

US EPA ARCHIVE DOCUMENT



THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 14 2012

Mr. Thomas W. Easterly
Commissioner
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204

Dear Mr. Easterly:

I am pleased to respond to your August 10, 2012, letter in which you filed a petition for reconsideration and stay concerning the U.S. Environmental Protection Agency's final rule, "Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards for Several Counties in Illinois, Indiana and Wisconsin; Corrections to Inadvertent Errors in Prior Designations." See 77 *Federal Register* 34221 (June 11, 2012). The petition requests that the EPA reconsider and stay the ozone nonattainment designation for Lake and Porter counties, Indiana, as part of the Chicago-Naperville, Illinois-Indiana-Wisconsin ozone nonattainment area.

The EPA has carefully evaluated the issues and information in your petition. For the reasons provided in the enclosure to this letter, the EPA is denying your petition and request for stay. The EPA continues to believe that Lake and Porter counties are properly designated as nonattainment because of their contributions to ozone nonattainment in the Chicago-Naperville, Illinois-Indiana-Wisconsin area.

The enclosure addresses the specific issues raised in your petition and provides the basis for this denial. The EPA hopes that the responses will help to explain the agency's conclusions so that you will better understand our final decision. The EPA considers the designation of nonattainment areas with appropriate boundaries to be an important step in implementing the 2008 ozone standards.

In the meantime, I thank you for your interest in protecting the quality of our environment.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa P. Jackson".

Lisa P. Jackson

Enclosure

Enclosure

EPA Response to Petition for Reconsideration from Indiana Department of Environmental Management

By letter dated August 10, 2012, the Indiana Department of Environmental Management (IDEM or petitioner) petitioned the U.S. Environmental Protection Agency to reconsider the final area ozone designation for Lake and Porter Counties, Indiana in the Chicago-Naperville, Illinois-Indiana-Wisconsin (IL-IN-WI) ozone nonattainment area (the Chicago nonattainment area) for the 2008 ozone National Ambient Air Quality Standards (NAAQS). For the reasons discussed below, the EPA is denying the Petition.

In the EPA response section below, the EPA references the specific documents identified in the following list. Please refer to this document list for the document acronyms used in the EPA response section.

Wherever the terms “we,” “us,” or “our” are used here, we mean the EPA.

Document Reference List

[Petition] Letter from Thomas W. Easterly, Commissioner, Indiana Department of Environmental Management, to Lisa P. Jackson, Administrator, U.S. Environmental Protection Agency, Gina McCarthy, Assistant Administrator, U.S. Environmental Protection Agency, Regarding: Request for Reconsideration and Stay of Final Rule “Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards for Several Counties in Illinois, Indiana, and Wisconsin,” Docket ID No. EPA-HQ-OAR-2008-0476, Dated August 10, 2012.

[RTC Addendum] “Addendum to Responses to Significant Comments on the State and Tribal Designation Recommendations for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) for Section 3.2.5.1. Chicago-Naperville, IL-IN-WI area,” Docket No. EPA-HQ-OAR-2008-0476, U.S. Environmental Protection Agency, May 2012.

[120-Day Reply] Letter from Thomas W. Easterly, Commissioner, Indiana Department of Environmental Management, to Susan Hedman, Regional Administrator, Region V, U.S. Environmental Protection Agency, Regarding: “Indiana 120-Day Response to U.S. EPA’s Revised Designations for the 2008 8-Hour Ozone National Ambient Air Quality Standard,” Dated April 13, 2012.

Attachments:

Appendix A: 1990 through 2010 Northwest Indiana Growth Rates and Patterns

Appendix B: 2008 Northwest Indiana Commuting Patterns

Appendix C: 2008 Nonattainment Area Emissions Inventory

Appendix D: Emission Reductions for Lake and Porter Counties Vehicle Emissions Testing

Appendix E: U.S. EPA Region 3, Region 4, Region 5 and Region 6 Technical Support Documents

[**RTC**] “Response to Significant Comments on the State and Tribal Designation Recommendations for the 2008 Ozone National Ambient Air Quality Standards (NAAQS),” Docket No. EPA-HQ-OAR-2008-0476, U.S. Environmental Protection Agency, April 2012.

[**Area Guidance**] Memorandum, “Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards,” from Robert J. Meyers, Principal Deputy Assistant Administrator, to Regional Administrators, Regions I-X, Dated December 4, 2008.

[**Baton Rouge TSD**] Technical Support Document, “Baton Rouge, Louisiana Final Area Designations for the 2008 Ozone National Ambient Air Quality Standard,” U.S. Environmental Protection Agency, Not Dated.

[**Chicago TSD**] Technical Support Document, “Chicago-Naperville, Illinois-Indiana-Wisconsin Area Designation for the 2008 Ozone National Ambient Air Quality Standards,” U.S. Environmental Protection Agency, Not Dated. (Note that this is the final version and differs from the draft version included with and addressed by Indiana’s April 13, 2012, 120-day response submittal.)

[**Columbus TSD**] Technical Support Document, “Columbus, Ohio Area Designations for the 2008 Ozone National Ambient Air Quality Standard,” U.S. Environmental Protection Agency, Not Dated. (Note that this is the final version and differs from the draft version included with Indiana’s April 13, 2012, 120-day response submittal.)

[**Knoxville TSD**] Technical Support Document, “Knoxville, Tennessee Area Designations for the 2008 Ozone National Ambient Air Quality Standards,” U.S. Environmental Protection Agency, Not Dated.

[**Pennsylvania TSD**] Technical Support Document, “Pennsylvania Area Designations for the 2008 Ozone National Ambient Air Quality Standards,” U.S. Environmental Protection Agency, Not Dated.

Petition Comments and EPA Responses

I. Nonattainment Designation For Counties With Monitored Attainment of the 2008 Ozone NAAQS

Comment/Issue: The petitioner objects to the designation of Lake and Porter Counties as nonattainment for the 2008 8-hour ozone NAAQS because all five ozone monitors in Northwest Indiana show attainment of the NAAQS [Petition, p. 2].

Response: The petitioner raised this issue during the 120-day comment period and the EPA provided a response in our response-to-comment document for the Chicago-Naperville, IL-IN-WI area [RTC Addendum, p. 3]. Therefore, this issue is not an appropriate basis for reconsideration.

Section 107(d) of the Clean Air Act (CAA) requires the EPA to designate as nonattainment any area that does not meet the NAAQS or that contributes to a violation of the NAAQS in a nearby area. Based on our analysis of contribution in the Technical Support Document for the Chicago area [Chicago TSD], we

determined that Lake and Porter Counties contributed to a monitored violation of the 2008 ozone NAAQS at the Zion, Illinois monitoring site during the period of 2009-2011. Therefore, pursuant to CAA section 107(d), the EPA designated Lake and Porter as nonattainment as part of the Chicago-Naperville, IL-IN-WI ozone nonattainment area for the 2008 ozone NAAQS. The presence of ozone monitors attaining the 2008 ozone NAAQS in Northwestern Indiana does not negate the EPA's conclusion that Lake and Porter Counties contribute to ozone nonattainment at the Zion, Illinois monitoring site.

II. Illinois Vehicle Inspection/Maintenance Shortfall and Its Contribution to the Monitored Ozone Standard Violation

Comment/Issue: The petitioner contends that the 2009-2011 ozone standard violation at the Zion, Illinois monitoring site can be solely attributed to a relaxation of the Illinois Vehicle Emission Testing program (VET program) to exclude 1990 and older vehicles from testing requirements, that the EPA has not approved this emission control revision into the Illinois State Implementation Plan (SIP), and that Indiana has no authority to correct this problem to attain the 2008 ozone NAAQS at the Zion, Illinois monitoring site [Petition, p. 3 and p. 5].

Response: The petitioner raised this issue during the 120-day consultation period and the EPA addressed this issue in the response-to-comments document for the Chicago-Naperville, IL-IN-WI area [RTC Addendum, p. 3]. Therefore, this issue is not an appropriate basis for reconsideration.

As noted in the response-to-comments document [RTC Addendum, p. 3], section 107(d) of the CAA, which governs the designation of nonattainment areas, requires the EPA to designate as nonattainment any area that does not meet the air quality standard or that contributes to a violation of the air quality standard in a nearby area. Based on our analysis of contribution in the Chicago TSD, we determined that Lake and Porter Counties contributed to the monitored violation of the 2008 ozone NAAQS at the Zion, Illinois monitoring site during 2009-2011 and included Lake and Porter Counties in the ozone nonattainment area. *See Catawba County, North Carolina v. EPA*, 571 F.3d 20, 39 (D.C. Cir. 2009) ("Given that the statute uses the word 'contribute' and that a contribution may simply exacerbate a problem rather than cause it, we see no reason why the statute precludes the EPA from determining that a county's addition of PM2.5 into the atmosphere is significant even though a nearby county's nonattainment problem would persist in its absence.") We further note here, that in evaluating whether an area is contributing to a current violation of the ozone NAAQS, we do not evaluate how the implementation of individual, specific measures, or the failure to implement such measures, might affect ozone levels within the area. The issue of what measures are appropriate for reducing ozone levels in an area violating the standard will be addressed by the states during the post-designation attainment planning process.

III. Modeled Ozone Contributions, Meteorology, and Emissions

Comment/Issue: The petitioner argues that the EPA relied on ozone and meteorology data provided by Illinois, Wisconsin, and Lake Michigan Air Directors Consortium (LADCO) that are not specific to the Zion, Illinois monitoring site and that are not specific to the 2009-2011 ozone standard violation period. The petitioner notes that the Indiana Department of Environmental Management (IDEM) provided the EPA with meteorological and ozone modeling data as part of the 120-Day Reply that demonstrate that Lake and Porter Counties did not consistently contribute to the Zion, Illinois monitored ozone standard violation during 2009-2011. [Petition, p. 5]

Response: Indiana submitted comments on this issue and the EPA addressed those comments in the RTC Addendum [p. 7] and in the [Chicago TSD [pp. 16-17, p. 19]. Therefore, this issue does not provide an appropriate basis for reconsideration.

In a response to Indiana's comments we acknowledged in the Chicago TSD [pp. 17-18] the pre-2009 LADCO ozone modeling data submitted by IDEM as part of IDEM's 120-Day Reply. IDEM submitted these ozone modeling data to support its conclusion that Lake and Porter Counties are minor contributors to the ozone nonattainment problem at Zion, Illinois. We disagreed with IDEM's conclusion, and instead concluded that these ozone modeling data confirm that Lake and Porter Counties are contributors to the ozone nonattainment problem at Zion, Illinois [Chicago TSD, pp. 17-19] [RTC Addendum, p. 10]. We note that our evaluation of Indiana's comments also resulted in our agreement with IDEM's conclusion that Jasper County should not be included in the Chicago nonattainment area.

The petitioner claims that the Indiana modeling demonstrates that Lake and Porter Counties did not "consistently" contribute to exceedances of the 2008 ozone NAAQS at the Zion, Illinois monitoring site during 2009-2011. We recognize that the Indiana modeling demonstrates that emissions from Lake and Porter Counties likely did not contribute to exceedances of the standard at the Zion monitor on some of the days with high ozone levels during 2009-2011. However, it is not necessary for a county to contribute to high ozone levels at a violating monitor on all days with high ozone levels to be determined to contribute to violations of the standard at that monitor. Note that wind trajectory data generated using the Hybrid Single Particle Lagrangian Integrated Trajectory Model (HYSPLIT) and submitted by Indiana for 2009-2011 in the 120-Day Reply [Enclosure 1, Appendix F] demonstrate that Lake and Porter County emissions were transported toward the Zion monitor for a number of days when this monitor recorded high ozone levels [Chicago TSD, p. 17].

While Indiana is correct that the Illinois and Wisconsin meteorological data considered by the EPA in the Chicago TSD [pp. 13-14] are not specific to 2009-2011, that does not mean that these data are unreliable or irrelevant. We note that meteorological conditions conducive to high ozone conditions do not vary significantly from year-to-year. These data indicate that Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) emissions originating in the Chicago-Naperville-Michigan City, IL-IN-WI CSA, which includes Lake and Porter Counties, Indiana, are transported over Lake Michigan, where they react in the presence of sunlight to form ozone. This ozone is subsequently transported to the Lake Michigan shoreline, including to the Zion, Illinois monitoring site, where it can result in monitored high ozone concentrations. These data, when considered with other data as part of our five-factor analysis supported a conclusion that Lake and Porter Counties contribute to a violation of the 2008 ozone NAAQS at the Zion, Illinois monitor.

Comment/Issue: The petitioner contends that, due to significant reduction of regional NOx emissions that has occurred subsequent to 2004, photochemistry and ozone precursor sensitivity have changed substantially in the LADCO ozone modeling domain, making older, pre-2009 LADCO ozone modeling data outdated. [Petition, p. 5]

Response: Although the petitioner relied on pre-2009 LADCO ozone modeling data in the 120-Day Reply [pp. 11-14] and in the Petition [pp. 7-9] to argue that the ozone contributions of Lake and Porter Counties to the monitored high ozone concentrations at Zion, Illinois are relatively small, the petitioner now argues that the LADCO ozone modeling data cannot be relied on due to regional NOx emission reductions occurring subsequent to 2004. The potential impact of NOx emission reductions on and the

invalidation of prior ozone modeling results is a new argument that was not raised to the EPA during the designation process. Since this argument could have been raised during the consultation period following the issuance of the 120-Day Reply, but was not, it is not an appropriate basis for reconsideration.

Indiana has provided no data to support its conclusion that the photochemistry has changed in the lower Lake Michigan area in a way that alters the source contribution patterns that existed in 2007, the period covered by the LADCO ozone source apportionment modeling. Moreover, the LADCO ozone source apportionment modeling, which we also considered [Chicago TSD, pp. 18-19], was conducted for a period well after the post-2004 implementation of the NO_x emission reductions that resulted from the EPA's NO_x SIP call.

Comment/Issue: The petitioner argues that the EPA compared Lake and Porter Counties' emission ratios to emissions from just Indiana's portion of the Chicago-Naperville-Michigan City, IL-IN-WI CSA, while it compared the emission ratios for other portions of the CSA to total emissions for the CSA [Petition, p. 7].

Response: This issue could have been raised during the state-EPA consultation period, but was not. As such, it is not an appropriate basis for reconsideration.

In the TSD, the EPA included county-specific emission percentages for each county within the CSA [Chicago TSD, pp. 8-9]. These emission percentages are clearly presented as percentages relative to CSA emission totals for VOC and NO_x for all counties in the CSA, including for Lake and Porter Counties.

Comment/Issue: The petitioner argues that, looking at modeled source sector ozone contributions at the Zion, Illinois and Chiwaukee Prairie (Kenosha County, Wisconsin) monitoring sites, roughly half of the modeled ozone contribution is from on-road and off-road mobile sources. The petitioner contends that Indiana is already controlling both mobile and point sources to the extent possible, and that additional control would be difficult to achieve, very costly, and ineffective from a cost-benefit perspective. [Petition, p. 10]

Response: During the comment period, Indiana raised the issue that additional emission control measures implemented in counties in Indiana would not significantly benefit attainment of the 2008 ozone NAAQS at the Zion, Illinois monitoring site. We addressed this issue in our response to comments [RTC Addendum, p. 9]. Because the issue could have been raised during the comment period (and was), it is not an appropriate basis for reconsideration.

In the RTC Addendum, we responded to the comment about whether controls in specific counties would benefit attainment by explaining that we do not consider what future controls may be adopted by an area to bring it into attainment, including which sources that states may choose to regulate. We do not believe that information about future controls addresses whether an area is currently violating or contributing to a nearby violation of the NAAQS. Once an area is designated as nonattainment for a NAAQS, the state(s) must consider the appropriate emission controls for bringing the area back into attainment of the NAAQS, and this consideration can take into account the level and types of emission controls already implemented.

IV. Monitored Ozone Standard Violation at Chiwaukee Prairie

Comment/Issue: The petitioner argues that a 2009-2011 violation of the 2008 ozone NAAQS at the Chiwaukee Prairie monitoring site in Kenosha County, Wisconsin (located within the boundaries of the Chicago-Naperville, IL-IN-WI ozone nonattainment area) now places an undue and disproportionate regulatory burden on Lake and Porter Counties, and that the State of Indiana was not provided with the opportunity to properly evaluate and comment on this problem during the 120-day consultation process. [Petition, pp. 5-6]

Response: The EPA based the ozone nonattainment designation for the Chicago-Naperville, IL-IN-WI area on the monitored violation of the 2008 ozone NAAQS at the Zion, Illinois monitoring site. The violation of the 2008 ozone NAAQS at the Chiwaukee Prairie monitoring site was not verified through certified information until too late in the designation process to allow its consideration. The EPA was required to issue final area designations no later than May 31, 2012, pursuant to a Consent Decree. (See *Wild Earth Guardians v. Jackson*, D. Ariz. No. 2:11-CV-1661.) Air quality monitoring data on or about May 1, 2012, were not available in sufficient time for the EPA to consider because section 107(d)(1)(B)(ii) of the CAA requires the EPA to provide states 120 days notice of any intended modifications to the states' area ozone designation recommendations. Certification of monitoring data on or about May 1, 2012, would not have allowed such notifications.

Regardless, the EPA designated Lake and Porter Counties as nonattainment based on their contribution to the violation of the 2008 ozone NAAQS at the Zion, Illinois monitor. Consideration of the violation of the 2008 ozone NAAQS at the Chiwaukee Prairie monitor would have no effect on that determination.

Comment/Issue: The petitioner notes that section 107(d)(4)(A)(iv) of the Clean Air Act does not require marginal nonattainment boundaries to be based on metropolitan statistical areas, but argues that the record in this matter indicates that Lake and Porter Counties were handled in a more critical manner than other contributing areas (see Milwaukee-related issues below) solely because they are within the Chicago-Naperville-Michigan City, IL-IN-WI CSA [Petition, p. 10].

Response: This argument could have been raised during the EPA-State consultation period. As such, it is not an appropriate basis for reconsideration.

Sections 107(d)(4)(A)(iv) and (v) of the CAA address the use of metropolitan statistical areas and consolidated metropolitan statistical areas as the presumptive starting point for nonattainment boundaries for serious and above nonattainment areas. These provisions directly applied only for purposes of the initial area designations for the 1-hour ozone standard at the time the CAA was amended in 1990. While these provisions do not directly apply to designations for a new or revised ozone NAAQS under section 107(d)(1) of the CAA, the EPA adopted the approach of using the Office of Management and Budget (OMB) statistical areas boundaries as the starting point for analyzing nonattainment areas for all areas designated as nonattainment for the 1997 ozone NAAQS and the 2008 ozone NAAQS. See "Boundary Guidance on Air Quality Designations for the 8-hour National Ambient Air Quality Standards (NAAQS or Standard)," memorandum from John S. Seitz, to Air Division Directors, March 28, 2000, pp. 3-4; "Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards," memorandum from Robert J. Meyers, to Regional Administrators, Regions I-X, December 4, 2008, p. 3. As noted in these memoranda, the EPA believes that using the statistical area

boundaries as the starting points for assessing appropriate boundaries is a reasonable means for evaluating which “nearby” areas contribute to a violation of the ozone NAAQS.

In the 2000 Seitz memorandum, the EPA explained that it is reasonable to consider a broad area because of the “pervasive nature of ground level ozone and its precursors.” Furthermore, this memorandum recognizes that the statistical areas historically experienced higher ozone levels and higher ozone precursor emissions than areas outside of urban statistical areas. In the 2008 Meyers memorandum, the EPA noted that the urban statistical areas were used as starting points for assessing designations for the 1997 ozone NAAQS because the factors used to establish the statistical areas “are similar to the factors the EPA plans to consider in determining whether a nearby area is contributing to violation(s) of the standard.”

The EPA believes that this approach provides a consistent and certain starting point for evaluating the areas across the country [RTC, p. 15]. By using the statistical areas as the starting points for its analyses, the EPA delineated the counties in the Chicago area it planned to evaluate under the five-factor analyses, and included that analysis in the initial TSD associated with the 120-day letters to the affected states. No states submitted, either in their initial recommendations or during the EPA-State consultation period, five-factor analyses for any other counties for EPA’s consideration as part of the Chicago ozone nonattainment area. Moreover, as noted elsewhere in this enclosure and in the Chicago TSD, we have determined that emissions from Lake and Porter Counties did in fact contribute to the ozone standard violation recorded at the Zion, Illinois monitoring site, justifying the inclusion of Lake and Porter Counties in the Chicago-Naperville, IL-IN-WI ozone nonattainment area.

Comment/Issue: The petitioner contends that IDEM provided the EPA with regional ozone modeling data that demonstrate that the Milwaukee area contributed equally or more ozone than Lake or Porter Counties to the Zion, Illinois and Chiwaukee Prairie monitoring sites. The petitioner argues that the exclusion of the Milwaukee area from the Chicago ozone nonattainment area, while including Lake and Porter Counties, shows that the inclusion of Lake and Porter Counties in the nonattainment area was arbitrary and capricious. [Petition, pp. 6-9]

Response: For the reasons explained below and in the previous response, we did not evaluate any counties in the Milwaukee area for inclusion as part of the designated Chicago ozone nonattainment area. Rather, we evaluated the Milwaukee area separately because it is a separate CSA and no state or other party submitted a five-factor analysis addressing whether to include all or part of the Milwaukee area as part of the Chicago CSA. Thus, this is not a case, as implied by the petitioner, where we applied our five-factor analysis inconsistently.

To the extent the petitioner is suggesting that all or part of the Milwaukee area may have a greater impact on the Zion monitored ozone concentrations than Lake or Porter Counties, this does not support a claim that Lake and Porter Counties were improperly included in the Chicago-Naperville, IL-IN-WI ozone nonattainment area. Rather, the issue raised is whether the petitioner should have presented a five-factor analysis for one or more counties within the Milwaukee area during the EPA-state consultative process. The ozone and meteorology modeling submitted by Indiana was not a full five-factor analysis supporting inclusion of Milwaukee as part of the Chicago area. Moreover, to the extent that it shows that emissions from the Milwaukee area impact the Zion monitor, it does so for the entire Milwaukee area, which is comprised of five counties. Thus, it is not a fair comparison with the county-specific emissions and ozone impacts for Lake and Porter Counties. The EPA was not provided with modeled ozone source apportionment impacts for individual counties in the Milwaukee area.

Since a five-factor analysis was not presented, the EPA did not evaluate any counties in the Milwaukee area for inclusion as part of the Chicago nonattainment area and instead followed its guidance by performing a five factor solely for the counties in the Chicago-Naperville-Michigan City, IL-IN-WI CSA. Since the Milwaukee area is a separate CSA, the EPA conducted a separate review for this area and did not consider it as part of its review for the Chicago CSA. We note that the Milwaukee area was designated as a separate ozone nonattainment area for both the 1-hour ozone NAAQS and the 1997 8-hour ozone NAAQS. Although we have recognized in the past that there is some influence between these two areas, more typically, this has been recognized as the Chicago area having a significant ozone impact on the Milwaukee area.

Comment/Issue: The petitioner objects to the fact that the Milwaukee area, an area they contend contributes to ozone standard violations in the Chicago nonattainment area as much as Lake and Porter Counties, will not be subject to the same regulatory burden and planning obligations as Lake and Porter Counties. The petitioner argues that, to be consistent, the EPA should exclude Lake and Porter Counties from the Chicago nonattainment area based on the same data and rationale that the EPA used to exclude the Milwaukee area from the Chicago nonattainment area. [Petition, pp. 6-7]

Response: As noted in the two previous responses, the EPA did not evaluate any counties in the Milwaukee CSA for inclusion as part of the designated Chicago area because they are located in a different CSA. Lake and Porter Counties differ from the Milwaukee area in that Lake and Porter Counties are part of the Chicago-Naperville-Michigan City, IL-IN-WI CSA.

V. Inconsistencies in the EPA's Approaches in Establishing Ozone Nonattainment Areas

Comment/Response: The petitioner argues that the EPA used differing and conflicting approaches in selecting which areas to include in or exclude from the various ozone nonattainment areas in the United States. The petitioner indicates that the EPA failed to reply to comments Indiana submitted in its 120-Day Reply that highlighted disparate treatment between Jasper, Lake, and Porter Counties in Indiana and Pickaway and Ross Counties in Ohio, Point Coupee Parish in Louisiana, Roane County in Tennessee, and Berks and Lancaster Counties in Pennsylvania. [Petition, p. 3]

Response: The EPA addressed this portion of Indiana's 120-Day reply in the RTC Addendum [pp. 7-9]. The EPA's response focused on the inclusion of Jasper County since Indiana appeared to be focusing its comments on Jasper County. However, even though the EPA did not specifically address this comment from the standpoint of Lake and Porter Counties, the record provides sufficient support for the EPA's final decisions for all of the counties at issue.

During the five-factor reviews, the EPA evaluated the data before it in making decisions on an area-by-area basis. The EPA uses all available information when making designation decisions in individual areas, but the type and quality of information can vary area-to-area. The comments made by Indiana in the 120-day Reply did not address whether the entirety of EPA's five factor analysis for the areas at issue resulted in disparate treatment, but instead focused on only one or two similarities between those other counties and the three Indiana Counties. Comparing counties from different areas based only one or two of the factors from the five-factor analyses is not sufficient to support a disparate treatment argument. See *Catawba County, North Carolina v. EPA*, 571 F.3d 20, (D.C. Cir. 2009) ("petitioners seize upon discrete data points and ignore the very nature of the nine-factor test, which is designed to analyze a wide variety of data on a 'case-by-case basis.'") Because the record fully addresses the EPA's

basis for the designation decision and these comments do not provide a sufficient basis for challenging that decision, they are not an appropriate basis for reconsideration.

The following summarizes the specific comments submitted by Indiana in the 120-day Reply and the EPA's responses as they relate to Lake and Porter Counties.

Pickaway and Ross Counties, Ohio

Comment: In the 120-Day Reply [pp. 32-33], IDEM argued that Pickaway and Ross Counties, Ohio were excluded from the Columbus, Ohio ozone nonattainment area even though the populations of Pickaway and Ross Counties are projected to increase significantly and at higher rates than the populations of Lake and Porter Counties. Finally, Indiana argued that the EPA determined that meteorological data were not informative in identifying which counties contributed to the ozone standard violation at the Columbus, Ohio monitor, whereas the EPA relied on outdated meteorological data to determine that emissions from Lake and Porter Counties contribute to the ozone standard violation at the Zion monitor. Indiana indicates that modeling and emissions data included in the 120-Day Reply demonstrate that Lake and Porter Counties are similar to Pickaway County and should be designated as attainment for the 2008 ozone NAAQS.

Response: In this comment, Indiana's primary focus is on one discrete data point under the emissions factor component of the five-factor analysis – population growth and size. The comment suggests that Lake and Porter Counties were treated different than Pickaway and Ross Counties, Ohio despite the higher growth rate and population size for the Ohio Counties.

While Indiana also refers to modeling and emissions data it submitted in the 120-Day Reply as demonstrating that Lake and Porter Counties are similar to Pickaway County, the State provided nothing substantive to explain how it interprets the submitted data to support this conclusion, thus providing nothing specific for the EPA to respond to. The comment did not provide a factor-by-factor analysis demonstrating why the EPA's treatment of the counties in Ohio was different than its treatment of Lake and Porter Counties, but instead only makes direct comparison for one element of the emissions factor and provides no analysis of why the "emissions and modeling" information it submitted suggests disparate treatment.

Finally, Indiana also suggests that the EPA treated the areas differently because the EPA concluded that wind direction data available for the Columbus area didn't shed light on which county's emissions were transported to the violating monitor, while the EPA was able to conclude from meteorological data for the Chicago area that winds did transport emissions from Lake and Porter Counties to the violating Zion monitor on days with high ozone levels. However, this was not a case of treating areas differently based on a similar evaluation; rather, it was a case where we concluded that the information for the Chicago area provided information that supported inclusion of Lake and Porter Counties as part of the designated nonattainment area under our five-factor analysis, whereas the information for the Columbus area only provided information that was inconclusive.

Pointe Coupee Parish, Louisiana

Comment: In the 120-Day Reply, IDEM argued that the EPA has designated Point Coupee Parish, Louisiana as unclassifiable /attainment for the 2008 ozone NAAQS even though, like Lake and Porter Counties, this parish has high ozone precursor emissions. Indiana also indicated that the ozone monitor

in Pointe Coupee Parish, while not violating the 2008 ozone NAAQS, has higher monitored ozone levels than the monitors in two counties included as part of the Baton Rouge nonattainment area. Indiana believes that Pointe Coupee Parish was spared an ozone nonattainment designation based on meteorological modeling performed by the EPA Region 6, and, had the EPA Region 5 conducted similar meteorological modeling for Lake and Porter Counties, the EPA would have drawn a similar conclusion to designate Lake and Porter Counties attainment. IDEM notes that it submitted, as part of the 120-Day Reply, the analysis that it believes Region 5 should have performed. [120-Day Reply, pp. 33-34]

Response: The EPA reviewed the meteorological modeling submitted by Indiana for purposes of making its final ozone designation decision. As we explained in the final TSD [Chicago TSD, pp. 16-17], we concluded that the information derived from meteorology and ozone modeling supported inclusion of Lake and Porter Counties as part of the designated Chicago nonattainment area because it shows that emissions from those counties are transported to the Zion, Illinois monitoring site on some high ozone days. [Chicago TSD, p. 17-18] See also response to issue III, above. In contrast, HYSPLIT modeling conducted by the EPA Region 6 showed no potential for ozone and ozone precursor transport from the single high NOx emission source in Pointe Coupee Parish to the violating monitoring sites in the Baton Rouge, Louisiana nonattainment area on high ozone days. [Baton Rouge TSD, pp. 8-10]

The NOx emissions in Pointe Coupee Parish were determined to be dominated by a single source (Big Cajun powerplant) located in the northeast corner of Pointe Coupee Parish. The HYSPLIT analyses conducted for the violating monitor (LSU monitoring site) in the Baton Rouge area showed that the emissions from this source and other emissions from Pointe Coupee Parish were not significant contributors to the ozone standard violation monitored at the LSU monitoring site. [Baton Rouge TSD, p. 8 and Figure 3] As discussed in the final TSD for the Chicago area [Chicago TSD, p. 17], the HYSPLIT modeling conducted by Indiana showed multiple high ozone days when emissions from Lake and Porter Counties were transported to the Zion, Illinois monitoring site during the 2009-2011 analysis period.

Roane County, Tennessee

Comment: The Indiana 120-Day Reply [p. 34] noted that Roane County borders three other counties designated as nonattainment and has an ozone monitor showing attainment as do Lake and Porter Counties.

Response: As provided in the Chicago TSD, we designated Lake and Porter Counties as nonattainment due to their contribution to a violation of the 2008 ozone NAAQS at the Zion, Illinois monitor, and we did not designate Lake and Porter Counties based on violating ozone concentrations in these counties. To the contrary, the EPA's five-factor analysis for the Knoxville-Seiverville-La Follette, Tennessee CSA found no contribution for Roane County to the violation of the 2008 ozone NAAQS monitored in Blount County, Tennessee.

Berks County, Pennsylvania

Comment: In the 120-Day Reply [pp. 34-35], Indiana noted that, for purposes of evaluating the single-county Metropolitan Statistical Area (MSA) of Berks County, Pennsylvania (Reading, Pennsylvania area), the EPA evaluated the adjacent counties (Lebanon and Schuylkill Counties, Pennsylvania). In the December 2011 intended ozone designation, the EPA indicated it intended to designate Berks County as nonattainment and Lebanon and Schuylkill Counties as attainment. Indiana argued that Lebanon and

Schuykill Counties' emissions account for approximately 41 percent of the NOx emissions and 42 percent of the VOC emissions in the three county area evaluated by the EPA Region 3. Indiana argued that the EPA inconsistently included Lake and Porter Counties in the Chicago-Naperville, IL-IN-WI ozone nonattainment area based on estimated emissions contributions of 25 percent for NOx and 12 percent for VOC from Lake and Porter Counties to the nonattainment area.

Response: Comparison of one discrete data point is not sufficient to demonstrate that the EPA's treatment of Lake and Porter Counties was inconsistent with EPA's treatment of Lebanon and Schuykill Counties. Our decisions for the counties considered for the Berks County (Reading) area were based on a full five-factor analysis of that area, as were our decisions for the 16 counties considered in the Chicago area. We further note that a comparison of emission percentages between the areas is misleading. For the Berks County area, only three counties were considered. Thus, it is not surprising that the percentage of emissions from each of the three counties appears high since, together, the total emissions percentages for the three counties must add up to 100 percent. In contrast, the 100 percent emissions total for the counties considered as part of the Chicago area is comprised of emissions from 16 counties. The emission percentages for each county in each area by themselves do not indicate the actual levels of emissions in each of the counties, which also reflect their potential to contribute ozone to downwind ozone monitors. Note that there are significantly more tons of NOx and VOC emissions in Lake and Porter Counties [Chicago TSD, pp. 8-9, Table 4] than there are in Lebanon and Schuykill Counties [Pennsylvania TSD, p. 88].

Lancaster County, Pennsylvania

Comment: Indiana noted that, for purposes of evaluating the single-county MSA of Lancaster County, Pennsylvania, the EPA also evaluated three adjoining counties, including York County, Pennsylvania. Indiana pointed out that NOx emissions from York County are almost twice as high as those from Lancaster County. In addition, Indiana noted that York County has the second highest VOC emissions of the four counties evaluated and the highest population growth rate of the four counties.¹

Response: Indiana's comment examines two of the items evaluated under the emission factor component of the five-factor analysis, it is limited in that it only draws a comparison between one of the five factors for York County and that same factor for Lake and Porter Counties. Because our designation decisions are based on a full five-factor analysis for each area, comparing just one of the factors does not demonstrate inconsistent treatment. Further, for the reasons provided in our previous response, comparing an individual factor for an area where only four counties were evaluated with the same factor for an area where significantly more counties were evaluated is not an "apples-to-apples" comparison.

¹ We note that at the end of this comment, Indiana stated: "Unlike U.S. EPA Region 6, the EPA Region 5 did not perform or supply a detailed analysis of speciated emissions and the overall potential to impact air quality on a particular area or monitor. To address this deficiency, IDEM has performed a detailed analysis of area-specific emissions, meteorology, and the resulting culpability. The results of this analysis are included in this document." We believe that these sentences were erroneously included as part of this comment as they refer to Region 6 and not to Region 3, which is the Region in which Pennsylvania is located. Moreover, Region 3 did not analyze speciated emissions for the Lancaster area.