwether, and Sumter Counties in Georgia, should be attainment/unclassifiable for PM2.5 based on low emissions, low VMT and low population.

Comment: 1038-1

Region: 4

State: AL

Area: Columbus, GA-AL | Chattanooga, TN-GA | Birmingham, AL

Comment: On behalf of the Alabama Department of Environmental Management (ADEM), the commenter disagrees with EPA's decision to designate four additional counties in Alabama as nonattainment. Based on a thorough review of EPA's information, the commenter requests that EPA designate only Jefferson County as nonattainment for PM2.5. The commenter offers the following on EPA's intended designation.

1. ADEM has the authority to impose reduction measures as necessary in any county near a nonattainment county, regardless of the attainment status of that nearby county. Accordingly, ADEM's recommendation only included those counties with monitoring data exceeding the PM2.5 standard. High background levels of PM2.5 present in the eastern United States are the major cause of PM2.5 problems, not emissions generated solely in the local areas.

2. ADEM's analysis of EPA's 11 factors supported the state's recommendation that only those counties that violated the annual PM_{2.5} standard, Jefferson and Russell should be designated nonattainment.

3. ADEM has several problems with EPA's composite emission score methodology including: there was no public or scientific review of the complex process used to develop the composite emission score; the inventory used to calculate the composite scores used emission data not available to ADEM and did not use the more recent 1999 national inventory; and the composite score did not take into account several important factors like the distance of emissions sources from violating monitors, the size of counties, and meteorology.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM_{2.5} standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air.

These monitors are used to calculate the values that are compared to the NAAQS (15 $\mu\text{g}/\text{m}^3$) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM_{2.5}.

It is also important to note that the PM_{2.5} (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM_{2.5} weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM_{2.5} in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

Comment: 1013a-4
Region: 4
State: AL | GA
Area: Columbus, GA-AL

Comment: With regard to the Columbus CMSA, EPA recommended that Lee and Russell Counties be designated nonattainment; Macon County should be included in the nonattainment area as well since it is part of the CMSA. EPA mentioned that Lee County is, “adjacent to the MSA, has high VMT and a large population;” this county is actually part of the CMSA and therefore must be included in the nonattainment area. Despite the fact that Macon County is part of the CMSA, EPA’s analysis failed to consider the county when analyzing several factors for determining the nonattainment boundary, including population data and growth and traffic data and VMT growth.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM-2.5 standard. Please refer to the TSD which explains EPA’s decisions on the States’ recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1013a-11
Region: 4
State: GA
Area:

Comment: Correspondence between the State and EPA indicates that Richmond County (Augusta) may be on the verge of nonattainment. Georgia had originally recommended

that this county be designated nonattainment, but both the State and EPA since determined that incomplete data capture at one of the monitoring sites should lead to an attainment/unclassifiable determination. According to the State's June 15, 2004 letter to EPA, the monitor with complete data (after data substitution) has a design value of 14.8 $\mu\text{g}/\text{m}^3$, very near the PM_{2.5} annual standard. EPA's AirData website indicates that the 2001-2003 design value for the monitor with incomplete data is 15.2 $\mu\text{g}/\text{m}^3$. While we recognize that an area can not be designated nonattainment with incomplete data, we request that EPA and the State be diligent in collecting complete data for this area in order to determine whether this area is indeed attaining the standard. Due to the monitoring data showing that air quality is most likely poor, this area should receive an unclassifiable designation at the most.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. The EPA is using the most current data in the decision making process. EPA and the States continue to work to improve data collection and analysis. On February 13, 2004, the State of Georgia submitted to EPA their PM 2.5 nonattainment recommendations. Georgia recommended only counties which contained a monitored violation and provided no further justification. On September 1, 2004, the State submitted additional information and revised recommendations for the Augusta area. The revision recommended that Richmond County be attainment/unclassifiable. Richmond County has two PM_{2.5} monitors with air quality data for 2001-2003. The data for one monitor demonstrates attainment and the other monitor has incomplete data for 2001-2003 that was violating. EPA's analysis of all the available monitoring data indicates that the area should be designated as attainment/unclassifiable.

Comment: 1036-6

Region: 4

State: GA

Area:

Comment: Georgia EPD Recommendations

A table indicating Georgia EPD's revised recommendations for all counties and partial counties in the state and a map indicating EPD's revised designations is attached to the comment letter.

Please note that during this evaluation, EPD discovered that the vehicle miles traveled (VMT) data posted on EPA's PM_{2.5} technical information web site and used by both EPA and Georgia EPD in attainment designation analysis is incorrect. EPD has used correct VMT data for the analyses created for this response. EPD will be checking the VMT data utilized in the data supporting our June 17, 2004, submittal and will notify EPA if the updated VMT data alters any of those analysis results.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1013a-9
Region: 4
State: GA
Area: Athens, GA

Comment: EPA did not recommend the inclusion of Oglethorpe County in the Athens nonattainment area, but this county is part of the MSA and must be included in the nonattainment boundary. There is no monitor in Oglethorpe County to prove that this county is attaining despite the PM_{2.5} violations in Clarke County.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1036-4
Region: 4
State: GA
Area: Athens, GA

Comment: Athens PM_{2.5} Nonattainment Area

U.S. EPA's June 29, 2004 letter added Madison and Oconee Counties to Georgia EPD's recommendation for the Athens PM_{2.5} nonattainment area. In our June 17th submission, EPD did not analyze Oconee County for the 7 "other factors," since EPD's Updated L-Score analysis indicated that the urban excess from Oconee County did not significantly

impact on the Athens area. Since U.S. EPA has included Oconee County in its recommendation for the Athens PM2.5 nonattainment area, EPD has conducted additional analysis for Oconee County. Also, EPD has conducted an analysis of meteorological factors that was not included in our June 17th submittal. Both of these analyses, together with the information already submitted to U.S. EPA on June 17th, indicate that neither Oconee nor Madison should be included in the Athens PM2.5 nonattainment area. Additionally, should EPA accept EPD's recommendation that Clarke County be designated as unclassifiable, then Madison and Oconee Counties should be designated either as attainment or unclassifiable. The additional analyses for Oconee and Madison Counties are contained in attachment 6.

EPA Response: On February 13, 2004, the State of Georgia submitted to EPA their PM 2.5 nonattainment recommendations. Georgia recommended only counties that contained a monitored violation and provided no further justification. On June 17, 2004, the State submitted additional information and revised recommendations. The revision recommended that Clarke County be designated as nonattainment. EPA has reviewed the State's additional information and now agrees with the State's recommendation as to Oconee and Madison Counties.

Comment: 1036-1

Region: 4

State: GA

Area: Athens, GA | Macon, GA

Comment: Commenter recommends that certain areas be classified as "unclassifiable." Based on PM2.5 monitoring trends through mid-2004, it is very possible that the 2002-2004 data will indicate attainment for the Athens monitor, the Macon Allied Chemical monitor (the Macon Forestry Office monitor already shows attainment), and the Rossville monitor. Data indicating these trends is included in attachment 3. We will have more complete data later this Fall, before U.S. EPA's expected November action. If these monitoring trends continue, EPD recommends that Clarke County, Bibb County, the partial county area of Monroe County that includes Plant Scherer, and Walker County be designated as "unclassifiable."

EPA Response: The EPA is using the most current data in the decision making process. EPA and the States continue to work to improve data collection and analysis.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in

the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1013a-10

Region: 4

State: GA

Area: Atlanta, GA

Comment: EPA did not include all or portions of Butts, Dawson, Haralson, Heard, Jasper, Lamar, Meriwether, Pickens, Pike, Polk, Hall, Troup and Upson Counties and Chambers County, Alabama in the Atlanta nonattainment boundary. These counties are all part of the CMSA and must be included in the nonattainment area. Instead, EPA listed Hall, Heard and Jasper as being adjacent to the CMSA and recommended partial inclusion in the nonattainment boundary. We agree that Putnam County should be included in the nonattainment area due to the Harlee Branch power plant located in the county, but for planning purposes, we believe that the entire county should be included in the nonattainment area.

EPA has agreed with the state to make Floyd County a separate nonattainment area; this county must be included in the Atlanta CMSA nonattainment area. The Hammond power plant, located in Floyd County contributes to the nonattainment problem in the Atlanta area. As for the other counties that are included in the CMSA, but not recommended to be part of the nonattainment area, EPA's letter to the state does not even address most of these other counties. Thus, it appears that no analysis has been done for several counties that are part of the CMSA and these counties must be included in the nonattainment area.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1036-3
Region: 4
State: GA
Area: Atlanta, GA

Comment: Atlanta PM2.5 Nonattainment Area

U.S. EPA's June 29, 2004 letter added Jasper and Putnam Counties to Georgia EPD's recommendation for the Atlanta PM2.5 nonattainment area. EPA's letter also suggested that EPD submit partial county recommendations for those counties. EPD has determined that it is not practical to design partial county nonattainment boundaries for Jasper and Putnam County. We have also conducted additional analysis using EPA's wind direction frequency data that, together with information submitted with our June 17th recommendation, supports EPD's earlier recommendation that neither Jasper nor Putnam County be included in the Atlanta PM2.5 nonattainment area. Also, by designating Jasper and Putnam County "attainment" for PM2.5, the Atlanta PM2.5 nonattainment boundary will be basically identical to the Atlanta 8-hour ozone nonattainment boundary ensuring more efficient air quality and transportation planning. EPD's additional analysis of Putnam County is included.

EPA Response: Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1036-2
Region: 4
State: GA
Area: Chattanooga, TN-GA

Comment: Chattanooga PM2.5 Nonattainment Area

U.S. EPA's June 29, 2004 letter included all of the Georgia Counties that are part of the Chattanooga MSA in the Chattanooga PM2.5 nonattainment area. It is our understanding

that this was due in part to the fact that EPD had not submitted an analysis of this area prior to EPA's June 29th letter. EPD has completed this analysis and it is attached. EPD has recommended above that Walker County be designated unclassifiable and further recommends that Catoosa County and Dade County be classified as "attainment". Should additional data available this fall not indicate that the Rossville monitor will attain the PM2.5 standard using 2002-2004 data or should U.S. EPA reject EPD's unclassifiable recommendation for Walker County, we recommend that the portion of Walker County as described below be included in the Chattanooga PM2.5 nonattainment area.

From the west Walker County line $\frac{3}{4}$ of a mile south of Lookout Mtn. city limits, the boundary travels southeast to the 3700 block of Lula Lake Rd. Boundary then travels south intersecting the 2200 block of Nick-a-Jack Rd. and continues south 1 $\frac{1}{2}$ miles. Boundary then travels east to 7600 block of Hwy 193 at N. Cedar Ln. intersection. Boundary then travels east following southern right of way of Walker Hollow Rd. to 1500 block of N. Marbletop Rd. Boundary then travels southeast intersecting 400 block of Childress Hollow Rd. and continuing east to east right of way of McCarty Rd. Boundary then travels south $\frac{1}{2}$ mile. Boundary then travels east to north right of way of Peter Lewis Trl. Boundary then travels southeast to 1100 block of S. Hwy 341 at Garretts Chapel Rd. intersection. Boundary then travels southeast to southern right of way of Hames Rd. and Driftwood Dr. Boundary then travels east to intersect 800 block of Lofton Ln. Boundary then travels northeast to 100 block of Glass Mill Rd. at Old Bethel Rd. intersection. Boundary then travels east along southern right of way of Glass Mill Rd. Boundary then intersects 500 block of Old LaFayette Rd. at Glass Mill Rd. intersection. Boundary continues east intersecting 9900 block of N. Hwy 27, 300 block of Arnold Rd., and 500 block of Long Hollow Rd. Boundary continues east to 1200 block of Peaving Rd. at E. Long Hollow Rd. intersection. Boundary continues east along southern right of way of Peavine Rd. to east Walker County line.

Clearly the opportunity for a partial county designation is something EPA is willing to consider (EPA's June 29, 2004 suggestion regarding both Putnam and Jasper counties, for example). In evaluating this recommendation, EPA should consider Walker County's geography, the location of the emission sources, other factors we have analyzed, and the fact that the northern urbanized area is not unlike the localized stationary sources EPA refers to in Jasper and Putnam counties.

A complete analysis and a map of the partial county area are included in an attachment.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in

the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1013a-12

Region: 4

State: GA

Area: Columbus, GA-AL

Comment: EPA has not recommended the inclusion of the CMSA counties of Chattahoochee and Marion in the Columbus nonattainment area. Our letter to you indicated that Troup County should be analyzed for its impact on the nonattainment problem. According to EPA's June 29, 2004 letter to Georgia, Troup County's NOx emissions were over twice as high as any of the counties EPA has recommended for nonattainment in this area. Primary PM and VOC emissions in Troup County also appear to be high.

EPA Response: Based on the analysis contained in the TSD, EPA agrees with the recommendation that Barbour, Chambers, Montgomery, Elmore and Tallapoosa Counties in Alabama, and Chattahoochee, Troup, Stewart, Meriwether, Sumter Counties in Georgia, should be attainment/unclassifiable for PM2.5 based on low emissions, low VMT and low population.

Comment: 1036-5

Region: 4

State: GA

Area: Columbus, GA-AL

Comment: Columbus/Phenix City Nonattainment Area

The commenter does not agree with U.S. EPA's recommended boundary. However, On July 28, 2004, EPD, in cooperation with Alabama's Department of Environmental Management, submitted a request for revision to the PM2.5 Monitoring Plan for the Columbus/Phenix City area. U.S. EPA's prompt action on this request will result in the attainment designation for the entire Columbus/Phenix City area, including both Muscogee and Harris County in Georgia.

EPA Response: Alabama's submittal in February 2004, recommended that Russell County be designated nonattainment for the fine particulate matter (PM_{2.5}), based on 2001 - 2003 monitoring data. Georgia's submittal in June 2004, recommended that Harris, Muscogee and Chattahoochee Counties be designated attainment for PM_{2.5}. Based on the analysis in the TSD, EPA recommends that Russell County in Alabama, and Muscogee County in Georgia should be included in the PM_{2.5} nonattainment area. Russell County has a violating monitor and the State recommended it as nonattainment. Muscogee County has high NO_x and VOC emissions, high VMT and a large population. Based on the analysis in the TSD, EPA agrees with the recommendation that Barbour, Chambers, Lee, Montgomery, Elmore and Tallapoosa Counties in Alabama, and Chattahoochee, Harris, Troup, Stewart, Meriwether, and Sumter Counties in Georgia, should be attainment/unclassifiable for PM_{2.5} based on low emissions, low VMT and low population.

Comment: 1013a-13

Region: 4

State: GA

Area: Macon, GA

Comment: EPA has not recommended that Crawford, Jones, Peach, Houston, and Twiggs Counties be part of the Macon nonattainment area despite the fact that these counties are all part of the CMSA. These counties must be included in the nonattainment area. In addition, EPA has only recommended that part of Monroe County be included in the nonattainment area; as this county is also part of the CMSA, the entire county must be included in the nonattainment area. Although EPA has assumed that air quality in the other counties is clean, Crawford, Jones, Peach and Twiggs Counties have no monitors in order to determine whether those counties are attaining or not. While Houston County's monitor is attaining, at 12.8 µg/m³, the county has the second largest population for the CMSA, after Bibb County, at 35%. In addition, Houston County is experiencing much faster growth than is Bibb County, with 24% growth between 1990 and 2000.

EPA Response: The Macon MSA contains the counties of: Bibb, Houston, Jones, Peach, and Twiggs. EPA agrees with the State's recommendation that Bibb County be nonattainment and Monroe County as a partial county nonattainment area.

Comment: 1013a-4

Region: 4

State: GA | AL

Area: Columbus, GA-AL

Comment: With regard to the Columbus CMSA, EPA recommended that Lee and Russell Counties be designated nonattainment; Macon County should be included in the nonattainment area as well since it is part of the CMSA. EPA mentioned that Lee County is, "adjacent to the MSA, has high VMT and a large population;" this county is actually part of the CMSA and therefore must be included in the nonattainment area. Despite the fact that Macon County is part of the CMSA, EPA's analysis failed to consider the

county when analyzing several factors for determining the nonattainment boundary, including population data and growth and traffic data and VMT growth.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1041-6

Region: 4

State: KY

Area:

Comment: Commenter states that EPA indicated in previous guidance its intention to consider 2002-2004 monitoring when making PM_{2.5} designations. Kentucky feels that EPA should follow through with its original intentions.

Commenter states that the Commonwealth of Kentucky believes that the date for official designation should be extended until after the beginning of 2005, instead of mid-November 2004. This would allow states to utilize the 2004 data, and would provide the use of the most recent available data, a requirement that EPA consistently espouses.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

The EPA is using the most current data in the decision making process. EPA and the States continue to work to improve data collection and analysis.

Comment: 1041-7

Region: 4

State: KY

Area:

Comment: The commenter states that the geographic location of a county and the historic prevailing wind data in an area has an impact on PM_{2.5} monitored values. In addressing comments from information presented in the February 2004 recommendations from Kentucky, EPA claims that an area may contribute to the monitored violation even if it is located downwind of another area, due to this being a “year-long” standard. EPA has previously made numerous references to “upwind areas impacting downwind areas” and “predominant wind patterns.” This has been the premise for several control programs recently implemented by EPA and most recently set the stage for the CAIR and BART proposals. Therefore, if the geographic location and predominant wind patterns are an important variable when determining when and at what levels PM impacts are seen, including at Class I areas, then the same variable should be taken into account when EPA makes final PM_{2.5} designations.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM_{2.5} standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

Comment: 1041-2

Region: 4

State: KY

Area:

Comment: The Commonwealth was surprised to learn that EPA had employed the use of a “weighted emissions scoring” process to evaluate counties for emissions contributions to an area attainment problem. At no time did U.S. EPA offer information concerning this methodology. Further, EPA did not afford the states the opportunity to provide input on the appropriateness of or the science behind this methodology. This approach was revealed in late May 2004, a full three months after states had been required to submit boundary recommendations to EPA. Taking this approach, especially at such a late date, is not only contrary to boundary guidance provided to states by U.S. EPA, but insults the established designation process which allows states to use their thorough knowledge of the monitoring network and local and regional circumstances to make those designations.

A full detailed explanation of the origin of the data and how EPA has used the scoring methodology has still not been released for review.

Given the facts presented above, the Commonwealth must go on record as being strongly opposed to the use of this process.

However, since EPA has utilized the weighted emission scores in its PM2.5 response letter to the states, it still remains important to document the problems that exist with the methodology used by EPA in determining those weighted emission scores:

1. EPA did not include adjacent county (i.e., county outside the MSA) emissions into the total emissions for an area when calculating the weighted emissions score. The weighted emissions score, in some instances for counties within the MSA, would have been drastically different if all counties emissions had been included in calculating the weighted emissions scores.
2. EPA's choice of regional speciation monitors must be questioned. EPA, has provided no explanation how it determined "appropriate" regional monitoring sites to use in the weighted emissions scoring process. This eliminates states air quality agencies from having any input on the appropriateness of those sites. States have "background" monitors located to determine background pollutant levels. For EPA to ignore the availability of area specific information, or request input from states on the appropriateness of using one site versus another, is shortsighted. It stands to reason that an in-state regional background monitor would have been more representative of the area than a monitor located in another state. This could have drastic impacts on the results obtained from the analysis.
3. EPA used the SMOKE model information from the Clear Skies modeling that was based on the 1996 NEI to generate the total carbon and crustal components of the emissions data used in their analyses. This data was used in an attempt to generate urban excess in the weighted emissions score calculation. This approach is subjective at best.
4. The use of a cumulative percentage roll-up of the weighted emissions scores is inherently flawed since it causes the inclusion of counties that have scores that are significantly lower than the top scoring counties in an area. The cumulative roll-up is purely an arbitrary mathematical exercise that does not take into account important information (e.g. geographic location, predominant wind patterns, future national control measures, etc.) that should be considered in making PM2.5 nonattainment designations.
5. EPA has still not supplied the speciation data nor the timeframes used in their analysis for the background monitor sites used in the regional analysis.
6. Other national studies performed have taken a different approach in determining source apportionment. Of particular note are conclusions contained in 2003 National Air Quality and Emissions Trends Report that compares the percent difference in PM constituency from regionally representative monitors and urban monitors. While this

approach on the front end is similar to the methodology EPA used, EPA went a step further in attempting to use that data to correlate with actual emissions within a set geographic area. Of a more specific concern, when reviewing regional background PM constituency compared with urban data, sulfates appear to make up a small percentage of urban excess. We believe this shows that sulfates are a regional problem and that the proposed regional controls of SO₂ should alleviate the problem. The second concern is that carbon mass seems to make up the largest percentage of the urban excess and it appears that mobile sources are a major contributor to PM_{2.5} levels in our urban areas. With the proposed federal changes to fuels and engine requirements, contributions from this sector will also be lowered within the next few years.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to

the excess PM2.5 in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM2.5 in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM2.5 in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM2.5 level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM2.5 component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM2.5 in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM2.5 components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM2.5. Accordingly, we are using the speciated PM2.5 data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM2.5.

It is also important to note that the PM2.5 (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

Comment: 1041-1

Region: 4

State: KY

Area:

Comment: EPA has finalized or is in the process of finalizing several new control initiatives that are designed to lower emissions that contribute to PM2.5 levels. The implementation dates for many of these initiatives will begin within the next two years and in many instances, will be in place well before control plan submittal deadlines or attainment dates. This fact should lead to the conclusion that greater caution should be

exercised before saddling an area with a nonattainment designation when no local control strategies will be available or required.

1. Clean Air Interstate Rule (CAIR)/BART

In the June 29, 2004, response to Kentucky, EPA has proposed nonattainment designations for several counties, either within the MSA or adjacent to an MSA, due to the location of a power plant within their borders.

The May 5, 2004, proposed BART rule states on page 25204 that “Based on our current evaluation, we believe the IAQR rule, as proposed, is clearly better than BART for those affected EGUs in the affected States which we propose to cover under the IAQR. We thus expect that the final IAQR would satisfy the BART requirements for affected EGUs that are covered pursuant to the final IAQR”. Per this EPA finding regarding PM and EGUs under the IAQR/BART, EPA should not include counties in PM2.5 nonattainment areas because they contain a power plant. EPA has determined that the IAQR (i.e., CAIR) will achieve the necessary PM air quality improvements.

Upon implementation of the Clean Air Interstate Rule (CAIR) SO₂ emissions from power plants will be reduced nationwide by 3.6 million tons in 2010 (approximately 40 percent below current levels) and by another 2 million tons per year when the rules are fully implemented (approximately 70 percent below current levels). NO_x emissions would be cut by 1.5 million tons nationwide in 2010 and 1.8 million tons annually in 2015 (about 65 percent below today’s levels).

To designate counties nonattainment because they have a power plant in them would place additional hardships on the county and would be counterproductive since the EGUs in the entire region will be mandated by EPA’s CAIR rule to significantly control their PM precursor emissions without being designated nonattainment. In addition, Non-EGUs in Kentucky will also be required to put on BART controls, which will further achieve PM air quality improvements.

2. Mobile Controls

In many areas, EPA based potential nonattainment designations on the supposition that population, commuter traffic, or local VMT played an important role in determining potential impacts on PM_{2.5} levels within an MSA. It is not feasible to designate a county as nonattainment if the only reason an area has been included was due to these population-based factors. With national controls being implemented that would address this contribution, including these counties as nonattainment would place additional, burdensome planning requirements on these local areas for no useful purpose. Due to the Tier 2 Vehicle and Low Sulfur Gasoline, scheduled to be in place by 2006, average national gasoline sulfur levels will be 90% lower. The new Low Sulfur Diesel Rule, scheduled to be phased in beginning in 2007, along with new clean engines operating requirements will reduce NO_x emissions by 50%, and reduce PM emissions by more than 90%. The implementation of these new federal rules will significantly decrease the fine

particulate contribution in and from areas impacted by population and transportation factors.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM-2.5 standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

Comment: 1004-1

Region: 4

State: KY

Area: Cincinnati-Hamilton, OH-KY-IN

Comment: Senator Mitch McConnell, U.S. Senate, requests EPA to consider the comments of Harold Tomlinson, County Judge/Executive of Carroll County, Kentucky. Mr. Tomlinson disagrees with EPA's proposed decision to designate Carroll County as nonattainment and comments that this will hurt Carroll County economically. He notes that there are no data demonstrating that Carroll County exceeds the PM2.5 standard, Carroll County is not a part of the Cincinnati-Hamilton, OH-KY-IN MSA, and Carroll County is not within the boundaries of an 8-hour ozone nonattainment area.

He believes EPA proposed the nonattainment designation solely on the fact that the LG&E coal-fired generating station is in Carroll County. He believes that EPA has the authority elsewhere in the CAA to regulate point sources and should not subject the entire county to a nonattainment designation for the purpose of exerting regulatory control over one facility.

EPA Response: Thank you for your letter of June 8, 2004, on behalf of Mr. Harold Tomlinson, the County Judge/Executive for Carroll County, Kentucky, concerning fine particulate matter (PM2.5) designations and northern Kentucky. In your letter you requested that the Environmental Protection Agency (EPA) provide you with an update on the status of PM2.5 designations, as well as relevant information on EPA's decisions regarding any region of Kentucky.

In determining an area's designation, we rely on the Clean Air Act (CAA) definition of a nonattainment area in section 107(d)(1)(A)(i): an area that is violating an ambient standard or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. In making designations, we use the most recent 3 years of monitoring data. Once we determine that a monitor is recording a violation, the next step is to determine if there are any nearby areas that are contributing to the violation and include them in the designated nonattainment area. In making this determination, we review all available technical data

such as air quality, source locations and emissions, meteorology, terrain, population, commuting, and growth in the area. PM2.5 is a regional pollutant and can be transported by prevailing wind.

States had until February 2004 to recommend to EPA areas that should be designated as attainment and nonattainment. The Commonwealth of Kentucky recommended that Fayette and Jefferson Counties be designated nonattainment and deferred making a recommendation on Boyd County in their February 20, 2004, submittal. EPA will review and consider those recommendations, and intends to respond to states and tribes by the end of June 2004. In that response, the Agency will notify states and tribes of any modifications EPA wishes to make to state or tribal recommendations. States will have an opportunity to comment on any modifications EPA makes to their recommendations. EPA expects to take the 2001-2003 data into consideration when making the final designations (by November 17, 2004). Tribes that have their own air quality programs may submit recommendations for designations; however, they are not required to do so. Because air quality data is lacking in some tribal areas, EPA will work with tribes to determine the appropriate designations. EPA will address all state and tribal lands during the designations process.

SCHEDULE

States/Tribes recommend designations February 2004

EPA responds with letters describing intended

“modifications” June 28-30, 2004

EPA proposes implementation rule Fall 2004

EPA finalizes designations November 17, 2004

Effective date of PM2.5 designations February 2005

EPA finalizes implementation rule Spring 2005

State/Tribal plans due February 2008

Attainment dates 2010 - 2015

Additional information regarding PM2.5 designations, along with links to the technical support documentation, is available on the web at the following web site:
<http://www.epa.gov/pmdesignations/>.

If you have questions or need additional information from EPA, please contact me or the Region 4 Office of Congressional and Intergovernmental Relations at (404) 562-8327.

Comment: 1013a-21

Region: 4

State: KY

Area: Cincinnati-Hamilton, OH-KY-IN

Comment: EPA failed to include Bracken, Carroll, Gallatin, Grant, Mason and Pendleton Counties in its recommended nonattainment area for Cincinnati. Bracken, Gallatin, Grant and Pendleton Counties are all part of the nonattainment area and must be designated nonattainment. Carroll and Mason Counties are adjacent to the Cincinnati CMSA, but both contain high emitting coal-fired power plants and therefore should be included in the nonattainment area due to their probable contribution to the poor air quality in the Cincinnati area. EPA's June 29, 2004 letter to the State explains that these counties should be designated attainment/unclassifiable despite their power plants because they have low population, population growth and VMT. These factors do not change the important fact that the Ghent electric generating facility in Carroll County produced over 46,000 tons of SO₂ and over 19,000 tons of NO_x while the H.L. Spurlock power plant in Mason County emitted over 40,000 tons of SO₂ and over 8,000 tons of NO_x in 2002. Regardless of population in these counties, these high emitting plants must be controlled for their impact on the nonattainment problem in the Cincinnati area.

EPA Response: In February 2004, Kentucky recommended that all Kentucky counties in the Cincinnati-Hamilton MSA be designated attainment for the PM_{2.5} standard. EPA is modifying Kentucky's recommendation to include Boone, Campbell and Kenton Counties in the Cincinnati-Hamilton nonattainment area. Boone County has significant emissions, relatively high population growth, and a large (>10,000 tons per year SO₂) power plant located in the County. Campbell and Kenton Counties have significant VMT, significant numbers of commuters into violating Hamilton County, and both counties part of the Cincinnati 1-hour ozone nonattainment area due to violating monitors. Kenton County also has monitoring data close to the standard. EPA agrees that the remaining KY MSA counties of Gallatin, Grant, and Pendleton should be designated as attainment/unclassifiable due to low emissions, very low population relative to the area, and very low numbers of commuters into the violating counties.

EPA agrees that the adjacent counties of Carroll and Mason should be designated attainment/classifiable for the PM_{2.5} standard, although they have significant emissions due to power plants. These counties have relatively low populations, low population growth, and low VMT. Further, their commuting patterns and distance from the violating monitors indicate that these counties do not contribute to the violations in the area. The other adjacent counties do not contribute and therefore, will be designated as attainment/unclassifiable. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1041-5

Region: 4

State: KY

Area: Cincinnati-Hamilton, OH-KY-IN | Dayton-Springfield, OH | Lexington, KY

Comment: Commenter states there were many contradictions or inaccuracies noted throughout the June 29, 2004 letter from EPA. These include:

1. On page 3, the letter states “Campbell and Kenton Counties...and both counties part [sic] of the Cincinnati 1-hour ozone nonattainment area due to violating monitors.” This statement is incorrect. On August 30, 2002, EPA’s final rule, redesignating the Kentucky portion of the Cincinnati-Hamilton 1-Hour Ozone Nonattainment Area to maintenance, became effective.
2. On page 4, the table that EPA utilizes in its analysis of the weighted emissions factor for the area includes Montgomery County, Ohio. However, Montgomery County, Ohio is not in the MSA, it is in the Dayton-Springfield MSA, so the emissions from this county would skew the analysis.
3. Comments on page 5 and page 12 indicate that even though a monitor shows attainment with the standard, being close to the standard is a reason for nonattainment designation.
4. On page 20, the letter states “Although Pulaski County This factor did not appear significant for the remaining counties listed in this table.” It appears that a sentence ending is missing.
5. On page 22, the letter states that Madison County “...has the largest number of workers commuting into Fayette County (6,870), which is relatively insignificant for such a large county as Fayette. Based on the analysis for this factor, there are no counties with commuting data showing a potential to contribute to the PM2.5 violations in Fayette County.” On page 23, the letter states, “...no other Kentucky counties, with the exception of Madison County, have VMT and commuting data with a potential to contribute to the PM2.5 violations in Fayette County.” One page indicates that commuting data indicates no potential impact; the next page states that the commuting data indicates a potential impact.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in

the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM_{2.5}.

It is also important to note that the PM2.5 (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

Comment: 1013a-22

Region: 4

State: KY

Area: Evansville, IN

Comment: Our June 16, 2004 letter to you indicated that the Kentucky portions of the Evansville MSA must be designated nonattainment along with the Indiana portion of this MSA. But EPA has failed to recommend that this area be designated nonattainment. Henderson and Webster Counties must be included in this nonattainment area. In addition, Daviess County, adjacent to the MSA, must be included in the nonattainment area. There are two coal-fired power plants in both Webster and Henderson Counties while the Elmer Smith power plant is located in Daviess County. Together, these facilities emitted almost 25,000 tons of SO₂ and almost 24,000 tons of NO_x in 2002. These power plants are most likely important factors in the area's nonattainment problem and must be controlled.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM_{2.5} standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

EPA is designating Henderson County as attainment. The following factors played a role in this decision: low emissions, attaining monitor (14.0), low population growth (4% or 1785 persons), relatively low commuting, designated attainment for the 8-hour ozone standard, relatively low VMT (510,000 miles/year), and no large power plants. The adjacent Kentucky Counties of Daviess and Webster were included in this analysis. EPA is designating the adjacent counties of Daviess and Webster as attainment. The following reasons played a role in this decision for Webster County: relatively low emissions as compared to MSA and adjacent counties, low population (14,079), low population growth rate, low VMT (119,000 miles/year), and low number of commuters. The following reasons played a role in this decision for Daviess County: attaining monitor

(14.9), relatively low emissions as compared to MSA and adjacent counties, adjacent to Henderson (attaining), and low number of commuters.

Comment: 1013a-23

Region: 4

State: KY

Area: Huntington-Ashland, WV-KY-OH

Comment: EPA failed to include Greenup County, part of the Huntington MSA, in its recommended nonattainment area. There is no monitor in this county in order to determine that this area is attaining despite the violation in the adjacent county. This county must be included in the nonattainment area.

EPA Response: In February 2004, Kentucky recommended that the PM_{2.5} designation for Boyd County be deferred and that Greenup and Carter Counties be designated attainment for the Huntington-Ashland MSA. EPA is modifying Kentucky's recommendation to include Boyd County and Lawrence Counties in Kentucky in the Huntington-Ashland nonattainment area. The following factors played a significant role in this decision for Boyd County: attaining monitor reading of 15.0 µg/m³, at the standard; significant SO_x, NO_x, and PM emissions; proximity to the violating MSA counties; controls with anticipated, substantial SO_x, NO_x, and PM emission reductions will not be implemented until the end of 2005, well after designations are made. Lawrence County, Kentucky is included due to significant emissions of SO_x and NO_x from a power plant and its close proximity to the violating counties in the MSA. We have included in our recommended nonattainment area this County that is adjacent to the Huntington-Ashland MSA with a violating monitor, that is generally rural in character, and that contains an identifiable large emitting facility (e.g., power plant) which we believe contributes to the nearby nonattainment problem. We have included this county in our initial recommendations in order to ensure that a sufficient portion of this county, including such a large facility, is included within the boundaries of the nonattainment area as part of the final designations. We invite you to submit to us a recommendation as to what portion of this adjacent county, encompassing the large facility, should be designated nonattainment.

EPA agrees with the State's recommendation that Greenup and Carter Counties in Kentucky should be designated attainment/unclassifiable due to their relatively low emissions, low populations, low VMT, low numbers of commuters into the violating counties, and small point sources.

Comment: 1013a-24

Region: 4

State: KY

Area: Lexington, KY

Comment: EPA failed to include 10 counties in the Lexington nonattainment area; those counties are: Anderson, Bath, Bourbon, Franklin, Jessamine, Menifee, Montgomery,

Pulaski, Rock Castle and Scott. With the exception of Pulaski County, all of these counties are part of the CMSA. The entire CMSA must be designated nonattainment. The Cooper electric generating facility is located in Pulaski County; this facility emitted over 22,000 tons of SO₂ and almost 5,000 tons of NO_x in 2002. Therefore, this county must be included in the nonattainment area due to its probable contribution to the poor air quality in the area.

EPA Response: In February 2004, Kentucky recommended that Fayette County be designated attainment for the PM_{2.5} standard for the Lexington, KY MSA, and the remaining MSA counties be designated attainment. EPA agrees that Fayette County should be designated nonattainment for PM_{2.5} due to a violating monitor (South Limestone). EPA is modifying Kentucky's recommendation to include a portion of the adjacent county of Mercer in the Lexington nonattainment area. EPA agrees that the remaining MSA Counties of Bourbon, Clark, Jessamine, Madison, Scott, and Woodford in Kentucky be designated attainment/unclassifiable due to their relatively low emissions, low populations, low VMT, low numbers of commuters into the violating counties, and small point sources.

EPA agrees with the State's recommendation that the adjacent county of Pulaski should be designated attainment/classifiable for the PM_{2.5} standard, although it has significant emissions due to a power plant. This county has relatively low population, low population growth, and low VMT. Further, the commuting patterns and distance from the violating monitors indicate that this county does not contribute to the violations in the area. The other adjacent counties do not contribute and therefore, will be designated as attainment/unclassifiable.

Comment: 1013a-25

Region: 4

State: KY

Area: Louisville, KY-IN

Comment: EPA failed to include 9 counties (Hardin, Henry, Larue, Meade, Nelson, Oldham, Shelly, Spencer and Trimble) in its recommended nonattainment area for the Louisville CMSA. EPA's analysis only indicates that Bullitt, Jefferson and Oldham Counties are part of the CMSA, but there are 6 other counties that are part of the CMSA. All of these counties must be included in the nonattainment area. Hardin County is the only county with a monitor besides Jefferson and Bullitt. The 2001-2003 design value for Hardin County is 14.1 µg/m³, which is very near to a violation.

EPA Response: In February 2004, Kentucky recommended that Jefferson County be designated nonattainment and that Bullitt and Oldham Counties be designated attainment for the PM_{2.5} standard for the Louisville MSA.

EPA agrees that the Kentucky MSA County of Oldham be designated attainment/unclassifiable due to low emissions and relatively low population. EPA agrees that Jefferson County be designated nonattainment due to four violating monitors in the

County and is modifying Kentucky's recommendation to include Bullitt County in the Louisville nonattainment area due to a relatively high number of commuters into violating Jefferson County, a monitored PM_{2.5} value of 14.9 that is very close to the standard, and relatively high population growth.

EPA agrees that the adjacent counties should be designated as attainment/unclassifiable due to low population growth, a low percentage of workers commuting into the Louisville MSA, relatively low emissions, and large distance from the violating monitors in the area.

Comment: 1037-3

Region: 4

State: NC

Area:

Comment: Commenter states that the emissions-weighted analysis fails to account for prevailing wind directions during the periods when PM_{2.5} values are higher, assumes incorrectly that emissions impact a monitor equally throughout the year, fails to consider distance between emissions and the monitors, and fails to recognize any effects from the significant reductions resulting from North Carolina's Clean Smokestacks Act. The most glaring demonstration of the weakness of the emissions-weighted approach is that some counties EPA intends to designate as nonattainment under this approach actually are in attainment according to monitors located in those counties. Moreover, this emissions-weighted analysis was introduced late and so could not be addressed by the Governors in their initial recommendations. This runs counter to the state-federal interactive process prescribed by law. For these reasons, the State believes that the use of the emissions-weighted approach is arbitrary and should not influence the final delineation of nonattainment area boundaries.

EPA Response: As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM2.5 component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM2.5 in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM2.5 components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM2.5. Accordingly, we are using the speciated PM2.5 data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM2.5.

It is also important to note that the PM2.5 (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

Comment: 1037-1

Region: 4

State: NC

Area: Greensboro-Winston-Salem-High Point, NC

Comment: Commenter notes that the non-attainment boundary recommended by EPA include several counties that North Carolina continues to believe should be designated attainment for PM2.5. Commenter also attaches PM2.5 Designation Response Technical Support Document.

1. In the Greensboro/Winston-Salem/High Point area, EPA recommends that the entire counties of Stokes, Guilford, Davidson, Forsyth and Randolph be designated non-attainment. North Carolina originally recommended Davidson County only as the PM2.5 non-attainment boundary. We continue to believe that only Davidson County should be designated as non-attainment.

2. North Carolina believes that Stokes County should be designated attainment for the following reasons. While Stokes County contains the Belews Creek power plant, an analysis of forward trajectories indicates that emissions from Belews Creek do not frequently impact the PM_{2.5} monitor in Davidson County. There are also PM_{2.5} monitors currently attaining the standard in Forsyth County that lie between Stokes County and the non-attaining monitor in Davidson County. Even if the Belews Creek facility is affecting the Lexington area, significant NO_x controls have already been installed on the plant. Selective catalytic reduction systems have already been installed on units 1 and 2 at the Belews Creek facility, and additional burner technology has been added at unit 2. This NO_x control technology began operation in 2003 and 2004. Consequently, the NO_x emissions will decrease from 43,567 tons per year to 7,022 tons per year and new SO₂ controls will be installed over the next several years as a result of the Clean Smokestacks Act. SO₂ emissions from Belews Creek will be reduced by nearly 90% in the next several years as these controls become fully operational.

3. Stokes County is an extremely rural county, and therefore has very little mobile emissions. North Carolina believes that the current and future controls on the Belews Creek facility, the apparent small impact of Belews Creek on Davidson County, and the rural nature of the county support designating Stokes County in attainment for PM_{2.5}. If EPA continues to believe that Stokes County should be designated non-attainment because of Belews Creek, North Carolina recommends that only the Sauratown Township where the Belews Creek power plant is located be designated non-attainment.

4. North Carolina believes that Randolph County should be designated attainment for several reasons. The EPA L-Factor ranking for Randolph County is the lowest of the counties recommended by EPA to be designated non-attainment. Randolph County is also predominately downwind of Davidson County during the summer months when PM_{2.5} concentrations are the highest and therefore emissions from Randolph County would not be expected to contribute significantly to PM_{2.5} concentrations in Davidson County during those months. The majority of emissions within Randolph County are mobile emissions and less than 5% of the workforce commutes into Davidson County. Furthermore, the mobile source emissions will be addressed by federal rules such as heavy-duty engine standards and low sulfur diesel.

5. Guilford and Forsyth counties each contain PM_{2.5} monitors that are attaining the standard based on current design values. The counties also lie to the north and northeast of Davidson County, which makes Guilford and Forsyth counties predominately downwind of Davidson County during the summer months when PM_{2.5} is the highest. The majority of emissions from these counties are mobile, and therefore these counties and surrounding counties will benefit from federal rules addressing mobile emissions as well as the expanded North Carolina motor vehicle inspection program. They will also benefit from local measures aimed at reducing mobile emissions as part of the Early Action Compact (EAC) effort in the Triad area.

6. 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 PM2.5 in Davidson County are the result of local factors rather than broader population-related regional influences and therefore the addition of counties beyond just Davidson County will not help the monitor attain the standard. Please see appendix for details.

7. With regard to the Lexington monitor, there has been a downward trend in the PM2.5 concentrations since 1999. We believe that this in considerable part reflects some reductions in the emission of pollutants in certain upwind states over that period. EPA itself has already concluded that these out-of-state sources contribute significantly to elevated PM2.5 in North Carolina. We expect that the downward trend should continue at this site as more emissions reductions are expected due to implementation of the Clean Smokestacks Act, NOx SIP call rules, federal heavy-duty engine standards and new fuel standards. We anticipate further improvement in Lexington monitor air quality will result from positive action by EPA on North Carolina's section 126 petition, as well as actual promulgation of the proposed Clean Air Interstate Rule, both of which will further reduce the contribution from upwind, out-of-state sources to the Lexington area's non-attainment and maintenance problems.

For the reasons stated herein, North Carolina believes that only Davidson County should be designated non-attainment, while Stokes, Randolph, Guilford and Forsyth counties should be designated as attainment for PM2.5.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

For the Greensboro area, EPA proposed to modify the State's recommendation to include Davidson County and the MSA counties of Guilford, Stokes, Forsyth and Randolph. Guilford, Forsyth and Randolph counties are adjacent to Davidson County and have large populations and large emissions. Stokes has significant power plant emissions. EPA did not take into consideration participation in Early Action Compacts (EACs) for 8-hour ozone in making modifications to recommended designations and boundaries for this area.

Comment: 1013a-34

Region: 4

State: NC

Area: Greensboro-Winston-Salem-High Point, NC

Comment: Davie, Surry, Yadkin, and Rockingham Counties are all part of the Greensboro CMSA, but EPA has not recommended that these areas be included in the nonattainment area. Rockingham County in particular is home to the Dan River coal-fired power plant, which emitted almost 3,000 tons of SO2 and over 1,000 tons of NOx in 2002. In addition, the adjacent counties of Chatham and Rowan must be included in the nonattainment area due to the coal-fired power plants located within these counties that

contribute to the nonattainment problem. The Cape Fear power plant emitted almost 12,000 tons of SO₂ and over 2,000 tons of NO_x in 2002. The Buck electric generating facility is located in Rowan and must be included in the nonattainment area as well due to its likely contribution to the poor air quality in this area.

EPA Response: In February 2004, North Carolina recommended that the entire county of Davidson, be designated as nonattainment for the Fine Particulate Matter Standard. In the June 29, 2004, response, EPA recommended Davidson County be designated nonattainment because it has a violating PM 2.5 monitor. The MSA counties of Guilford, Stokes, Forsyth and Randolph were also being recommended as nonattainment. EPA agreed that Alamance, Davie, Yadkin, Rowan, Chatham, Rockingham, and Iredell Counties be designated attainment/unclassifiable. Alamance is an MSA county with an attaining monitor of 13.7 micrograms per cubic meter (µg/m³), 75 % of the commuters remain in Alamance County and the county has low emissions. Davie and Yadkin are MSA counties that do not contain PM 2.5 monitors, have low populations, and low commuting into Davidson. There is significant distance between the violating monitor and the counties of Iredell and Yadkin. Rowan and Iredell are adjacent to the MSA, do not contain PM 2.5 monitors and are a part of the Charlotte-Gastonia-Rock Hill nonattainment area for ozone. Rowan and Rockingham both have small power plants, and there are attaining monitors in Rockingham between the SO₂/NO_x sources in Rockingham and the violating monitor. Chatham is an adjacent county to the Greensboro-Winston-Salem-High Point MSA with an attaining monitor of 12.2 µg/m³, has low population, and part of the county is in the Raleigh-Durham-Chapel Hill nonattainment area for ozone. The remaining adjacent counties all have low emissions, low population and low VMT, indicating they should be attainment/unclassifiable. EPA's final decisions on the State's recommendations are contained in the TSD.

Comment: 1072-1

Region: 4

State: NC

Area: Greensboro-Winston-Salem-High Point, NC |

Hickory-Morganton-Lenoir, NC

Comment: Commenter is commenting on behalf of the Southern Environmental Law Center (SELC) and the Southern Alliance for Clean Energy. Commenter is concerned that without adequate justification, EPA proposes to exclude numerous counties that lie within presumptive nonattainment boundaries as well as other areas that contribute to monitored violations. Commenter is also concerned about the small boundaries that North Carolina is proposing in the Piedmont area of the state.

Commenter urges EPA to expand North Carolina boundaries to include all counties in all MSAs where a violations is registered anywhere within the MSA. This would result in the entire MSA of Greensboro-Winston Salem-High Point and Hickory-Morganton-Lenoir being designated nonattainment for PM_{2.5}. Commenter also urges EPA designate all areas that contribute to a nonattaining monitor. This would result in EPA designating at least Rowan County as nonattainment within the Charlotte MSA, and quite likely the

entire Charlotte MSA as nonattainment. Commenter specifically requests a response from EPA on their letter requesting EPA designate the entire Charlotte MSA as nonattainment for PM2.5. Commenter urges installation of a PM2.5 monitor in Rowan County to ensure that fine particulate matter levels in Rowan meet the NAAQS.

Specific comments are found below:

1. EPA has not justified its proposal to designate only part of the Hickory and Triad areas as nonattainment. EPA's proposed designations are an improvement over the state's recommendation but are still not nearly sufficient to meet CAA requirements and ensure good air quality. EPA should follow its own presumptive boundaries and designate as nonattainment all counties in the Hickory and Greensboro MSAs.
2. EPA must designate Rowan County as nonattainment because of its significant contributions to violating PM2.5 levels in Davidson County in the Greensboro MSA. As EPA's own data demonstrates, Rowan matches or exceeds counties that have been recommended for nonattainment designation in all nine sections of EPA's 9-factor analysis. Furthermore, during the summer months when the State reports that most PM2.5 violations occur, meteorological patterns put the county upwind of much of the Greensboro MSA, including the violating monitor in Davidson County.
3. EPA has not addressed SELCs recommendations to designate the Charlotte MSA nonattainment. EPA is required to designate as nonattainment any areas that contribute pollution to monitors registering violations. EPA information has consistently indicated that sources from the Charlotte area contribute to violations of PM2.5 in Davidson and Catawba Counties.
4. EPA should designate the balance of the Charlotte MSA nonattainment because of its significant contributions to PM2.5 Violations in Davidson County.
5. North Carolina's recommendation that only a portion of Catawba County be designated as nonattainment is inconsistent with EPA guidance. Counties containing violating monitors must be designated in their entirety.
6. North Carolina's argument based on economic considerations is flawed and inapplicable to health-based NAAQS.
7. Trends and predictions are irrelevant with regard to nonattainment designations. What North Carolina characterizes as a trend toward cleaner air may in fact simply reflect a temporary lowering of PM2.5 values during the cooler, wetter years of 2003 and 2004.
8. Areas that were designated nonattainment for ozone should not be excluded from PM2.5 nonattainment designation.
9. Davidson County is receiving pollution from both local and regional sources. This supports a much larger area for designation than Davidson County alone. It is no surprise

that a county located between Greensboro, Charlotte and Catawba County is facing a serious air quality problem. It is essential that EPA respond by designating as nonattainment all areas that contribute to Davidson County's dirty air, including the entire Greensboro, Hickory, and Charlotte MSAs.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations. EPA has considered the Charlotte MSA and based on our analysis disagrees with the commenter that Charlotte be included in the Greensboro area. It would be inconsistent with the Clean Air Act for EPA, at this stage, to add any counties not previously cited in its notice of proposed modifications to the State's recommendations.

Comment: 1037-2

Region: 4

State: NC

Area: Hickory-Morganton-Lenoir, NC

Comment: 1. With regard to the non-attaining monitor in Hickory, North Carolina continues to oppose a non-attainment designation for any area beyond the metropolitan planning organization boundary of Catawba County. There is little to be gained by including the partial counties of Burke and Caldwell in the non-attainment area for the Hickory region for several reasons. Catawba County emissions are significantly higher than both Burke and Caldwell counties in the L-Factor analysis. The bulk of emissions from these counties is from the mobile sector and therefore will benefit from state and federal rules addressing mobile emissions. There would be little to no additional opportunity to reduce mobile emissions by designating Burke and Caldwell counties as non-attainment.

2. A non-attainment designation for PM2.5 would place significant additional burdens on Burke and Caldwell counties since these counties are already participating in an EAC for ozone. These counties are making progressive strides to reduce emissions as part of the EAC effort and North Carolina feels that a designation of non-attainment for these counties would do little to reduce PM2.5 in Catawba County. North Carolina believes the recommendation to designate only Catawba County as non-attainment is appropriate, while Burke, Caldwell and the non-MPO parts of Catawba counties should be designated as attainment for PM2.5.

3. Furthermore, on the basis of air quality data for 2004 gathered to date, North Carolina believes there is a significant probability that the Hickory monitor will attain the standard based on complete 2002-2004 data. We expect that it will be possible to maintain this attainment status as more emissions reductions are expected due to implementation of the Clean Smokestacks Act, NOx SIP call rules, federal heavy-duty engine standards and new fuel standards. We are also anticipating needed reductions from upwind out-of-state sources from the proposed Clean Air Interstate Rule, North Carolina's section 126 petition and other initiatives, which will help Davidson County as well. EPA already has

concluded that these out-of-state sources contribute significantly to elevated PM2.5 in North Carolina.

4. North Carolina therefore suggests that EPA designate the Hickory area as "unclassifiable", if the designation is made before December 31, 2004. The designation for this area as attainment can then be finalized in February 2004 using the 2002-2004 data, assuming that it in fact shows what we anticipate. Alternatively, if the designation is made after December 31, 2004, the designation should be based on the 2002-2004 data. This approach would conserve significant federal, state and local resources by avoiding the need for the redesignation demonstration, as well as transportation conformity, in an area that is already attaining the PM2.5 standard.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM-2.5 standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1013a-35

Region: 4

State: NC

Area: Hickory-Morganton-Lenoir, NC

Comment: EPA only recommended parts of Burke and Caldwell Counties for nonattainment and did not recommend Alexander, Cleveland and Rutherford Counties for nonattainment. Cleveland and Rutherford Counties, adjacent to the Hickory MSA, both have higher emissions and must be included in the nonattainment area. The Cliffside coal-fired power plant, located in both of these counties, emitted over 22,000 tons of SO₂ and almost 4,000 tons of NO_x in 2002. All of these counties must be included in the nonattainment area in their entirety.

EPA Response: In February 2004, North Carolina recommended that the Unifour Metropolitan Planning Organization's (MPO) Planning Boundary in Catawba County, be designated as nonattainment. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1039-1

Region: 4

State: SC

Area: Greenville-Spartanburg, SC

Comment: Commenter reaffirms South Carolina DHEC's recommendation of the entire state as attainment for the PM2.5 NAAQS. They disagree with EPA's recommendation of the Greenville-Spartanburg area as unclassifiable until 3 years of data are collected.

1. The Greenville EQC sampler was placed into operation in August 2001. This sampler in addition to the two 'core' samplers required for the MSA demonstrate attainment with the annual and 24-hour PM2.5 NAAQS.

2. All of these areas have been reviewed and it has been determined that spatial averaging is appropriate for the planning areas in South Carolina.

3. Apart from the process for attainment determination, DHEC is concerned about the atypical impacts on air quality indicated by the Greenville EQC sampler. DHEC has taken steps to evaluate the potential sources of emissions that cause atypical readings in cold weather. The nature and distribution of these unusual samples indicate impact at the monitoring site from a local particulate source, possibly residential sources that heat with wood, fuel, oil and coal. DHEC intends to work closely with EPA for advice and assistance as they work with the community on this effort.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM_{2.5} standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Comment: 1040-2

Region: 4

State: TN

Area: Chattanooga, TN-GA

Comment: 1. Tennessee does not object to the naming of Hamilton County, as it is consistent with our most recent recommendation and the fact that it is measuring nonattainment of the PM_{2.5} standard.

2. Tennessee does object to the naming of Marion County as there are essentially no point source emissions and most of the county's emission inventory is mobile source emissions from through commuters (heavy duty trucks) along Interstate 24. Because of federal preemptions on fuels and the fact that these trucks are not stationed in Marion County, there is nothing that the county or the state can do but wait on the federal fuels and diesel rules to take effect. It makes no sense to place a county in economic growth jeopardy by declaring them to be nonattainment contributing when the facts so clearly justify otherwise.

3. There have been numerous meetings since June with local city & county representatives, Metropolitan Planning Organizations, Economic and Community Development, environmental groups, industry and the public. This has also provided an opportunity for additional discussions regarding the potential PM2.5 nonattainment areas. Control measures that are being implemented to address ozone nonattainment will also have positive impacts in mitigation of PM2.5 nonattainment. Tennessee is also planning to implement, in a number of areas, including Knoxville and Chattanooga, PM2.5 forecasting or Air Quality forecasts (in areas with existing Ozone forecasting programs). The opportunity to educate the public and encourage business participation and involvement in reducing PM2.5 emissions and precursors will also provide a positive benefit toward achieving and maintaining PM2.5 attainment.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1073-3

Region: 4

State: TN

Area: Chattanooga, TN-GA

Comment: Hamilton County MSA

1. Supports EPA's inclusion of Marion County in the Hamilton County nonattainment area. Marion County is a significant contributor of PM2.5 in the Chattanooga area because of the commuting patterns of its residents, high VMTs and the presence of a major highway, I-24, through the county.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1073-1

Region: 4

State: TN

Area: Chattanooga, TN-GA | Knoxville, TN

Comment: The commenter, on behalf of the Southern Alliance for Clean Energy, national Parks Conservation Association, Tennessee Citizens for Wilderness Planning, Southern Environmental Law Center, and Tennessee Environmental Council, suggests EPA make their designations in a cautious manner. She notes that EPA's scientists have suggested that the current PM_{2.5} standard of 15 µg/m³ is not protective and have recommended a standard as low as 12 µg/m³ and healthcare experts have recommended a standard as low as 10 µg/m³. She suggests EPA should keep in mind that many counties have design values that exceed 10-12 µg/m³ as the agency designates nonattainment areas. She supports broad designations that will lead to controlling sources outside of the violating area that are likely contributing to nonattainment. In addition she comments that the Tennessee DEC recommendations are not in the best interest of citizens and would result in people in Knox and Hamilton Counties breathing unhealthy air far longer than is necessary. In general, commenter agrees with EPA's proposal for nonattainment areas with the exception of the exclusion on Campbell and Union Counties from the Knox County area.

EPA Response: In a February 12, 2004 letter, the State recommended that Knox, Roane, and McMinn Counties be designated nonattainment based on 2000-2002 monitoring data. The State revised its recommendation on May 7, 2004, to recommend that McMinn and Roane Counties be designated attainment due to 2001-2003 data. Therefore, the State's current recommendation for the Knoxville MSA PM_{2.5} nonattainment area only includes Knox County and recommends that all other MSA and adjacent counties be designated attainment. The State submitted justification for this recommendation. Union County has very small amounts of PM_{2.5} and precursor emissions, indicating no contribution. Therefore, EPA agrees that Union County should be designated attainment/unclassifiable.

Please refer to the TSD which explains EPA's decisions on the States' recommendations

Comment: 1040-1

Region: 4

State: TN

Area: Knoxville, TN

Comment: Tennessee offered the following comments regarding the PM_{2.5} nonattainment designations recommended by the Environmental Protection Agency (EPA) as outlined in EPA's June 29, 2004 letter.

1. McMinn and Roane Counties:

EPA has proposed the inclusion of McMinn and Roane Counties as PM_{2.5} nonattainment areas primarily because of a large source in each county despite the fact that these two

counties are not in a metropolitan statistical area (MSA). Apparently, the sources of concern are Bowater Newsprint and the TVA Kingston Steam Plant. The EPA June 29, 2004 letter declares that meteorology or geography/topography are not factors in the EPA rationale for including the counties.

Tennessee avers that the naming of these rural counties as nonattainment based upon a large source in that county is patently unfair to the citizens of that county. The monitors currently measure PM2.5 attainment, so it has to be an argument of contribution. Tennessee agrees that in general, the larger sources do have a potential to be contributors to the formation of PM2.5, but there has been no plausible demonstration to show that these sources actually impact either the Chattanooga or Knoxville MSAs where air monitoring measures PM2.5 nonattainment.

Therefore, with respect to McMinn and Roane counties, Tennessee declares the following:

- Neither county should be listed as significantly contributing to the nonattainment of another county.
- If a source(s) in a county outside of an MSA is to be listed as significantly contributing to the nonattainment of another county, it should be listed only after modeling confirms that.
- Ultimately, a state implementation plan to ensure that all of Tennessee will attain the PM2.5 standard will be required.
- In preparing the PM2.5 State Implementation Plan, Tennessee commits to model the two sources to ascertain their impact upon the Knoxville and Chattanooga MSAs and to the extent necessary, require sufficient control on the facilities to attain the standard.
- EPA extends the invitation to discuss a partial county designation to capture these sources of concern as long as the ultimate nonattainment boundary in that county captures the source and is contiguous to an MSA nonattainment area. Tennessee rejects this offer, as it has no scientific or technical merit. The counties measure attainment, so it is not an argument over how large an area a nonattaining monitor should represent. This argument concerns contribution from point, rather than area sources. If a boundary is to be drawn, it must be point limited without a peninsula connecting it to a nonattaining MSA.
- Upon designation of nonattainment, existing sources are expected to meet a RACT level of control for the pollutants causing nonattainment. In the case of the TVA Kingston Plant, oxides of nitrogen control in the form of Low NOx burners and Selective Catalytic Reduction units is underway. Lower sulfur fuels are being used in the interim and ultimately scrubbers will be installed. Details of the control efficiencies and timeline for implementation are enclosed as attachments to this letter. Since the facility of concern will have controls for SOx and NOx that far exceed the requirements of RACT, it seems

useless to name a county or a well-controlled facility as being nonattainment contributing without a specific modeling study done at the controlled level making a demonstration of attribution.

- The "urban excess" evaluations conducted by EPA and proposed as a method for "L factor" ranking of the counties within an area (MSA), according to their relative emissions of direct and indirect PM_{2.5} related air contaminants, also provides a method to evaluate potential reductions needed. An evaluation of the urban excess data for Knoxville, Tennessee area reveals that approximately 3 µg/m³ total urban excess is present. This can be apportioned based on the emission inventory. The approximate amount of reduction needed, based on the urban excess calculations is equal to about 2% of the inventory. This is the projected amount needed to reduce the PM_{2.5} levels below the 15.0 µg/m³ threshold for the Knoxville area. When the entire emission reduction amounts are actually realized, the PM_{2.5} monitored levels could be reduced to approximately 14.0 µg/m³ (assuming a reduction equal to the total urban excess amount).

- The existing reductions proposed as part of the NO_x SIP call and the NO_x RACT requirements along with the other federal program reductions planned and the TVA NO_x reductions already underway, should produce reductions that will achieve these goals.

- It is unreasonable to include the Roane and McMinn county areas that are monitoring attainment for the PM_{2.5} standard, when it is highly likely that the emission reductions described above will alone be significant enough to bring the Knoxville area into attainment. The implementation of the federal programs and the NO_x SIP/RACT requirements will also bring about similar reductions for the sources in those counties as well. These reductions will also have a positive impact if the areas are considered to be contributing to PM_{2.5} nonattainment in the Knoxville region.

2. Tennessee does not object to the naming of Knox County, as it is consistent with our most recent recommendation and the fact that it is measuring nonattainment of the PM_{2.5} standard. The additional consideration of the "L" factor analysis proposed by EPA as a method to rank the emission component of the 9 factors to be considered in including or excluding counties in a given area as contributing to nonattainment, identifies several counties other than Knox as significantly contributing to nonattainment in the Knox County area. Tennessee agrees that Anderson and Loudon counties have a significant "L factor" score. However, the "urban excess" contributions should be further discussed. Blount County has an attaining PM_{2.5} monitor and relatively lower emissions than either Knox, Anderson or Loudon counties. In fact the reported NO_x emissions are the lowest in the MSA except for Sevier County. Carbon and nitrates are identified as significant in the EPA calculated "urban excess" for the Knoxville region. The fact that nitrates are a significant component of the "urban excess" with Blount County demonstrating monitored attainment for PM_{2.5} does not support naming Blount county nonattainment. Tennessee agrees that there are other components of the "9" factors that are identified as significant for Blount County in the EPA analysis. However, attainment of the standard is the true test for significant contribution. Again, Blount County has measured attainment with the PM_{2.5} standard and should be given due credit for this.

3. The following control measures are being considered: more stringent controls for open burning, a NOx RACT rule for portions of West Tennessee and for the Tennessee Valley connecting Chattanooga and Knoxville. Statewide anti-tampering rules for vehicles have been adopted by the State Air Pollution Control Board in addition to a vehicle emission testing program in Hamilton County.

4. Tennessee recommends that Marion, Anderson, Blount, Loudon, McMinn, Roane and Sevier be classified attainment and if that is not possible, they should be designated as unclassifiable.

5. Tennessee commits to examine its counties in accordance with PM2.5 SIP requirements and further commits to prepare a SIP for the attainment of the Federal PM2.5 standards in accordance with Federal guidance and regulations. Sources will be analyzed and if additional controls are needed, they will be imposed in order to achieve the PM2.5 standards within the Federally established compliance deadlines.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

In a February 12, 2004 letter, the State recommended that Knox, Roane, and McMinn Counties be designated nonattainment based on 2000-2002 monitoring data. The State revised its recommendation on May 7, 2004, to recommend that McMinn and Roane Counties be designated attainment due to 2001-2003 data. Therefore, the State's current recommendation for the Knoxville MSA PM2.5 nonattainment area only includes Knox County and recommends that all other MSA and adjacent counties be designated attainment. The State submitted justification for this recommendation. Union County has very small amounts of PM2.5 and precursor emissions, indicating no contribution. Therefore, EPA agrees that Union County should be designated attainment/unclassifiable.

Comment: 1013a-45

Region: 4

State: TN

Area: Knoxville, TN

Comment: EPA failed to include Campbell and Union Counties (both part of the Knoxville CMSA) in its recommended nonattainment area. These areas must be included as part of the nonattainment area.

EPA Response: In a February 12, 2004 letter, the State recommended that Knox, Roane, and McMinn Counties be designated nonattainment based on 2000-2002 monitoring data. The State revised its recommendation on May 7, 2004, to recommend that McMinn and Roane Counties be designated attainment due to 2001-2003 data. Therefore, the State's current recommendation for the Knoxville MSA PM2.5 nonattainment area only includes Knox County and recommends that all other MSA and adjacent counties be designated attainment. The State submitted justification for this recommendation. Union County has

very small amounts of PM_{2.5} and precursor emissions, indicating no contribution. Therefore, EPA agrees that Union County should be designated attainment/unclassifiable. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1073-2

Region: 4

State: TN

Area: Knoxville, TN

Comment: Knox County MSA:

1. Encourages EPA to include Campbell and Union Counties although neither have a monitor. In order to base the designations on the most representative data available, EPA should use the most recent (2003) OMB metropolitan boundary lists for its PM_{2.5} nonattainment boundary designations. Using the most recent statistical data is essential in order to reflect accurately current populations and the quantity emissions attributable on a per capita basis.

2. Supports EPA's inclusion of McMinn and Roane Counties in their entirety in the Knox County MSA nonattainment area. These counties are home to major sources of SO₂. She would not support a partial designation of these counties. Such a designation would be inconsistent with EPA guidance and would create jurisdictional challenges.

3. Supports EPA's inclusion of Anderson, Blount, Loudon, and Sevier Counties in the Knox MSA nonattainment area. Blount County has a design value of 14.4 µg/m³ that is considered by many to be unhealthy. Loudon County monitor has incomplete data, but the data available showed a design value of 15.4 µg/m³. Sevier and Anderson Counties have extremely high volumes of traffic that undoubtedly contribute to air pollution in the area.

EPA Response: In a February 12, 2004 letter, the State recommended that Knox, Roane, and McMinn Counties be designated nonattainment based on 2000-2002 monitoring data. The State revised its recommendation on May 7, 2004, to recommend that McMinn and Roane Counties be designated attainment due to 2001-2003 data. Therefore, the State's current recommendation for the Knoxville MSA PM_{2.5} nonattainment area only includes Knox County and recommends that all other MSA and adjacent counties be designated attainment. The State submitted justification for this recommendation. Union County has very small amounts of PM_{2.5} and precursor emissions, indicating no contribution. Therefore, EPA agrees that Union County should be designated attainment/unclassifiable. Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1074-1

Region: 4

State: TN

Area: Knoxville, TN

Comment: EPA's 9-factor analysis for the Knoxville area does not support including McMinn County. Not one of the nine factors included in EPA's justification supports designating McMinn County as nonattainment for PM_{2.5}. EPA has not conducted a modeling analysis or impact studies to prove McMinn County has adverse effects on the Knox County MSA. Any designation would appear unfounded at best. McMinn County respectfully objects to EPA's designation based on the July 29, 2004 justification and requests EPA to designate McMinn county as attainment based on the 2001-2003 design value of 14.6 µg/m³ and significant opportunity for a lower design value.

The commenter offers the following comments on the 9-factor analysis conducted by EPA.

1. Factor 1 - Emissions

In the case of the Knoxville MSA, there was no monitored urban excess of sulfate, based on the information contained in the EPA supporting spreadsheet "For states-PM_{2.5}designs-urban excess data 061404.XLS." Therefore, SO₂ emissions are not included in the weighted emission scores for the Knoxville Area. The conclusion that McMinn County has large SO₂ emissions that contribute to the PM_{2.5} violations in Knoxville is not supported by Factor 1.

The weighted emission score for McMinn County NO_x emissions is 4.4 out of a total emission score of 27. Therefore, the McMinn County NO_x emissions are minor and cannot justify the inclusion that large NO_x emissions from McMinn County contribute to violations in Knoxville.

2. Factor 2- Air Quality

The 2001-2003 PM_{2.5} design value for McMinn County is 14.6µg/m³ and is attaining the standard. In addition, the design value is trending downward. Furthermore, monitors in two other counties also attain the standard, and are not included in the modified nonattainment recommendation from EPA. Therefore, the conclusion that large SO₂ and NO_x emissions from McMinn County are contributing to violations in Knoxville is not supported by Factor 2.

3. Factor 3 – Population Density

The population and population density in a number of surrounding counties is similar to McMinn County, however these adjacent counties were not included in the modified nonattainment recommendation from EPA. Therefore, the conclusion that large SO₂ and

NOx emissions from McMinn County are contributing to violations in Knoxville is not supported by Factor 3.

4. Factor 4- Traffic and Commuting Patterns

EPA presented the 2002 VMT for the Knoxville MSA and Roane and McMinn counties. EPA did not present the VMT from some other adjacent counties that are contained in the EPA supporting spreadsheet. The 2002 VMT in several counties is similar to McMinn County; however these adjacent counties were not included in the modified nonattainment recommendation from EPA. Therefore, the conclusion that large SO₂ and NO_x emissions from McMinn County are contributing to violations in Knoxville is not supported by Factor 4.

5. Factor 5 – Expected Growth

The 1990-2000 population growth and percent population growth in several counties is similar to McMinn County, however these adjacent counties were not included in the modified nonattainment recommendation from EPA. Furthermore, the projected 2002-2010 population growth for McMinn County is negative, whereas the 2002-2010 projected growth in a number of other counties is positive, however, these adjacent counties were not included in the recommendation by EPA. Therefore, the conclusion that large SO₂ and NO_x emissions from McMinn County are contributing to violations in Knoxville is not supported by Factor 5.

6. Factor 6 - Meteorology

In Factor 6, EPA states meteorology did not play a significant role in the decision making process. Therefore, the conclusion that large SO₂ and NO_x emissions from McMinn County are contributing to violations in Knoxville is not supported by Factor 6.

7. Factor 7 – Geography/Topography

In Factor 7, EPA states geography/topography did not play a significant role in the decision making process. Therefore, the conclusion that large SO₂ and NO_x emissions from McMinn County are contributing to violations in Knoxville is not supported by Factor 7.

8. Factor 8 – Jurisdictional Boundaries

In Factor 8, EPA states jurisdictional boundaries did not play a significant role in the decision making process. Therefore, the conclusion that large SO₂ and NO_x from McMinn County are contributing to violations in Knoxville is not supported by Factor 8.

9. Factor 9- Level of Control of Emission Sources

In Factor 9, EPA states level of control of emission sources did not play a significant role in the decision making process. However, EPA did not consider NOx SIP call requirements on McMinn County NOx sources. EPA also did not consider the impact of the NOx SIP call emission reductions in Factor 1. Therefore, the conclusion that large SO2 and NOx from McMinn County are contributing to violations in Knoxville is not supported by Factor 9.

EPA Response: Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1076-1

Region: 4

State: TN

Area: Knoxville, TN

Comment: The commenter, representing ThyssenKrupp Waupaca, Inc., a facility in McMinn County, Tennessee disagrees with EPA's intended designation of McMinn County as nonattainment. Waupaca does not believe that McMinn County contributes significantly to violations of the PM2.5 NAAQS in the Knoxville MSA and should not be designated nonattainment until modeling studies show that McMinn County contributes to violations of the standard. If McMinn County is designated nonattainment for PM2.5, it will discourage the expansion of existing facilities or relocation of new facilities to McMinn County, which will deprive the county of economic stimulation, new tax income, and new jobs. A nonattainment designation will subject the county to transportation conformity requirements, which target mobile source emission issues. In addition, mobile sources may be targeted as a strategy to achieve emission reductions; however, EPA has provided little data regarding mobile source emissions from McMinn County. Also, it is likely that fine particle emissions due to mobile sources will decrease over the next few years due to cleaner fuels and cleaner vehicles. Existing regulatory programs like the NOx SIP call, the NOx RACT requirements, and others will reduce emissions in the Knoxville nonattainment area including McMinn County. Because Knoxville area emissions in McMinn County that may (or may not) contribute to Knoxville PM2.5 violations are also likely to decrease in the next few years, McMinn County should not be designated nonattainment. Specific comments on the 9 Factor Analysis are as follows.

1. Factor 1 – Emission is Areas Potentially Included Vs. Excluded from the Nonattainment Area

Waupaca does not believe that EPA has proven that emissions of regulated contaminants in McMinn County- at whatever levels- contribute to PM2.5 violations in Knox County. Before McMinn County is designated nonattainment, modeling should be undertaken to determine if emission sources contribute to Knoxville PM2.5 violations.

2. Factor 2 – Air Quality in Potentially Included Vs. Excluded Areas

The air quality in McMinn County is improving. The monitor in McMinn County is attaining and the design value and monitor value are trending downward. Knoxville MSA numbers are also trending downward. Based on this factor, McMinn County should be excluded from the Knoxville MSA nonattainment area.

3. Factor 3 – Population Density and Degree Urbanization

McMinn County has one of the lowest projected growth rates from 2000 – 2025 of any of the counties in or adjacent to the Knoxville MSA. McMinn County is not urbanized. Based on McMinn County's low population density, low degree of urbanization, and limited commercial development, this factor weighs against inclusion of McMinn County in the PM2.5 nonattainment area.

4. Factor 4- Traffic and Commuting patterns

Waupaca does not believe the information provided by EPA in its 9-Factor Analysis for the fourth factor supports EPA's proposal to designate McMinn County nonattainment. EPA fails to provide the number of McMinn County commuters who travel to Knox County and does not discuss what percentage of McMinn County's VMT are traveled on I-75 by cars not registered in McMinn County.

5. Factor 5 – Expected Growth

With the exception of Anderson County, McMinn County's projected twenty-five year growth rate of 19.6% is the lowest of the ten counties either contained in the Knoxville MSA, designated nonattainment for ozone, or proposed as nonattainment by EPA for PM2.5.

6. Factor 6- Meteorology

Waupaca urges EPA to accept Tennessee DEC's suggestion to designate McMinn County attainment, yet monitor portions of the county to determine contribution. EPA has cited no meteorological factors that support its recommendation to designate McMinn County nonattainment.

7. Factor 7- Geography/Topography

EPA shouldn't ignore the dominant geographic features, the Great Smoky Mountains and the Tennessee Valley, when analyzing the impact of emissions from McMinn County on the Knoxville MSA.

8. Factor 8- Jurisdictional boundaries

McMinn County is not within the Knoxville MSA. Designating Knox County alone as nonattainment may be sufficient to address Knoxville's PM2.5 nonattainment issues, and at most, only the Knoxville MSA or CMSA counties should be designated. Therefore the

burden is on EPA to show that McMinn County contributes to Knoxville's PM2.5 nonattainment.

9. Factor 9- Level of Control of Emission Sources

EPA should consider the level of control of current and future air emission sources in McMinn County. The NOx SIP call and NOx RACT requirements will lead to further reductions in PM2.5 emissions. Also, the Waupaca facility has recently installed state-of-the-art BACT emission controls.

EPA Response: Please refer to the TSD which explains EPA's decisions on the States' recommendations.

Comment: 1075-1

Region: 4

State: TN

Area: Knoxville, TN

Comment: The commenter believes that EPA's analysis of Factor 1 for McMinn County is flawed because it is based on 2001 emissions that are much greater than actual McMinn County 2001 emissions. Bowater has reviewed the point source emissions for McMinn County that were used by EPA. It has identified seven sources at the Bowater facility whose 2001 actual emissions are much less than those listed in the National Emission Inventory used by EPA. Bowater notes that the McMinn County 2001 emissions included in Factor 1 are not representative because the Bowater 2001 actual emissions are overstated. Bowater then recalculated the weighted emissions scores for each county. The commenter notes that the Bowater facility has recently installed low NOx burners on two power boilers at the facility to comply with the NOx SIP Call. These burners will reduce NOx emissions by approximately 900 additional tons per year. Therefore, based on the corrected 2001 actual emissions and the further reductions at the Bowater facility, the commenter requests that EPA revise its proposed designation accordingly.

EPA Response: Please refer to the TSD which explains EPA's decisions on the States' recommendations.

**5. Responses to Comments EPA Region 5 (Illinois, Indiana, Michigan, Minnesota,
Ohio and Wisconsin)**

Comment: 1015-1

Region: 5

State: IL

Area: Chicago-Gary-Lake County, IL-IN

Comment: Gov. Jim Doyle comments that Kenosha County, WI should be designated attainment for the PM2.5 standard. He believes that Kenosha County has little impact on the Chicago MSA for the following reasons:

1. The monitor located in Kenosha County is attaining the PM2.5 standard.
2. The monitor in Lake County Illinois, which falls in between Kenosha County and the violating monitor in urban Chicago, is also clean.
3. The predominant wind direction from Kenosha County is away from the violating counties in the Chicago MSA.
4. The area outside of Kenosha County covers 90 percent of the emissions in the Chicago CMSA. In addition, Year 2000 Census data show that approximately 75 percent of the Kenosha County commuters travel to Lake County, IL that also meets the PM2.5 standard.
5. Kenosha County has a lower urban density than the area with the monitor that violates the PM2.5 standard.
6. 97 percent of the sulfur dioxide and 78 percent of the nitrogen oxide emissions in Kenosha County come from the Pleasant Prairie Power Plant that has already installed selective catalytic reduction (SCR) on one unit.

EPA Response: EPA has reviewed the technical information found in Governor Doyle's letter and agrees with the recommendation that Kenosha County should be designated attainment. Please see the technical support document for more information regarding this decision.

Comment: 1013a-14

Region: 5

State: IL

Area: Chicago-Gary-Lake County, IL-IN

Comment: EPA failed to include DeKalb, Kankakee and parts of Grundy and Kendall Counties in its recommended nonattainment boundary for the Chicago CMSA. These areas, in entirety, must be included in the nonattainment area. In addition, adjacent La Salle County appears to have high emissions, while the design value for this area is 14.1 µg/m³. This county should be analyzed for its impact on the nonattainment problem in the Chicago area.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM2.5 nonattainment areas. EPA considered nine factors including the emissions, population, and Vehicle miles traveled (VMT) from DeKalb, Grundy, Kankakee, Kendall and La Salle Counties before deciding to designate them as attainment/unclassified. The emissions from these counties are a small percentage of the total emissions in the Chicago CMSA and the population and VMT from all five counties are a small percentage of the population and VMT in the Chicago CMSA. Aux Sable and Goose Lake Townships in Grundy County, and Oswego Township in Kendall County, however, were included in the nonattainment area at the State's request to maintain consistency with the 8-hour ozone designations and thereby facilitate planning.

Speciated PM2.5 weighted emissions were used in developing a weighted emission score for each county in a potential nonattainment area. In the Chicago area, only monitors in Cook County and Northwest Indiana show a violation of the PM2.5 standard. Despite monitoring attainment, EPA evaluated LaSalle County for contributions to these violations using the PM2.5 weighted emissions (and scores) in the context of all the relevant factors in determining the boundary of the nonattainment area. On a weighted emissions basis, emissions in LaSalle County are 2.5 percent of the emissions in the Chicago metropolitan area. Based on this information and information for the other factors, EPA concluded that LaSalle County did not warrant being included in the Chicago nonattainment area.

Comment: 1021-1

Region: 5

State: IL

Area: St. Louis, MO-IL

Comment: Commenter urges EPA to discard its arbitrary policy of designating adjacent counties as nonattainment simply because of their proximity and the fact they contain an electric generating station. He notes that the air quality data was not used as the basis for the intended designation. Commenter suggests that a nonattainment designation would adversely impact the growth of the county. He supports the position of Illinois EPA and the Governor in designating Randolph County attainment for PM2.5.

EPA Response: The EPA agrees that Randolph County does not have a monitor that is violating the PM2.5 standard although it is adjacent to counties in the Saint Louis area that are monitoring unhealthy air quality in excess of the national standard. The CAA defines nonattainment as an area that is violating the standard or contributing to a violation of the standard in a nearby area.

A portion of Randolph County was recommended by the state as unclassified. In EPA's June 29, 2004 letter to the State of Illinois, EPA indicated that Randolph County should be nonattainment, but invited the state to submit additional justification, based on the 9 factors, to support their original designation recommendations. The state submitted technical information pertaining to the county in September 2004, and satisfactorily demonstrated to EPA that part of the county can be designated as attainment. EPA finds

that Baldwin Township warrants being designated nonattainment because it is contributing to the violation in the Saint Louis area. The remainder of Randolph County was determined to not contribute to the air quality violations.

The Baldwin power plant, located in Baldwin Township, produces a substantial amount of the Randolph County emissions. EPA acknowledges that the Baldwin power plant has significantly reduced its emissions, however, it is unclear whether these emission reductions are enforceable and emissions are moderately high even after the reductions. These emissions are located in the portion of the county nearest to the violation and where winds would commonly blow toward the observed violations.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth.

Comment: 1020-1

Region: 5

State: IL

Area: St. Louis, MO-IL

Comment: Commenter believes that EPA expressed intent to designate Randolph County as nonattainment simply because Randolph County has a power plant and is near to a metropolitan area that violates the PM_{2.5} air quality standards, an approach that the commenter finds arbitrary. Commenter reaffirms Illinois EPA's previous recommendation to designate a portion of Randolph County, specifically Baldwin Township, as unclassifiable and disagrees with EPA's intended designation of the entire county as nonattainment. However, if EPA is going to designate part/all of Randolph County as nonattainment, then only the Baldwin Township should be nonattainment. The Baldwin power plant, located in the Baldwin Township accounts for almost all of the precursor emissions from Randolph County. Of the 2004 SO₂ emissions (27,061 tons per year) virtually all (26,267 tons per year) are emitted from the Baldwin power plant.

EPA Response: EPA did not apply the approach alleged by the commenter. That is, EPA did not simply designate all counties near violating metropolitan areas with power plants as nonattainment. Instead, EPA examined emissions data for the violating metropolitan areas and other pertinent information for the nearby areas that might be contributing to the violations. EPA expressed intent to apply a nonattainment designation to those counties or subcounty areas with high emissions judged likely to contribute to the violations, irrespective of whether those emissions arose from power plants or from other sources. Conversely, EPA expressed intent to apply an attainment designation to those counties or subcounty areas with low emissions judged unlikely to contribute to the violations, again irrespective of whether those emissions arose from power plants or from other sources.

The EPA agrees that Randolph County does not have a monitor that is violating the PM_{2.5} standard although it is adjacent to counties in the Saint Louis area that are monitoring unhealthy air quality in excess of the national standard. The CAA defines nonattainment as an area that is violating the standard or contributing to a violation of the standard in a nearby area.

A portion of Randolph County was recommended by the state as unclassified. In EPA's June 29, 2004 letter to the State of Illinois, EPA indicated that Randolph County should be nonattainment, but invited the state to submit additional justification, based on the 9 factors, to support their original designation recommendations. The state submitted technical information pertaining to the county in September 2004, and satisfactorily demonstrated to EPA that part of the county can be designated as attainment. EPA concludes that Baldwin Township is nonattainment because it is contributing to the violation in the Saint Louis area. The remainder of Randolph County was determined to not contribute to the air quality violations.

Comment: 1022-1

Region: 5

State: IL

Area: St. Louis, MO-IL

Comment: The commenter objects to EPA's designation of Randolph County as nonattainment. The commenter believes that EPA erred as the designation was based solely on the presence of the Baldwin Energy Complex in the county and an arbitrary assumption that its emissions of SO₂ and NO_x contribute to nonattainment in the St. Louis metropolitan area. EPA did not consider the recommendations of Illinois EPA or the actual monitored PM_{2.5} data. The commenter states that EPA ignored key factors that EPA itself established to evaluate individual counties. A more detailed discussion of how EPA erred in its decision is attached to this letter. The commenter notes that the designation of Randolph County as nonattainment would have serious impacts on its citizens, local government and business.

The commenter offered the following evidence that EPA improperly applied its own classification criteria.

1. EPA used outdated Baldwin Energy Complex emission data and failed to analyze the relationship between recent SO₂ and NO_x emissions at the Baldwin Energy Complex and measured ambient PM_{2.5} levels in the St. Louis area.
2. PM_{2.5} concentrations in Randolph County have never exceeded the NAAQS notwithstanding the emissions from the Baldwin plant.
3. The Randolph County population density is significantly lower than other most areas considered attainment, and much lower than the others included in the St. Louis nonattainment area.
4. The traffic and commuting patterns of Randolph County are much lower than other areas considered attainment, and much lower than the others included in the St. Louis nonattainment area.
5. Randolph County has a negative expected growth factor significantly below the expected growth of areas considered attainment and below several of the other areas included in the St. Louis nonattainment area.
6. Meteorological characteristics of Randolph County are typical of the region. EPA provided no correlation between the measured nonattainment occurrences in St. Louis and the meteorological conditions in Randolph County. EPA provided no modeling or other analysis indicating that the surface level measurements were in any way related to the emissions from the Baldwin complex emitted from the top of a 605-foot high stack.
7. Randolph County has no geographic features that influenced its intended nonattainment designations. EPA provided no modeling of geography or topography to reject Illinois EPA's recommendation.
8. Regarding jurisdictional boundaries, EPA excluded Randolph County from the St. Louis nonattainment area and for consistency should have excluded it from the PM_{2.5} nonattainment area.
9. EPA ignored the level of emissions control at the Baldwin Power Complex when making its decision. Additionally, there is no correlation between emissions from the Baldwin Power Complex and PM_{2.5} levels in the St. Louis metropolitan area.

EPA Response: The EPA agrees that Randolph County does not have a monitor that is violating the PM_{2.5} standard although it is adjacent to counties in the Saint Louis area that are monitoring unhealthy air quality in excess of the national standard. The CAA defines nonattainment as an area that is violating the standard or contributing to a violation of the standard in a nearby area.

A portion of Randolph County was recommended by the state as unclassified. In EPA's June 29, 2004 letter to the State of Illinois, EPA indicated that Randolph County should be nonattainment, but invited the state to submit additional justification, based on the 9

factors, to support their original designation recommendations. The state submitted technical information pertaining to the county in September 2004, and satisfactorily demonstrated to EPA that part of the county can be designated as attainment. EPA finds that Baldwin Township warrants being designated nonattainment because it is contributing to the violation in the Saint Louis area. The remainder of Randolph County was determined to not contribute to the air quality violations.

The Baldwin power plant, located in Baldwin Township, produces a substantial amount of the Randolph County emissions. EPA acknowledges that the Baldwin power plant has significantly reduced its emissions, however, it is unclear whether these emission reductions are enforceable and emissions are moderately high even after the reductions. These emissions are located in the portion of the county nearest to the violation and where winds would commonly blow toward the observed violations.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth.

Comment: 1013a-15

Region: 5

State: IL

Area: St. Louis, MO-IL

Comment: EPA failed to include Bond, Calhoun, Clinton, Jersey, Macoupin, Montgomery, Morgan and Sangamon Counties in its recommended St. Louis nonattainment area. EPA recommended that Randolph County be designated nonattainment as part of the St. Louis area, but is allowing for the State to submit further information documenting a justification for including only a portion of the county in the nonattainment area. Although Montgomery, Morgan and Sangamon Counties are not part of the CMSA, they all contain power plants that must be analyzed for their impacts on the nonattainment problem. In 2002, these four plants together emitted over 78,000 tons of SO₂ and over 27,000 tons of NO_x.

EPA Response: A portion of Randolph County was recommended by the state as unclassified. In EPA's June 29, 2004 letter to the State of Illinois, EPA indicated that Randolph County should be nonattainment, but invited the state to submit additional justification, based on the 9 factors, to support their original designation recommendations. The state submitted technical information pertaining to the county in September 2004, and satisfactorily demonstrated to EPA that part of the county can be designated as attainment. EPA finds that Baldwin Township warrants being designated nonattainment because it is contributing to the violation in the St. Louis area. The remainder of Randolph County was determined to not contribute to the air quality violations.

The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM_{2.5} designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, and Vehicle miles traveled (VMT) from Bond, Calhoun, Clinton, Jersey, Macoupin, Montgomery, Morgan and Sangamon Counties before deciding to designate them as attainment/unclassified. Although Clinton and Jersey Counties are within the CMSA, their emissions are much lower than from Madison and St. Clair Counties, the Illinois counties in the St. Louis CMSA with violating monitors. Bond, Calhoun, Clinton, Jersey and Macoupin Counties have fairly low emissions and the emissions, population and VMT from Bond, Calhoun, Clinton, Jersey, Macoupin, Montgomery, Morgan and Sangamon Counties represent a small percentage of the total emissions, population and VMT from the St. Louis CMSA. The presence of power plants in Montgomery, Morgan and Sangamon Counties does not necessarily indicate that the counties should be judged to be contributing to the area's violations. Also, Sangamon County does have a monitor which shows that Sangamon County is attaining the PM_{2.5} standard.

Comment: 1020-2

Region: 5

State: IL | WI | IN

Area: Chicago-Gary-Lake County, IL-IN

Comment: Commenter states that Illinois EPA recommends that Kenosha County, Wisconsin, and Lake and Porter Counties, Indiana not be included in the Chicago MSA PM_{2.5} nonattainment area.

1. Regarding Kenosha County, ambient data collected show this county to be in attainment. Studies indicate that due to the predominant wind direction, Kenosha County has a minimal impact on downwind monitors. This county should be designated attainment.

2. Regarding Lake and Porter Counties, commenter believes that if EPA and the State of Indiana agree that these two counties should be designated nonattainment, they should be designated as a separate nonattainment area and not a part of the Chicago MSA. Concerns stem from the EPA's policy regarding transportation conformity in multi-state nonattainment areas and its impact on the need for MPOs to conduct transportation planning independently.

EPA Response: Response to Comment 1.

The EPA uses the CMSA/MSA as a presumptive boundary of nonattainment areas for PM_{2.5}. EPA guidance also provides for use of 9 factors to evaluate alternative nonattainment area boundaries to include the area that is violating the standards and the nearby areas that are contributing to these violations.

For the PM_{2.5} NAAQS, the EPA invited States to consult and make recommendations on air quality and appropriate boundaries to EPA. When EPA first considered Kenosha County as nonattainment, EPA had received no formal recommendations from the State of Wisconsin regarding PM_{2.5} nonattainment areas or boundaries. On August 9, 2004, EPA received a letter from Wisconsin Governor, Jim Doyle, that recommended Kenosha County as attainment. Many of the points raised in the letter from Illinois EPA are also raised in the Governor's letter.

Based on the justification found in Governor Doyle's letter, EPA has determined that Kenosha County should be designated as attainment for the PM_{2.5} standard. See the technical support document for more information regarding the rationale for this decision.

Response to Comment 2.

For several large metropolitan areas such as the Chicago-Gary-Kenosha Metropolitan Area, EPA expressed intent for the nonattainment area to include applicable portions of multiple states. EPA disagrees with Illinois' recommendation to split the Chicago-Gary-Kenosha area into multiple single-state nonattainment areas. EPA is designating Kenosha County as attainment, but EPA is retaining the Illinois and the Indiana portions of the area as a single nonattainment area. The air quality in Northeast Illinois and Northwest Indiana are interconnected, and the area must be designated as a single nonattainment area in order to assure that air quality planning efforts address these interconnections.

EPA understands that EPA's conformity policy dictates that areas that included as a single nonattainment area must address conformity as a single area unless and until separate emission budgets are prepared for separate portions of the area. Further, we understand Illinois's concern that this raises the possibility that a conformity lapse could occur in Illinois as a result of problems in Indiana through no fault of Illinois. However, EPA believes that this concern does not warrant distorting the planning process to subdivide what in air quality terms is a single area. EPA also believes that this concern does not warrant modifying the conformity process to allow subdivision of the area

subject to conformity planning prior to the time that firm emission budgets for the relevant portions of the area have been established.

Comment: 1032-2

Region: 5

State: IN

Area:

Comment: EPA has not proposed or finalized essential guidance or implementing the PM2.5 standards.

The PM2.5 implementation rule is critical to understanding the significance and consequences of a nonattainment designation and the planning procedures that a nonattainment designation triggers. For example, if the PM2.5 designations take effect in early 2005 and the implementation rule has not been finalized, states will be unable to apply nonattainment New Source Review requirements to new permit applications.

EPA Response: The identification of areas that are not meeting, or contributing to other areas not meeting, the PM2.5 standards is an essential first step that must occur before the development of suitable PM2.5 control strategies. EPA regrets that it has not as yet finalized its PM2.5 implementation guidance that will address these issues, including its effect on permitting. EPA recognizes the importance of this guidance and will provide this guidance as soon as feasible. Nevertheless, EPA is required by law to proceed with designations irrespective of the availability of implementation guidance.

Comment: 1032-3

Region: 5

State: IN

Area:

Comment: EPA is poised to automatically impose tougher permit requirements that have not been shown to be necessary for every new nonattainment area.

Based on EPA's statements to date relative to the ozone standard, it is presumed that EPA will seek to impose nonattainment area new source review immediately for any area designated as nonattainment for PM2.5. Not only is this approach unwarranted, as discussed in Governor Kernan's letter, but at the very least nonattainment New Source Review should be deferred until the implementation rule is final.

EPA Response: The identification of areas that are not meeting, or contributing to other areas not meeting, the PM 2.5 standards is an essential first step that must occur before the development of suitable PM2.5 control strategies. The PM2.5 designations do not, by themselves, impose emission control or permitting requirements. Although EPA has not as yet finalized its PM2.5 implementation guidance that will address these issues, including its effect on permitting, EPA will take this into consideration and provide appropriate guidance as soon as feasible.

Comment: 1032-4

Region: 5

State: IN

Area:

Comment: The science associated with determining the causes of and contributions to PM2.5 nonattainment is still developing.

Modeling and other technical analyses have not progressed to the point where we know with certainty which geographic areas to control, which sources to control and the quantity of pollutants to control. Significant technical work will take place to fill these gaps over the next several years. Until these analyses are conducted and more is known relative to the causes and contributions to PM2.5 nonattainment and the trends in PM2.5 air quality, any areas designated as nonattainment should be limited to those that clearly and directly influence the existing monitor readings.

EPA Response: In addition to the important contribution from long-range transport, EPA believes that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well, not just from sources near the violating monitors. While determining the exact impact of a source on the fine particulate concentration in an area continues to be developed, EPA is proceeding using our current knowledge of the problem to protect the air quality in Indiana. This is why our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. As we learn more about what sources and pollutants to control in the future, control strategies can be update to better control fine particulates. This will expedite bring areas in attainment of the air quality standard.

Comment: 1032-5

Region: 5

State: IN

Area:

Comment: There is a significant regional component to PM2.5 nonattainment.

Current scientific evidence, including EPA's modeling for the proposed Clean Air Interstate rule and the Lake Michigan Air Director's Consortium technical analysis, shows there is a regional component to PM2.5, in addition to the local component. There is widespread recognition that regional controls of SO2 and NOx will be necessary to address PM2.5 nationwide. For those counties with violations, regional controls should take them a long way toward compliance. For example, EPA's modeling shows its

proposed Clean Air Interstate Rule will bring all Indiana counties into attainment by 2015, and all but one county (Lake) into nonattainment by 2010. Despite this regional component, Indiana's monitors do not show widespread violations of the annual standard. Many of Indiana's urban and suburban counties monitor compliance. Nonattainment designations for these urban and suburban counties would require stricter permitting of new sources, which may be unnecessary. Furthermore, such designations would impose economic hardships and encourage urban sprawl beyond the current urban boundaries without contributing to attainment in adjacent counties. Technical analysis to date is not conclusive on the issue of how local emissions decreases will affect PM2.5 concentrations downwind.

EPA Response: The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM2.5 standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport from areas that are not adjacent to the metropolitan area. EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the proposed Clean Air Interstate Rule (CAIR).

EPA cannot base an area's air quality designation on projected air quality or on uncertain future emission reductions. EPA agrees that it is important to have programs that address emissions on a national and regional scale. These programs would positively affect the air quality for many areas in Indiana and across the country. Similarly, EPA is not delaying designation even though knowledge of contributions may improve in the future.

The criteria in the Clean Air Act for designating nonattainment areas do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product (GDP) of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for

designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth.

EPA recognizes that further work needs to be done to evaluate the impact of sources at various distances from monitors recording violations of the PM_{2.5} standards. The Clean Air Act provides for EPA to determine nonattainment area boundaries to include all of the nearby source areas which according to currently available information contribute to the violations. The Clean Air Act provides for states then to conduct an analysis of the specific sources and source areas that contribute to the problem and to adopt emission control measures as needed to achieve attainment. However, before that detailed analysis is completed, EPA must establish nonattainment area boundaries that reflect EPA's best judgment of the source areas near to the monitored violations that warrant review in the subsequent planning process.

Comment: 1032-6

Region: 5

State: IN

Area:

Comment: Local contributions and source impacts should not be overlooked.

Of the 18 full counties and 1 partial county proposed as nonattainment by the EPA on June 29, 2004, only six of these counties have monitors that measure a violation of the annual standard for fine particles. Unlike ozone, background concentrations of fine particles are below the standard throughout the state. Although background concentrations are close to the standard at many monitors, IDEM believes that in certain cases the monitors that actually exceed the standard do so because of urban excess and/or local sources. For example, suburban counties are often below the standard in areas adjacent to the urban core where there is an exceedance. Therefore, it should not be assumed that a county contributes significantly to a violation nearby, especially if the county is downwind of the violations and/or monitors ambient air that meets the standard.

EPA Response: Once EPA determines that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard.

In addition to the impact from local sources on an area's air quality, EPA believes that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) and sometimes beyond. Fine particles include a variety of constituents. Some constituents are directly emitted, and tend to be found at highest concentrations near to the points of highest emissions. Even for these constituents, EPA believes a relatively large nonattainment area is warranted, both because a larger area facilitates addressing mobile sources that originate in other nearby counties and because the impacts

for surrounding counties can nevertheless be sufficient to be included in attainment planning. Other constituents form through atmospheric chemical reactions, such that the point of highest concentrations may be some distance from the point of highest emissions. For these constituents, the counties surrounding the violating county may have the most important emissions to be addressed.

For these reasons, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas reflects an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources. Thus, even if the county is monitoring attainment or does not have a monitor, it was evaluated for contributing to a nearby violation using the remaining eight factors. This includes reviewing the annual wind data as part of the meteorology factor. The wind direction tends to vary day to day in Indiana, so an area county will be upwind of the violating county some days and downwind on other days.

Comment: 1013a-16

Region: 5

State: IN

Area: Chicago-Gary-Lake County, IL-IN

Comment: EPA failed to include Jasper, La Porte and Newton Counties in its recommendation for the Chicago nonattainment area. These counties are all part of the CMSA and must be designated nonattainment. EPA concluded that La Porte County is adjacent to the CMSA and does not contribute to nonattainment in the Chicago area. This county is actually included in the CMSA, and contains a coal-fired power plant. Jasper County also contains a coal-fired power plant. Jasper and Newton Counties do not have monitors in order to determine whether these areas are attaining.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM_{2.5} designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, and vehicle miles traveled (VMT) from Newton, Jasper, and La Porte Counties before deciding to designate them as attainment/unclassified. Even with the power plants in Jasper and La Porte Counties, their combined emissions represent a small percentage of the total emissions in the Chicago CMSA. Although Jasper and Newton counties do not have monitors, their emissions,

VMT and population are much less than Lake County, the only Indiana county in the Chicago CMSA that has monitored nonattainment of the PM_{2.5} standard.

Comment: 1032-8

Region: 5

State: IN

Area: Chicago-Gary-Lake County, IL-IN

Comment: Porter County is upwind of LaPorte County and LaPorte County's monitor values are well below the standard. Porter County does not appear to be contributing to PM_{2.5} violations anywhere within the region. Therefore, IDEM continues to recommend that Porter County be designated attainment.

Indiana comments that the monitoring site for which EPA identified a design value of 17.7 µg/m³ has been identified as a hot spot site for which concentrations should not be compared to the annual standard. Indiana states that the design value for Lake County should instead be 15.2 µg/m³.

EPA Response: EPA agrees with Indiana that Porter County does not have violating monitor. While westerly winds are more common in Porter County than easterly winds, the wind blows from the east sufficiently frequently that EPA believes that Porter County emissions contribute to violations in Lake County, Indiana, and Cook County, Illinois. Moreover, the Porter County emissions rank fourth out of the 13 Chicago area counties. There is also a large number of people commuting from Porter County into Lake County, Indiana.

Indiana is correct that it has identified the site recording a 3-year average concentration of 17.7 µg/m³ as a hot spot site for which concentrations are not to be compared to the annual average. EPA appreciates this correction.

Comment: 1013a-17

Region: 5

State: IN

Area: Cincinnati-Hamilton, OH-KY-IN

Comment: EPA failed to recommend a portion of Dearborn County and Franklin and Ohio Counties for nonattainment. These counties are all part of the Cincinnati CMSA and must be included in the nonattainment area in entirety. It is of particular importance that the coal-fired power plant in Dearborn County be included within the nonattainment area boundaries.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be

June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM_{2.5} designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, and Vehicle miles traveled (VMT) from Dearborn County outside of Lawrenceburg Township, and Ohio and Franklin Counties before deciding to designate them as attainment/unclassified. The only coal-fired power plant within these three counties is in Lawrenceburg Township, which EPA is designating as nonattainment. Outside of Lawrenceburg Township the emissions from Dearborn, Ohio and Franklin Counties are an extremely small percentage of the total emissions in the Cincinnati CMSA and the population and VMT from all three counties are a small percentage of the population and VMT in the Cincinnati CMSA.

Comment: 1032-13

Region: 5

State: IN

Area: Cincinnati-Hamilton, OH-KY-IN

Comment: IDEM disagrees with EPA's intended designation of Dearborn County as nonattainment for the following reasons:

1. There is only one significant source of PM in Dearborn County, the Tanners Creek power plant, and it has reduced emissions by installing permanent combustion controls and low NO_x burners. There are no monitors in Dearborn County; if there were, it is not unreasonable to assume that the values would be consistent with background values elsewhere in the state and Midwest. Therefore, IDEM does not believe that PM_{2.5} concentrations exceed the standard in Dearborn County.
2. Based on analysis of similar urban areas, IDEM does not believe that emissions from Dearborn County contribute significantly to PM_{2.5} values elsewhere in the Cincinnati CMSA. For example, this county only accounts for approximately 2% of the population with the CMSA.

IDEM recommends Dearborn County be designated attainment/unclassifiable.

EPA Response: EPA realizes that Dearborn County does not have a monitor for the PM_{2.5} standard, but it is adjacent to several counties in the Cincinnati area that are monitoring unhealthy air quality in excess of the national standard. The CAA defines nonattainment areas as an area that is violating the standard or contributing to a violation of the standard in a nearby area. EPA feels that part of the county, Lawrenceburg Township, is nonattainment because it is contributing to the violation in the Cincinnati area. The remainder of the mostly rural Dearborn County was determined to not contribute to the air quality violations. The AEP Tanners Creek power plant, located in Lawrenceburg Township, produces a substantial amount of the Dearborn County emissions. Tanners Creek has reduced its emissions by improving emissions control. Even with these reductions, the emissions from Lawrenceburg Township remain significant in the Cincinnati area. EPA cannot consider potential future reductions

because of the uncertainty associated with any proposed rule. EPA evaluated all nine factors in determining that just Lawrenceburg Township should be included in the Cincinnati nonattainment area.

Comment: 1032-9

Region: 5

State: IN

Area: Elkhart, IN

Comment: The Elkhart monitor exceeds the standard only marginally and the three St. Joseph County monitors are well below the standard. It is reasonable to assume that regional controls such as the utility NOx rule and low sulfur fuels will reduce PM2.5 concentrations to enable Elkhart County to attain in a reasonable time. IDEM continues to recommend that St. Joseph County be designated attainment.

EPA Response: Although the CAIR rule may achieve substantial emission reductions, EPA cannot base an area's air quality designation on projected air quality or on uncertain future emission reductions. EPA agrees that it is important to have programs that address emissions on a national and regional scale. These programs would positively affect the air quality for many areas in Indiana and across the country.

The air quality in North Central Indiana continues to improve and seems likely to attain the PM2.5 standard soon. EPA has decided to provide an opportunity for states to provide complete 2004 data to allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data. Saint Joseph County has higher emissions, population, and vehicle miles traveled than Elkhart County. There is also significant commuting between the counties. EPA continues to believe both Elkhart and Saint Joseph Counties belong in the area.

Comment: 1024-1

Region: 5

State: IN

Area: Evansville, IN

Comment: Commenter expresses concern over EPA's proposed designation of Spencer County, IN as nonattainment for PM2.5. He notes that the Governor of IN and IN DEM believe this county should be attainment. Their belief is based on the following:

1. Regional emissions will continue to be significantly reduced in compliance with current and proposed regulations
2. A background monitor located in Spencer County has shown the county to be in compliance
3. AEP's power plant has already made significant emission reductions since 1999, the base year used by EPA to propose nonattainment designation

4. The nonattainment designation will handicap the county's efforts to draw development to the area and expand industrial production/jobs

5. The nonattainment designation will undercut significant infrastructure improvements that have been planned or recently completed.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emission reductions including information on controls added to the Indiana Michigan Power Rockport power plant. Future control requirements are not being considered because the amount and time frame of the reductions is unknown. EPA considered the new emissions information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to

markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth.

Similarly, EPA does not expect a nonattainment designation to have a negative impact on infrastructure projects. Infrastructure improvement projects may be reviewed to avoid negative impacts to the Spencer County air quality.

Comment: 1027-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: Commenter is concerned about EPA's proposed designation for Spencer County, IN as nonattainment for PM_{2.5}. He notes that the county has had difficulty providing a sufficient tax base to fund schools and infrastructure. He doesn't agree with designating the county nonattainment simply because of its proximity to violating counties, noting that Spencer County is monitoring attainment. He also comments that the power plant in Spencer County has spent large amounts of money to reduce emissions.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries does not consider the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant local contributions. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors:

air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emission reductions including information on controls added to the Indiana Michigan Power Rockport power plant. EPA considered this new information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth. A nonattainment designation is not expected to have a negative impact on the infrastructure improvement projects in Spencer County.

Comment: 1025-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: Commenter expresses concern over EPA's proposed designation of Spencer County, IN as nonattainment. He notes that the monitors are demonstrating the area is in attainment, and the designation is due to Spencer County's proximity to adjacent areas. He states that the AEP power plant has made significant emission reductions since 1999 and a nonattainment designation would impact the area economically. He asks EPA to reconsider its intended designation.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area

that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant local contributions. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control on emission sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emission reductions including information on controls added to the Indiana Michigan Power Rockport power plant. EPA considered this new information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth. A nonattainment designation is not expected to have a negative impact on the infrastructure improvement projects in Spencer County.

Comment: 1026-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: Commenter expresses concern over EPA's proposed designation of Spencer County, IN as nonattainment for PM_{2.5}. She notes that the air in Spencer County meets EPA's guidelines, yet it is being designated as nonattainment. She offers the following arguments:

1. Regional emissions will continue to be significantly reduced in compliance with current and proposed regulations.
2. A background monitor located in Spencer County has shown the county to be in compliance.
3. AEP's power plant has already made significant emission reductions since 1999, the base year used by EPA to propose nonattainment designation.
4. The nonattainment designation will handicap the county's efforts to draw development to the area and create jobs.
5. The nonattainment designation will undercut significant infrastructure improvements that have been planned.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant

emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emission reductions including information on controls added to your facility, the Rockport power plant. Future control requirements are not being considered because the amount and timing of the reductions are unknown. EPA considered the new emissions information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth. A nonattainment designation is not expected to have a negative impact on Spencer County's infrastructure improvement projects.

Comment: 1023-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: Commenter writes on behalf of Spencer County, IN. He concurs with the comment letters already sent to EPA and requests EPA to reconsider its proposed designation.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to

designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant local contributions as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emissions including information on controls added to the Indiana Michigan Power Rockport power plant. EPA considered this new information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth.

Please also see EPA's responses to other comments on the fine particulate designation for Spencer County.

Comment: 1043-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: The commenter makes the following comments on behalf of Perry County, located adjacent to Spencer County. He agrees with Indiana DEP that Spencer County should be designated attainment/unclassifiable.

1. More current information is available that shows significant NO_x and SO₂ reductions in Spencer County. Specifically, countywide NO_x emissions are down by 21% since 1999 while countywide SO₂ emissions have been reduced by 30%. Point source emissions have declined by 10%. EPA should consider this more recent information.
2. Too much emphasis was placed on the fact that a power plant is located in Spencer County. This is a greater concern since the power plant has achieved significant NO_x and SO₂ emissions.
3. Spencer County is adjacent to but not a part of the Evansville MSA. If designated, it should be a rural nonattainment area.

The commenter is concerned about the proposed nonattainment designation because of the shared economy of the area. He believes the designation will hurt the economic development plans and opportunities of the entire area (i.e., both Spencer and Perry Counties).

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not consider the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas also reflect significant local contributions. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the

area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided us the updated information mentioned on Spencer County emissions including information on controls added to the Indiana Michigan Power Rockport power plant. Even with the modest reduction, the emissions from the Rockport power plant dominate the Spencer County totals. EPA considered this new information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth. The economic outlook in Perry County is unlikely to change much from a neighboring county being designated nonattainment.

Comment: 1013a-18

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: EPA failed to recommend that Posey and Knox Counties be included in the Evansville nonattainment area. Posey County, inside the MSA, is home to a coal-fired power plant and must be included in the nonattainment area. In 2002, the A.B. Brown facility emitted almost 9,000 tons of SO₂ and over 7,000 tons of NO_x. Knox County, adjacent to the MSA, also contains a coal-fired power plant (Edwardsport) that emitted over 8,000 tons of SO₂ and almost 2,000 tons of NO_x in 2002. Neither of these counties contains monitors.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. Knox County was not considered because it is

not within the Evansville CMSA/MSA and its emissions are relatively small, especially considering that EPA is intending to include Gibson, Spencer, and Pike Counties, which have coal-fired power plants and much greater emissions, as nonattainment counties. Also, Knox County does have a monitor which shows that Knox County is attaining the PM-2.5 standard. Although Posey County is within the CMSA/MSA its emissions are a small percentage of the total emissions in the metropolitan area, especially considering the emissions from Gibson, Spencer and Pike Counties. In addition, the population and VMT from Posey County are much lower than from Vanderburgh and Warrick Counties, the other Indiana counties in the Evansville Metropolitan area. Although Posey County does not have a monitor, its population and VMT are much less than from Vanderburgh County, which has monitored nonattainment and more like that of the adjacent Henderson County in Kentucky, which has similar population and VMT as Posey County and has monitored attainment of the PM2.5 standard. The presence of power plants, especially power plants with comparatively low emissions, does not necessarily indicate that the county should be judged to be contributing to an area's violations.

Comment: 1032-11

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: IDEM disagrees with EPA's intended designation of Gibson, Pike, Spencer and Warrick Counties as nonattainment.

1. Monitoring data in Spencer County and Knox County demonstrate these counties are in attainment even though these rural background monitors are impacted by air masses with high PM levels that cross the state line. These values are an indication that neighboring Warrick and Gibson Counties could be in attainment if monitors were present.

2. Power plants and industrial sources in Gibson, Warrick, Pike and Spencer counties have reduced emissions significantly since 1999. Further, there is no scientific evidence that emissions from these counties or facilities contribute to monitored violations in Vanderburgh or Dubois counties and a nonattainment designation is unnecessary.

EPA Response: The Clean Air Act requires that nonattainment areas include not only the area that is violating the standard but also any nearby areas that contribute to these violations. In Southwest Indiana, violations have been recorded in Vanderburgh and DuBois Counties. The definition of what area should be nonattainment is a function of what source areas contribute to these violations. Southwest Indiana has numerous large power plants and other large industrial sources, in rural as well as urban locations. EPA believes all of the counties it is designating as nonattainment are contributing to the violations.

EPA believes further that violations in Dubois and Vanderburgh Counties arise from a common set of sources, such that the entire area should be designated as a single nonattainment area.

With all three monitors in Vanderburgh County exceeding the standard, there is no reason to believe that the air quality in Warrick and Gibson Counties is good. Even with the monitors in Knox and Spencer Counties measuring below the standard, Warrick and Gibson Counties have emissions several times greater than the Vanderburgh County emissions. There is also a violation in Dubois County. Pike and Spencer Counties have significant emissions as well.

Comment: 1088-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: The commenter expresses concern over EPA's proposed designation of Spencer County Indiana as nonattainment. Commenter notes that the air in Spencer County meets EPA guidelines. Indiana DEP has requested EPA lift the nonattainment designation. The commenter urges EPA to consider the following:

1. Regional Emissions will continue to be significantly reduced in compliance with current proposed EPA regulations.
2. A background monitor located in Spencer County has shown Spencer County to be in compliance.
3. AEP's coal-fired power plant in Spencer County has already made significant emissions reductions since 1999, the base year used by EPA to propose the nonattainment designation.
4. The nonattainment designation will handicap Spencer County efforts to expand production and jobs.
5. The nonattainment designation will undercut significant infrastructure improvements that have been planned or completed in recent years, such as the US Hwy 231 project.

The commenter closes by suggesting that the situation in Spencer County does not justify a nonattainment designation and undermines the Spencer County Regional Chamber of Commerce's long-term efforts to create jobs and economic development in the area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to

designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant local contributions. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control on emission sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emission reductions including information on controls added to the Indiana Michigan Power Rockport power plant. EPA considered this new information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth. A nonattainment designation is not expected to have a negative impact on the infrastructure improvement projects in Spencer County.

Comment: 1089-1

Region: 5

State: IN

Area: Evansville, IN-KY

Comment: The commenters, on behalf of the Spencer County Regional Chamber of Commerce, express concern over EPA's proposed designation of Spencer County as nonattainment. Commenters note that the air in Spencer County meets EPA guidelines. Indiana DEP has requested EPA lift the nonattainment designation. The commenters urge EPA to consider Indiana DEP's comments that:

1. Regional emissions will continue to be significantly reduced in compliance with current proposed EPA regulations.
2. A background monitor located in Spencer County has shown Spencer County to be in compliance.
3. AEP's coal-fired power plant in Spencer County has already made significant emissions reductions since 1999, the base year used by EPA to propose the nonattainment designation.
4. The nonattainment designation will handicap Spencer County efforts to expand production and jobs.
5. The nonattainment designation will undercut significant infrastructure improvements that have been planned or completed in recent years, such as the US Hwy 231 project.

The commenter closes by suggesting that the situation in Spencer County does not justify a nonattainment designation and undermines the Spencer County Regional Chamber of Commerce's long-term efforts to create jobs and economic development in the area.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant

local contributions. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control on emission sources.

In Southwest Indiana, monitors in Vanderburgh and Dubois Counties show a violation of fine particulate matter standard. Therefore despite monitoring attainment, EPA evaluated Spencer County for contributions to these violations using the other eight factors. Indiana provided updated information on Spencer County emission reductions including information on controls added to the Indiana Michigan Power Rockport power plant. EPA considered this new information in making its final decision on Spencer County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth. A nonattainment designation is not expected to have a negative impact on the infrastructure improvement projects in Spencer County.

Comment: 1032-1

Region: 5

State: IN

Area: Evansville, IN-KY | Louisville, KY-IN

Comment: The Emission Weighting System is flawed

Although EPA provided states and Regional Administrators guidance for devising nonattainment boundary recommendations that is virtually identical to that associated with the 8-hour ozone standard, it appears that the EPA placed enormous reliance on the new emissions weighting system to substantiate its proposed designations. IDEM believes that this weighting system:

- Was devised after states submitted their recommendations,
- Was applied with insufficient consultation and consideration with states and within EPA,
- Places undue weight on outdated emissions data as opposed to other key considerations such as meteorology, photochemical modeling, or speciated data analysis,
- Fails to consider the true impact of emissions on actual monitor values,
- Was not applied to numerous counties that may have a greater impact on counties with a monitored violation, and
- Unfairly penalizes counties in smaller urban areas since it relies on complex ratios that do not take volume of actual emissions into consideration.

One result of EPA's approach is that counties such as Jefferson, Pike and Spencer that are located adjacent to, but not within, urban areas are automatically included as nonattainment counties if they contain a power plant. This result is unjustified for several reasons:

- a. There is no scientific basis to assume that these power plants are contributing to urban nonattainment but more remote plants are not. In fact, EPA has determined just the opposite to be true: in its proposed Clean Air Interstate Rule (CAIR), it found that all power plants in the east and Midwest are contributing to high background PM_{2.5} levels.
- b. EPA has used outdated emissions and emissions control information about power plants in the counties it has proposed as nonattainment.
- c. EPA is poised to require substantial reductions of NO_x and SO₂ from the power plant sector through the CAIR from facilities in both attainment and nonattainment counties. Including these particular counties with power plants in nonattainment areas is not necessary to ensure the reductions will occur.

EPA Response: Fine particles include a variety of constituents. Therefore, EPA's evaluation of the areas that may contribute to monitored violation must consider emissions of several pollutants. EPA formulated weighted emission values as a means of compiling data on emissions of multiple pollutants into a single indicator of the level of emissions that could contribute to PM_{2.5} concentrations.

EPA's letter to Indiana dated June 29, 2004, describes the calculation of weighted emissions values. In brief, to give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. EPA used 2001 emissions information for all counties. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated

PM2.5 component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM2.5 in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM2.5 components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM2.5. Accordingly, we are using the speciated PM2.5 data from rural and urban monitors, along with estimates of emissions within the area, to identify the pollutants with the greatest contribution to the urban excess PM2.5. The emission weighting is then extended to counties adjacent to the metropolitan area. Counties that are further removed from the metropolitan area were not given a weighted emission score. Emissions from these counties contribute to the regional background PM2.5 levels.

Indiana's comment seems to object not so much to the formulation of the composite emission value as to an alleged overuse of emissions data in general. Indiana is correct that the level of emissions in a county does not by itself establish the level of impact of that county's emissions on ambient air quality at any particular location. For that reason, EPA also examined several other factors in considering the potential of a county's emissions to contribute to observed violations. Most notably, EPA considered meteorology. Because the critical PM2.5 standard is an annual standard, and because winds blow in all directions at one time or another during a year, emissions in any direction from a violation will contribute. At the same time, winds in Indiana blow more often from the southwest than from the northeast, and so a ton of emissions to the southwest will likely have greater impact than a ton of emissions to the northeast. EPA considered these principles and considered the area-specific wind information given under factor 6 for each area. Generally, EPA considered this information in a qualitative manner, but in the Indianapolis area EPA performed quantitative calculations to consider this information.

EPA recognizes that a ton of emissions will result in a higher composite emission score in a small area than in a large area. For this reason, EPA is not using composite emission scores to compare areas. EPA is instead using these scores on an area-by-area basis to evaluate what counties have more and less emissions and thus more and less potential impact resulting in the violation that the area has monitored.

EPA considered the additional emission information Indiana submitted for its areas. Indiana provided updated emission inventories and information on controls added to power plants that further reduce emissions. With Indiana's help, EPA used the best available emissions information in judging potential contributions to observed violations of the PM2.5 standard.

Contrary to Indiana's comment, in no cases did EPA express intent to designate a county as nonattainment simply because the county contained a power plant. EPA examined emissions data as a first indicator of a county's potential to contribute to violations, and EPA expressed intent to promulgate a nonattainment designation for those counties which had sufficient emissions and for which other factors supported the view that the counties indeed contribute to nearby violations. As a general matter, large power plants have significant emissions and commonly were found to be potential contributors not just to regional background concentrations but also to local concentrations above background levels. Conversely, EPA is promulgating a designation of attainment for counties that have small power plants and that have no other emissions or monitored violations that warrant a nonattainment designation.

Although the CAIR rule may achieve substantial emission reductions, EPA cannot base an area's air quality designation on projected air quality or on uncertain future emission reductions. EPA agrees that it is important to have programs that address emissions on a national and regional scale in addition to local control measures.

Regarding additional points that Indiana makes, EPA finds:

- The states have had the opportunity to comment on the weighted emissions calculations as part of the 120-day consultation process
- EPA of course thoroughly considered how to make these calculations, and
- EPA considered all counties with potential to meet Clean Air Act criteria of being a nearby area contributing to the violation

Comment: 1042-1

Region: 5

State: IN

Area: Indianapolis, IN

Comment: Commenter is concerned about the analysis scheme that is the basis for the PM_{2.5} designations. He comments this scheme will result in nonattainment for many counties where air quality meets the standard and where the designation is not necessary to address sources contributing to regional air pollution levels. He is concerned that Hamilton County will be designated nonattainment which could result in economic loss for the area. He asks EPA to reconsider its policy and limit designations to areas that exceed the NAAQS.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. The criteria in the Clean Air Act for establishing

nonattainment boundaries do not include the potential economic consequences of imposing nonattainment area requirements. Including all areas that contribute to violations in the nonattainment area enhances the planning process and enhances the likelihood that the health benefits of meeting the NAAQS will be achieved.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas will reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

In the Indianapolis area, monitors in Marion County show a violation of the standard. There is no monitor in Hamilton County. Therefore, EPA evaluated Hamilton County for contributions to the Marion County violations using the other eight factors. Indiana did provide updated information on emission including information on fuel conversion of the PSI Energy power plant in Noblesville from coal to natural gas. EPA considered this updated information in making its final decision on Hamilton County.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product (GDP) of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Focusing on nonattainment areas, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations significantly retard economic growth.

Comment: 1013a-19

Region: 5

State: IN

Area: Indianapolis, IN

Comment: EPA did not include 10 counties in its recommended nonattainment area for the Indianapolis CMSA. Those counties are: Bartholomew, Boone, Brown, Hancock, Henry, Jennings, Madison, Montgomery, Putnam, and Shelby. The entire CMSA must be designated as one nonattainment area.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM-2.5 designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, vehicle miles traveled (VMT) and wind frequency from Boone, Hancock, Madison and Shelby (which are part of the 1999 Indianapolis CMSA/MSA) and Bartholomew, Brown, Henry, Jennings, Montgomery, and Putnam Counties (which are part of the 2003 Indianapolis CBSA/CSA) before deciding to designate them as attainment/unclassified. This decision was made because most of the emissions, population, and VMT are from Hamilton, Hendricks, Johnson, Marion and Morgan Counties, which will be designated as nonattainment for PM_{2.5}.

Comment: 1032-10

Region: 5

State: IN

Area: Indianapolis, IN

Comment: The only monitored violations of the standard within the Indianapolis MSA occur in Marion County. Four of the six monitors within the MSA exceed the standard. Marion County maintains the highest concentration for employment, VMT, commerce, and recreation compared to the other counties within the MSA. Stationary sources within Marion County account for over half of the direct PM_{2.5} emissions from stationary sources within Central Indiana and the next closest county within the region accounts for just 11 percent. Sources within Marion County also account for 70 percent of the SO₂ emissions from stationary sources within the Central Indiana Region. Unlike ozone, PM_{2.5} monitoring values indicate that PM_{2.5} values decrease away from the core of the Indianapolis urban area into the suburban area. This is represented by the lower values registered at the Mann Road monitor which is southwest of the core urban area and by the Madison County monitor which is northeast of the core urban area. Both of these monitors register values below the standard.

As a result of the weighted emission scoring system, EPA has proposed that Hamilton, Hendricks, and Johnson and Morgan counties be included in the nonattainment area due to population density and the potential impact of mobile source emissions. However, the predominant VMT concentrations and commuting patterns occur at the fringes of the county along the I-465 corridor in the northeast, northwest, and southwest corners of Marion County where monitor values are either below the standard or predicted to be below the standard. There are power plants in Hamilton and Morgan counties that have dramatically reduced emissions. The closest downwind monitor of Morgan County is the Mann Road monitor in Marion County. This monitor maintains a value below the standard. Therefore, IDEM recommends that Hamilton Hendricks, Johnson and Morgan Counties be designated attainment.

EPA Response: On April 1, 2003 and February 13, 2004, the Environmental Protection Agency (EPA) issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated metropolitan area as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, our final set of boundaries of nonattainment areas reflects an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

For the Indianapolis area, monitors in Marion County showed a violation of the fine particulate matter standard. EPA evaluated the eight surrounding counties for contributions to the violation. Indiana did provide updated information on emission reductions at stationary sources in surrounding counties. This information did not include emissions from mobile sources. Information on fuel conversion of the PSI Energy power plant in Hamilton County from coal to natural gas was included. The weight emission scores did change slightly after adjusting for the updated emissions. Marion County still accounts for a just over half of the weighted emissions. The emissions score for Hamilton County dropped below the Morgan County score. None of the surrounding counties stand out individually, although they do collectively, when considering just emissions and only about half of the weighted emissions for the area are from Marion County. The Indianapolis area extends somewhat into each of the counties that EPA is designating nonattainment, and EPA concluded more than just Marion County contributes to the violations found in Marion County. After evaluating on all nine factors, EPA was able to determine the appropriate counties to include in the Indianapolis nonattainment area.

Comment: 1013a-20

Region: 5

State: IN

Area: Louisville, KY-IN

Comment: EPA failed to recommend that Harrison, Scott and Washington Counties be included in the Louisville nonattainment area. None of these counties contain monitors in order to determine whether they are attaining, but since they are all part of the CMSA, they must be included in the nonattainment area.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM-2.5 designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, and vehicle miles traveled (VMT) from Harrison and Scott Counties (which are part of the 1999 Louisville CMSA/MSA) and Washington County (which is part of the 2003 Louisville CBSA/CSA) before deciding to designate them as attainment/unclassified. Harrison, Scott and Washington Counties have fairly low emissions and the emissions, population and VMT from these counties represent a small percentage of the total emissions, population and VMT from the Louisville CMSA. In addition, a portion of Jefferson County, Indiana, will be designated as nonattainment, thereby making the contribution from Harrison, Scott and Washington Counties even less significant. Harrison, Scott and Washington Counties do not contain monitors, EPA does not have convincing evidence that these areas exceed the air quality standard, and the emissions generated in these counties would not be expected to contribute to nonattainment of the PM_{2.5} standard.

Comment: 1032-12

Region: 5

State: IN

Area: Louisville, KY-IN

Comment: IDEM believes that EPA should designate Floyd and Jefferson Counties as attainment. There are two monitors within Indiana's portion of the Louisville MSA- Clark and Floyd Counties. The Clark County monitor is the only monitor violating.

1. Monitoring data suggests that the Clark County monitor may be affected by a local source/sources within Clark County including onroad and nonroad contributions from a nearby interstate undergoing major reconstruction.
2. Jefferson County is not a part of the Louisville MSA and is downwind of Louisville, thus it is highly unlikely that it is significantly contributing to violations in the Louisville

MSA. Counties should not be singled out because they are adjacent to a MSA or because a power plant is located within it.

3. There is a power plant in Floyd County but there is no scientific evidence that it is a significant contributor to the Clark County monitor exceedance. In addition, this source will be regulated by future control requirements (e.g., CAIR).

EPA Response: EPA disagrees with Indiana's comment. The Clark County monitor is showing a PM-2.5 design value of 16.2 micrograms/cubic meter based on the three most current years of data, 2001-03. The design value for Jefferson County, Kentucky is 16.9 µg/m³ for 2001-03. So, there is no reason to believe the violation in Clark County is caused by local sources only. EPA believes that breathing unhealthy levels of PM_{2.5} is a serious air pollution problem and that the designation should reflect the area that is experiencing and/or contributing to the unhealthy levels of the pollutant.

Even though some rural counties are not a part of some CMSAs, these counties are being designated as nonattainment areas because they contribute emissions to the nonattainment problem in the affected CMSAs. The CAA requires EPA to designate as nonattainment any area that is violating the standard and any area that is contributing to a violation in a nearby area. Therefore, EPA is including a portion of Jefferson County, Indiana in the Louisville nonattainment area. EPA is including this area in the nonattainment area not simply due to the presence of a power plant but rather because the power plant has sufficiently large emissions to conclude that the area is a nearby source area that contributes to the Louisville area violations. While Jefferson County is more often downwind than upwind of Louisville, the wind blows from Jefferson County toward Louisville with sufficient frequency for Jefferson County sources to contribute to Louisville area violations. The technical support document defines the area within Jefferson County that is being designated nonattainment and provides further discussion of EPA's rationale for this designation.

As for Floyd County, EPA cannot base an area's air quality designation on projected air quality or on proposed legislation. EPA agrees that it is important to have programs that address emissions on a national and regional scale. These programs would improve the air quality in many areas across the country. Further, Floyd County has the highest emissions of the Indiana counties in the Louisville area. There is also substantial commuting from Floyd County into Clark County and Kentucky. EPA believes that Floyd County emissions contribute to violations found elsewhere in the Louisville nonattainment area.

Comment: 1014-1

Region: 5

State: MI

Area: Detroit-Ann Arbor, MI

Comment: Commenter disagrees with EPA's proposal to designate 7 counties as nonattainment. MI DEQ believes that only Wayne and Monroe counties should be

designated nonattainment, and that each county should be designated a separate nonattainment area. Commenter attaches comments that he believes supports MI DEQ's position for the following reasons:

1. EPA's proposal for a 7-county nonattainment area in SW Michigan is arbitrary as it applies to PM_{2.5}, which is clearly evident after reviewing current and historical PM_{2.5} data for PM.
2. Most monitors intended to gauge attainment status are measuring attainment, making a widespread nonattainment designation inappropriate from a regulatory perspective and misleading from a public health perspective.
3. The EPA proposed CAIR with the stated purpose of reducing transport of PM_{2.5} and precursors would include all of the CMSA. Most of the transported particulate sources that may be impacting the nonattainment area will be covered by CAIR and the NO_x SIP call. These rules negate the need for widespread nonattainment designations to secure reductions in transport.
4. Even though the prevailing winds are from the south and southwest, the downwind monitors in other urban counties in the CMSA still measure attainment, further evidence that the presumptive CMSA boundary is inappropriate. Michigan provided extensive analyses of trajectories and related information, supplementing information submitted in February 2004 which it believes EPA did not consider, which lead Michigan to conclude that several of the counties that EPA expressed intent to designate as nonattainment in fact are predominantly downwind of the violations and do not contribute to these violations.
5. Michigan has the authority to adopt controls beyond the nonattainment boundary if needed for reaching attainment. Also, EPA is required to reject a SIP if it does not meet the attainment demonstration test. Nothing is gained by lumping in counties where monitors record attainment.

EPA Response: Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. In addition to the important contribution from long-range transport, we believe that violations which we find in urban areas reflect significant contributions from the associated Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as well. Therefore, our guidance establishes a presumption that the full metropolitan area contributes to observed violations in urban areas. Nevertheless, the boundaries of nonattainment areas reflect an area-specific overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting, vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

Once an area has a monitor violating the NAAQS, EPA uses emissions data, along with other information, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important to give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM_{2.5}.

It is also important to note that the PM_{2.5} (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. As described above, the speciated PM_{2.5} weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bright-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute the most to the elevated PM_{2.5} in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR). Although the CAIR rule may achieve substantial emission reductions, EPA cannot base an area's air quality designation on projected air quality or on proposed legislation. Further, EPA agrees that it is important to have programs that address emissions on a national and regional scale. Although these programs would have a positive impact on many areas in Michigan and across the country, EPA must also define a nonattainment area that includes the more local sources that need consideration in air quality planning. EPA appreciates Michigan's statement that it can implement necessary control measures outside the nonattainment area, but EPA must follow the Clean Air Act's prescription to include both the violation area and all nearby areas that contribute to the violation and thereby providing for the full range of Clean Air Act

provisions (including but not limited to the attainment planning requirement) that help address nonattainment problems.

In Southeast Michigan, monitors in Wayne and Monroe Counties show violations of the PM_{2.5} standard. Despite monitoring attainment, EPA evaluated the other counties in the Detroit CMSA for contributions to these violations using the nine factors including the emissions, population, and vehicle miles traveled (VMT). EPA believes that the Detroit nonattainment area should include Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne Counties. EPA disagrees with Michigan's recommendations to split Monroe and Wayne Counties into two smaller nonattainment areas. EPA believes that Wayne County and the other nearby counties contribute to the violation in Monroe County, and EPA believes that Monroe County contributes to the violations in Wayne County. EPA seeks to maximize consistency between the PM_{2.5} and the 8-hour ozone designations and keeping these counties together under PM_{2.5} would be consistent with the designations under 8-hour ozone.

Michigan provided updated population and VMT information, in addition to PM_{2.5} concentration roses, to show that the downwind counties are not impacting the Wayne County PM_{2.5} concentrations. EPA considered this information in making its final decision on the Detroit CMSA. In fact, EPA's June 2004 letter to Michigan discusses the trajectory information provided with Michigan's February 2004 recommendations, noting that trajectory analyses and other similar analyses will often better describe the origins of regional transport rather than the origins of local contributions. EPA concludes that annual average concentrations reflect contributions from all wind directions and disagrees with the State's arguments that the nonattainment area need only reflect source areas to the south and west of the monitors recording violations.

Michigan provided information from the Michigan Economic Development Commission stating that Livingston County population grew by only 7 percent between 2000 and 2003. However, data from the U.S. Census Bureau suggest a population growth of 10 percent over this period (from 156,951 to 172,881), similar to the growth rate for 1990 to 2000 that led EPA to identify Livingston County as a prospective part of the Detroit nonattainment area. In addition, U.S. Census Bureau data includes Livingston County in the top 100 fastest growing U.S. counties with a 13.2 percent increase in Housing Unit estimates for this same period. EPA continues to consider Livingston County a relatively high growth area, and EPA is including this county in the Detroit PM_{2.5} nonattainment area.

Comment: 1013a-29

Region: 5

State: MI

Area: Detroit-Ann Arbor, MI

Comment: Detroit CMSA:

EPA failed to recommend Genesee and Lapeer Counties for nonattainment. These counties are part of the CMSA and must be designated nonattainment. EPA's letter to the state reports that NOx emissions in Genesee County are around 20,000 tons annually. EPA cites prevailing wind direction as a reason for not including Genesee County in the nonattainment area. Because the PM2.5 standard is an annual standard prevailing wind direction does not have as much impact on the elevated values as it would with the 24-hour standard. Although Lapeer County's emissions are lower, the population growth between 1990 and 2000 was 18%, which may lead to an increasing emission trend in the area. In addition, Ingham County in the Lansing-East Lansing-Owosso CMSA has high emissions, due to the Eckert Station power plant, which emitted over 6,500 tons of SO2 and over 3,500 tons of NOx in 2002. This county should be included in the nonattainment area as well.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM2.5 nonattainment areas. The boundaries of CMSAs and MSAs include populated areas associated with core urban areas. EPA considered nine factors including the emissions, population, and vehicle miles traveled (VMT) from Genesee, Ingham and Lapeer Counties before deciding to designate them as attainment/unclassified. The emissions from these counties are small relative to the total emissions in the Detroit CMSA, and the population and VMT from the three counties are a small percentage of the population and VMT in the Detroit CMSA. The growth of Lapeer's population by 18 percent over 10 years is not high enough to lead to a high level of emissions any time soon. The commenter is correct that annual average concentrations reflect contributions from all wind directions, and indeed EPA disagrees with the State's arguments that the nonattainment area need only reflect source areas to the south and west of the monitors recording violations. Nevertheless, because winds blow less frequently from the north and east, the emissions in Genesee and Lapeer Counties will have less impact than comparable emissions located in areas that are more frequently upwind. Genesee and Lapeer Counties are also somewhat distant from the monitored violations, which also reduces the likely impact of these emissions on the violations. The presence of a power plant in Ingham County does not necessarily indicate that the county should be judged to be contributing to the area's violations. Notwithstanding the presence of the power plant, EPA concluded that the emissions from Ingham County are too small and too distant from the monitored violations to include this county in the Detroit nonattainment area. It is worth noting that Ingham County has a monitor which shows that Ingham County is attaining the PM2.5 standard.

Comment: 1013a-36

Region: 5

State: OH

Area: Canton, OH

Comment: EPA failed to include Carroll County in this recommended nonattainment area; this area is part of the Canton MSA and must be designated nonattainment with the rest of this area.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by the Office of Management and Budget (OMB) in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM_{2.5} designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, vehicle miles traveled (VMT) and wind frequency before deciding to designate Carroll County as attainment/unclassified. Among the reasons for the attainment/unclassified designation are:

- a. Carroll County is 96% wooded or agricultural.
- b. Carroll county has a population density of 74 persons per square mile, as compared to 656 persons per square mile in Stark County.
- c. The majority of the population of the Canton-Massillon MSA resides in Stark County (29,166 for Carroll vs. 377,940 for Stark).
- d. Although 40% of commuters travel from Carroll County to areas outside that county, that number is only 5,125 persons, which is a small amount. In Stark County, only 1 percent of commuters travel to other counties, which suggests that any cause of PM_{2.5} attributed to vehicular traffic would tend to be caused by, and reside in, Stark County.
- e. Emissions emanating from Carroll County are small when compared to Stark County (386 tpy vs. 2,736 tpy for SO₂)(1,886 tpy vs. 14,968 tpy for NO_x).

The majority of emissions and population are located in Stark County. Carroll County is rural, with low population density, and does not significantly contribute to the CMSA.

Comment: 1013a-37

Region: 5

State: OH

Area: Cincinnati-Hamilton, OH-KY-IN

Comment: Brown and Clinton Counties are not recommended for nonattainment despite their being part of the Cincinnati CMSA. The entire CMSA must be designated nonattainment.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM-2.5 nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by the Office of Management and Budget (OMB) in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM-2.5 designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, vehicle miles traveled (VMT) and wind frequency before deciding to designate Brown and Clinton counties as attainment/unclassified. Among the reasons for the attainment/unclassified designations for Brown and Clinton Counties are:

- a. The population of Brown and Clinton Counties are small when compared to the rest of the Ohio portion of the CMSA* (84,554 (Brown and Clinton) vs. 1,532,749)
- b. SO₂ emissions from Brown and Clinton Counties are small when compared to the rest of the Ohio portion of the CMSA (for Brown: 395 tpy vs. 186,751 tpy) (for Clinton: 375 tpy vs. 186,751 tpy)
- c. NO_x emissions from Brown and Clinton Counties are small when compared to the rest of the Ohio portion of the CMSA (for Brown: 2,927 tpy vs. 131,316 tpy) (for Clinton: 2,490 tpy vs. 131,316 tpy)
- d. The population density of Brown County is only 88 persons per square mile.
- e. The growth rates for the years 1990-2000 for Brown and Clinton Counties are 21% and 14%, respectively. As noted in point a, above, the populations of these counties are small when compared to the remainder of the Ohio portion of the CMSA, and the growth experienced did not have a significant impact on the population of the CMSA.

Brown and Clinton Counties are a small portion of the CMSA's population and emissions. Accordingly, EPA concluded that these counties do not contribute to nonattainment in the Cincinnati area.

*Butler, Clermont, Hamilton, and Warren Counties

Comment: 1013a-38

Region: 5

State: OH

Area: Cleveland-Akron-Lorain, OH

Comment: The nearby Wayne County should be included in the Cleveland nonattainment area due to its high emissions of SO₂, NO_x and VOC.

EPA Response: EPA recommends in our 120-day letters that the entire Cleveland-Akron-Elyria metropolitan be designated nonattainment. Wayne County, which is adjacent to but not part of the Cleveland-Akron-Elyria CMSA, has low emissions when compared to the Cleveland metropolitan area (Ashtabula, Lake, Geauga, Cuyahoga, Lorain, Medina, Summit, and Portage counties). The population of Wayne County, while moderate in size, is small when compared to the population of the Cleveland metropolitan area (112,704 persons vs. 2,950,614 persons). While 19 percent of Wayne county commuters commute to other metro counties, the number of commuters is small (10,099). For SO₂, Wayne County emissions are low when compared to the Cleveland metropolitan area (21,450 tpy vs. 138,379 tpy). NO_x emissions from Wayne County are also small when compared to the Cleveland metropolitan area (8,911 tpy vs. 173,252 tpy).

A further analysis of Wayne County's emissions, which consisted of a comparative review of 1996 and 1999 NEI data, shows that between 1996 and 1999, the Tenneco Packaging facility, the second largest point source in Wayne County, had shut down, taking with it 10,328 tpy SO₂. The 1996 NEI data show the total point source SO₂ emissions for Wayne County at 28,776.46 tons per year. The 1999 NEI data (which reflect the Tenneco shutdown) show the total point source SO₂ emissions for Wayne County at 18,716.73 tons, a 10,000 ton reduction. While neither the 1996 nor 1999 NEI values are substantially different from the 2001 NEI value used in the designations spreadsheet (21,450 tons), they suggest the variability and potential uncertainty of NEI data for rural or non-metropolitan area counties. Regardless, the emissions and population of Wayne County are small when compared to the Cleveland metropolitan area.

Comment: 1031-3

Region: 5

State: OH

Area: Cleveland-Akron-Lorain, OH

Comment: Geauga and Ashtabula Counties are part of the Cleveland/Akron/Ashtabula combined metropolitan statistical area. These counties only combine for 6.6% of the CMSA population, have the lowest VMT in the proposed nonattainment area and, on annual average basis, are downwind of the monitored violations. While neither of these counties are currently monitored, there are monitors measuring attainment between these counties and the monitors exhibiting the urban excess. Ohio does not believe that these

areas are experiencing or significantly contributing to the nonattainment problems in Cleveland or Akron.

Based on data from the EPA Clean Air Markets database, emissions have been reduced at the Ashtabula plant since 1996 due to various unit retirements and reductions in utilization. In fact, it appears that emissions at the plant have been reduced from approximately 67,000 tons of SO₂ to 2600 tons and a reduction in NO_x emissions from approximately 4800 to 1700 tons over the same period. In addition, Ashtabula County is generally downwind of the Cleveland nonattainment area. Wind roses from Cleveland and Erie, PA, based on National Weather Service meteorological data collected from 1984-1992, show that there are relatively few occurrences of winds that would transport emissions from Ashtabula County to Cleveland. Additional emission controls on sources in Ashtabula County would do little or nothing to achieve attainment in the Cleveland area.

EPA Response: Regarding Ashtabula County, the emissions data EPA used in assessing PM_{2.5} designations reflect emissions for 2001. Ohio cited emission reductions since 1996 but does not specify whether any of these reductions occurred since 2001. In EPA's database, the Ashtabula Plant is estimated to emit 11,882 tons per year of SO₂ and 3,085 tons per year of NO_x. Thus, it appears that most of the emission reductions noted by Ohio have in fact already been credited.

As a result, EPA views Ashtabula Township, which includes the Ashtabula plant and a significant fraction of the population of Ashtabula County, as contributing to nonattainment in the Cleveland area. However, EPA concludes that the remainder of this county may be designated attainment.

Regarding Geauga County, EPA has reassessed the data for this area and concluded that this county indeed has low emissions and low population. EPA is thus designating Geauga County as attaining the standard.

Comment: 1013a-39

Region: 5

State: OH

Area: Columbus, OH

Comment: EPA failed to include Ross, Madison, Morrow, Pickaway, Union, Marion, Know and Fayette Counties in the recommended Columbus CMSA nonattainment area. The Picway electric generating station in Pickaway County emitted over 10,000 tons of SO₂ in 2002. Coshocton County, adjacent to the CMSA, is home to the Conesville electric generating facility. In 2002 this facility emitted over 135,000 tons of SO₂ and almost 27,000 tons of NO_x.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM_{2.5} nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by the Office of Management and Budget (OMB) in 1999, include

populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM2.5 designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, vehicle miles traveled (VMT) and wind frequency before deciding to designate Ross, Madison, Morrow, Pickaway, Union, Marion, Knox, and Fayette Counties as attainment/unclassified. Among the reasons for the attainment/unclassified designations for Ross, Madison, Morrow, Pickaway, Union, Marion, Knox, and Fayette Counties are:

a. Ross County:

-Ross County is outside the Columbus MSA, yet considered part of the Columbus CSA. However, urban increment data for Columbus show that the PM2.5 urban excess in Columbus is 27% nitrates and 73% carbon. While nitrogen precipitation is known to occur long distances away from the source, nitrogen emissions are small when compared to Delaware, Fairfield, Franklin, and Licking counties (8,000 tpy vs. 62,000). The direct carbon emissions from Ross County are small when compared to Delaware, Fairfield, Franklin, and Licking Counties (423 tpy vs. 4,073 tpy).

b. Madison County:

- While part of the Columbus MSA, Madison County, when compared to Delaware, Fairfield, Franklin, and Licking Counties, has low population (40,365 persons vs. 1,490,105 persons) and emissions (SO₂: 233 tpy vs. 9466 tpy)(NO_x: 3,106 tpy vs. 62,000 tpy)(direct carbon: 259 tpy vs. 4,073 tpy).

c. Morrow County:

- Morrow County, when compared to Delaware, Fairfield, Franklin, and Licking Counties, has low population (32,976 persons vs. 1,490,105 persons) and emissions (SO₂: 291 tpy vs. 9466 tpy)(NO_x: 2,434 tpy vs. 62,000 tpy)(direct carbon: 157 tpy vs. 4,073 tpy).

d. Pickaway County:

- EPA's comparison of the concentrations of PM2.5 components in Columbus versus background locations suggest that the principal impacts of Columbus area sources on concentrations in Columbus are from sources of nitrogen oxides and directly emitted carbonaceous particles. Specifically, the Columbus urban excess is estimated to be comprised of 27% nitrates and 73% direct carbon. Notwithstanding the uncertainties in this estimate, and notwithstanding the fact that Pickaway County emits about half of the SO₂ of the metropolitan area, the evidence suggests that SO₂ emissions should not be an important factor in defining the area from which local contributions to Columbus

violations arise. More significantly, the NOx and direct carbon emissions from Pickaway are low when compared to Delaware, Fairfield, Franklin, and Licking Counties (NOx: 5,971 tpy vs. 62,000 tpy) (direct carbon: 363 tpy vs. 4,073 tpy).

e. Union County:

- Union County, when compared to Delaware, Fairfield, Franklin, and Licking Counties, has low population (74,469 persons vs. 1,490,105 persons) and emissions (SO2: 377 tpy vs. 9466 tpy)(NOx: 2,202 tpy vs. 62,000 tpy)(direct carbon: 246 tpy vs. 4,073 tpy).

f. Marion County:

- Marion County, when compared to Delaware, Fairfield, Franklin, and Licking Counties, has low population (66,028 persons vs. 1,490,105 persons) and emissions (SO2: 675 tpy vs. 9466 tpy)(NOx: 3,896 tpy vs. 62,000 tpy)(direct carbon: 273 tpy vs. 4,073 tpy).

g. Knox County:

- Knox County, when compared to Delaware, Fairfield, Franklin, and Licking Counties, has low population (56,037 persons vs. 1,490,105 persons) and emissions (SO2: 302 tpy vs. 9466 tpy)(NOx: 2,225 tpy vs. 62,000 tpy)(direct carbon: 258 tpy vs. 4,073 tpy).

h. Fayette County:

- Fayette County, when compared to Delaware, Fairfield, Franklin, and Licking Counties, has low population (28,176 persons vs. 1,490,105 persons) and emissions (SO2: 309 tpy vs. 9466 tpy)(NOx: 2,136 tpy vs. 62,000 tpy)(direct carbon: 204 tpy vs. 4,073 tpy).

Regarding the Conesville power plant in Coshocton County, EPA concurs with the commenter and is designating Franklin Township as nonattainment in order that the nonattainment area include the Conesville power plant.

Comment: 1013a-40

Region: 5

State: OH

Area: Dayton-Springfield, OH

Comment: Champaign, Darke, Miami and Preble Counties were left out of EPA's recommended nonattainment area, but are part of the Dayton CMSA and must be included in the nonattainment area.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM-2.5 nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be

June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM2.5 designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, vehicle miles traveled (VMT) and wind frequency from Miami County (which is part of the 1999 Dayton CMSA/MSA), and Champaign, Darke, and Preble counties (which are part of the 2003 CSA/CBSA) before deciding to designate them as attainment/unclassified. Among the reasons we designated these counties attainment are:

a. Miami County

-The population of Miami County is low when compared to the rest of the MSA (99,596 vs. 847,850).

-The emissions for Miami County are small when compared to the rest of the MSA (for SO₂: 478 tpy vs. 13,653 tpy) (for NO_x: 4,116 tpy vs. 38,709 tpy)

(for direct carbon: 337 tpy vs. 1,974 tpy) (for crustal: 972 tpy vs. 3,298 tpy)

-We do not feel that Miami County is contributing to PM_{2.5} violations in the Dayton Area

b. Champaign County

-The population of Champaign County is low when compared to Clark, Greene and Montgomery counties (39,121 vs. 847,850)

-The emissions from Champaign County are small when compared to emissions from Clark, Greene, and Montgomery Counties (for SO₂: 383 tpy vs. 13,653 tpy) (for NO_x: 1,757 tpy vs. 38,709 tpy) (for direct carbon: 180 tpy vs. 1,974 tpy) (for crustal: 602 tpy vs. 3,298 tpy)

-We do not feel that Champaign County is contributing to PM_{2.5} violations in the Dayton area.

c. Darke County

The population of Darke County is low when compared to Clark, Greene and Montgomery counties (52,966 vs. 847,850)

-The emissions from Darke County are small when compared to emissions from Clark, Greene, and Montgomery Counties (for SO₂: 551 tpy vs. 13,653 tpy) (for NO_x: 3,174 tpy vs. 38,709 tpy) (for direct carbon: 381 tpy vs. 1,974 tpy) (for crustal: 1,316 tpy vs. 3,298 tpy)

-We do not feel that Darke County is contributing to PM_{2.5} violations in the Dayton area.

d. Preble County

The population of Preble County is low when compared to Clark, Greene and Montgomery counties (42,680 vs. 847,850)

-The emissions from Preble County are small when compared to emissions from Clark, Greene, and Montgomery Counties (for SO₂: 428 tpy vs. 13,653 tpy) (for NO_x: 2,765 tpy vs. 38,709 tpy) (for direct carbon: 1228 tpy vs. 1,974 tpy) (for crustal: 721 tpy vs. 3,298 tpy)

-We do not feel that Preble County is contributing to PM_{2.5} violations in the Dayton area.

Comment: 1031-2

Region: 5

State: OH

Area: Huntington-Ashland, WV-KY-OH

Comment: Several facilities have installed controls in response to the NO_x SIP call. These facilities include: SCR: Avon Lake, Eastlake, Cardinal, Gavin, Keiger Creek, Killen, Miami Fort, Sammis, Stuart, and Zimmer. With respect to the counties that we are requesting to be excluded from the nonattainment list, Killen and Stuart are in Adams County and Gavin and Kyger Creek are in Gallia County.

Ohio EPA is also in the process of reviewing permit applications and modeling protocols for the installation of sulfur dioxide scrubbers for several facilities. A permit application (or a determination of environmentally beneficial project by the Director) for scrubbers at Miami Fort units 7 and 8 is currently being processed. Modeling protocols have been submitted for scrubber installations at Cardinal, Killen, and Stuart. Killen and Stuart are in Adams County. The rise in the cost of SO₂ allowances is partially responsible for driving these utilities to install this equipment.

EPA Response: While SCR on these facilities is a good and necessary measure for reducing emissions from these facilities, SCR primarily reduces NO_x emissions and does not address SO₂ emissions from these facilities. EPA believes that even with SCR, power plants can still contribute to the sulfate component of PM_{2.5} violations in the state.

In regards to the permits in process at the State, EPA reiterates that future controls cannot be a factor in determining the attainment/nonattainment status for any area. Notwithstanding the submittal of modeling protocols and other indications of progress toward Ohio permitting installation of controls, Ohio EPA did not identify when these controls might become effective and provided no means of assuring that these controls will necessarily be installed. Therefore, EPA cannot give credit for these potential controls.

Comment: 1031-5

Region: 5

State: OH

Area: Huntington-Ashland, WV-KY-OH

Comment: Scioto County contains one monitoring location. Based on the complete three year period 2001-2003, that monitor was not attaining the PM_{2.5} annual standard. The peak three-year average annual concentration for the period 1999-2001 was 22.03 µg/m³. The three-year annual average concentration for the period 2001-2003 at that monitor was 17.23 µg/m³. Based on the most recent 10 quarters, (January 2002-June 2004), the highest annual average concentration is 14.37 µg/m³. The improvement at this monitor is obviously attributable to the shutdown of the New Boston Coke facility in April 2002 as well as the reductions associated with the compliance with Title IV of the Clean Air Act Amendments of 1990. This area will clearly attain the annual PM_{2.5} standard by the proposed effective date for PM_{2.5} designations in early 2005.

EPA Response: EPA has decided to provide a 45-day opportunity for states to provide complete 2004 data. This will allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data. However, EPA views the Huntington-Ashland area as a single nonattainment area, so EPA does not intend to designate Ohio portions of the area as attainment if violations continue to be monitored for example in the West Virginia portion of the area.

Comment: 1031-6

Region: 5

State: OH

Area: Huntington-Ashland, WV-KY-OH

Comment: Lawrence County contains one monitoring location. Based on the complete three year period 2001-2003, that monitor was not attaining the PM 2.5 annual standard. The peak three-year average annual concentration for the period 199-2001 was 17.67 ug/m³. The three-year annual average concentration for the period 2001-2003 at that monitor was 15.83 ug/m³. Based on the most recent 10 quarters (January 2002-June 2004), the highest annual average concentration is 14.03 ug/m³. The improvement at this monitor is obviously attributable to reductions associated with compliance with Title IV of the Clean Air Act Amendments of 1990. This area will clearly attain the annual PM_{2.5} standard by the proposed effective date for PM 2.5 designations in early 2005.

EPA Response: EPA has decided to provide a 45-day opportunity for states to provide complete 2004 data. This will allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data. However, EPA views the Huntington-Ashland area as a single nonattainment area, so EPA does not intend to designate Ohio portions of the area as attainment if violations continue to be monitored for example in the West Virginia portion of the area.

Comment: 1031-1

Region: 5

State: OH

Area: Huntington-Ashland, WV-KY-OH | Cleveland-Akron-Lorain, OH | Wheeling, WV-OH | Columbus, OH

Comment: The commenter believes that the boundaries U.S. EPA is proposing are too broad.

The inclusion of adjacent "power plant" counties represents an inconsistent implementation of U.S. EPA's findings that all power plants in the NO_x SIP Call/CAIR region contribute to nonattainment. For U.S. EPA to be consistent, all areas containing coal-fired power plants should be designated nonattainment.

U.S. EPA has indicated that all power plants within the region contribute significantly to nonattainment, but yet only counties with power plants that are in or adjacent to an area with a measured violation are included into the nonattainment area. The inconsistent application of nonattainment designations will put a number of counties in Ohio at a disadvantage to similar power plants in other states. This is especially unfortunate given the faulty logic EPA used to justify its eleventh hour inclusion. For example, designating Adams County will not affect the ability of the Scioto County monitor to reach attainment.

Ohio EPA does not believe that designating power plant counties nonattainment will improve air quality or in any way assist states in developing plans to bring attainment to these areas. Adams, Ashtabula, Belmont, Coshocton, and Gallia Counties should not be designated nonattainment.

Ohio EPA also expressed concern about the identification and control of those sources associated with the urban/industrial excess in areas where the CAIR requirements will not be sufficient to attain the standards. U.S. EPA has made major assumptions about the source of the urban excess concentrations which have been found at the violating monitors. An extensive analysis was prepared by U.S. EPA which purports to identify the location of the sources of the urban excess. In this weighted emissions analysis, all emissions within and adjacent to the metropolitan area have been assumed to have equal potential to contribute to the urban excess. We believe that this fundamental assumption underlying the weighted emissions analysis is flawed.

Finally, Ohio EPA identified several areas in the State for which data from 2002 to mid-2004 show attainment; Ohio EPA recommends that these areas be designated attainment.

EPA Response: EPA cannot take into account proposed rules like CAIR when designating areas as attainment or nonattainment for the PM_{2.5} NAAQS. Since there is no guarantee that proposed rules like CAIR will be implemented, EPA cannot take CAIR into consideration in this process. Regarding the NO_x SIP Call, it is true that NO_x emissions from power plants, which can contribute to an area's PM_{2.5} problem, are

addressed. However, the same facilities also emit SO₂, which is not addressed in the NO_x SIP Call and contributes to PM_{2.5} problems in Ohio.

Section 107(d)(1)(A)(i) of the Clean Air Act requires EPA to designate as "nonattainment, 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 EPA were to simply designate all areas with power plants in the state as nonattainment, it might be viewed as arbitrary and capricious. EPA intends to designate as nonattainment full and partial counties which include all but one of the power plants listed in Title IV. The power plant in Pickaway County is the only Title IV plant to be located in an proposed attainment area. This is because EPA's 9-factor review shows that Pickaway county does not significantly contribute to emissions violations in the Columbus area.

EPA has decided to provide a 45-day opportunity for states to provide complete 2004 data. This will allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data.

a. Adams County

-EPA intends to designate Sprigg and Monroe Townships as nonattainment for PM_{2.5}. The J.M. Stuart and Killen plants are located in the proposed nonattainment area. EPA believes that emissions from these plants are contributing to violations in the Huntington-Ashland Area.

b. Gallia County

-EPA intends to designate Cheshire Township as nonattainment for PM_{2.5}. The Kyger Creek and J.M. Gavin plants are located in the proposed nonattainment area. EPA believes that emissions from those plants are contributing to violations in the Huntington-Ashland area.

c. Belmont County

-Not only does the power plant in Belmont County contribute to violations in the Parkersburg-Marietta area, but the 69,448 persons living in Belmont County represent 46% of the three-County metropolitan area population.

d. Ashtabula County

-EPA believes that emissions in Ashtabula Township within Ashtabula County significantly contribute to PM_{2.5} Violations in the Cleveland area.

e. Coshocton County

-EPA intends to designate Franklin Township as nonattainment for PM_{2.5}. The Conesville plant is located in the proposed nonattainment area. EPA believes that the plant contributes to violations in the Columbus area.

With respect to EPA's weighted emissions information, this information is only part of the information EPA considered. Emissions information is one of 9 factors which EPA used to analyze potential nonattainment areas. The weighted emissions value was intended as a means of compiling information on emissions of a variety of pollutants that have different emissions-air quality relationships to obtain a single indicator of the overall level of emissions in a county. However, EPA recognizes that other factors also influence the impact that each county's emissions have. This is why the other 8 factors (most notably wind data and information on geographic proximity) were utilized by EPA to judge better the potential contribution of a county's emissions to its respective metropolitan area.

Comment: 1031-4

Region: 5

State: OH

Area: Parkersburg-Marietta, WV-OH

Comment: Washington County is part of the Parkersburg/Marietta MSA. The area has one monitor, located in Wood County, West Virginia. Annual average concentrations for this monitor have been significantly decreasing. Annual average concentrations for the period 2001 to present are 2001, 17.4 µg/m³, 2002, 15.8 µg/m³, 2003, 14.9 µg/m³, and 2004 (so far) 12.7 µg/m³. The most recent three year average, including the 2004 partial year, is 14.47 µg/m³. The improvement at this monitor is obviously attributed to reductions associated with compliance with Title IV of the Clean Air Act Amendments of 1990. This area will clearly attain the annual PM_{2.5} standard by the proposed effective date for PM 2.5 designations in early 2005.

Ohio EPA also notes that a "recently approved SIP revision to the AMP Ohio Gorsuch facility greatly reduces the potential emissions of PM_{2.5} precursors".

EPA Response: EPA has decided to provide a 45-day opportunity for states to provide complete 2004 data. This will allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data.

Despite the reduction in the 'potential' emissions from the AMP Gorsuch Plant, EPA has seen no evidence that the actual emissions from the Gorsuch Plant have decreased, and so EPA has no evidence that the actual contribution from this plant has decreased.

Comment: 1013a-41

Region: 5

State: OH

Area: Toledo, OH

Comment: EPA failed to recommend that the Toledo CMSA counties of Fulton, Ottawa and Sandusky be designated nonattainment; these areas must be included in the nonattainment area.

EPA Response: The EPA uses the CMSA/MSA as the presumptive boundary for considering PM-2.5 nonattainment areas. The boundaries of CMSAs and MSAs, which were delineated by OMB in 1999, include populated areas associated with core urban areas. EPA's April 2003 guidance recognized that OMB planned to publish revised urban area definitions sometime in 2003, but, because the release date (which turned out to be June 6, 2003) was not known at that time, EPA decided that it needed to use the 1999 definitions for the PM-2.5 designation process. However, EPA encouraged states to consider counties in the CBSAs or CSAs under the 2003 definitions. EPA considered nine factors including the emissions, population, vehicle miles traveled (VMT) and wind frequency from Fulton and Ottawa Counties (which are part of the 1999 Dayton CMSA/MSA), and Sandusky County (which is part of the 2003 CSA/CBSA) before deciding to designate them as attainment/unclassified. Among the reasons we designated these counties attainment are:

a. Fulton County

-The population of Fulton County is low when compared to Lucas and Wood Counties (42,573 vs. 575,893).

-The emissions for Fulton County are small when compared to Lucas and Wood Counties (for SO₂: 878 tpy vs. 32,410 tpy) (for NO_x: 5,105 tpy vs. 45,797 tpy)

(for direct carbon: 336 tpy vs. 1,836 tpy) (for crustal: 692 tpy vs. 3,115 tpy)

-We do not feel that Fulton County is contributing to PM_{2.5} violations in the Toledo Area

b. Ottawa County

-The population of Ottawa County is low when compared to Lucas and Wood Counties (41,049 vs. 847,850)

-The emissions from Ottawa County are small when compared to emissions from Lucas and Wood Counties (for SO₂: 1,544 tpy vs. 32,410 tpy) (for NO_x: 5,031 tpy vs. 45,797 tpy) (for direct carbon: 403 tpy vs. 1,836 tpy) (for crustal: 687 tpy vs. 3,115 tpy)

-We do not feel that Ottawa County is contributing to PM_{2.5} violations in the Toledo

c. Sandusky County

The population of Sandusky County is low when compared to Lucas and Wood Counties (61,698 vs. 847,850)

-The emissions from Sandusky County are small when compared to emissions from Lucas and Wood Counties (for SO₂: 2,937 tpy vs. 32,410 tpy) (for NO_x: 8,288 tpy vs. 45,797 tpy) (for direct carbon: 300 tpy vs. 1,836 tpy) (for crustal: 1,170 tpy vs. 3,115 tpy)

-We do not feel that Sandusky County is contributing to PM_{2.5} violations in the Toledo area.

Comment: 1031-7

Region: 5

State: OH

Area: Toledo, OH

Comment: The Toledo MSA contains three monitoring locations. Based on the complete three year period 2001-2003, there was one monitor not attaining the PM 2.5 annual standard. The peak three-year annual average concentration for the period 1999-2001 was 16.97 µg/m³. The three-year annual average concentration for the period 2001-2003 at that monitor was 15.07 µg/m³. Based on the most recent 10 quarters, (January 2002-June 2004), the highest annual average concentration is 14.03 µg/m³. The improvement in this area is obviously attributable to the reductions associated with Title IV of the Clean Air Act Amendments of 1990. This area will clearly attain the annual PM_{2.5} standard by the proposed effective date for PM 2.5 designations in early 2005.

EPA Response: EPA has decided to provide a 45-day opportunity for states to provide complete 2004 data. This will allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data.

Comment: 1031-8

Region: 5

State: OH

Area: Youngstown-Warren-Sharon, OH-PA

Comment: The Youngstown MSA currently contains four monitors. During the period 2001-2003, there were two monitors with three years worth of data. The peak three-year annual average concentration for the period 1999-2001 was 16.43 µg/m³. The highest three year annual average concentration for the period 2001-2003 was 15.20 µg/m³. Based on the most recent 10 quarters, (January 2002-June 2004), the highest annual average concentration is 14.10 µg/m³. The improvement in this area is obviously attributable to the reductions associated with Title IV of the Clean Air Act Amendments of 1990. This area will clearly attain the annual PM_{2.5} standard by the proposed effective date for PM 2.5 designations in early 2005.

EPA Response: EPA has decided to provide a 45-day opportunity for states to provide complete 2004 data. This will allow EPA to adjust its final designations according to whether areas are violating the air quality standards based on 2002 to 2004 data.

Comment: 1031-9

Region: 5

State: OH

Area: Youngstown-Warren-Sharon, OH-PA

Comment: Columbiana County is part of the Youngstown/Warren MSA. The MSA also includes Mahoning and Trumbull Counties. Columbiana County should be excluded from this MSA nonattainment even if the remainder of the MSA is retained. Columbiana County should be excluded due to:

-Proximity to the source region/nonattainment area: Columbiana County is located south of the Youngstown urban/industrial area. The area would not expect to be impacted by, nor should it be considered a receptor for, the Youngstown area.

-Population: The population of Columbiana County is 112,075 which is only 19% of the total MSA (594,746).

Emissions: Columbiana County emissions of SO₂, VOX, and NO_x are 1291, 6157 and 5511 tons per year, respectively. MSA total emissions of VOC and NO_x are 40,968 and 39,376 tons per year, respectively. Columbiana County is near the Steubenville and Canton MSAs but is northeast (downwind) of a primarily rural/agricultural area.

-Land use: Columbiana County is over 96% wooded or agricultural.

EPA Response: EPA believes that 19% is a large fraction of an area's representative population. When looking at the entire nation, Columbiana County's demographics and emissions are small numbers, but they represent a significant proportion (about 16% of the overall emissions) of a fairly small metropolitan area that nevertheless violates the PM_{2.5} standard. EPA believes that Columbiana County is contributing to PM_{2.5} violations in Youngstown-Warren, and should be part of the nonattainment area.

Also, while Mahoning and Trumbull counties have seen population losses in the past 10 years (-7,251 and -2,697 persons, respectively), Columbiana County has seen an increase (3,799), the only population increase in the 3-County MSA.

Comment: 1006-1

Region: 5

State: WI

Area: Chicago-Gary-Lake County ,IL-IN

Comment: Commenters express concern regarding the presumptive inclusion of Kenosha County in the Chicago-Gary nonattainment area. They are concerned about a

presumptive designation that does not cite unacceptable levels of PM2.5 in the county and one that does not distinguish state regulations and local efforts. They ask EPA to carefully consider specific conditions in Kenosha County before they lump it in with the other counties in the Chicago-Gary MSA.

EPA Response: The EPA uses the CMSA/MSA as a presumptive boundary of nonattainment areas for PM2.5 EPA guidance also provides for use of 9 factors to evaluate alternative nonattainment area boundaries to include the area that is violating the standards and the nearby areas that are contributing to these violations.

For the PM2.5 NAAQS, the EPA invited States to consult and make recommendations on air quality and appropriate boundaries to EPA. At the time this comment was received, the EPA had received no formal recommendations from the State of Wisconsin regarding PM2.5 nonattainment areas or boundaries. On August 9, 2004, EPA received a letter from Wisconsin Governor, Jim Doyle, that recommended Kenosha County as attainment. Many of the points raised in the commenter's letter are also raised in the Governor's letter.

EPA has reviewed the justification found in Governor Doyle's letter and evaluated other available information regarding the pertinent 9 factors. Based on this review, EPA has determined that Kenosha County should be designated as attainment for the PM2.5 standard. The technical support document provides a more complete discussion of EPA's rationale for this decision.

Comment: 1034-1

Region: 5

State: WI

Area: Chicago-Gary-Lake County, IL-IN

Comment: Commenters strongly urge EPA to reconsider designating Kenosha County as attainment and including it as part of the Chicago-Gary-Kenosha area. They believe Kenosha County should be excluded on the basis of the following factors:

1. Kenosha County has a reading of 11.7 ppm, which is well below the NAAQS standard of 15 ppm.
2. Kenosha County's level of emissions represent less than 10% of the total emissions in the MSA.
3. Kenosha's population density of 548.2 persons/square mile is less than half of neighboring Lake County, IL and less than one-tenth of Cook County, IL.
4. Approximately 75% of Kenosha County commuters travel to Lake County, IL, which also meets the PM2.5 NAAQS.

5. The predominant direction of wind from Kenosha County is away from the violating areas.

6. Most of the SO₂ and NO_x emissions in Kenosha County can be traced to power plant that has already made significant pollution equipment upgrades.

EPA Response: While EPA originally considered Kenosha County as a candidate for nonattainment, that was based on a presumption that all counties in a CMSA with a violating monitor should be nonattainment unless a technical justification from the State gave a compelling reason, or reasons, to consider a county attainment. At the time, there was no recommendation from Wisconsin regarding Kenosha County or any other counties in Wisconsin.

On August 9, 2004, Wisconsin Governor, Jim Doyle, submitted a letter to EPA that recommended Kenosha County as attainment for the PM_{2.5} standard. Given the technical justification in that letter (many of the same points were raised by Congressmen Feingold, Kohl and Ryan in their letter) EPA has determined that Kenosha County should be attainment. Please see the technical support document for more details regarding this decision.

Comment: 1035-1

Region: 5

State: WI

Area: Chicago-Gary-Lake County, IL-IN

Comment: The commenter writes on behalf of the City of Kenosha to request that EPA designate Kenosha County as an attainment area for the PM_{2.5} National Ambient Air Quality Standard. The available data does not support the inclusion of Kenosha County in the Chicago CSMA PM_{2.5} nonattainment area.

The City is very concerned about the potential economic impacts and impediments to job growth that could occur in our community as a result of a nonattainment designation. Based on the available data, it does not appear that designating Kenosha County as nonattainment (when our county has some of the lowest concentrations of particulates in the area) will in any way help EPA achieve its goal or improve air quality in the counties experiencing exceedances of the PM_{2.5} particulate standard.

FACTOR 1. EMISSIONS IN AREAS POTENTIALLY INCLUDED VERSUS EXCLUDED FROM THE NONATTAINMENT AREA. According to EPA's data, Kenosha County has a composite emissions score of 5.4, meaning that almost ninety-five percent of emissions contributing to PM_{2.5} originates from outside of the County. See Illinois Response at 4-5. Moreover, as explained in detail in Factor 9 below, prior to the time state implementation plans are due, emissions from Kenosha County will have been reduced through federally enforceable controls to a level that would represent an approximate composite emission score of 2.7. See Exhibit A. Thus, more than ninety-five

percent of the emissions contributing to PM_{2.5} will originate from outside of Kenosha County.

Significantly, EPA has proposed to designate as attainment the counties of DeKalb and Kankakee as well as the majority of Grundy and Kendall counties in Illinois concluding that the bulk of emissions in the Chicago CMSA area would be captured without including those counties. See *id.* At 4. For comparison purposes, DeKalb, Kankakee, Grundy and Kendall counties have a total composite emission score of 5.2. *Id.* Clearly, Kenosha County, with a current composite emission score of 5.4 and an ultimate composite emission score of 2.7 (once federally enforceable controls are fully implemented), is similarly situated to the Illinois counties EPA has proposed to designate as attainment.

FACTOR 2. AIR QUALITY IN POTENTIALLY INCLUDED VERSUS EXCLUDED AREAS. As EPA's data indicates, Kenosha County has no monitored violations for PM_{2.5}. See Illinois Response at 5. The design value for this monitoring site is 11.7 µg/m³ which is well below the 15 µg/m³ standard. *Id.*, see also EPA's air emissions monitoring data available on the World Wide Web at <http://www.epa.gov/air/data/>. In fact, according to EPA's data, the Kenosha County design value is the lowest value for any of the counties in, or adjacent as attainment. See *id.* At 5-6. Furthermore, monitors in the adjoining Chicago CMSA counties of Lake and McHenry, both of which fall in between the Kenosha County monitor and the violating monitor in urban Chicago, also have no monitored violations for PM_{2.5}. See *id.*

FACTOR 3. POPULATION DENSITY AND DEGREE OF URBANIZATION INCLUDING COMMERCIAL DEVELOPMENT INCLUDED VERSUS EXCLUDED AREAS. According to EPA's data, Kenosha County only represents approximately 1.7 percent of the total population in the Chicago CMSA area. See Illinois Response at 6. Consistent with its analysis under Factor 1, the EPA has proposed to designate as attainment the counties of DeKalb and Kankakee as well as the majority of Grundy and Kendall counties in Illinois concluding that the bulk of the population would be captured without including those counties. *Id.* at 4. For comparison purposes, DeKalb, Kankakee, Grundy and Kendall counties account for approximately 3.2 percent of the population in the Chicago CMSA area compared to the 1.7 percent of the population in Kenosha County.

Moreover, Kenosha County has a lower urban density than the areas with monitors that violate the PM_{2.5} standard. *Id.* at 6. Furthermore, the further away from the area of urban density, the lower the PM_{2.5} measurements are. This would tend to indicate that the problem originates in the urban area instead of coming from the less dense area into the urban area.

FACTOR 4. TRAFFIC AND COMMUTING PATTERNS. According to EPA's data, Kenosha County represents only 1.8 percent of the total Chicago CMSA daily vehicle-miles traveled while DeKalb and Kankakee counties represent 2.3 percent and Grundy and Kendall counties represent 1.2 percent. See Illinois Response at 6. Moreover, EPA's

data shows that only about 28 percent of the Kenosha County resident labor force commutes to another county in the Chicago CMSA compared to 31 percent for DeKalb, 19 percent for Kankakee, 46 percent for Grundy and 67 percent for Kendall.

In addition, only 20,500 residents of Kenosha county commute to other counties in the Chicago CMSA compared to 23,000 commuters from DeKalb and Kankakee Counties and 27,500 commuters from Grundy and Kendall Counties. Furthermore, according to the Year 2000 U.S. Census, approximately seventy-five percent of the Kenosha County commuters traveling to other counties in the Chicago CMSA travel to adjacent Lake County, IL which currently meets the standard. This supports the argument that commuters from Kenosha County are not significantly contributing to PM2.5 exceedances and that Kenosha County should not be included in the nonattainment area.

FACTOR 5. EXPECTED GROWTH (INCLUDING EXTENT, PATTERN AND RATE OF GROWTH). According to EPA's data, the growth in population in Kenosha County from 1990 to 2000 was about 17 percent compared to 14 percent in DeKalb, 8 percent in Kankakee, 16 percent in Grundy and 38 percent in Kendall. See Illinois Response at 7. Clearly the similarity in growth patterns between Kenosha County and the excluded counties of DeKalb, Kankakee, Grundy and Kendall support excluding Kenosha County from the nonattainment designation.

FACTOR 6. METEOROLOGY (WEATHER/TRANSPORT PATTERNS). According to EPA's data, the predominant wind direction from Kenosha County is away from the violating counties in the Chicago CMSA while the wind direction from DeKalb, Kankakee, Grundy and Kendall counties is more predominately toward the violating counties. See Illinois response at 7.

FACTOR 7. GEOGRAPHY/TOPOGRAPHY (MOUNTAIN RANGES OR OTHER AIR BASIN BOUNDARIES). It does not appear the geography/topography is a significant factor in considering whether Kenosha County should be included in the Chicago CMSA nonattainment area.

FACTOR 8. JURISDICTIONAL BOUNDARIES (e.g., COUNTIES, AIR DISTRICTS, RESERVATIONS, ETC.). Jurisdictional boundaries do not support including Kenosha County in the Chicago CMSA nonattainment area. For example, EPA recommends that states consider common boundaries for areas classified as nonattainment for both PM2.56 and ozone. See e.g., Boundary Guidance at 5 ("EPA seeks to maximize consistency between designations for PM2.5 and designations for the 8-hour ozone standard."). As EPA is aware, Kenosha County is considered to be part of the Milwaukee CMSA for the purpose of defining 1-hour and 8-hour ozone nonattainment areas. Accordingly, to maximize consistency between the PM2.5 and ozone designations, Kenosha County should be treated as part of the Milwaukee CMSA for PM2.5 air quality planning purposes. As a result, since there are no PM2.5 exceedances in the Milwaukee CMSA, Kenosha County should be designated attainment for the PM2.5 standard.

Furthermore, treating Kenosha County as part of Chicago CMSA lessens Wisconsin's control over its air quality programs, and may penalize the County for actions in other states that are entirely out of Wisconsin's control. For example, although Wisconsin has no control over a conformity failure to Indiana, it would suffer the consequences (e.g., loss of federal funding and projects stop) for such a failure.

FACTOR 9. LEVEL OF CONTROL OF EMISSION SOURCES. Perhaps most importantly, EPA should note that in 2001, more than 85 percent of sulfur dioxide (SO₂) and nitrogen oxide (NO_x) emissions in Kenosha County came from the Pleasant Prairie Power Plant operated by We Energies. That company has already installed Selective Catalytic Reduction (SCR) on one unit. In addition, Wisconsin DNR issued permit number 03-RSG-296 on April 5, 2004 to We Energies to allow installation of SCR on the remaining unit as well as scrubbers to control sulfur dioxide emissions on both units (a copy of the We Energies permit is attached as Exhibit B). These controls are expected to be fully operational prior to December 2007 when state implementation plans for PM_{2.5} attainment are expected to be due.

Furthermore, these controls and the level of emissions from the We Energies facility will be federally enforceable. Notably, once these controls are fully implemented, emissions from Kenosha County will represent less than 2.7 percent of the total Chicago CMSA emissions. See Composite Emission Score for Kenosha County shown in Exhibit A. The composite emission score for Kenosha County was calculated by factoring in the emission reductions that will be achieved at the We Energies facility. More specifically the composite emission score was calculated as follows: first, the projected maximum allowable emissions (assuming the plant operates 8760 hours per year at full capacity) from the facility after the controls are fully implemented using the limits specified in the permit were calculated; second, the maximum allowable emissions were subtracted from the 2001 actual emission totals from the facility to provide a total emission reduction number; third the total emission reductions that will be realized were then subtracted from the county-wide emission totals for Kenosha County as shown in Factor 1 of the Illinois Response; finally the composite emission was calculated using the "urban increment" weighted averages as shown in the Illinois Response. As a result, these federally enforceable emission controls should allow EPA to exclude Kenosha County from the Chicago CMSA PM_{2.5} nonattainment area.

EPA Response: While EPA originally considered Kenosha County as a candidate for nonattainment, that was based on a presumption that all counties in a CMSA with a violating monitor should be nonattainment unless a technical justification from the State gave a compelling reason, or reasons, to consider a county attainment. At the time, there was no recommendation from Wisconsin regarding Kenosha County or any other counties in Wisconsin.

On August 9, 2004, Wisconsin Governor, Jim Doyle, submitted a letter to EPA that recommended Kenosha County as attainment for the PM_{2.5} standard. Given the technical justification in that letter (many of the same points were raised in the letter submitted by

the City of Kenosha) EPA has determined that Kenosha County should be attainment. Please see the technical support document for more details regarding this decision.

Comments Received Late

Response to comment letter dated November 30, 2004, from Steven Chester to Bharat Mathur:

A letter dated November 30, 2004, from Steven Chester to Bharat Mathur, comments on the PM_{2.5} designation for the Detroit area. The core of these comments are expressed as 8 numbered paragraphs. The following responses refer to the numbers of the items as given in that letter.

Items 1, 2, 3, 6, and 7 are points that were made in the letter from the Michigan Department of Environmental Quality dated September 1, 2004, and were addressed in the response to that set of comments.

Regarding items 4 and 5, as stated in the response to the letter from the Michigan Department of Environmental Quality dated September 1, 2004, EPA cannot base an area's air quality designation on projected air quality or on proposed legislation. Further, EPA agrees that it is important to have programs that address emissions on a national and regional scale. Although these programs would have a positive impact on many areas in Michigan and across the country, EPA must also define a nonattainment area that includes the more local sources that need consideration in air quality planning.

In response to item 8, although preliminary 2004 monitoring data indicate Monroe County may be in attainment of the PM_{2.5} standard, Monroe County contributes to violations of the standard in Wayne County. Thus, Monroe County should be designated as part of the Detroit nonattainment area regardless of Monroe County air quality.

Comment and Response

11/30/04 email from Dona J. Bergman, Director Evansville Environmental Protection Agency

Comment: As of the end of the 2004 third quarter, Vanderburgh County is nonattainment of the PM_{2.5} annual national ambient air quality standard based upon data through the first three quarters of 2004. In addition, the PM_{2.5} levels in SW Indiana for the fourth quarter have been lower than each year's third quarter numbers.

Response: Three full calendar years of PM air quality data are required to establish an area's designation status. The Vanderburgh County data for 2004 cannot be used until the data for the entire year has been quality assured and the 2001-2003 PM air quality data has a 15.2 micrograms/cubicmeter, which indicated nonattainment of the PM standard. However, EPA is allowing sufficient time for the 2004 fourth quarter data to be included, provided that this quality assured is submitted to EPA by 45 days after the PM designation notice is published.

EPA views Southwest Indiana, including Evansville as well as DuBois County, as a single area in which sources throughout the area contribute to violations currently being

observed in both Vanderburgh and DuBois Counties. EPA intends to retain a nonattainment designation for the entire area until such time as all monitors in the area, including the monitor in DuBois County as well as the monitors in Vanderburgh County, are showing attainment.

Comment: USEPA has stated the predominant wind direction for SW Indiana is from the S-SW. Therefore, we can conclude Vanderburgh County with PM2.5 levels meeting the NAAQS, would not be adversely impacting Dubois County monitors.

Response: The predominant wind direction to Dubois County is SW and Vanderburgh County is SW of Dubois County.

Comment: In that much of the area between Vanderburgh and Dubois is rural, with few if any point sources, we believe it would be unfounded and unfair to designate Vanderburgh County, as well as Gibson, Pike, Spencer, and Warrick as nonattainment simply on the basis of the Dubois County monitor.

Response: In fact, Gibson, Pike, Spencer, and Warrick have significant (mostly power plant) emissions.

Response to late comments from Indiana Department of Environmental Management:

EPA uses three full years of data to determine the design value for an area. EPA did examine the 2004 PM 2.5 data provided by Indiana. This data indicates the air quality in Southwestern Indiana is improving since the monitored PM 2.5 values continue to trend down. We understand your desire to avoid designating the area as nonattainment in December 2004 and then begin the redesignation process several months later if the complete 2004 PM 2.5 data indicates the area attains the annual NAAQS. This is why EPA is allowing states to submit their 2004 data before the designations effective date. EPA can revise its nonattainment designation for the area counties if the 2004 data shows that the entire Evansville area is attaining the fine particulate NAAQS. This data policy will also be applied in other areas.

We agree that power plant emissions are a substantial contributor to regional values. This includes contributions to the violations in Dubois and Vanderburgh Counties. A nonattainment area is defined in section 107(d) of the Clean Air Act (CAA) as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment. That is why EPA is designating Dubois, Vanderburgh, and Warrick Counties and portions of Gibson, Pike, and Spencer Counties as the Evansville nonattainment area.

Response to late comments from the mayor of Evansville:

EPA is required to use three full years of data to determine the design value for an area. Thus, the 2002-2004 design value for Vanderburgh County cannot be determined until all the 2004 data is received. EPA did examine the PM 2.5 data for the first three quarters of 2004 provided by the Indiana Department of Environmental Management. This data indicates the air quality in Southwestern Indiana is improving since the monitored PM 2.5 values continue to trend down. We understand the desire to avoid designating Vanderburgh County as nonattainment in December 2004 and then begin the redesignation process just months later if the complete 2002-2004 PM 2.5 data indicates the area attains the annual NAAQS. This is why EPA is allowing states to submit their 2004 data before the designations effective date. EPA can revise its nonattainment designation for Vanderburgh County and the rest of the area if the 2004 data shows that the entire Evansville area is attaining the fine particulate NAAQS.

Many people believe that designation of an area as a nonattainment area significantly limits economic growth. EPA does not share this belief. First, the requirements for new sources in nonattainment areas are fairly similar to those in attainment areas: in both areas, new sources must be well controlled and must address their impact on the area's air quality. Second, while companies sometimes blame environmental restrictions for plant location decisions, in fact these decisions reflect a variety of factors such as access to markets, access to skilled labor, access to raw materials, and various cost factors that will commonly have more influence on the company's bottom line. Third, EPA believes that history has shown that nonattainment designations have not significantly affected economic growth. Nationally, from 1970 to 2003, the Gross Domestic Product of the nation has risen 176 percent, even while total emissions of the six criteria pollutants have decreased by 51 percent. Also, many areas that have been designated nonattainment have been growing just as much or more than attainment areas. Therefore, even beyond the fact that impacts on growth are not a criterion for designations under the Clean Air Act, EPA does not agree that nonattainment designations limit economic growth.

There is no consent decree requiring EPA to make its designations prior to December 15, 2004. EPA met the congressional deadline of December 31, 2004 for making PM 2.5 designations. As stated above, EPA is nevertheless providing the opportunity for states to submit air quality data showing that 2002 to 2004 data support a different designation than 2001 to 2003 data. As for the Dubois County monitor, we have no information on the monitor being incorrectly sited. Therefore EPA considers the monitor site as appropriate and the data collected as valid.

6. Responses to Comments EPA Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas)

No areas are currently exceeding the PM2.5 NAAQS.

7. Responses to Comments EPA Region 7 (Iowa, Kansas, Missouri, and Nebraska)

Comment: 1013a-30
Region: 7
State: MO
Area: St. Louis, MO-IL

Comment: St. Louis CMSA:

St. Francois County, Lincoln, Warren, Washington Counties and Sullivan City (in Crawford County) are not included in the recommended nonattainment area. Neighboring Ste. Genevieve County's NOX emissions are projected to be over 18,000 tons per year due to new industrial growth. This county should be included in the nonattainment area as well.

EPA Response: As a part of the process to determine what areas should be designated as nonattainment, EPA first uses the Federal Reference Method (FRM) monitors to determine violations of the NAAQS. The FRM monitors measure the total mass of PM_{2.5} in the ambient air. These monitors are used to calculate the values that are compared to the NAAQS (15 µg/m³) in deciding if the ambient air in an area exceeds the NAAQS.

Second, once an area has a monitor violating the NAAQS, EPA uses the speciated PM_{2.5} air quality data, along with other data, to help determine which counties in the area are contributing to the violation. In identifying counties that contribute to an area's violating air quality, it is important give more weight to emissions (sources) that contribute to the excess PM_{2.5} in the urban area. For example, a ton of nitrogen oxide emitted within an area contributes less to the PM_{2.5} in that area than a ton of organic carbon emissions. Nitrogen oxide takes time to form into PM_{2.5} in the atmosphere and therefore is more of a regional pollutant. In addition, it will be important to understand which emissions are mostly contributing to an area's PM_{2.5} level in determining what sources could be effectively controlled within the area.

To give each county in an urban area the proper "weight" for their "contributing" emissions, the emissions in the county must be adjusted in two steps. In step 1, we must determine the county's percentage of the violating area's total emissions. In step 2, we adjust this percentage by the violating area's excess urban emissions for the pertinent speciated PM_{2.5} component. In doing this, we calculate the excess levels associated with sulfates, nitrates, carbonaceous matter and crustal material. These components represent the vast majority of chemicals that make up PM_{2.5} in urban areas.

The calculated urban excess for each of the four components is the difference between the speciated PM_{2.5} components for an urban area and speciated components from a near-by rural area. While it may seem best to choose a "rural" FRM (total mass) monitor and an "urban" FRM monitor for purposes of estimating the mass of the urban excess, this would not allow us to relate the air quality levels to the area's emissions. This situation is one of the main reasons for a monitoring network for speciated PM_{2.5}. Accordingly, we are using the speciated PM_{2.5} data from rural and urban monitors, along

with estimates of emissions within the area, to identify the urban sources with the greatest contribution to the urban excess PM2.5.

It is also important to note that the PM2.5 (air quality) weighted emissions (and scores) are considered in the context of all the relevant factors in determining the boundary of a nonattainment area. We consider the other factors, in addition to air quality and emissions, in identifying the counties that should comprise the nonattainment area. As described above, the speciated PM2.5 weighted emissions are used in developing a ranking score (weight) for each county in a potential nonattainment area. In developing these scores, we do not intend that they be used in "bight-line" manner. Rather, they offer a basis for looking closest at the counties in an area that may contribute to the most to the elevated PM2.5 in the area. For the counties with the highest score, we look at the other information as we determine the collection of counties in a nonattainment area.

As such, recognizing the process described above, EPA evaluated Lincoln, Warren, Crawford, St. Francois, Ste. Genevieve, Washington, St. Louis, Jefferson, St. Charles, Franklin counties and the City of St. Louis in the Missouri portion of the St. Louis MSA.

Lincoln, Warren, Crawford, St. Francois, Ste. Genevieve, and Washington counties were not included in the nonattainment designations for a number of reasons:

1. None of these counties contain violating PM2.5 monitors.
2. All of these counties had relatively low contribution to the PM2.5 violations as reflected in the weighed emissions scores. In fact, the weighed emission score values for Lincoln, Warren, Crawford, St. Francois, St. Genevieve, and Washington counties fell below 9.1, which was the natural break in the weighted emission Scores for all Missouri MSA counties and counties adjacent to the St. Louis, Missouri MSA.
3. None of these counties were recommended for a nonattainment designation by the state of Missouri, which had provided substantial technical analysis in support of their designation recommendation.

Specifically, in regards to Ste. Genevieve County, emissions were adjusted to account for industrial growth from new permits and PSD applications received by the state of Missouri.

Further county specific information is included in the Technical Support Document.

8. Responses to Comments EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)

Comment: 1047-1
Region: 8
State: MT
Area: Libby, MT

Comment: Governor Martz disagrees with EPA's intention to identify the entire state as a single attainment Section 107(d) area with the exception of Lincoln County. She is disappointed by EPA's position as the State of Montana has committed considerable resources in developing the appropriate method for defining Section 107(d) areas that best suits Montana's unique mix of sources, meteorology, and geography. She reiterates Montana's original recommendation. She submits additional information illustrating the PM2.5 attainment/unclassifiable areas defined by the Universal Transverse Mercator (UTM) coordinate system using 10,000 meter grid intervals and additional information clarifying Montana's intended use of the UTM Grid coordinate system for describing PM2.5 attainment Section 107(d) areas and for potential tracking of increment within baseline areas.

Governor Martz disagrees with EPA that defining attainment area boundaries for purposes of increment tracking is premature. In fact, planning for PM2.5 increment tracking as part of the initial designation process is appropriate and has been approved by EPA for another Region 8 state. In closing, the governor expresses adamant opposition to EPA's intended action to modify the Section 107(d) attainment areas from Montana's original geographic area descriptions. Designation of the entire state results in one unmanageable Section 107(d) attainment area.

EPA Response: EPA's initial recommendation was to designate the entire state of Montana as one single attainment/unclassifiable area. However, based on recent conversations with the State and a letter from the State dated November 10, 2004 in which the State modified their recommendation to designate attainment/unclassifiable areas using county boundaries, EPA has agreed to define the attainment/unclassifiable areas in Montana on a county-by-county basis, consistent with the EPA's 8 hour ozone designations. At this time it would be premature to subdivide the entire State into over 4,000 10 km by 10 km squares, as Montana has recommended. While the state continues to assert that the rest-of-state or even county-by-county delineation is unmanageable for tracking increment consumption, it has been used in many states for many years. We have also made designations based on county boundaries and states have used these boundaries to track increment consumption for many years as well. On the other hand, we are concerned that the creation of 4,000 plus attainment/unclassifiable areas could make it difficult to effectively track increment consumption. We are also concerned about the general policy and legal implications for the PSD program. We have never dealt with the subdividing of a state on this scale, and we are not prepared to do so until we have had a sufficient chance to determine the adequacy of such an approach.

In reaching our decision, we have carefully considered Montana's response to our July 20, 2004 letter as well as discussions that followed this letter. Based on Montana's response, we are relatively comfortable with the use of Universal Transverse Mercator

(UTM) coordinates to define geographic boundaries. As Montana points out, we have approved the use of UTM coordinates to define other designation boundaries in Montana.

Montana's response, however, has not convinced us (1) that the extent of subdividing proposed by Montana is appropriate to a PM_{2.5} increment that has not been established, (2) that Montana could effectively track increment consumption in multiple baseline areas with multiple baseline dates, (3) that the proposed level of subdivision is consistent with the purposes of the PSD program.

At this point, we don't know which pollutants or precursors would have to be tracked under an increment for PM_{2.5} or at what level such an increment or significant ambient impacts would be set. We have no basis to conclude that thousands of attainment/unclassifiable areas 10,000 meters on a side would be appropriate for PM_{2.5}.

Montana indicates it currently tracks increment consumption in approximately 40 baseline areas. Montana makes no projection of the number of baseline areas that might result if its recommendations were accepted. Theoretically, with a starting point of over 4,000 separate attainment/unclassifiable areas, hundreds or perhaps even thousands of baseline areas could result. The state has presented no evidence that it could effectively administer tracking of increment consumption in so many areas.

We note that Montana previously requested the redesignation of its attainment areas for other pollutants into 10,000 meter by 10,000 meter squares across the entire state. EPA, per a December 13, 2000 memorandum signed by John Seitz, then head of EPA's Office of Air Quality Planning and Standards, stated concerns regarding Montana's and other states' requests and a need for EPA to reexamine its relevant rules and policies. Among other things, the Seitz memo stated a concern that redesignating PSD baseline areas to only encompass the impact area of a PSD source "could allow for unexamined growth in emissions, with possible deterioration of air quality up to the level of the National Ambient Air Quality Standards (NAAQS)." The Seitz memo went on to state that the "proposed actions do not appear to be consistent with Congressional intent or the PSD mandates of the Act, as allowing baseline areas of such size might jeopardize air quality and could be difficult to administer in some cases." Montana's February 25, 2004 and August 30, 2004 recommendations for PM_{2.5} designations are analogous to the redesignations the Seitz memo addressed.

While the Governor indicates we are being inconsistent in our treatment of other states, we note that Utah and Wyoming's situations are distinguishable from Montana's. Wyoming primarily recommended county boundaries to define attainment/unclassifiable areas for PM_{2.5}, with further subdivision based on the boundaries of a limited number of cities and towns. This is not equivalent to Montana's recommendation to establish over 4,000 separate attainment/unclassifiable areas. Wyoming's recommendation is largely equivalent to the use of county boundaries to define attainment/unclassifiable areas that we've historically been willing to accept and that states have used to track increment consumption. As stated above, EPA and the State of Montana recently came to an agreement to identify attainment/unclassifiable areas on a county-by-county basis.

We recently learned that when we issued our July 20, 2004 letter stating our agreement with the State of Utah's recommended attainment/unclassifiable area boundaries, we misinterpreted Utah's recommendation. While we thought that Utah was primarily recommending designations according to county boundaries, with some smaller areas covering metropolitan areas along the Wasatch Front, Utah was actually recommending designations by township boundaries. Townships are six-mile by six-mile squares. Thus, Utah's original recommendation would have resulted in thousands of separate attainment/unclassifiable areas within the State.

However, in recent discussions, EPA and Utah have come to agree that EPA's original interpretation of Utah's recommended boundaries is appropriate at this time. As with Wyoming, attainment/unclassifiable boundaries in Utah are being defined largely by county boundaries, with subdivision of a limited number of counties along the Wasatch Front into two areas. This is not equivalent to Montana's initial recommendation which recommended 4,000 10 km by 10 km squares. We note that EPA has committed to work with Utah in the future to define a process for identifying boundary areas for when a major source locates in an area.

Montana indicated that tracking increment consumption within county boundaries would provide little advantage over entire state designations due to the large size of counties in Montana and the diverse topography. However, Utah, Wyoming and other states in Region 8 and across the country could make similar claims. As we explained in response to comments regarding the boundary designations for Utah and Wyoming, we believe the boundary designations we're making for Utah and Wyoming will allow for adequate tracking of increment consumption and be consistent with the purposes of the PSD program.

Given our actions on Wyoming, Utah, and the other Region 8 states, Montana has not been singled out. Also, because we have not established a PM2.5 increment, the State should not face any immediate effects from our decision. Before we establish a PM2.5 increment, we can revisit this issue. At that time, we would have a better sense of the implications of Montana's proposal for PM2.5 specifically. In the meantime, it would be appropriate to further study the possible effects of subdividing the State into many, many small attainment/unclassifiable areas. We welcome Montana's input on these issues.

Comment: 1012-1

Region: 8

State: MT | WY | UT

Area:

Comment: 1st Comment: Commenters express concern about the recommendations that several western states have made to designate unreasonably small areas as nonattainment/unclassifiable areas for PM2.5. Montana, Utah, and Wyoming recommended dividing the portions of their states that were not designated as nonattainment for PM2.5 into many attainment/unclassifiable areas. Commenters suggest that these state proposals would undermine the Clean Air Act's prevention of significant

deterioration (PSD) program. The commenters disagree with EPA's intended approval of Utah and Wyoming's recommended designations. If EPA fails to disallow the recommendations, it will disregard Congress's intent to protect existing air quality that is better than the NAAQS through PSD, since failing to trigger PSD increment protections in significant portions of these states would result in those areas simply being governed by the NAAQS. The designation of PM_{2.5} areas based on arbitrary grid or jurisdictional boundaries within a state would also constitute arbitrary and capricious action because such boundaries bear no conceivable relationship to any of the relevant requirements or purposes of the CAA. In order to make PSD protections meaningful, EPA should promulgate PSD regulations for PM_{2.5} as required under Section 166 of the CAA.

2nd Comment: The commenter believes that EPA's action approving the states' request is premature and arbitrary and capricious. Congress pointedly required EPA to issue regulations to prevent significant deterioration of air quality for PM_{2.5} in tandem with or prior to the air quality status designations under section 107. This reflects the obvious interlocking statutory linkages between the PSD program and the 107 designations. We respectfully request that EPA swiftly carry out its long overdue statutory responsibility to issue PSD regulations for PM_{2.5} and reject or at the very least hold in abeyance any final action on Utah and Wyoming as well as Montana's recommendations until it has promulgated the framework regulations required to prevent significant deterioration with respect to PM_{2.5}, so that the implications of the proposed boundaries can be meaningfully assessed.

EPA Response: EPA's Response to 1st Comment: We are approving Wyoming's recommendation for attainment/unclassifiable boundaries based on the boundaries of counties and ten cities/towns. For Utah, we are defining attainment/unclassifiable boundaries as county boundaries, with the exception of a limited number of counties along the Wasatch Front, which are being divided in two.¹ For Montana we are approving a recommendation for attainment/unclassifiable boundaries based on the boundaries of county-by-county. We believe this is reasonable for the following reasons.

First, while attainment areas have often been delineated as "rest-of-state", we have also commonly used county boundaries to designate attainment/unclassifiable areas. For example, for TSP, county-by-county designations were used for the states of Kentucky and Kansas. In certain limited instances, we have redesignated portions of counties as separate attainment/unclassifiable areas. For example, in the Powder River Basin, parts of Converse and Campbell Counties, Wyoming are designated separate attainment/unclassifiable areas for PM₁₀.

There is no requirement in the CAA or our regulations that attainment/unclassifiable areas encompass an entire state. Second, Utah and Wyoming's further limited delineation of areas within a county should not unreasonably complicate the tracking of increment within the States or subdivide the States to such a degree as to undermine the PSD program. It is worth noting that the extent of a baseline area for tracking increment consumption is not limited by the initial designation of attainment/unclassifiable area

boundaries. Instead, all attainment/unclassifiable areas in which the triggering source's emissions would have a significant ambient impact are included in the baseline area.

We note commenters' support for our July 20, 2004 letter regarding Montana's recommendations. Based on further discussions with the State of Montana and a letter from the State dated November 10, 2004, we are approving a recommendation to define the attainment/unclassifiable areas within Montana on a county-by-county basis, similar to that which was done under EPA's 8-hour ozone designations.

Footnote 1: We recently learned that when we issued our July 20, 2004 letter stating our agreement with the State of Utah's recommended attainment/unclassifiable area boundaries, we misinterpreted Utah's recommendation. While we thought that Utah was primarily recommending designations according to county boundaries, with some smaller areas covering metropolitan areas along the Wasatch Front, Utah was actually recommending designations by township boundaries for most of the state. However, in recent discussions, EPA and Utah have come to agree that EPA's original interpretation of Utah's recommended boundaries is appropriate at this time. As with Wyoming, attainment/unclassifiable boundaries in Utah are being defined largely by county boundaries, with subdivision of a limited number of counties along the Wasatch Front into two areas.

EPA's Response to 2nd Comment: As noted above, for Montana we are defining the entire State other than the Libby nonattainment area on a county-by-county basis. For Wyoming, we believe it is reasonable to delineate attainment/unclassifiable areas by the county and 10 city/town boundaries the state has proposed. For Utah, we believe it is reasonable to delineate attainment/unclassifiable areas primarily by county boundaries, with the division in two of Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties. These boundary designations are consistent with others we are doing for PM2.5 and have done for other pollutants, where we have commonly used county boundaries to define attainment areas. As discussed above, Utah and Wyoming's further delineation within counties should not unreasonably complicate the tracking of increment within the states or undermine the PSD program. We don't anticipate that any PSD regulations for PM2.5 would so alter the basic structure of the PSD program so as to render these designations inappropriate. We acknowledge the commenters' request that we quickly issue PSD regulations for PM2.5.

Comment: 1093-1

Region: 8

State: UT

Area:

Comment: Utah recommended attainment area designations in a February 13, 2004 letter from Governor Walker to EPA. We have learned that EPA understood Utah's February 13, 2004 letter to indicate that county boundaries would be used to define attainment/unclassifiable area boundaries for most of the state. While this was not Utah's original intent, we can agree that counties would be an initial system of boundaries that

could be amended in the future using a collection of townships to refine boundaries based on the EPA designation criteria, PSD rules and a more detailed township boundary setting process to be developed.

Utah does not propose to use single townships as a nonattainment area or a PSD air quality impact/baseline area. We understand that such a proposal would not be approved by EPA. Townships are to be used as the “currency” for defining the boundaries of larger non-attainment or PSD analysis areas, not the areas themselves.

Utah understands that its February 13, 2004 boundary recommendations for Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties are acceptable to EPA. These boundary recommendations are illustrated in Attachment 1 to the February 13, 2004 letter.

EPA Response: EPA and Utah are in agreement that the PM2.5 attainment/unclassifiable boundary areas to be identified in Part 81 will reflect EPA’s interpretation of Utah’s recommendation; i.e., county-by-county designations, with subdivision of a limited number of counties into two areas (Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber Counties). EPA commits to work with Utah to develop a process for identifying boundary areas when a major source locates in an area.

Comment: 1012-1

Region: 8

State: UT | MT | WY

Area:

Comment: 1st Comment: Commenters express concern about the recommendations that several western states have made to designate unreasonably small areas as nonattainment/unclassifiable areas for PM2.5. Montana, Utah, and Wyoming recommended dividing the portions of their states that were not designated as nonattainment for PM2.5 into many attainment/unclassifiable areas. Commenters suggest that these state proposals would undermine the Clean Air Act's prevention of significant deterioration (PSD) program. The commenters disagree with EPA's intended approval of Utah and Wyoming's recommended designations. If EPA fails to disallow the recommendations, it will disregard Congress's intent to protect existing air quality that is better than the NAAQS through PSD, since failing to trigger PSD increment protections in significant portions of these states would result in those areas simply being governed by the NAAQS. The designation of PM2.5 areas based on arbitrary grid or jurisdictional boundaries within a state would also constitute arbitrary and capricious action because such boundaries bear no conceivable relationship to any of the relevant requirements or purposes of the CAA. In order to make PSD protections meaningful, EPA should promulgate PSD regulations for PM2.5 as required under Section 166 of the CAA.

2nd Comment: The commenter believes that EPA's action approving the states' request is premature and arbitrary and capricious. Congress pointedly required EPA to issue regulations to prevent significant deterioration of air quality for PM2.5 in tandem with or

prior to the air quality status designations under section 107. This reflects the obvious interlocking statutory linkages between the PSD program and the 107 designations. We respectfully request that EPA swiftly carry out its long overdue statutory responsibility to issue PSD regulations for PM2.5 and reject or at the very least hold in abeyance any final action on Utah and Wyoming as well as Montana's recommendations until it has promulgated the framework regulations required to prevent significant deterioration with respect to PM2.5, so that the implications of the proposed boundaries can be meaningfully assessed.

EPA Response: EPA's Response to 1st Comment: We are approving Wyoming's recommendation for attainment/unclassifiable boundaries based on the boundaries of counties and ten cities/towns. For Utah, we are defining attainment/unclassifiable boundaries as county boundaries, with the exception of a limited number of counties along the Wasatch Front, which are being divided in two.¹ For Montana we are approving a recommendation for attainment/unclassifiable boundaries based on the boundaries of county-by-county. We believe this is reasonable for the following reasons.

First, while attainment areas have often been delineated as "rest-of-state", we have also commonly used county boundaries to designate attainment/unclassifiable areas. For example, for TSP, county-by-county designations were used for the states of Kentucky and Kansas. In certain limited instances, we have redesignated portions of counties as separate attainment/unclassifiable areas. For example, in the Powder River Basin, parts of Converse and Campbell Counties, Wyoming are designated separate attainment/unclassifiable areas for PM10.

There is no requirement in the CAA or our regulations that attainment/unclassifiable areas encompass an entire state. Second, Utah and Wyoming's further limited delineation of areas within a county should not unreasonably complicate the tracking of increment within the States or subdivide the States to such a degree as to undermine the PSD program. It is worth noting that the extent of a baseline area for tracking increment consumption is not limited by the initial designation of attainment/unclassifiable area boundaries. Instead, all attainment/unclassifiable areas in which the triggering source's emissions would have a significant ambient impact are included in the baseline area.

We note commenters' support for our July 20, 2004 letter regarding Montana's recommendations. Based on further discussions with the State of Montana and a letter from the State dated November 10, 2004, we are approving a recommendation to define the attainment/unclassifiable areas within Montana on a county-by-county basis, similar to that which was done under EPA's 8-hour ozone designations.

Footnote 1: We recently learned that when we issued our July 20, 2004 letter stating our agreement with the State of Utah's recommended attainment/unclassifiable area boundaries, we misinterpreted Utah's recommendation. While we thought that Utah was primarily recommending designations according to county boundaries, with some smaller areas covering metropolitan areas along the Wasatch Front, Utah was actually recommending designations by township boundaries for most of the state. However, in

recent discussions, EPA and Utah have come to agree that EPA's original interpretation of Utah's recommended boundaries is appropriate at this time. As with Wyoming, attainment/unclassifiable boundaries in Utah are being defined largely by county boundaries, with subdivision of a limited number of counties along the Wasatch Front into two areas.

EPA's Response to 2nd Comment: As noted above, for Montana we are defining the entire State other than the Libby nonattainment area on a county-by-county basis. For Wyoming, we believe it is reasonable to delineate attainment/unclassifiable areas by the county and 10 city/town boundaries the state has proposed. For Utah, we believe it is reasonable to delineate attainment/unclassifiable areas primarily by county boundaries, with the division in two of Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties. These boundary designations are consistent with others we are doing for PM2.5 and have done for other pollutants, where we have commonly used county boundaries to define attainment areas. As discussed above, Utah and Wyoming's further delineation within counties should not unreasonably complicate the tracking of increment within the states or undermine the PSD program. We don't anticipate that any PSD regulations for PM2.5 would so alter the basic structure of the PSD program so as to render these designations inappropriate. We acknowledge the commenters' request that we quickly issue PSD regulations for PM2.5.

Comment: 1012-1

Region: 8

State: WY | UT | MT

Area:

Comment: 1st Comment: Commenters express concern about the recommendations that several western states have made to designate unreasonably small areas as nonattainment/unclassifiable areas for PM2.5. Montana, Utah, and Wyoming recommended dividing the portions of their states that were not designated as nonattainment for PM2.5 into many attainment/unclassifiable areas. Commenters suggest that these state proposals would undermine the Clean Air Act's prevention of significant deterioration (PSD) program. The commenters disagree with EPA's intended approval of Utah and Wyoming's recommended designations. If EPA fails to disallow the recommendations, it will disregard Congress's intent to protect existing air quality that is better than the NAAQS through PSD, since failing to trigger PSD increment protections in significant portions of these states would result in those areas simply being governed by the NAAQS. The designation of PM2.5 areas based on arbitrary grid or jurisdictional boundaries within a state would also constitute arbitrary and capricious action because such boundaries bear no conceivable relationship to any of the relevant requirements or purposes of the CAA. In order to make PSD protections meaningful, EPA should promulgate PSD regulations for PM2.5 as required under Section 166 of the CAA.

2nd Comment: The commenter believes that EPA's action approving the states' request is premature and arbitrary and capricious. Congress pointedly required EPA to issue regulations to prevent significant deterioration of air quality for PM2.5 in tandem with or

prior to the air quality status designations under section 107. This reflects the obvious interlocking statutory linkages between the PSD program and the 107 designations. We respectfully request that EPA swiftly carry out its long overdue statutory responsibility to issue PSD regulations for PM2.5 and reject or at the very least hold in abeyance any final action on Utah and Wyoming as well as Montana's recommendations until it has promulgated the framework regulations required to prevent significant deterioration with respect to PM2.5, so that the implications of the proposed boundaries can be meaningfully assessed.

EPA Response: EPA's Response to 1st Comment: We are approving Wyoming's recommendation for attainment/unclassifiable boundaries based on the boundaries of counties and ten cities/towns. For Utah, we are defining attainment/unclassifiable boundaries as county boundaries, with the exception of a limited number of counties along the Wasatch Front, which are being divided in two.¹ For Montana we are approving a recommendation for attainment/unclassifiable boundaries based on the boundaries of county-by-county. We believe this is reasonable for the following reasons.

First, while attainment areas have often been delineated as "rest-of-state", we have also commonly used county boundaries to designate attainment/unclassifiable areas. For example, for TSP, county-by-county designations were used for the states of Kentucky and Kansas. In certain limited instances, we have redesignated portions of counties as separate attainment/unclassifiable areas. For example, in the Powder River Basin, parts of Converse and Campbell Counties, Wyoming are designated separate attainment/unclassifiable areas for PM10.

There is no requirement in the CAA or our regulations that attainment/unclassifiable areas encompass an entire state. Second, Utah and Wyoming's further limited delineation of areas within a county should not unreasonably complicate the tracking of increment within the States or subdivide the States to such a degree as to undermine the PSD program. It is worth noting that the extent of a baseline area for tracking increment consumption is not limited by the initial designation of attainment/unclassifiable area boundaries. Instead, all attainment/unclassifiable areas in which the triggering source's emissions would have a significant ambient impact are included in the baseline area.

We note commenters' support for our July 20, 2004 letter regarding Montana's recommendations. Based on further discussions with the State of Montana and a letter from the State dated November 10, 2004, we are approving a recommendation to define the attainment/unclassifiable areas within Montana on a county-by-county basis, similar to that which was done under EPA's 8-hour ozone designations.

Footnote 1: We recently learned that when we issued our July 20, 2004 letter stating our agreement with the State of Utah's recommended attainment/unclassifiable area boundaries, we misinterpreted Utah's recommendation. While we thought that Utah was primarily recommending designations according to county boundaries, with some smaller areas covering metropolitan areas along the Wasatch Front, Utah was actually recommending designations by township boundaries for most of the state. However, in

recent discussions, EPA and Utah have come to agree that EPA's original interpretation of Utah's recommended boundaries is appropriate at this time. As with Wyoming, attainment/unclassifiable boundaries in Utah are being defined largely by county boundaries, with subdivision of a limited number of counties along the Wasatch Front into two areas.

EPA's Response to 2nd Comment: As noted above, for Montana we are defining the entire State other than the Libby nonattainment area on a county-by-county basis. For Wyoming, we believe it is reasonable to delineate attainment/unclassifiable areas by the county and 10 city/town boundaries the state has proposed. For Utah, we believe it is reasonable to delineate attainment/unclassifiable areas primarily by county boundaries, with the division in two of Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties. These boundary designations are consistent with others we are doing for PM2.5 and have done for other pollutants, where we have commonly used county boundaries to define attainment areas. As discussed above, Utah and Wyoming's further delineation within counties should not unreasonably complicate the tracking of increment within the states or undermine the PSD program. We don't anticipate that any PSD regulations for PM2.5 would so alter the basic structure of the PSD program so as to render these designations inappropriate. We acknowledge the commenters' request that we quickly issue PSD regulations for PM2.5.

9. Responses to Comments EPA Region 9 (Arizona, California, Guam, Hawaii, and Nevada)

Comment: 1092-1

Region: 9

State: AZ

Area:

Comment: The commenter recommends that EPA designate the air quality management area within the Gila River Indian Community (GRIC) as unclassifiable for the PM_{2.5} NAAQS. This area includes all GRIC lands within both Maricopa and Pinal Counties.

This recommendation is based on the following:

1. Current monitoring data for fine particulate matter collected since March 2002 indicates the GRIC air quality is well within the required standard for PM_{2.5}. A third year of data is required to make a designation, however, the GRIC does not anticipate elevated levels from sources on or off the GRIC.
2. An emissions inventory of the various pollution sources within the GRIC was performed in 1997. Findings indicated that sources most likely to emit significant levels of fine particulates are not present in the GRIC.

EPA Response: Thank you for your letter of June 17, 2004 regarding the PM_{2.5} designation recommendation for the areas under the Gila River Indian Community's jurisdiction. EPA has reviewed your recommendation and, consistent with Section 107(d)(1) of the Clean Air Act we are informing you that we intend to designate the geographic area covered in your recommendation as attainment/unclassifiable, as you recommended.

Comment: 1013a-6

Region: 9

State: CA

Area: Los Angeles-South Coast Air Basin, CA

Comment: The Los Angeles CMSA also includes Ventura County, which must be part of the nonattainment area. The current PM_{2.5} three-year annual average is 14.5 µg/m³, which is very close to the annual standard. The air quality in this area must be protected along with the rest of the Los Angeles nonattainment area. EPA has also recommended the exclusion of parts of Los Angeles, Riverside and San Bernardino Counties due to low emissions, lower populations and physical separations from the main portion of the CMSA. According to EPA's June 29, 2004 letter to California, total emissions from the excluded portions of these four counties totals over 65,000 tons per year of reactive organic gas (ROG), 98,000 tons per year of NO_x, over 3,500 tons per year of SO_x and over 20,000 tons per year of PM_{2.5}. While these emissions do not make up the majority of emissions for the nonattainment area, they are nonetheless significant enough to impact the nonattainment area. We emphasize again the importance of including entire counties in this nonattainment area.

EPA Response: EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. EPA's decisions on the State's recommendations are contained in the June 29th letter sent by EPA to California Governor Schwarzenegger which may be found in the docket for this action.

Comment: 1091-1

Region: 9

State: CA

Area: San Diego, CA

Comment: The commenter, on behalf of the Pala Band of Mission Indian Reservation, recommends that the lands within the exterior boundaries of the reservation be classified and designated as Unclassifiable for the PM10 and PM2.5 NAAQS. The commenter notes that the reservation occupies approximately 12,000 acres; has a population of 1,200 people; and is situated in a valley with livestock ranches on the western boundary, citrus groves, gravel and sand pit operations on the eastern part of the reservation, and a casino/hotel complex and a two lane state highway crossing the reservation.

The Pala EPA is currently conducting PM10 and PM2.5 monitoring with a co-located Anderson Dichot Sampler. Sampling data has been generated for one and a half years but the required 3 years worth of data has not been collected. Current information indicates that the reservation will meet the NAAQS.

EPA Response: We have reviewed your recommendation regarding the PM 2.5 designation for your area, and wish to inform you that, at this time, EPA does not intend to implement your recommendation, and instead intends to include the Pala Indian Reservation in the surrounding "nonattainment area" (area not meeting the PM2.5 health standard). It should be noted that this decision is not final; EPA expects to make final decisions on PM 2.5 designations in November. In making this determination regarding air quality in your area, we reviewed a number of factors, including ambient air monitoring data, modeled air pollution levels, patterns of pollution transport, and meteorology. Because PM2.5 is a regional pollutant, high levels can be widespread, and will often affect areas far from urban centers and pollution sources.

10. Responses to Comments EPA Region 10 (Alaska, Idaho, Oregon, Washington and Native Tribes)

No areas are currently exceeding the PM2.5 NAAQS.

HQ. Responses to Comments EPA Headquarters

Comment: 1013-1

Region: HQ

State:

Area:

Comment: This letter transmits spreadsheets used in a previous analysis submitted on the same day (9-1-04).

EPA Response: Dear Ms. Copeland and Ms. Patton:

Thank you for your letter of June 16, 2004, concerning the designation of nonattainment areas for the fine particulate matter (PM_{2.5}) air quality standards. In your letter you expressed concerns over the designation recommendations submitted by States to address PM_{2.5}. In particular you expressed concerns that some States may have submitted recommendations which only identified counties with monitored violations, and did not identify counties that contributed significant emissions to the affected area. You also expressed concerns that some State recommendations failed to recommend all counties within a Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as nonattainment, and you indicated concern that some States may not have considered the updated 2003 Office of Management and Budget (OMB) boundaries in making their nonattainment recommendations.

As you indicated in your letter, State recommendations for PM_{2.5} designations were received in February 2004. We subsequently responded to these recommendations on June 29, 2004. EPA is required to notify States and Tribes of any intended modifications to their recommendations at least 120 days prior to promulgating the designations. The 120-day period is designed for consultation between EPA and the States and Tribes. We have asked States to provide additional information that they would like for us to consider in the designations process by September 1, 2004. EPA intends to promulgate final designations in November 2004. At that time, EPA will address all state and tribal lands during the designations process.

On April 1, 2003 and February 13, 2004, EPA issued guidance for states and tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. As discussed in the above referenced guidance, this determination is based on the overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting and vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

To help assess the emissions of multiple air pollutants contributing to the formation of PM_{2.5}, we developed a weighted emissions score for each county under consideration. The methodology for calculating these county scores was distributed to our State and local air quality agency contacts and discussed with them on STAPPA/ALAPCO conference calls. In responding to State nonattainment recommendations we examined all available information and identified a number of counties adjacent to violating urban areas that had relatively high emissions. We have included these counties in the list of our prospective nonattainment areas. In some cases the boundary recommendations submitted by a State have been modified to reflect the addition of various counties adjacent to the CMSA/MSA which we believe contribute significant emissions to the nonattainment area.

Comment: 1013a-1

Region: HQ

State:

Area:

Comment: Commenters representing public health and environmental organizations urge EPA to reconsider and significantly strengthen its recommended air quality designations for PM_{2.5}. They believe an alarming number of the recommendations contravene the law, EPA's long-standing policy, good science, and basic common sense.

The nonattainment designations serve two essential public health functions. First, they establish the framework for air quality management plans across the country to address harmful particulate pollution levels. Second, the nonattainment designations tell the public whether the community where they live and are raising their families has air that is unhealthy. Such information can and does build public support for the measures needed to clean up the air. If EPA further advances the narrow approach it has recommended, the nation would suffer severe public health consequences.

EPA has recommended that 244 counties, including 11 partial counties and several cities and the District of Columbia be designated nonattainment for PM_{2.5}. Our analysis found that 406 counties should be included in the nonattainment areas in order to include complete C/MSAs and to properly control emissions. We are especially concerned that EPA's recommendations left out 30 coal-fired power plants that are either in or adjacent to nonattaining C/MSAs. The sulfur dioxide (SO₂), totaling 451,453 tons per year, and nitrogen oxides (NO_x), totaling 164,569 tons per year, from these facilities contribute greatly to fine particulate air pollution. Clean up of these power plants must be an integral part of state implementation plans to restore healthy air.

Below are deficiencies identified by the commenters that they believe threaten the nation's pressing need to protect public health and lower the harmful concentrations of PM_{2.5}.

1. Presumptive nonattainment boundaries that constitute the full C/MSAS are essential to protect public health from harmful particulate pollution

EPA's August 29, 2003 draft staff assessment of the policy implications of scientific and technical information about particulate matter or "staff paper," acknowledges that there is a large body of new health effects studies for particulates (PM), indicating further evidence of the serious adverse health effects of the pollutant. These studies are based on epidemiologic, toxicological, controlled human exposure, and dosimetry analyses. Any delay in attainment of the PM_{2.5} national ambient air quality standard will prolong these sensitive groups' exposure to unhealthy particulate pollution levels.

Unfortunately, many of EPA's recommended nonattainment designations for the PM_{2.5} standard do not encompass all counties in a Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area (C/MSA) within which a monitored violation of the standard has occurred. These recommendations are contrary to the Clean Air Act, lacking in any reasoned basis, and must be rejected in the absence of a compelling technical justification for the smaller boundary.

The failure of EPA to promulgate protective nonattainment designations would threaten vital public health protections. Many urban centers are surrounded by rapidly expanding suburban counties. Timely attainment of the PM_{2.5} standard will depend on comprehensive boundaries that ensure that all pollution sources, both existing and new, are subject to effective air pollution abatement measures. In the absence of a nonattainment designation for the entire C/MSA, both existing air pollution sources and growth in counties that have been designated attainment or unclassifiable will result in increased air pollution just outside the core nonattainment counties. This unchecked air pollution could dramatically undercut the emission reductions progress being made in the core-designated counties. And this would mean that critical progress in lowering particulate pollution levels will be stymied.

Narrow boundaries will also unfairly distribute pollution control burdens among sources that contribute to the nonattainment problem. The private firms in the counties designated nonattainment will have to make additional pollution reductions to compensate for pollution abatement strategies that do not in fact encompass all contributing pollution sources. Comprehensive boundaries will, by contrast, help ensure all contributing sources are responsible for their share of pollution reductions.

2. EPA Must Use The Most Recent OMB Metropolitan Boundary Lists For The Designation of Nonattainment Boundaries

In order to base these designations on the most representative data available, EPA must use the most recent (2003) OMB metropolitan boundary lists for its PM_{2.5} nonattainment boundary designations. This must be done in order to reflect current populations and the emissions resulting from those populations. Our comments in this letter are based on the 2003 OMB lists.

3. Designation of Attainment/Unclassifiable Areas Must Be Consistent with the Mandates of the Prevention of Significant Deterioration Program.

Commenter is concerned that several states (e.g., Montana, Utah, and Wyoming) are dividing their area into numerous "postage stamp" attainment/unclassifiable areas.

EPA Response: Thank you for your letter of June 16, 2004, to Assistant Administrator Holmstead, concerning the designation of nonattainment areas for the fine particulate matter (PM_{2.5}) air quality standards. In your letter you expressed concerns over the designation recommendations submitted by States to address PM_{2.5}. In particular you expressed concerns that some States may have submitted recommendations which only identified counties with monitored violations, and did not identify counties that contributed significant emissions to the affected area. You also expressed concerns that some State recommendations failed to recommend all counties within a Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area (CMSA/MSA) as nonattainment, and you indicated concern that some States may not have considered the updated 2003 Office of Management and Budget boundaries in making their nonattainment recommendations.

As you indicated in your letter, State recommendations for PM_{2.5} designations were received in February 2004. We subsequently responded to these recommendations on June 29, 2004. The Environmental Protection Agency (EPA) is required to notify States and Tribes of any intended modifications to their recommendations at least 120 days prior to promulgating the designations. The 120-day period is designed for consultation between EPA and the States and Tribes. We have asked States to provide additional information that they would like for us to consider in the designations process by September 1, 2004. EPA intends to promulgate final designations in November 2004. At that time, EPA will address all State and Tribal lands during the designations process.

On April 1, 2003, and February 13, 2004, EPA issued guidance for States and Tribes to use in identifying nonattainment areas. A nonattainment area is defined in section 107(d) of the Clean Air Act as an area that is violating an ambient air quality standard, or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

Once we determine that an area is violating the standard, the next step is to determine if there are any nearby areas that are contributing to the violation and should be included in the designated nonattainment area. As discussed in the above referenced guidance, this determination is based on the overall assessment of currently available technical information relating to nine specific factors: air quality monitoring information, pollutant emissions, population and growth in the area, commuting and vehicle miles traveled, meteorology, terrain, jurisdictional boundaries, and the existing level of control of emissions sources.

To help assess the emissions of multiple air pollutants contributing to the formation of PM_{2.5}, we developed a weighted emissions score for each county under consideration. The methodology for calculating these county scores was distributed to our State and local air quality agency contacts and discussed with them on State and Territorial Air Pollution Administrators/Association of Local Air Pollution Control Officials conference

calls. In responding to State nonattainment recommendations we examined all available information and identified a number of counties adjacent to violating urban areas that had relatively high emissions. We have included these counties in the list of our prospective nonattainment areas. In some cases, the boundary recommendations submitted by a State have been modified to reflect the addition of various counties adjacent to the CMSA/MSA which we believe contribute significant emissions to the nonattainment area.

Comment: 1032-7

Region: HQ

State: IN

Area:

Comment: EPA's rules should be completed soon, should provide flexibility, and should harmonize dates and planning.

We urge EPA to complete the PM2.5 implementation rule soon, and in doing so, provide states with as much flexibility as possible to develop State Implementation Plans. In addition, we urge EPA to reconcile the attainment dates for PM2.5 with the NOX and SO2 reduction dates in the Clean air Interstate Rule. PM2.5 SIPs will be due in early 2008, and attainment will be required by early 2010. If the first phase of the proposed reductions does not occur until 2010, attainment may not be achieved until 2013 or later. EPA should harmonize as much as possible the planning and implementation for PM2.5 with ozone and regional haze efforts.

EPA Response: Thank you for your comments concerning the PM2.5 Implementation rule and the reconciliation of the timelines for PM2.5 State Implementation Plans (SIPs) and the require emissions reductions related to the CAIR rule. EPA is currently in the process of finalizing the PM2.5 Implementation rule and it is our intent to propose the rule in the fall of 2004 and finalize the rule in the Spring of 2005. It is also EPA's intent to designate areas for PM2.5 under Subpart 1 of Part D. EPA's believes that Subpart 1 provides sufficient flexibility in terms of implementation of control measures that constitute RACM and RACT for specific areas.

It is EPA's intent not to propose a multi-category classification scheme for PM2.5 nonattainment areas under which areas are assigned different classifications, attainment dates, and varying control strategy requirements based on the varying design values and severity of the nonattainment problem in the area. EPA has taken into consideration the associated attainment dates for SIPs due for areas related to the 8 hour ozone standard and the CAIR rule, and to the extent possible we have tried to reconcile these dates. However, due to the differences in the implementation dates related to these rules it is possible that the dates for meeting these requirements do not totally correspond. In the event that States find that regional controls are required to provide emissions reductions necessary to attain the standard along with the implementation of local control measures, State's may request an extension of the attainment date of up to five years. Requests for

extensions of attainment dates will be granted based upon the severity of the nonattainment problem in the area among other related requirements.

The CAA requires EPA to designate as nonattainment any area that is monitoring a violation of the standard or that is contributing to a violation of the standard in a nearby area. Thus, our designations include both areas monitoring violations of the PM2.5 standard as well as those nearby areas that are determined to be contributing to violations at the affected monitors. The issue of regional transport primarily concerns long range transport - i.e., transport from areas that are not "nearby". EPA agrees that this is an important issue and is currently addressing the issue of regionally transported emissions via the Clean Air Interstate Rule (CAIR).

Comment: 1041-4

Region: HQ

State: KY

Area:

Comment: Commenter notes that ambient data for the period of 1999-2004 continues to show a downward trend in PM2.5 levels in Kentucky. This improvement in PM2.5 levels is consistent with those seen in the southeast during the same time period. According to a recent EPA report on air quality improvements, PM2.5 levels have decreased 18% in the southeastern U.S. since monitoring began in 1999.

It would appear that consideration of this data would be prudent in the designation process. Failure to do so ignores the fact that some areas in Kentucky are on track to achieve the PM2.5 standard by the end of 2004.

EPA Response: The EPA is using the most current data in the decision making process. EPA and the States continue to work to improve data collection and analysis.

EPA thanks the commenter for his comments regarding the designations for the PM2.5 standard. EPA's decisions on the State's recommendations are contained in the TSD.

Appendix A

Controlled Correspondences and Comments Received prior to 120-Day Letters



RECEIVED
APR 26 2004
AIR ENFORCEMENT BRANCH,
U.S. EPA. REGION 5

April 20, 2004

Mr. Steve Rothblatt
Assistant Regional Administrator-Air and Radiation Division
USEPA Region 5
77 West Jackson Street
Chicago, IL 60604-3590

Dear Mr. Rothblatt:

RE: PM 2.5 designations for Southwest Indiana

Once again, we are distressed that Indiana has recommended an area in southwest Indiana for designation as nonattainment that fails to uphold both the provisions of the Clean Air Act and the "Guidance on Nonattainment Area Designations for PM 2.5."

When the Clean Air Act was enacted and later amended, it was clear the Congress' intent was to treat entire Metropolitan Statistical Areas (MSA's) as singular unit for designation since they recognized the regional nature of the various pollutants.

The same thing can be said for the EPA "guidance document" issued April 1, 2003 and signed by Jeffrey R. Holmstead, Assistant Administrator for Air and Radiation.

In fact, Mr. Holmstead says essentially the same thing twice in both his memorandum and the more formal Attachment #2 of the guidance document.

In the memorandum, Holmstead says, "As explained in the guidance, we intend to apply a presumption that the boundaries for urban nonattainment areas should be based on Metropolitan Area boundaries. A metropolitan area, as defined by the Office of Management and Budget, may consist of a single Metropolitan Statistical Area in some cases, and a Consolidated Metropolitan Statistical Area in other cases... The presumptive use of metropolitan area boundaries to define urban nonattainment areas is based on recent evidence that violations of the PM_{2.5} air quality standards generally include a significant urban-scale contribution as well as a significant larger scale regional contribution..."

In the Guidance Attachment #2, EPA clearly restates the same thing, "...a nonattainment area **must** (emphasis added) be defined not only to include the area that is violating the standard, but also to include the nearby source areas that contribute to the violation. Thus, a key factor in setting boundaries for nonattainment areas is determining the geographic extent of nearby source areas contributing to the nonattainment problem. For each monitor or group of monitors that exceed the standard, nonattainment boundaries **must** (emphasis added) be set that include a sufficiently large area to include both the area judged to violate the standard and the source areas that contribute to these violations..."

In the case of southwest Indiana there are four monitors placed by IDEM, three in Vanderburgh County and one in DuBois County. All show violations of the standard for PM_{2.5}.

However, instead of following both the Clean Air Act and the guidance listed above, IDEM has recommended that only the counties where the monitors are placed be designated as 'nonattainment.'

This is particularly onerous since, in Vanderburgh County particularly, there are few sources for fine particles except from the transportation sector and diesel exhaust. However, surrounding Vanderburgh and DuBois Counties exist some of the largest sources for both direct PM_{2.5} pollution as well as the precursors for PM_{2.5}—Sulfur Dioxide and Nitrogen Oxides.

Of course, I am referring to the numerous very large coal fired power plants located in Pike, Spencer, Warrick, Posey and Gibson Counties in Indiana and Henderson/Webster Counties in Kentucky. Together, these power plants represent some of the largest sources of particulate pollution in the world but since IDEM has failed to locate monitors in these counties, they claim there must be no violation. Obviously, this is directly contradictory to the guidance but it also defies both the logic of the Clean Air Act and its purpose, which is to protect the health of United States citizens.

Monitors were ostensibly placed in both DuBois and Vanderburgh Counties because IDEM claimed, at the time, those counties would be “representative” of the region. We agreed with that assessment in the belief that any monitor placed in the region would show violations. We were right. However, now we find that IDEM has reneged on its commitment to citizens and the values of the Clean Air Act.

IDEM’s recommendation to designate only Vanderburgh and DuBois Counties as nonattainment is specious and nearly tantamount to fraud since it misrepresents the totality of the air pollution problem and its effect on the health of residents of southwest Indiana.

For them to say that Vanderburgh County or even DuBois County are responsible for the region’s voluminous particulate problem shows that they are letting politics trump science and common sense.

Valley Watch trusts that you and Region 5 will see through this façade and declare the entire region as nonattainment of the PM_{2.5} standard. At minimum, this should include the following counties, Posey, Vanderburgh, Gibson, Pike, Warrick, Spencer, Perry and DuBois Counties in Indiana and Henderson and Webster Counties in Kentucky.

We look forward to your response to this letter and working with you to achieve significant reduction in PM pollution and their precursors in the coming years.

Sincerely,



John Blair, president

CC: Governor Joseph Kernan
Senator Evan Bayh
Senator Richard Lugar
Congressman John Hostettler
Region 4 USEPA
Rep(s) Avery, Hasler, Becker
Phil Hoy
Media



PALA ENVIRONMENTAL PROTECTION AGENCY

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May 5, 2004

Wayne Nastri
U. S. EPA Regional Administrator
75 Hawthorne Street
San Francisco, CA. 94105

Handwritten tracking table with columns for various environmental categories and checkboxes. Includes handwritten date '5/10/04' and 'X' marks.

Subject: Proposed Unclassifiable Designation for PM 10/2.5 for the Pala Band of Mission Indian Reservation.

Dear: Mr. Nastri

The goals of the Pala Band of Mission Indian are to maintain good air quality, strive to protect the air resources for future generations, and exercise our inherent sovereign authority over our air shed as provided in sections 301(d) and 110(o) of the Clean Air Act.

The Pala Band of Mission Indian Reservation currently occupies approximately 12,000 acres. The reservation is located in Southern California, San Diego County, on the San Luis Rey River, approximately 30 miles east of the Pacific Ocean and approximately 60 miles north east of the city of San Diego.

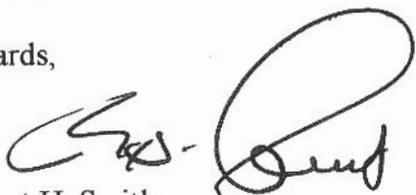
The Pala EPA is currently conducting PM 10 and PM 2.5 monitoring with a co-located Andersen Dichot 241-CU Sampler. Sampling data has been generated for one and a half year, but the required 3 years worth of data has not been collected.

If you have, any questions regarding these recommendations please contact:

Lenore Volturmo, Pala EPA Director 760 742 3174
Melvin Bitsui, Pala EPA Air Technician. 760 891 3511

We look forward to a continued dialogue with you about the designation of our area for the PM standard.

Regards,

A handwritten signature in black ink, appearing to read 'R. Smith', with a large, stylized loop at the end.

Robert H. Smith
Tribal Chairman

JUN. 9. 2004 11:05AM

SEN MITCH McCONNELL

NO. 6143

P. 1/6

U.S. Senator

MITCH McCONNELL

Room 361-A
Russell Senate Office Building

Phone: (202) 224-2541
FAX: (202) 224-2499

To: 501-1519

FROM:

Sen. Mitch McConnell

TO:

Administrator Leavitt

RE:

Nonattainment Areas

PAGES TO FOLLOW: 5

*Staff Contact: Michael Zehr
202-228-0890*

*CCU
Chelba
John
Craig
Janis W
Catherine*



W A S H I N G T O N

JUN. 9. 2004 11:06AM

SEN MITCH McCONNELL

NO. 6143 P. 2/6

MITCH McCONNELL
KENTUCKY

MAJORITY WHIP

COMMITTEES:
AGRICULTURE

APPROPRIATIONS

SUBCOMMITTEE ON FOREIGN OPERATIONS
CHAIRMAN

RULES AND ADMINISTRATION

361-A RUSSELL SENATE OFFICE BUILDING
WASHINGTON, DC 20510-1702
(202) 224-2541**United States Senate**

June 8, 2004

The Honorable Michael O. Leavitt
 Administrator
 Environmental Protection Agency
 1200 Pennsylvania Avenue, N.W.
 Washington, D.C. 20460

Dear Administrator Leavitt:

I am contacting you regarding a number of counties in Kentucky who have expressed concerns that the Environmental Protection Agency (EPA) may soon designate them as nonattainment areas according to the National Ambient Air Quality Standards for PM 2.5. In particular, some areas of northern Kentucky have specific concerns about this ongoing process.

I am enclosing a letter that I received from Harold Tomlinson, the County Judge/Executive for Carroll County, KY, that expresses his concerns with both the process and potential economic impacts that a designation as a nonattainment area could have on his county. I would appreciate your careful consideration of these concerns.

It is my understanding that the EPA is expected to make preliminary decisions on designations affecting these areas by June 15. With this date quickly approaching, it would be very helpful if you could provide me with an update on the status of this matter, as well as relevant information on EPA's decisions regarding any region of Kentucky.

Thank you for your assistance on this important issue, and I look forward to hearing from you in the near future.

Sincerely,



MITCH McCONNELL
 UNITED STATES SENATOR

Enclosure

JUN. 9. 2004 11:06AM

SEN MITCH McCONNELL

Commonwealth of Kentucky

440 MAIN STREET
SECOND FLOOR COURTHOUSE
CARRINGTON, KENTUCKY 0128



502-732-7000 OFFICE
502-732-7025 FAX
cjudg@state.ky.gov

HAROLD "SHORTY" TOMLINSON
CARRIOL COUNTY JUDGE/EXECUTIVE

June 7, 2004

Fax (202) 224-2499

Senator Mitch McConnell
361-A Russell Senate Office Building
Washington, DC 20510

Dear Senator McConnell:

As County Judge/Executive, I have been proud of our county's efforts to attract good paying jobs. We can no longer depend on tobacco for our future and economic development has and will continue to be a priority for our community. Fortunately, our efforts have been successful. The decision of Acerinox, S.A. of Madrid, Spain to locate North American Stainless in our county has created more than 900 good paying jobs. Acerinox has invested more than \$1.2 billion in NAS which is considered one of the most advanced stainless steel mills in the world. NAS represents the single largest Spanish investment in the United States and you may recall that H.R.H. Prince Felipe, the Spanish Crown Prince, dedicated the \$260,000,000 Hot Mill in 1999. We are also very proud that the men and women of NAS are exporting substantial tonnage to China. Therefore, we believe that NAS is very important to the future of our county and the Commonwealth.

I am writing to you because we greatly need your assistance with regard to recent developments with EPA which may jeopardize future expansions at NAS as well as our other manufacturers. Last Wednesday, June 2, I attended a conference sponsored by the Kentucky Division for Air Quality (DAQ). At this conference, we were advised that EPA may reject the Commonwealth's analysis and recommendations for PM-2.5 designations and designate as nonattainment not only all the northern Kentucky counties in the Cincinnati-Hamilton MSA but also our county.

We understand that EPA intends to make its decision about our county by June 15. If EPA designates our county as nonattainment, our county will be harmed greatly for no reason. Though I do not want to burden you with too many details, I think it is important to advise of

JUN. 9. 2004 11:06AM

SEN MITCH McCONNELL L COURT

SNO. 6143782P. 4/6² 02/04

Commonwealth of Kentucky

440 MAIN STREET
SECOND FLOOR COURTHOUSE
CAMPBELL, KENTUCKY 40301



502-722-2000 OFFICE
502-722-2023 FAX
ccjudge@bellnet.com

HAROLD "SHORTY" TOMLINSON
CARROLL COUNTY JUDGE/EXECUTIVE

what I have learned since attending the DAQ conference. Therefore, I hope the following is of assistance:

KENTUCKY DAQ

The Clean Air Act requires States to classify Air Quality Control Regions (usually counties) within the States as being in attainment or nonattainment with National Ambient Air Quality Standards. The EPA issued guidance in April 2003 to its Regional Administrators for the purpose of assisting States in making Clean Air Act designations for PM-2.5 ambient air quality standard. The guidance recommends use of Metropolitan Statistical Areas (MSAs) as presumptive definitions for source areas contributing to PM-2.5 nonattainment problems. The guidance also identifies factors that can be considered in deviating from MSA boundaries to make nonattainment areas either larger or smaller than the MSA. EPA's guidance also recommends that States promote consistency between PM-2.5 designations boundaries and used for implementation of the 8-hour ozone standard, in order to coordinate planning and control strategies. This is because many of the same sources of pollutants will influence both the ozone and PM-2.5 standards (e.g., NOx and VOC are precursors of both ozone and PM-2.5).

DAQ's analysis and recommendations for PM-2.5 nonattainment designations were conducted in accordance with the guidance and included an assessment of the Kentucky portion of the Cincinnati-Hamilton, OH-KY-IN MSA, which includes Campbell, Kenton, Boone, Gallatin, Grant, and Pendleton Counties. The Commonwealth's analysis of all relevant factors concluded that none of the Kentucky counties in the MSA could justifiably be classified nonattainment for PM-2.5.

EPA

EPA apparently may challenge Kentucky's conclusion and may even go further to propose that Carroll County be included in the nonattainment area designation. We strongly disagree and object to EPA's announced intentions. In the first instance, there are no data demonstrating that Carroll County exceeds the PM 2.5 standard, this despite a requirement that EPA collect such data. Furthermore, Carroll County is not part of the Cincinnati-Hamilton, OH-KY-IN MSA. Additionally, there are no factors that justify including Carroll County within the boundaries of the nonattainment area for this region.

As mentioned above, EPA's own guidance document recommends confirming PM-2.5 nonattainment areas with 8-hour ozone nonattainment areas. There is no basis for including

JUN. 9. 2004 11:06AM

SEN MITCH McCONNELL U.S. COURT

NO. 6143702P. 5/6. 03/04

Commonwealth of Kentucky

640 MAIN STREET
SECOND FLOOR COURTHOUSE
CARROLLTON, KENTUCKY 40008



502-732-2000 OFFICE
502-732-7023 FAX
cshd@bellcourts.net

HAROLD "SHORTY" TOMLINSON CARROLL COUNTY JUDGE/EXECUTIVE

Carroll County because the boundary designation for the 8-hour ozone standard in this area includes only Boone, Campbell, and Kenton Counties in Kentucky. Carroll County is not even contiguous to any of these counties.

As EPA notes in its guidance, section 107(d) of the Clean Air Act specifies that nonattainment areas shall include "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." The guidance further notes that areas should be classified "nonattainment" if they are "violating a standard or contributing to nearby violations."

Because there are no PM-2.5 ambient air quality data for Carroll County, there is no basis whatsoever to conclude that the county is violating the PM-2.5 ambient air quality standard. Also, there is no basis for classifying the county as nonattainment because there is no demonstration that the county contributes to nearby ambient air quality standard violations.

The nearest downwind county is Gallatin County, which is located in the MSA. Kentucky's analysis of counties in the MSA concluded that Gallatin County, even though located within the MSA, should be classified attainment because there are no data showing nonattainment in the county. Moreover, the nearest monitors further downwind in Kenton County demonstrate attainment with the PM-2.5 standard. Further, the analysis concluded that emissions in Gallatin County are negligible, do not contribute to nonattainment in the MSA, and recommended Gallatin County be classified as attainment. If Gallatin County is not contributing to nearby violations and itself has no data showing violations, then neither can the further upwind county (Carroll) be contributing to ambient air quality violations.

Also, it is important to understand that in those Kentucky counties within the MSA where PM-2.5 concentrations have been monitored, the data for the period 2001-2003 show attainment with the annual average design values. For Campbell County the 3-year average PM-2.5 value is 13.9 micrograms per cubic meter, and for Kenton County the 3-year average is 14.9 micrograms per cubic meter. These data demonstrate that upwind sources in Gallatin County, much less, distant Carroll County, are not contributing to nonattainment in those counties where the greatest potential for impacts would be expected.

We strongly believe that there is no justification for designating Carroll County as nonattainment for PM-2.5. We believe that EPA may seek to include Carroll County within the proposed PM-2.5 nonattainment designation solely because the LG&E Ghent Generating Station (coal-fired electric utility) is located just within the boundary line between Carroll and Gallatin

JUN. 9. 2004 11:06AM

SEN MITCH McCONNELL COURT

SNO. 6143722P. 6/8/04/04

Commonwealth of Kentucky

440 MAIN STREET
SECOND FLOOR COURTHOUSE
CARROLLTON, KENTUCKY 40011



502-743-7000 OFFICE
502-743-7003 FAX
-jtp@ballboon.net

HAROLD "SHORTY" TOMLINSON
CARROLL COUNTY JUDGE/EXECUTIVE

Countries. EPA has ample authority elsewhere in the Clean Air Act to regulate point source emissions from power plants and should not subject our entire county to a nonattainment designation simply for the purpose of exerting regulatory control over one facility.

CONCLUSION

Therefore, we respectfully submit the law requires that EPA demonstrate that the county is either exceeding the standard or is contributing to nearby nonattainment. All the available data suggests that neither of these requirements is met. Accordingly, it would appear that if EPA attempts to include Carroll County within the greater Cincinnati PM-2.5 Nonattainment Designation that EPA will not comply with its own policy or the Clean Air Act.

Though we understand the important job that EPA is performing for our citizens, it seems to me that EPA will make a terrible mistake if it designates Carroll County as nonattainment for PM-2.5. If EPA on June 15 includes Carroll County, this mistake will have a dramatic impact on our future. As you are very well aware from your knowledge of our community, we need to create additional jobs at NAS and elsewhere and very much appreciate your interest and support of efforts to secure the jobs for the citizens of Carroll County. We will greatly appreciate it if you will inquire of EPA as to the status of this matter and determine how we may best make our concerns known to EPA.

Sincerely,


Harold Tomlinson
County Judge/Executive


State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897

June 11, 2004

Michael Leavitt, Administrator
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave N.W.
Mail Stop Code 3213A
Washington, D.C. 20460

RECEIVED

JUL - 7 2004

**OFFICE OF THE
EXECUTIVE SECRETARIAT**

Subject: Response to U.S. EPA Request for Recommended PM-2.5 Area Designations

Dear Administrator Leavitt;

Wisconsin is pleased that the US-EPA is moving forward to implement the PM-2.5 national ambient air quality standards. The new standards can be expected to result in improvements to the respiratory health and general well-being of millions of the nation's residents.

At this time I am not in a position to recommend any designation of Wisconsin counties as either attainment or nonattainment for purposes of EPA's designation process for a number of reasons. EPA has not promulgated the PM-2.5 implementation guidance and a final designation memorandum. Wisconsin's most recent year of data for the annual standard (2003) has not been fully quality-assured. In addition, the regional assessment of the relative scope and significance of Wisconsin direct contribution to the PM-2.5 problem in downwind nonattainment areas has not been finalized.

Wisconsin believes EPA needs to finalize the PM-2.5 guidance and promulgate this guidance as expeditiously as practicable so we can pursue timely discussion regarding your proposed area designations in the context of final EPA guidance. I also understand that EPA will send preliminary designations to all states by early summer, whether or not a state has made a formal recommendation. Therefore, I urge EPA to provide Wisconsin with the full 120day review and appeal process for such action as directed by the Clean Air Act once the implementation guidance for this new standard is complete.

Sincerely,

Jim Doyle
Governor

Co: Scott Hassett, DNR
Al Shea, DNR
Lloyd Eagan, DNR

Jun 16 2004 12:08

P.01

CASS BALLENGER

10TH DISTRICT, NORTH CAROLINA

DEPUTY MAJORITY WHIP

COMMITTEE ON EDUCATION
AND THE WORKFORCE

SUBCOMMITTEE ON WORKFORCE PROTECTION
EMPLOYER-EMPLOYEE RELATIONS

INTERNATIONAL RELATIONS COMMITTEE
SUBCOMMITTEE ON WESTERN HEMISPHERE
(CHAIRMAN)

SUBCOMMITTEE ON INTERNATIONAL
OPERATIONS AND HUMAN RIGHTS

2122 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-3310
202-225-2576
cass.ballenger@mail.house.gov
www.house.gov/ballenger/

**Congress of the United States
House of Representatives
Washington, DC 20515-3310**

DISTRICT OFFICE:

P.O. BOX 1830
351-16TH AVENUE DRIVE, NE
HICKORY, NC 28603
828-327-6100
1-800-677-3678 TOLL FREE

Facsimile Transmission

To: Administrator Leavitt

Date: 6/16

Fax: 501-1450

From:

- | | | | |
|-----------------------|-------------------------------------|-----------------|-------|
| Congressman Ballenger | <input checked="" type="checkbox"/> | Heath Weems | _____ |
| Roberta Hood | _____ | Teresa McFadden | _____ |
| Gail Davies | _____ | Mark Baxter | _____ |
| Preston Hartman | _____ | Bob Meek | _____ |

Mary-Margaret Smith _____

Pages (not including cover sheet): 4

Comments:

If you have any questions regarding this fax, please call 202-225-2576.

Jun. 16 2004 12:09

P. 02

CASS BALLENGER

10TH DISTRICT, NORTH CAROLINA

DEPUTY MAJORITY WHIP

COMMITTEE ON EDUCATION
AND THE WORKFORCESUBCOMMITTEE ON WORKFORCE PROTECTIONS
EMPLOYER-EMPLOYEE RELATIONS

INTERNATIONAL RELATIONS COMMITTEE

SUBCOMMITTEE ON WESTERN HEMISPHERE
CHAIRMANSUBCOMMITTEE ON INTERNATIONAL
OPERATIONS AND HUMAN RIGHTS**Congress of the United States
House of Representatives
Washington, DC 20515-3310**

June 16, 2004

2182 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-3310
202-225-2578
cassb.ballenger@mail.house.gov
www.house.gov/ballenger/**DISTRICT OFFICE:**P.O. BOX 1830
381-10TH AVENUE DRIVE, NE
HICKORY, NC 28603
828-927-6100
1-800-477-2578 TOLL FREE**The Honorable Michael O. Leavitt
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460****Dear Administrator Leavitt:**

I am contacting you regarding counties in the 10th District of North Carolina which have expressed concerns that your agency may soon designate them as nonattainment areas according to the National Ambient Air Quality Standards (NAAQS) for PM 2.5. This designation would be devastating to the economy of the 10th District, especially considering its huge loss of manufacturing jobs over the past three years. Although my state has worked with the Environmental Protection Agency (EPA) to address federal concerns regarding PM 2.5, it appears we are being penalized in spite of our efforts.

Specifically, Rutherford and Burke counties would be unduly punished by a nonattainment designation as neither of these counties has a monitor in their area. Despite this lack of hard science, they are reported to be under consideration by the EPA for nonattainment status due to a coal-fired energy generating unit (EGU) in the area. The Cliffside EGU, located in Rutherford county and owned by Duke Power, went through a \$60 million upgrade over the past year to reduce SOx and NOx emissions. These controls have been put into place despite a slow economy that has resulted in unemployment rates of over ten percent for the past year in Rutherford county.

I am enclosing a letter from County Manager Ron George of Burke County, North Carolina, that expresses concerns with both the process and potential economic impacts that a designation of a nonattainment area could have on this county alone. It appears that Burke county is being thrown into the mix for the single reason that EPA needs a land bridge between Catawba county (where the violating monitor is located) and Rutherford county. EPA is ignoring the fact that McDowell county to the west has a non-violating monitor. I want to see the science behind your agency's policy in this situation, especially considering the consistently high unemployment rate in the area (8.1% unemployment for Burke county in 2003). In times like these, it is important that the EPA focus on fact-based policy initiatives and consider regulatory flexibility to the greatest extent possible.

Jun 16 2004 12:09

P.03

The Honorable Michael O. Leavitt

June 16, 2004

Page 2

It is my understanding that the EPA is expected to make preliminary decisions on designations affecting these areas by June 30. My constituents have brought forth legitimate concerns regarding these potential designations which deserve a thorough response. I strongly urge you to reconsider any recommendations that go beyond those put forth by North Carolina Department of Environment and Natural Resources Secretary William Ross in his February letter to EPA Regional Administrator James Palmer.

Thank you for your assistance on this important issue. I look forward to a written response to my constituents' concerns in the near future.

Sincerely,

Cass Ballenger
CASS BALLENGER
Member of Congress

CB:mb
Enclosure

Jun 16 2004 12:09

P.04

06/18/04 09:18 8284362782

BURKE COUNTY

002/003

Thomas K. Johnson, Chairman
Maynard Taylor, Vice Chairman
Wayne F. Abele, Sr., Commissioner
Benny Orders, Commissioner
Ruth Ann Suttle, Commissioner



Ron George, Manager
Vicki Craigo, Clerk to the Board
Dan Kuehnert, Attorney

Burke County

June 16, 2004

Congressman Cass Ballenger
2182 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Ballenger:

We understand that the Environmental Protection Agency is planning to designate Burke County as being an air quality non-attainment area for particulate matter (pm). This designation is scheduled to be made prior to July 1st.

The Burke County Board of Commissioners is very opposed to this designation for several reasons:

1. The air quality monitor which measures particulate matter (pm) is in Catawba County not Burke County. This monitor has readings slightly above the permitted amount and therefore Catawba County has been proposed for non-attainment designation. McDowell County which is adjacent to Burke County to the west has a monitor that is in compliance. No other county adjacent to Catawba County has been proposed for designation except for Burke. There is no evidence to suggest that the air quality is any different in Burke County than other counties adjacent to Catawba and no evidence that the air quality in Burke County is not in compliance with standards.
2. The North Carolina Division of Air Quality did not recommend Burke County to be included in the pm non-attainment designation due to a lack of data indicating that Burke County should be included.

Jun 16 2004 12:09

P.05

06/16/04

09:20

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BURKE COUNTY

003/003

3. In addition to Catawba and Burke, Rutherford County is also scheduled to be designated apparently because of a large coal-fired power generation plant. Rutherford County also has no monitor and can only be legally designated if it is adjacent to another designated County. Since Burke County is adjacent to both Catawba and Rutherford, Burke County can serve as a "bridge" between the two counties. In other words, Rutherford County cannot be non-attainment unless Burke is also non-attainment. If this reasoning has impacted Burke County's designation it is clearly wrong and unfair to us.

We are asking for your help in contacting the EPA to try and get Burke County off of this proposed designation list for pm non-attainment status. As you know Burke County has been hard hit by economic decline over the past several years. We are working to rebuild our local economy and further air quality restrictions can only hinder this effort.

On behalf of the Burke County Board of Commissioners we seek your assistance in helping us avoid this unfair regulatory burden.

Thank you for your assistance.

Sincerely yours,


Ron George
County Manager

cc: Burke County Board of Commissioners

jf

Richard P. Nardis
GOVERNOR



Mary V. Thomas
LIEUTENANT GOVERNOR

Gila River Indian Community
EXECUTIVE OFFICE OF THE GOVERNOR & LIEUTENANT GOVERNOR

June 17, 2004

Wayne Nastri
Regional Administrator
U.S. Environmental Protection Agency-Region 9
75 Hawthorne Street
San Francisco, CA. 94105-3901

RE: PM 2.5 Designation Recommendation for the Gila River Indian Community

Dear Mr. Nastri,

Thank you for the opportunity to submit a recommendation for the areas under the Gila River Indian Community's jurisdiction for the PM 2.5 National Ambient Air Quality Standard. In accordance with provisions of the Clean Air Act, the Gila River Indian Community (GRIC or Community) recommends that the U.S. Environmental Protection Agency designate the air quality management area within Community exterior boundaries as unclassifiable for the PM 2.5 National Ambient Air Quality Standard. This management area includes all GRIC lands within both Maricopa and Pinal Counties.

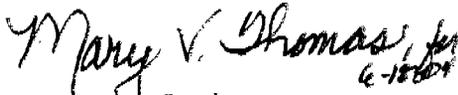
The Community, with support from GRIC Tribal Council (see attached resolution), makes this recommendation based on several factors. Current monitoring data for fine particulate matter collected since March, 2002 by the GRIC Department of Environmental Quality indicates the Community's air quality is well within the required standard for PM 2.5. In fact, monitoring data for the State of Arizona suggests fine particulates are not a problem for the state and a violation has never occurred. Though a third year of data from the Community is required to make a designation recommendation of attainment for PM 2.5, GRIC does not anticipate elevated levels from sources on or off the Community. Until the additional monitoring data can be collected for PM 2.5, GRIC is recommending a designation of unclassifiable. An Emissions Inventory of the various pollution sources within the Community was performed in 1997. Though PM 2.5 was not one of the pollutants estimated in the inventory, sources most likely to emit significant levels of fine particulates are not present at GRIC.

This designation recommendation incorporates the same GRIC boundaries established through the process of receiving an eligibility determination for implementing Clean Air Act programs (the Treatment as a State status) in accordance with the Tribal Authority Rule and the Clean Air Act. In April of 1999, GRIC applied for and received eligibility

under Section 105 of the Clean Air Act from EPA to receive funding to develop an ongoing air quality program. The Community has actively taken on the responsibility of protecting human health and the environment by drafting a Tribal Implementation Plan (TIP) to regulate both major and minor sources of air pollution at GRIC. The TIP allows the tribe to exercise its rights and responsibilities as a sovereign nation.

The Gila River Indian Community looks forward to continuing our work with EPA to find the optimum strategies for the protection of human health and the environment.

Sincerely,

A handwritten signature in cursive script that reads "Mary V. Thomas". To the right of the signature, there is a date "6-18-04" written in a smaller, less legible hand.

Richard P. Narcia
Governor

- cc: GRIC Council members
Janet Napolitano, Governor, State of Arizona
Doug McDaniel, EPA Region 9
Colleen McKaughan, EPA Region 9
Steve Page, OAQPS
Laura McKelvey, OAQPS
Steve Owens, ADEQ
Dennis Smith, MAG
Don Gabrielson, Pinal County AQCD
Al Brown, MCESD
Pat Mariella, GRIC DEQ

Attachments: GRIC PM 2.5 Monitoring Data
GRIC Council Resolution GR-37-04



GILA RIVER INDIAN COMMUNITY

SACATON, AZ 85247

RESOLUTION GR-37-04

A RESOLUTION RECOMMENDING THAT THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY DESIGNATE THE GILA RIVER INDIAN COMMUNITY AS UNCLASSIFIABLE FOR THE FINE PARTICULATE MATTER NATIONAL AMBIENT AIR QUALITY STANDARD

WHEREAS, the Gila River Indian Community (the "Community") is highly committed to the protection of human health and the environment; and

WHEREAS, the Community has jurisdiction over more than 374,000 acres in central Arizona; and

WHEREAS, the Community has developed a Department of Environmental Quality to manage and protect human health and the environment and has received an eligibility determination from the U.S. Environmental Protection Agency (EPA) to implement Clean Air Act programs within the exterior boundaries of the Community as a separate and sovereign jurisdiction; and

WHEREAS, sources of fine particulate matter (PM_{2.5}) from within the Community do not cause nor contribute to violations of the PM_{2.5} National Ambient Air Quality Standard (NAAQS), nor is the Community receptor for excess levels of PM_{2.5} generated elsewhere; and

WHEREAS, there are no significant sources located within the Community which have the potential for causing violations of the PM_{2.5} NAAQS; and

WHEREAS, data collected for two years at two PM_{2.5} monitoring sites within the Community have measured levels well within the NAAQS; and

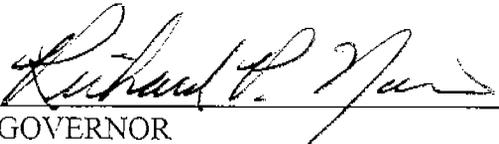
WHEREAS, fine particulates are not a significant problem in the State of Arizona and to date, no monitoring sites within the State have measured violations of the PM_{2.5} NAAQS;

NOW, THEREFORE BE IT RESOLVED, that the Gila River Indian Community Council hereby strongly recommends that the United States Environmental Protection Agency designate the entire Gila River Indian Community as unclassifiable under the PM_{2.5} NAAQS.

CERTIFICATION

Pursuant to authority contained in Article XV, Section 1, (a), (1), (7), (9), (18) and Section 4 of the amended Constitution and Bylaws of the Gila River Indian Community, ratified by the Tribe January 22, 1960 and approved by the Secretary of the Interior on March 17, 1960, the foregoing Resolution was adopted this 7th day of April, 2004, at a Regular Community Council Meeting held in District 3, Sacaton, AZ, at which a quorum of 13 Members were present by a vote of: 13 FOR; 0 OPPOSE; 0 ABSTAIN; 4 ABSENT; 0 VACANCY.

GILA RIVER INDIAN COMMUNITY

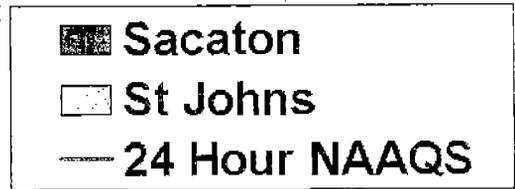

GOVERNOR

ATTEST:

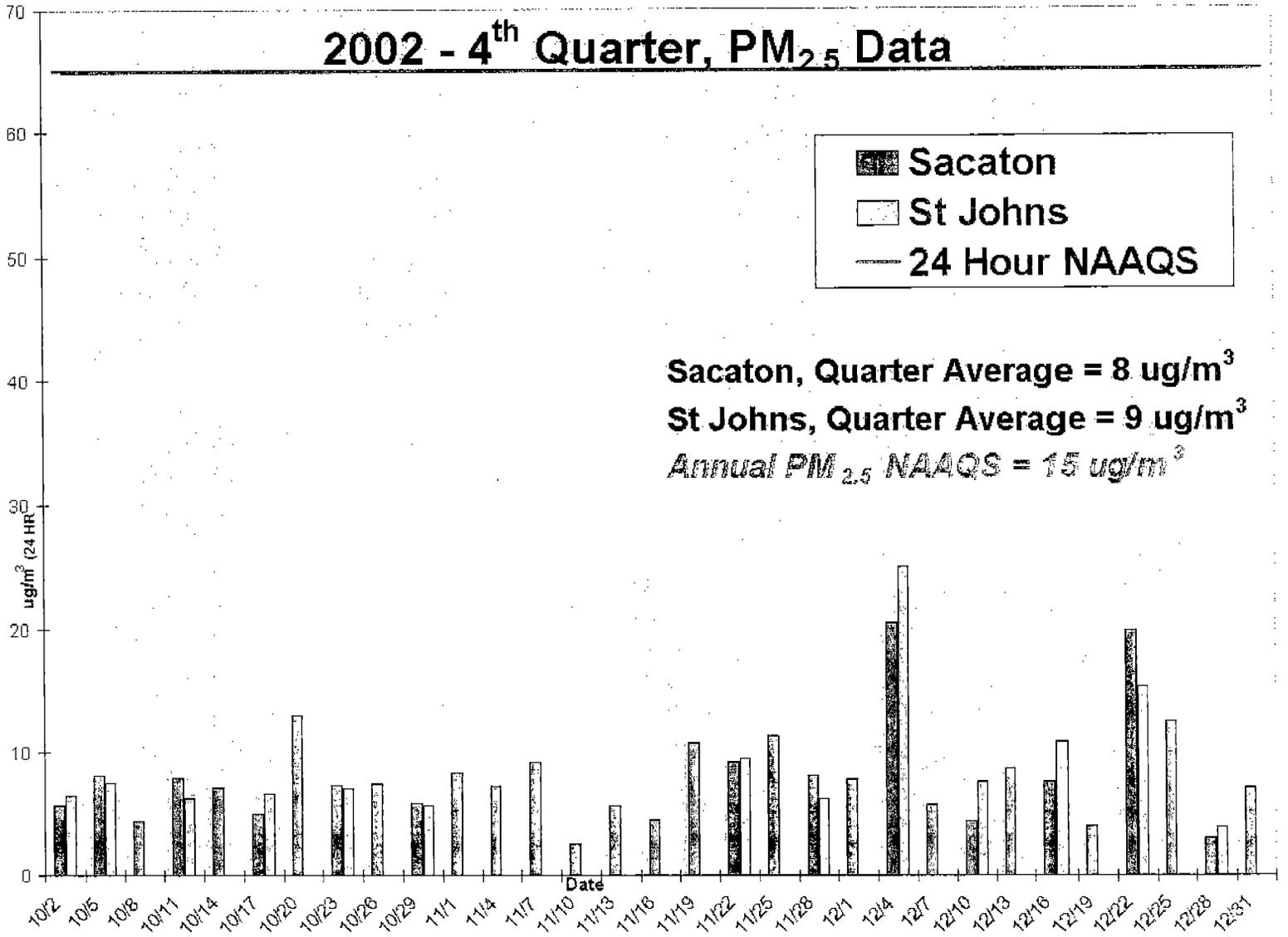

COMMUNITY COUNCIL SECRETARY

APR 10 2004
11:11 AM
GILA RIVER INDIAN COMMUNITY

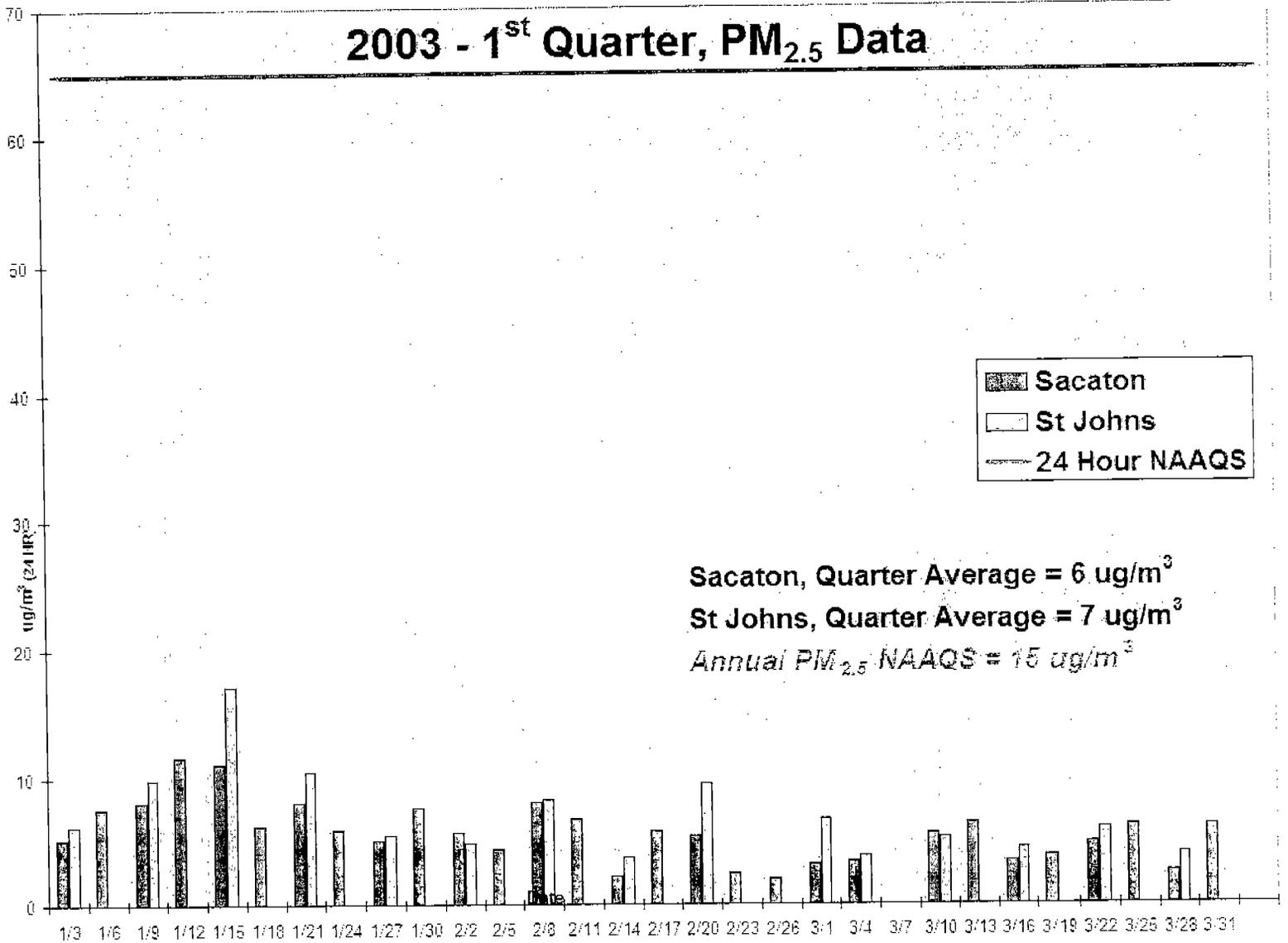
2002 - 4th Quarter, PM_{2.5} Data



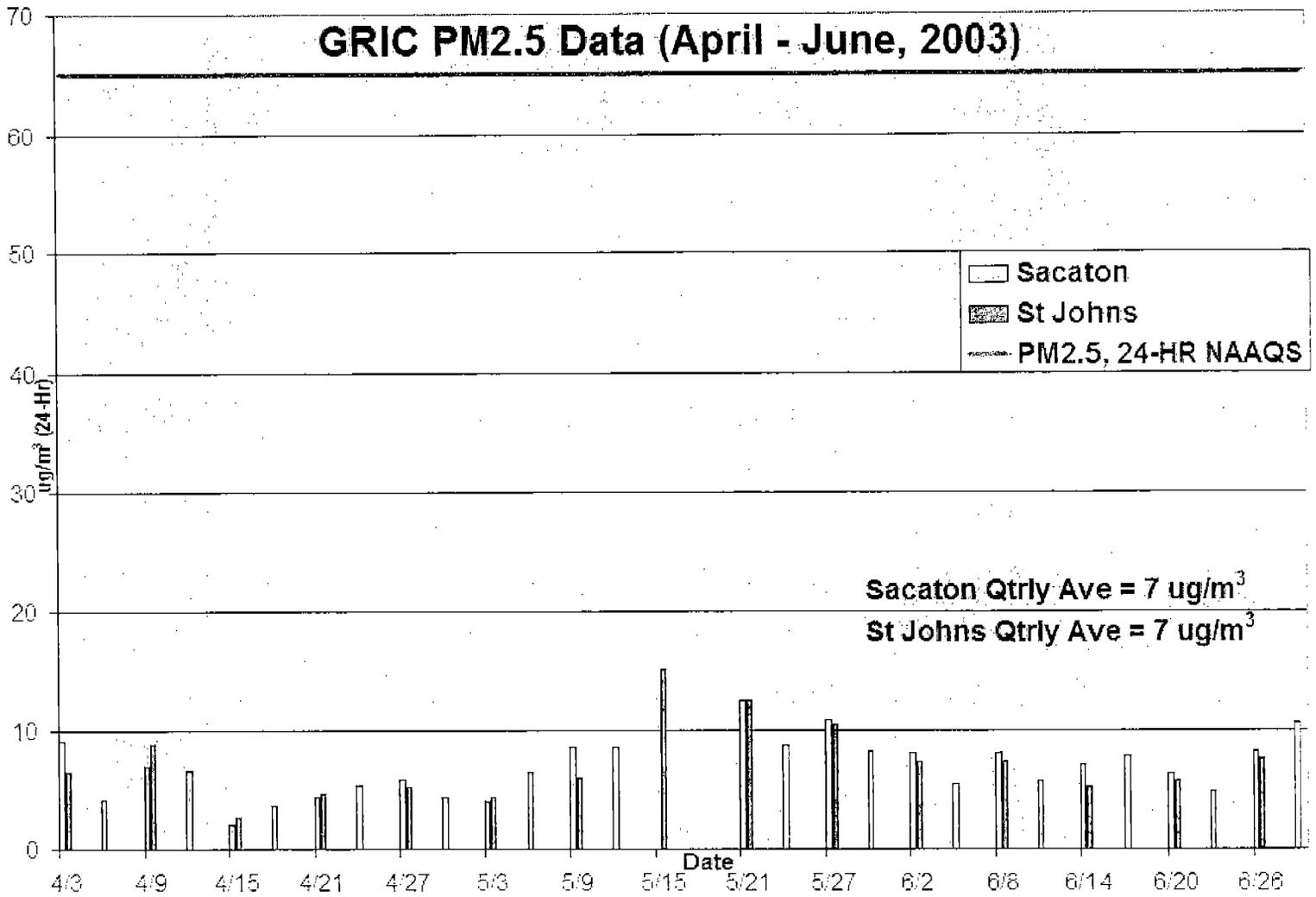
Sacaton, Quarter Average = 8 ug/m³
St Johns, Quarter Average = 9 ug/m³
Annual PM_{2.5} NAAQS = 15 ug/m³



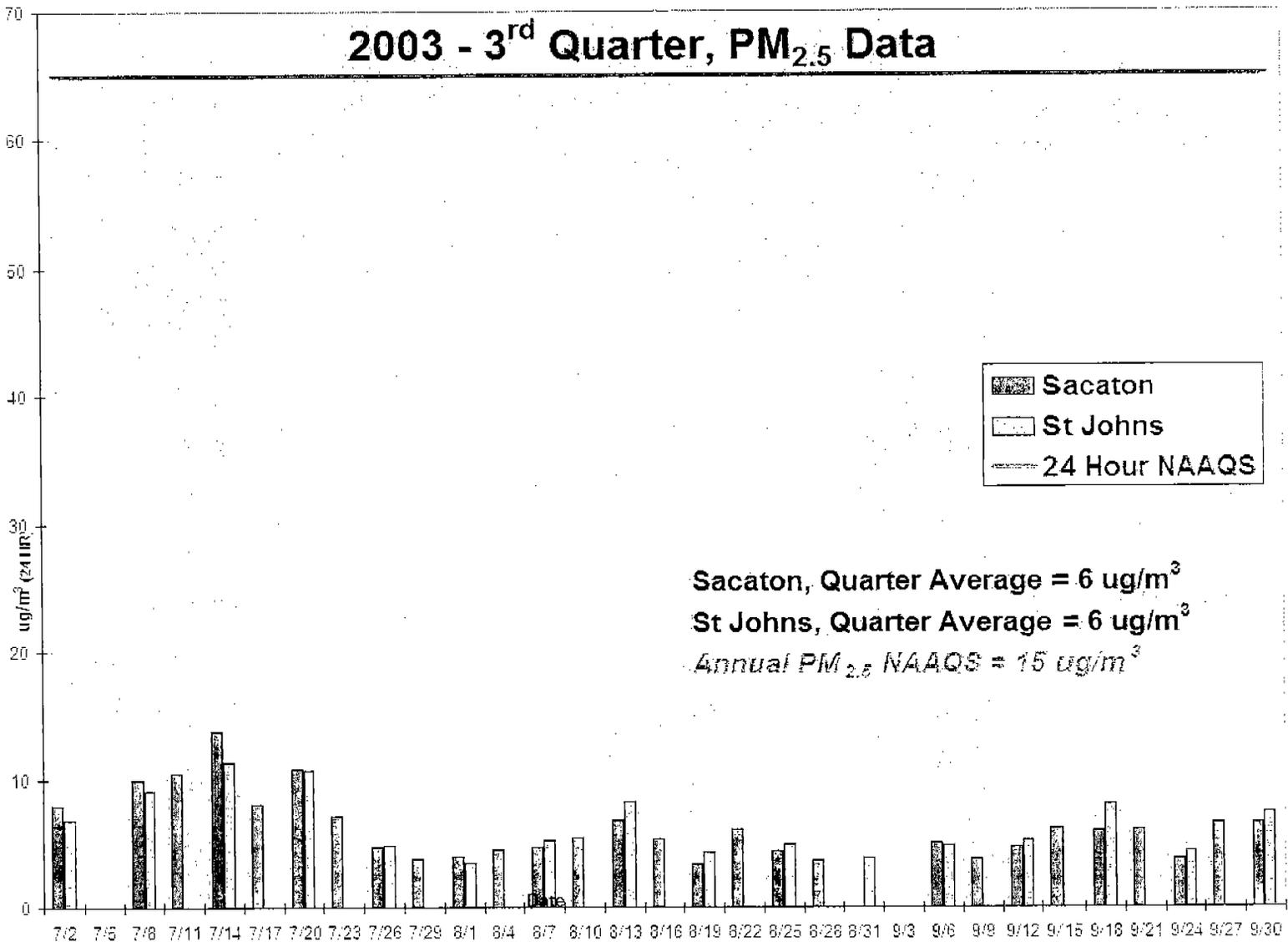
2003 - 1st Quarter, PM_{2.5} Data



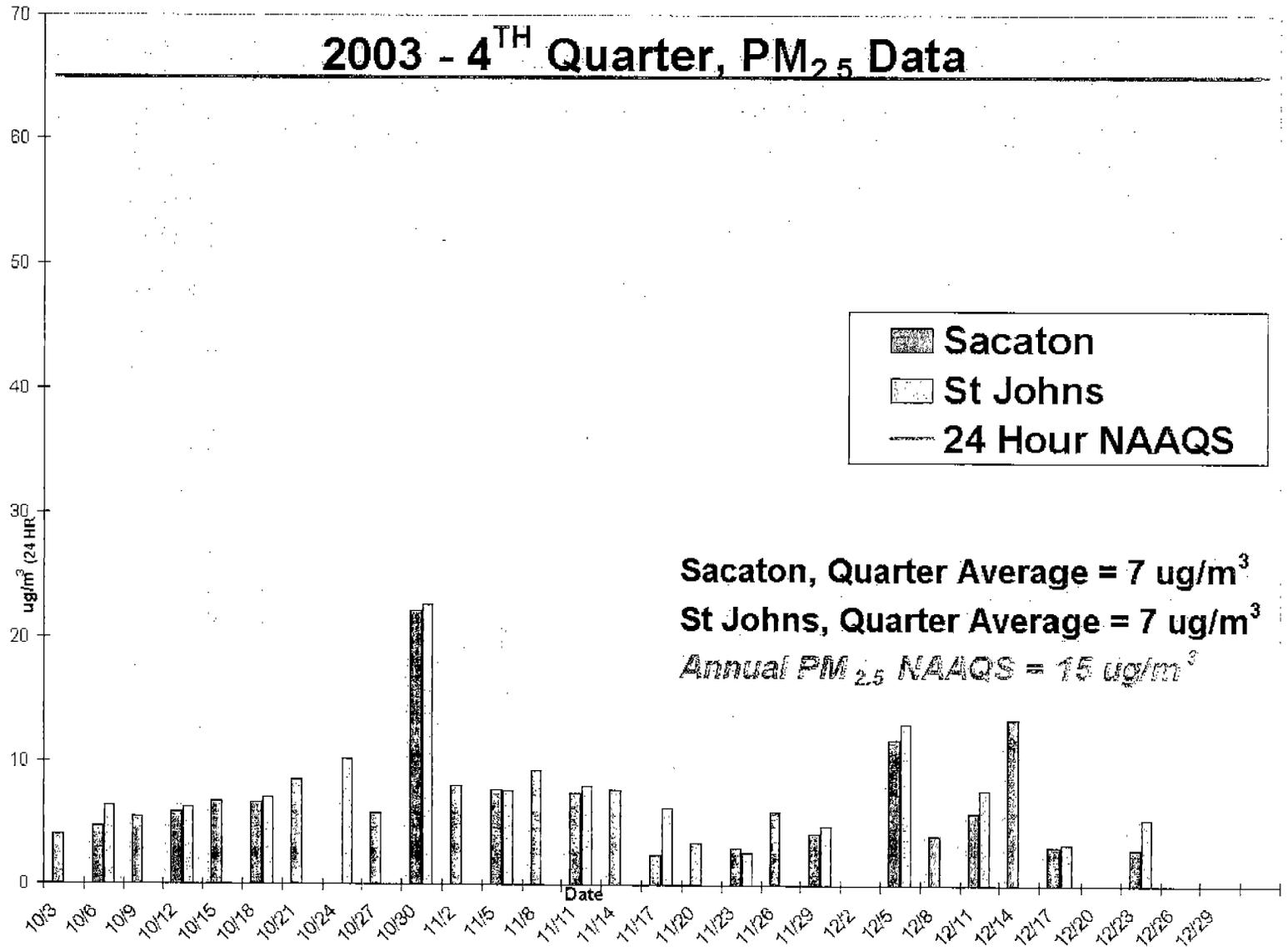
GRIC PM2.5 Data (April - June, 2003)



2003 - 3rd Quarter, PM_{2.5} Data



2003 - 4TH Quarter, PM_{2.5} Data





STATE OF INDIANA
HOUSE OF REPRESENTATIVES
THIRD FLOOR STATE HOUSE
INDIANAPOLIS, INDIANA 46204

L. Jack Lutz
5070 Stonespring Way
Anderson, IN 46012
website: www.in.gov/h35

COMMITTEES:
Commerce, Economic Development, RMM
Environmental Affairs

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JUL - 7 2004

OFFICE OF THE
EXECUTIVE SECRETARIAT

June 28, 2004

Michael Leavitt, Administrator
United States Environmental Protection Agency
1101 A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator Leavitt,

I am writing today regarding the process the EPA is using to determine nonattainment areas for fine particle standards. I would like to thank you in advance for your time and consideration.

It is my understanding that the EPA is planning to base its proposed PM2.5 nonattainment designations on a very flawed analysis scheme. This scheme will result in nonattainment status for many counties where air quality actually meets the health standard and where the designation is not necessary to address sources that may be contributing to regional air pollution levels. This is a great concern to me because a county in my district, Hamilton County, would be considered nonattainment under this new proposal and this status could unnecessarily impact economic development efforts in our area.

Again, thank you for your consideration. I truly hope you will reconsider this policy and limit nonattainment designations to areas where measured air quality exceeds a health standard or where it is necessary to achieve needed reductions.

Sincerely,

L. Jack Lutz
State Representative

LJL/ab

4

Appendix B
Supporting Information



ENVIRONMENTAL DEFENSE

finding the ways that work

September 1, 2004

Jeffrey R. Holmstead
Assistant Administrator, Air and Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W. (Mailcode 6101A)
Washington, D.C. 20460

Stephen D. Page
Director, Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency (Mailcode C404-04)
Research Triangle Park, NC 27711

Dear Mr. Holmstead and Mr. Page:

Today Environmental Defense and several other environmental organizations submitted a letter to you with detailed comments on the PM_{2.5} nonattainment area boundaries. With this letter, we are submitting the spreadsheets that were used for much of that analysis.

- ❖ The first spreadsheet, entitled “PM_{2.5} Designations – Potential Nonattainment Areas and Factors for Consideration,” (May 21, 2004) was developed by OAQPS.
- ❖ The second spreadsheet, entitled “PM_{2.5} Nonattainment Area Recommendations – Comparison of State, EPA and Environmental Coalition Recommended Area,” (September 1, 2004) was developed by Environmental Defense. The result of the analysis shown in this spreadsheet shows that 406 counties should be included in the nonattainment areas in order to include complete C/MSAs and to properly control emissions. EPA’s recommendations left out 30 coal-fired power plants that are either in or adjacent to nonattaining C/MSAs. The sulfur dioxide (SO₂), totaling 451,453 tons per year, and nitrogen oxides (NO_x), totaling 164,569 tons per year, from these facilities contribute greatly to fine particulate air pollution.
- ❖ The last spreadsheet, also developed by Environmental Defense, is titled “Power Plants in and Near PM_{2.5} Nonattainment Areas,” (2004). This is a comprehensive list of all the power plants in and near PM_{2.5} nonattainment areas.

Please consider the transmission of these spreadsheets to be an official submittal to EPA for its PM_{2.5} boundary designations process.

Sincerely,

Cindy Copeland
Environmental Defense
2334 North Broadway
Boulder, CO 80304
303-440-4901

Enclosures

cc: Lydia Wegman, EPA OAQPS
Rich Damberg, EPA OAQPS
Larry Wallace, EPA OAQPS

PM2.5 Nonattainment Area Recommendations - Comparison of State, EPA and Environmental Coalition Recommended Areas (9/1/04)													
State	Area Name	State Recommended NAA Counties	EPA Recommended NAA Counties	# Complete Counties	# Partial Counties	Power Plants Not Included in EPA Recommendations	# Plants	SO2 in TPY	NOx in TPY	Environmental Coalition Recommended Nonattainment Counties	# Counties Recommended by Environmental Coalition		
Alabama	Atlanta									Chambers	1		
	Birmingham	Jefferson	Jefferson								Jefferson		
			Shelby								Shelby		
			Walker	3							Walker		
											Bibb		
											Blount		
	Chattanooga										Chilton		
											Cullman		
												Gadsden (Etowah)	1
										8741	1918	Etowah	
											St. Clair	9	
	Chattanooga		Jackson	1							Jackson	1	
Columbus	Russell		Lee								Lee		
			Russell	2							Russell		
											Macon	3	
California	Imperial County	Calexico City								Imperial	1		
Los Angeles	Los Angeles	Los Angeles(P)	Los Angeles(P)								Los Angeles		
		Orange	Orange								Orange		
		Riverside (P)	Riverside (P)								Riverside		
		San Bernardino (P)	San Bernardino (P)	1	3						San Bernardino		
											Ventura	5	
San Diego	San Diego	San Diego	1							San Diego	1		
San Joaquin Valley	Fresno	Fresno	Fresno								Fresno		
		Kern (P)	Kern (P)								Kern		
		Kings	Kings								Kings		
		Madera	Madera								Madera		
		Merced	Merced								Merced		
		San Joaquin	San Joaquin								San Joaquin		
		Stanislaus	Stanislaus								Stanislaus		
	Tulare	Tulare	7	1						Tulare	8		
Connecticut	New York	New Haven	Fairfield								Fairfield		
			New Haven	2							New Haven		
											Litchfield	3	
Delaware	Philadelphia	New Castle	New Castle	1						New Castle	1		
DC	Washington	DC	DC	1						DC			
Georgia	Athens	Clarke	Clarke								Clarke		
			Madison								Madison		
			Oconee	3							Oconee		
											Oglethorpe	4	
	Atlanta	Barrow	Barrow	Barrow								Barrow	
			Bartow	Bartow								Bartow	
			Carroll	Carroll								Carroll	
			Cherokee	Cherokee								Cherokee	
			Clayton	Clayton								Clayton	
			Cobb	Cobb								Cobb	
Coweta			Coweta								Coweta		
DeKalb	DeKalb								DeKalb				
Douglas	Douglas								Douglas				
Fayette	Fayette								Fayette				
Forsyth	Forsyth								Floyd				
Fulton	Fulton								Forsyth				

		Gwinnett	Gwinnett							Fulton	
		Hall	Hall							Gwinnett	
		Heard (P)	Heard (P)							Hall	
		Henry	Henry							Heard (P)	
		Newton	Newton							Henry	
		Paulding	Paulding							Newton	
		Rockdale	Rockdale							Paulding	
		Spalding	Spalding							Rockdale	
		Walton	Walton							Spalding	
			Jasper							Walton	
			Putnam	22	1					Jasper	
										Putnam	
										Butts	
										Dawson	
										Haralson	
										Lamar	
										Meriwether	
										Pickens	
										Pike	
										Polk	
										Troup	
										Upson	34
Georgia	Floyd County	Floyd	Floyd	1						recommended as part of Atlanta NAA	
Georgia	Chattanooga	Walker	Walker							Walker	
			Catoosa							Catoosa	
			Dade	3						Dade	3
	Columbus		Harris							Harris	
			Muscogee	2						Muscogee	
										Chattahoochee	
										Marion	4
	Macon	Bibb	Bibb							Bibb	
			Monroe (P)	1	1					Monroe	
										Crawford	
										Houston	
										Jones	
										Peach	
										Putnam	
										Twiggs	8
Illinois	Chicago	Cook	Cook							Cook	
		DuPage	DuPage							DuPage	
		Grundy (P)	Grundy (P)							Grundy	
		Kane	Kane							Kane	
		Kendall (P)	Kendall (P)							Kendall	
		Lake	Lake							Lake	
		McHenry	McHenry							McHenry	
		Will	Will	6	2					Will	
										DeKalb	
										Kankakee	10
	St. Louis	Madison	Madison							Madison	
		Monroe	Monroe							Monroe	
		St. Clair	St. Clair							St. Clair	
			Randolph	4						Randolph	
										Bond	
										Calhoun	
										Clinton	
										Jersey	
										Maccoupin	
										Coffeen	1 42331 14339
										Meredosia	1 25149 3816
										Lakeside & Dallman	2 10630 9245
										Sangamon	12

Indiana	Chicago	Lake	Lake Porter	2					Lake Porter	
			RM Schahfer	1	27,495	17,370	Jasper			
			Michigan City	1	9,178	9,898	La Porte			
									Newton	5
	Cincinnati		Dearborn (P)		1				Dearborn	
								Franklin		
								Ohio	3	
	Elkhart	Elkhart	Elkhart St. Joseph	2					Elkhart St. Joseph	2
	Evansville	Dubois	Vanderburgh	Dubois					Dubois	
				Vanderburgh				Vanderburgh		
				Gibson				Gibson		
		Pike				Pike				
		Spencer				Spencer				
		Warrick	6			Warrick				
			Edwardsport	1	8,178	1,925	Knox			
			AB Brown	1	8,639	7,400	Posey	8		
							Hamilton			
			Hendricks				Hendricks			
			Johnson				Johnson			
			Marion				Marion			
			Morgan	5			Morgan			
							Bartholomew			
							Boone			
							Brown			
							Hancock			
							Henry			
							Jennings			
							Madison			
							Montgomery			
							Putnam			
							Shelby	15		
Indiana	Louisville	Clark	Clark					Clark		
			Floyd				Floyd			
			Jefferson	3			Jefferson			
							Harrison			
							Scott			
						Washington	6			
Kentucky	Cincinnati		Boone					Boone		
			Campbell				Campbell			
			Kenton	3			Kenton			
				Ghent	1	46,552	19,179	Bracken		
								Carroll		
								Gallatin		
								Grant		
				HL Spurlock	1	40,510	8,235	Mason		
								Pendleton	9	
Evansville			Elmer Smith	1	7,113	9,561	Daviess			
			Henderson 1 & HMP&L Station 2	2	3867	5725	Henderson			
			Robert Reid & RD Green	2	14006	8696	Webster	3		
Huntington			Boyd				Boyd			
			Lawrence	2			Lawrence			
							Greenup	3		
Lexington	Fayette	Fayette					Fayette			

		St. Louis City	St. Louis City	5					St. Louis City	
									St. Francois	
									Lincoln	
									Sullivan City	
									Warren	
									Washington	10
									Ste. Genevieve	
Montana	Lincoln County	Libby area	Lincoln	1					Lincoln	1
New Jersey	New York	Bergen	Bergen						Bergen	
		Essex	Essex						Essex	
		Hudson	Hudson						Hudson	
		Mercer	Mercer						Mercer	
		Middlesex	Middlesex						Middlesex	
		Monmouth	Monmouth						Monmouth	
		Morris	Morris						Morris	
		Passiac	Passiac						Passiac	
		Somerset	Somerset						Somerset	
		Union	Union	10					Union	
									Ocean	
									Sussex	12
	Philadelphia		Burlington						Burlington	
			Camden						Camden	
			Gloucester	3					Gloucester	
						BL England	1	12,122	3,717	Cape May
										Cumberland
						Deepwater	1	2,459	979	Salem
										6
New York	New York	Bronx	Bronx						Bronx	
		Kings	Kings						Kings	
		New York	New York						New York	
		Queens	Queens						Queens	
		Richmond	Richmond						Richmond	
			Nassau						Nassau	
			Orange						Orange	
			Rockland						Rockland	
			Suffolk						Suffolk	
			Westchester	10					Westchester	
									Duchess	
									Putnam	
									Ulster	13
North Carolina	Greensboro	Davidson	Davidson						Davidson	
			Forsyth						Forsyth	
			Guilford						Guilford	
			Randolph						Randolph	
			Stokes	5					Stokes	
						Cape Fear	1	11,755	2,645	Chatham
									Davie	
						Dan River	1	2,949	1,376	Rockingham
						Buck	1	7,427	2,110	Rowan
									Surry	
									Yadkin	11
	Hickory	Catawba (P)	Burke (P)						Burke	
			Caldwell (P)	1	2				Caldwell	
			Catawba						Catawba	
									Alexander	
						Cliffside (Cleveland & Rutherford)	1	22,098	3,633	Cleveland
									Rutherford	6
Ohio	Canton	Stark	Stark	1					Stark	
									Carroll	2

	Cincinnati	Butler Clermont Hamilton Warren	Butler Clermont Hamilton Warren		4					Butler Clermont Hamilton Warren Brown Clinton	6
	Cleveland	Cuyahoga Lake Lorain Medina Portage Summit	Cuyahoga Lake Lorain Medina Portage Summit Ashtabula Geauga		8					Cuyahoga Lake Lorain Medina Portage Summit Ashtabula Geauga Wayne	9
	Columbus	Delaware Fairfield Franklin Licking	Delaware Fairfield Franklin Licking Coshocton		5					Delaware Fairfield Franklin Licking Coshocton Ross Madison Morrow	
						Picway	1	10,457	1,098	Pickaway Union Marion Know Fayette	13
	Dayton	Clark Greene Montgomery	Clark Greene Montgomery		3					Clark Greene Montgomery Champaign Darke Miami Preble	7
	Huntington	Lawrence Scioto	Lawrence Scioto Adams Gallia		4					Lawrence Scioto Adams Gallia	4
	Parkersburg		Washington		1					Washington	1
	Steubenville	Jefferson	Jefferson		1					Jefferson	1
	Toledo	Lucas Wood	Lucas Wood		2					Lucas Wood Fulton Ottawa Sandusky	5
	Wheeling		Belmont		1					Belmont	1
	Youngstown	Trumbull	Trumbull Columbiana Mahoning		3					Trumbull Columbiana Mahoning	3
Pennsylvania	Harrisburg	Cumberland Dauphin	Cumberland Dauphin Lebanon		3					Cumberland Dauphin Lebanon Perry	
						Sunbury	1	25,217	5,398	Snyder	5

	Johnstown	Cambria	Cambria							Cambria	
			Indiana	2						Indiana	2
	Lancaster	Lancaster	Lancaster	1						Lancaster	1
	New York									Pike	1
	Philadelphia	Chester	Chester							Chester	
		Delaware	Delaware							Delaware	
		Philadelphia	Philadelphia							Philadelphia	
			Bucks							Bucks	
			Montgomery	5						Montgomery	
										Lehigh	
										Martins Creek & Portland	2
							46371		8141	Northhampton	7
	Pittsburgh	Alleghany	Alleghany							Alleghany	
		Beaver	Beaver							Beaver	
		Washington	Washington							Washington	
		Westmoreland	Westmoreland							Westmoreland	
			Armstrong							Armstrong	
			Butler							Butler	
			Greene							Greene	
			Lawrence	8						Lawrence	
										Fayette	9
	Reading	Berks	Berks	1						Berks	1
	York	York	York	1						York	
										Gettysburg	2
	Youngstown		Mercer	1						Mercer	1
Tennessee	Chattanooga	Hamilton	Hamilton							Hamilton	
			Marion	2						Marion	2
	Knoxville	Knox	Knox							Knox	
			Anderson							Anderson	
			Blount							Blount	
			Loudon							Loudon	
			McMinn							McMinn	
			Roane							Roane	
			Sevier	7						Sevier	
										Campbell	
										Union	9
Virginia	Washington		Alexandria City							Alexandria City	
			Arlington							Arlington	
			Fairfax							Fairfax	
			Loudoun							Loudoun	
			Prince William							Prince William	
			Falls Church City							Falls Church City	
			Manassas City							Manassas City	
			Manassas Park City							Manassas Park City	
			Fairfax City	9						Fairfax City	
										Clarke	
										Fauquier	
										Frederick	
										Fredericksburg City	
										Spotsylvania	
										Stafford	
										Warren	
										Winchester City	17
West Virginia	Hagerstown	Berkeley	Berkeley	1						Berkeley	
										Morgan	2

	Charleston	Kanawha	Kanawha							Kanawha	
		Putnam	Putnam							Putnam	
			Mason	3						Mason	
										Boone	
										Clay	
										Lincoln	6
	Huntington	Cabell	Cabell							Cabell	
		Wayne	Wayne	2						Wayne	2
	Fairmont	Marion	Marion							Marion	
			Harrison							Harrison	
			Monongalia	3						Monongalia	
						Albright	1	20,561	4,672	Preston	
										Doddridge	
										Taylor	6
	Parkersburg	Wood	Wood							Wood	
			Pleasants	2						Pleasants	
										Wirt	3
	Steubenville	Brooke	Brooke							Brooke	
		Hancock	Hancock	2						Hancock	2
	Wheeling	Marshall	Marshall							Marshall	
		Ohio	Ohio	2						Ohio	2
Wisconsin	Chicago		Kenosha	1						Kenosha	1
Totals		133 counties, 9 partial counties		233	11		30	451453	164569		406

Power Plants in and Near PM _{2.5} Nonattainment Areas (all coal-fired plants except where noted) - 2004													
State	CMSA	County	Attainment Status	Recommended NA by State	Recommended NA by EPA	Plant Name	# of plants	# of Units*	SO ₂ **	CMSA SO ₂ Subtotals	NO _x **	CMSA NO _x Subtotals	Controls
Alabama	Birmingham-Hoover-Cullman CMSA	Walker	in nonattaining CMSA	no	yes	Gorgas	1	2	97,831		29,378		SCR at 1 unit
Alabama	Birmingham-Hoover-Cullman CMSA	Shelby	in nonattaining CMSA	no	yes	E.C. Gaston	1	5	182,757		29,171		none
Alabama	Birmingham-Hoover-Cullman CMSA	Jefferson	in nonattaining CMSA	yes	no	James H. Miller Jr.	4	44,149		324,757	28,035	86,584	SCR at 2 units
Alabama	Gadsden MSA	Etowah	adjacent to Birmingham CMSA	no	no	Gadsden	1	2	8741		333,498	1918	88,502 none
Alabama	none	Jackson	adjacent to Chattanooga CMSA	no	yes	Widows Creek		8	43982		43982	25161	25161 SCR & wet scrubbers on units 7 & 8
Connecticut	New York-Newark-Bridgeport, NY-NJ-CT-PA CMSA	Fairfield	in nonattaining CMSA	no	yes	Bridgeport Harbor	1	3 (2 units are O/G but the other is not)	4,091		4,091	1,736	1,736 none
Delaware	Philadelphia-Camden-Vineland, PA-NJ-DE-MD CMSA	New Castle	in nonattaining CMSA	yes	yes	Edgemoor	1	3	10,528		10,528	3,307	3,307 SNCR at 2 units
Georgia	Macon-Warner Robins-Fort Valley CMSA	Monroe	in nonattaining CMSA	no	yes (part)	Scherer	1	4	86,350		86,350	27,627	27,627 none
Georgia	none	Putnam	adjacent to Macon CMSA & Atlanta CMSA	no	yes (included w/Atlanta)	Harlee Branch	1	4	73943		27809		none
Georgia	none	Floyd	adjacent to Atlanta CMSA	yes	yes	Hammond	1	4	27,593		8,410		SCR at 1 unit
Georgia	Atlanta-Sandy Springs-Marietta, GA-AL CMSA	Bartow	in nonattaining CMSA	no	yes	Bowen	1	4	160674		37301		SCR at 4 units
Georgia	Atlanta-Sandy Springs-Marietta, GA-AL CMSA	Cobb	in nonattaining CMSA	no	yes	Jack McDonough	1	2	27,993		4,884		none
Georgia	Atlanta-Sandy Springs-Marietta, GA-AL CMSA	Coweta	in nonattaining CMSA	no	yes	Yates	1	7	41518		9127		Wet lime scrubber on 1 unit
Georgia	Atlanta-Sandy Springs-Marietta, GA-AL CMSA	Heard	in nonattaining CMSA	no	yes	Wansley	1	6	73,601		405,322	20,332	107,863 SCR on at least 2 units
Illinois	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Lake	in nonattaining CMSA	yes	yes	Waukegan	1	3	10782			4945	none
Illinois	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Cook	in nonattaining CMSA	yes	yes	Frisk	1	1	3,843			2,463	none
Illinois	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Cook	in nonattaining CMSA	yes	yes	Crawford	1	2	7595			2850	none
Illinois	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Will	in nonattaining CMSA	yes	yes	Joliet 29	1	4	20,664			3,809	none
Illinois	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Will	in nonattaining CMSA	yes	yes	Joliet 9	1	1	4560		47444	2562	16628 fuel reburning
Illinois	St. Louis-St. Charles-Farmington, MO-IL CMSA	Madison	in nonattaining CMSA	yes	yes	Wood River	1	5	7,262		7,262	2,426	none
Illinois	none	Morgan	adjacent to St. Louis CMSA	no	no	Mercedosa	1	6	25149			3816	none
Illinois	Springfield MSA	Sangamon	adjacent to St. Louis CMSA	no	no	Lakeside	1	2	7,211			1,215	none
Illinois	Springfield MSA	Sangamon	adjacent to St. Louis CMSA	no	no	Crawman	1	3	3419			8030	none
Illinois	none	Montgomery	adjacent to St. Louis CMSA	no	no	Coffeen	1	2	42331			14339	none
Illinois	none	Randolph	adjacent to St. Louis CMSA	no	yes	Baldwin	1	3	26,267		111,639	22,374	52,200 none
Indiana	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Lake	in nonattaining CMSA	yes	yes	Mirant State Line Energy, LLC	1	2	8,443			7,141	none
Indiana	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Lake	in nonattaining CMSA	yes	yes	Dean H. Mitchell	1	4	127			50	none
Indiana	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Jasper	in nonattaining CMSA	no	no	R. M. Schaffner	1	4	27,495			17,370	2 units have wet scrubbers
Indiana	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Porter	in nonattaining CMSA	no	yes	Porter	1	2	5,218			16,380	2 units have wet scrubbers
Indiana	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	La Porte	in nonattaining CMSA	no	no	Michigan City	1	4	9,178			50,461	9,898 50,839
Indiana	Louisville-Elizabethtown-Scottsburg, KY-IN CMSA	Floyd	in nonattaining CMSA	no	yes	R. Gallagher	1	4	47,768			6,132	none
Indiana	none	Jefferson	adjacent to Louisville CMSA	no	yes	Clifty Creek	1	6	39,599			87,367	33,990 40,122 5 units have SCR
Indiana	Indianapolis-Anderson-Columbus CMSA	Marion	in nonattaining CMSA	yes	yes	Elmer W. Stout	1	16	47,269			6,635	
Indiana	Indianapolis-Anderson-Columbus CMSA	Morgan	in nonattaining CMSA	no	yes	H.T. Pritchard (Morgan Valley)	1	6	17,216			64,485	4,495 11,130 none on units 3-6
Indiana	Evansville, IN-KY MSA	Gibson	in nonattaining MSA	no	yes	Gibson	1	5	127,356			38,242	SCR on 5 units, wet scrubber on 2 units
Indiana	Evansville, IN-KY MSA	Posey	in nonattaining MSA	no	no	A. B. Brown	4	4	8,639			7,400	SCR and wet scrubbers on units 1 and 2
Indiana	Evansville, IN-KY MSA	Warrick	in nonattaining MSA	no	yes	Warrick	1	4	98,777			17,551	
Indiana	Evansville, IN-KY MSA	Warrick	in nonattaining MSA	no	yes	F. B. Culley	3	3	7,119			6,318	SCR on 1 unit, wet scrubbers on 2 units
Indiana	none	Pike	adjacent to Evansville MSA	no	yes	Petersburg	1	4	47,152			20,249	wet scrubber on all 4 units
Indiana	none	Pike	adjacent to Evansville MSA	no	yes	Frank E. Pratts	1	2	18,055			4,013	none
Indiana	none	Spencer	adjacent to Evansville MSA	no	yes	Rockport	1	2	53,196			34,243	none
Indiana	none	Knox	adjacent to Evansville MSA	no	no	Edwardsport	1	4	8,178			368,472	1,925 129,941 none on at least 3 units
Indiana	Cincinnati-Middletown-Wilmington, OH-KY-IN CMSA	Dearborn	in nonattaining CMSA	no	yes (part)	Tanners Creek	1	4	62,533			62,533	17,534 17,534 none
Kentucky	Lexington-Fayette—Frankfort—Richmond CMSA	Woodford	in nonattaining CMSA	no	yes	Tyrone	1	5	2,564			678	none
Kentucky	Lexington-Fayette—Frankfort—Richmond CMSA	Clark	in nonattaining CMSA	no	yes	Dale	1	2	7,404			1,977	none
Kentucky	none	Mercer	adjacent to Lexington CMSA	no	yes	E.W. Brown	1	10	46,606			7,925	none on units 1-3
Kentucky	none	Pulaski	adjacent to Lexington CMSA	no	no	Cooper	1	2	22,713			79,287	4,771 15,351 SCR on unit 2
Kentucky	Louisville-Elizabethtown-Scottsburg, KY-IN CMSA	Jefferson	in nonattaining CMSA	yes	yes	Mill Creek	1	4	22,550			14,600	wet scrubber on all 4 units, SCR on 2 units
Kentucky	Louisville-Elizabethtown-Scottsburg, KY-IN CMSA	Jefferson	in nonattaining CMSA	yes	yes	Cane Run	1	4	14,976			6,276	wet scrubber on at least 3 units
Kentucky	Louisville-Elizabethtown-Scottsburg, KY-IN CMSA	Trimble	in nonattaining CMSA	no	no	Trimble County	1	3	8,371			45,897	5,214 26,090 SCR on at least 1 unit
Kentucky	none	Lawrence	adjacent to Huntington-Ashland	no	yes	Big Sandy	1	2	41,899			41,899	15,149 15,149 SCR on unit 2
Kentucky	Evansville, IN-KY MSA	Henderson	in nonattaining MSA	no	no	Henderson 1	1	1	382			40	none
Kentucky	Evansville, IN-KY MSA	Henderson	in nonattaining MSA	no	no	HMP&L Station 2	1	2	3,485			5,685	wet lime scrubber on both
Kentucky	Evansville, IN-KY MSA	Webster	in nonattaining MSA	no	no	Robert Reid	1	1	10,582			1,296	none
Kentucky	Evansville, IN-KY MSA	Webster	in nonattaining MSA	no	no	R.D. Green	2	2	3,424			7,400	wet lime scrubber on both
Kentucky	none	Davess	adjacent to Evansville MSA	no	no	Elmer Smith	1	2	7,113			24,986	9,561 23,982 wet scrubber on both units
Kentucky	Cincinnati-Middletown-Wilmington, OH-KY-IN CMSA	Boone	in nonattaining CMSA	no	yes	East Bend	1	1	12,918			5,455	wet scrubber
Kentucky	none	Mason	adjacent to Cincinnati CMSA	no	no	H.L. Spurlock	1	2	40,510			8,235	SCR on both units
Kentucky	none	Carroll	adjacent to Cincinnati CMSA & no	no	no	Ghent	1	4	46,552			99,980	19,179 32,869 wet scrubber on 1 unit
Maryland	Hagerstown-Martinsburg, MD-WV MSA	Washington	in nonattaining CMSA	yes	yes	R.P. Smith	1	2	4,588			4,588	1,256 1,256 none
Maryland	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV-Montgomery	Montgomery	in nonattaining CMSA	yes	yes	Dickerson	1	5	33,911			7,381	none on 3 units
Maryland	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV-Prince George's	Charles	in nonattaining CMSA	yes	yes	Chalk Point	1	8	52,525			15,228	none on 2 units
Maryland	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV-Charles	Charles	in nonattaining CMSA	yes	yes	Morgantown	1	2	70,344			18,619	none
Maryland	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV-Baltimore	Baltimore	in nonattaining CMSA	yes	yes	C.P. Crane	1	2	32,386			10,742	fuel reburning at both units
Maryland	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV-Anne Arundel	Anne Arundel	in nonattaining CMSA	yes	yes	Brandon Shores	1	2	39,974			11,669	SCR on both units
Maryland	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV-Anne Arundel	Anne Arundel	in nonattaining CMSA	yes	yes	Herbert A. Wagner	1	14 (2 units are O/G)	18,794			247,934	5,708 69,347 SCR on one unit
Michigan	Detroit-Warren-Flint CMSA	St. Clair	in nonattaining CMSA	no	yes	Belle River	1	5	24,358			9,833	none
Michigan	Detroit-Warren-Flint CMSA	St. Clair	in nonattaining CMSA	no	yes	Greenwood	1	4	2,815			1,043	

Tennessee	Knoxville-Sevierville-La Follette, TN CMSA	Anderson	in nonattaining CMSA	no	yes	Bull Run	1	1	42,188		17,912		SCR on 1 unit
Tennessee	Knoxville-Sevierville-La Follette, TN CMSA	Roane	in nonattaining CMSA	yes	yes	Kingston	1	9	77,569	119,757	26,084	43,996	SCR on all units
Virginia	Washington-Baltimore-North Virginia, DC-MD-VA-WV C	Alexandria City	in nonattaining CMSA	no	yes	Potomac River	1	5	16,142		6,010		fuel reburning on all 5 units
West Virginia	none	Mason	adjacent to Huntington-Ashland	no	yes	Philip Sporn	1	5	40,246		13,185		none
West Virginia	none	Mason	adjacent to Huntington-Ashland	no	yes	Mountaineer	1	1	43,224	83,470	12,911	26,096	SCR
West Virginia	Charleston MSA	Kanawha	in nonattaining MSA	yes	yes	Kanawha River	1	2	15,862		6,168		none
West Virginia	Charleston MSA	Putnam	in nonattaining MSA	yes	yes	John E. Amos	1	3	107,619	123,481	43,501	49,669	SCR on all 3 units
West Virginia	Parkersburg-Marietta, WV-OH MSA	Pleasants	in nonattaining MSA	no	yes	Willow Island	1	2	14,457		5,946		none
West Virginia	Parkersburg-Marietta, WV-OH MSA	Pleasants	in nonattaining MSA	no	yes	Pleasants	1	2	41,909	56,366	13,714	19,660	wet lime scrubber on both units
West Virginia	Wheeling MSA	Marshall	in nonattaining MSA	yes	yes	Kammer	1	3	39,096		13,174		none
West Virginia	Wheeling MSA	Marshall	in nonattaining MSA	yes	yes	Mitchell	1	2	56,010	95,106	29,598	42,772	none
West Virginia	adjacent to Fairmont CMSA	Monongalia	adjacent to nonattaining CMSA	no	yes	Fort Martin	1	2	91,120		11,236		SNCR on 1 unit
West Virginia	Fairmont CMSA	Marion	in nonattaining CMSA	yes	yes	Rinesville	1	2	4,412		2,027		none
West Virginia	Fairmont CMSA	Harrison	in nonattaining CMSA	no	yes	Harrison	1	3	8,691		29,089		SCR & wet scrubber on all units
West Virginia	adjacent to Fairmont CMSA	Preston	adjacent to nonattaining CMSA	no	no	Albright	1	3	20,561		4,672		none
Wisconsin	Chicago-Naperville-Michigan City, IL-IN-WI CMSA	Kenosha	in nonattaining CMSA	(state has not submitted any)	yes	Pleasant Prairie	1	2	33,446	33,446	21,487	21,487	none
Totals							152		5,297,141		1,771,252		
*number of units reporting to EPA's Acid Rain Database													
**data from EPA's Acid Rain Database													