

US EPA ARCHIVE DOCUMENT

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 Number EPA-HQ-OAR-2008-0476
U.S. Environmental Protection Agency

May 2012

Note to Readers: On May 31, 2012, EPA completed area designations for the 2008 ozone standards by designating the counties in the Chicago-Naperville, Illinois-Indiana-Wisconsin area (i.e., the Chicago metropolitan area), as meeting or not meeting the 2008 ozone standards. EPA designated the rest of the country on April 30, 2012.

This document, together with the May 31, 2012 preamble to the final rule designating the counties in the Chicago metropolitan area, the Technical Support Document (TSD) for the Chicago metropolitan area, and the April 2012 Response to Comments document¹, presents the EPA's responses to the significant comments we received on our proposed designations for the Chicago metropolitan area as reflected in letters dated January 31, 2012 to the Governors of Illinois, Indiana, and Wisconsin. The responses presented in this document are intended to augment the responses to comments that appear in the April 2012 Response to Comments document, the preamble to the final rule, and the TSD or to address comments not discussed in those documents.

3.2.5.1. Chicago-Naperville, IL-IN-WI

3.2.5.1.1. State of Illinois Comments

Illinois has made no comments concerning EPA's intended ozone nonattainment area boundary for the Chicago area or concerning EPA's draft TSD for the January 31, 2012, letters to the Governors of Illinois, Indiana, and Wisconsin.

3.2.5.1.2. State of Indiana Comments

Indiana comment: Indiana commented that the design values for the monitors in Lake and Porter are meeting the standard. The ozone design values in Lake and Porter Counties for the 2008-2010 period range from 0.061 ppm to 0.067 ppm. The 2009-2011 period shows ozone design values ranging from 0.062 ppm to 0.068 ppm. Only one of the 22 monitors in the Greater Chicago area is violating the 2008 ozone NAAQS, with 2009-2011 ozone design value exceeding the standard by only 0.0004 ppm. The monitors for the greater Chicago area in Illinois and Wisconsin have ozone design values ranging from 0.060 ppm to 0.074 ppm for the period of 2008-2010 and 0.063 ppm to 0.076 ppm for the period of 2009-2011. Because the values are truncated after the third decimal place, an ozone design value of 0.0759 ppm would be truncated to 0.075 ppm and would be in attainment of the standard. When calculating the ozone design value for the period of 2009-2011, the three-year average at the Zion, Illinois violating monitoring site would be 0.0763ppm, showing a violation of the standard (relative to the 0.0759 ppm monitored cutoff) by only 0.0004 ppm.

¹ See "Responses to Significant Comments on the State and Tribal Designation Recommendations for the 2008 Ozone National Ambient Air Quality Standards (NAAQS)," Document No. EPA-HQ-OAR-2008-0476-0675, U.S. Environmental Protection Agency, April 2012, available in Docket No. EPA-HQ-OAR-2008-0476 at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2008-0476;dt=FR%252BPR%252BN%252BO%252BSR>.

Indiana argued that the localized violation of the 2008 ozone NAAQS was due to a change in Illinois's Vehicle Emissions Testing (VET) program, exempting car models of 1968 through 1995 from the program. Indiana commented that they had considered similar changes and had analyzed the emissions impacts during their consideration through the MOBILE6.2 model and tailpipe data. Indiana ran MOBILE6.2 and Comprehensive Air Quality Model (CAMx) modeling for the Illinois VET program changes and concluded that the emission effects of the changes resulted in an ozone increase of 0.0014 ppm. Indiana commented that, based on Indiana's original analysis, the real lost emission reductions could exceed 35 percent of the emission reductions resulting from Illinois' original, pre-change VET, and, without these lost emission reductions, Illinois' violating ozone monitoring site would meet the standard. The State argues that the 0.0014 ppm increase in ozone concentration resulting from the change in Illinois' VET program is more than enough to cause the 0.0004 ppm excess in monitored ozone concentrations, and that the monitored ozone standard violation would not have occurred if Illinois has not weakened the VET program. In addition, the State notes that, if the modeled ozone impact of the VET change is applied to the current, 2009-2011 ozone design value for the Zion, Illinois monitoring site, the adjusted ozone design value for this monitoring site would be 0.0749 ppm.

Indiana argues that ozone modeling demonstrates that all Indiana counties will continue to attain the 2008 ozone NAAQS in advance of the applicable deadline. In addition, most of the stationary sources in Indiana are already subject to Federal emission control programs, including CSAPR, the boiler MACT, and mercury and air toxics standards. Indiana asserts that NOx emissions in Northwest Indiana are projected to decline by almost 42 percent between 2005 and 2008 as the result of EPA's NOx SIP call, CSAPR, Tier 2 Motor Vehicle Emission Standards, and gasoline sulfur control requirements. In addition, NOx RACT also applies in Northwestern Indiana. Adding counties to those with monitored ozone standard violations will not result in additional emissions reductions or advance the attainment date under the 2008 ozone NAAQS.

Indiana argues that, because the monitored ozone standard violation and the cause of the ozone standard violation resides only in Illinois, the ozone nonattainment boundary should be limited to Illinois, where the authority resides to correct the ozone problem.

EPA Response: We address the technical information provided by the State of Illinois in our TSD. Regardless of the cause of the ozone standard violation, the ozone standard designation process under section 107(d) of the Clean Air Act (CAA) does not allow EPA to discount or ignore ozone standard violations. Section 107(d) of the Clean Air Act requires 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 TSD, we believe that the Indiana counties contribute to violations at the violating monitor; assuming Indiana has maintained a better vehicle I/M program than the State of Illinois does not affect that analysis of contribution.

Indiana comment: Indiana objects to the procedure followed by EPA in notifying the State of Indiana on January 31, 2012, of its intention to modify Indiana's original 2009 area

recommendations and to revise EPA's initial, December 9, 2011, intended area ozone designations for the Chicago area. First, Indiana asserts that the State was not afforded the opportunity to conduct a "proper nine-factor analysis" to update the State's 2009 designation recommendations based on more current air quality and emissions data prior to EPA proceeding with its intended area designation notification to the State (through the 120-day notification process prior to issuing final area designations). Second, the State asserts that EPA failed to conduct an appropriate nine-factor analysis for the Indiana portion of the Chicago area in keeping with EPA's December 4, 2008, ozone designation policy. Third, the State asserts that EPA has given the State of Indiana inadequate time to respond to EPA's revised 120-day intended area notification letter, dated January 31, 2012, despite EPA's promise in that letter that the State would have time to review and respond to this letter. The State assumed that it would have the full 120-day period to review and respond to EPA's 120-day notification letter. The State objects to EPA's subsequent request that the State complete this response by mid-April. As a result, Indiana believes that insufficient time was provided to conduct an appropriate revised nine-factor analysis.

EPA Response: As an initial matter, we note that the CAA does not specifically address the process for evaluating new information that becomes available during the 2 year designation process. When the States submitted their initial recommendations in March 2009, there were violating monitors in the Chicago CSA and the States performed nine-factor analyses for purposes of their 2009 recommendation. While Indiana did not have a lengthy period of time to consider the information submitted by the State of Illinois in December 2011, we believe that the overall process provided sufficient time for Indiana to consider whether, and if so which, counties in Indiana should be included as part of the designated nonattainment area.

On September 22, 2011, EPA issued a memorandum (Subject: "Implementation of the Ozone National Ambient Air Quality Standard, From: Gina McCarthy, Assistant Administrator, To: Air to Air Division Directors, Regions 1-10) to clarify for state and local agencies the status of the 2008 ozone standards and to outline plans for moving forward with implementation of the standards. EPA indicated that it would proceed with initial area designations using the state area recommendations submitted in 2009, updating EPA's review of the state recommendations using the most current, state-certified air quality data.

In EPA's December 9, 2011, letter to Governor Mitchell E. Daniels, Governor of Indiana, EPA noted that Illinois had submitted quality assured 2011 air quality data and that EPA would respond to this new information for the Chicago-Naperville-Michigan City, IL-IN-WI CSA, which includes several counties in Northwest Indiana, including Lake, Porter, and Jasper Counties. Therefore, Indiana had warning that EPA might reconsider its position on the ozone designation for this CSA prior to EPA's January 31, 2012, letter to Governor Mitchell E. Daniels informing the State of its intention to designate a portion of the CSA as nonattainment for the 2008 ozone NAAQS. When EPA sent the December 9, 2011, letter to the State of Indiana, the State could have begun a five factor analysis² to revise the State's area designation

² Subsequent to December 4, 2008, EPA combined several closely related factors of the original nine factors into five factors and began referring to the analysis as a five-factor analysis. For simplicity, throughout this RTC, we refer to the analysis as a five-factor analysis.

recommendation for the Indiana portion of the Chicago-Naperville-Michigan City, IL-IN-WI CSA.

On January 31, 2012, EPA informed the State of Indiana that EPA intended to designate Lake, Porter, and Jasper Counties in Indiana as nonattainment as part of the Chicago-Naperville, IL-IN-WI ozone nonattainment area. This notification was 120-days in advance of a consent decree deadline of May 31, 2012 for EPA to issue final ozone designations for all areas of the country. EPA indicated that states (Illinois, Indiana, and Wisconsin) would have until April 2, 2012, to provide EPA with information to support any further changes to EPA's intended area designations and boundaries. This provided the states with 60 days to submit any such information and EPA with 60 days to evaluate the states' new submittals and make any appropriate changes to the area designations and boundaries. In response to concerns expressed by Indiana regarding the need for additional time to gather information, EPA agreed to extend the states' deadline for submitting additional information until April 20, 2011, curtailing EPA's follow-up response time to 42 days. We further note that the 120-day period is provided in the CAA and that this period necessarily includes time for both the State to provide feedback to EPA regarding EPA's intended modification and time for EPA to make the necessary final decision; it is not intended as a 120-day period for the States to respond. Despite Indiana's concern regarding the time allowed for the State's response to EPA's intended area designations for the Indiana portion of the Chicago-Naperville, IL-IN-WI area, Indiana (and Illinois and Wisconsin) has been effectively given more time to make such responses than other states subject to EPA's December 9, 2011, 120-day intended ozone designation letters.

With regard to the adequacy of EPA's five-factor analysis, this is addressed through EPA's responses to the following Indiana comments and through EPA's final TSD for the Chicago-Naperville, IL-IN-WI area ozone designations.

Indiana Comment: Indiana commented that EPA did not designate the nonattainment area based on a culpability study under a five-factor analysis. Instead, the focus was placed on cause and contribution assumptions. Indiana commented that EPA referred to 2009 state meteorological analyses from Illinois and Wisconsin rather than conducting its own analysis using current data. Indiana commented that it could not critique Illinois' and Wisconsin's meteorological analyses.

Indiana looked at Lake Michigan Air Director Consortium's (LADCO's) Source Apportionment Modeling, which shows area-specific and source type-specific ozone impacts at the Zion, Illinois violating ozone monitoring site, and looked at the NO_x and VOC emissions for counties within the Chicago-Naperville-Michigan, IL-IN-WI CSA. Indiana concluded that the ozone impacts from Lake and Porter Counties at the violating monitor are small and that the ozone contribution from Jasper County at this monitoring site is very small. Indiana then looked at EPA's CSAPR modeling and concluded that the violating monitor will come into attainment by 2014 through the implementation of CSAPR, and without additional emission controls in the States.

EPA Response: At the time EPA made its decision regarding its intended area designations, it used the best meteorological information available for the Chicago-Naperville-Michigan City,

IL-IN-WI CSA, and in particular for the northern portion of this area, since this area was impacted with the highest ozone concentrations approaching or exceeding the 2008 ozone NAAQS. EPA continues to believe that it is most appropriate to consider all available ozone, emissions, and meteorological data, but, with regard to meteorological data, EPA believes that it is particularly important to consider meteorological data for the areas experiencing the highest ozone concentration since these meteorological data can point toward the areas of critical emissions that can contribute to these high ozone concentrations. Therefore, EPA believes that it made the correct decision in reviewing the meteorological data provided by the States of Illinois and Wisconsin for the northern portion of the CSA, and that it correctly interpreted these data as indicating that the high ozone concentrations monitored at the Zion, Illinois monitoring site originated as a result of emissions occurring southeast through southwest from this monitoring site. This conclusion is generally consistent with a conceptual model of ozone formation and transport developed by LADCO based on ozone modeling, monitoring, and meteorological analyses.

EPA believes that, as a participant in LADCO, the State of Indiana, represented by the Indiana Department of Environmental Management (IDEM), has had access to meteorological data considered by and summarized by Illinois and Wisconsin, both of whom also participate in LADCO ozone air quality, meteorology, and ozone modeling analyses. EPA also believes that Indiana has had ample time to collect and analyze meteorological data summarized by the States of Illinois and Wisconsin. Therefore, EPA disagrees with Indiana's expressed concern that it has not had access to or an opportunity to review the meteorological data summarized by the States of Illinois and Indiana and relied on by the EPA to determine the logical source area for the high ozone concentrations monitored at the Zion, Illinois monitoring site (and now also at Chiwaukee Prairie monitoring site).

Like Indiana, EPA has also, subsequent to January 31, 2012, considered ozone modeling data for the Chicago area generated by LADCO. EPA's review and analysis of these ozone modeling data, meteorological data, and other ozone-related conclusions developed by LADCO is provided in the TSD for the Chicago area. Based on EPA's review of LADCO's data, data supplied by the State of Indiana as part of its comments on EPA's intended ozone designations for the Chicago-Naperville-Michigan City, IL-IN-WI CSA, and data previously considered, EPA has determined that the high ozone concentrations monitored at the Zion, Illinois monitoring site are most attributable to NOx and VOC emissions originating to the southeast through southwest of the monitoring site, which includes sources in the Illinois and Indiana portions of the Chicago-Naperville-Michigan City, IL-IN-WI CSA. EPA also believes that emissions in the eastern portion of Kenosha County, Wisconsin contribute to the ozone standard violation recorded at the Zion, Illinois monitoring site.

Indiana Comment: Indiana argues that the emissions and meteorological modeling relied on by EPA are dated and not relevant to the monitored ozone standard violation at Zion, Illinois. In addition, EPA failed to model the impacts of Indiana's emissions for 2009 through 2011 and for the specific violating monitoring site.

EPA Response: EPA acknowledges that it has not considered ozone modeling results for 2009 through 2011 for the Chicago-Naperville-Michigan City, IL-IN-WI CSA and its surrounding domain since such modeling data are not currently available. As part of the designation process, EPA does not conduct modeling analyses, but rather performs a five-factor analysis to determine whether nearby areas contribute to an ozone concentration at a violating monitor. EPA, however, notes that LADCO had conducted many ozone modeling analyses for high ozone periods prior to 2009-2011 and has developed a general conceptual model to explain the development and transport of high ozone levels in this area. As explained in the final ozone designation TSD for this area, EPA believes that its conclusions regarding the likely source area and transport pattern for high ozone levels in this area, including those monitored during the period of 2009-2011 at the Zion, Illinois monitoring site, is in keeping with the conceptual model developed by LADCO. Indiana has not provided any meteorological, emissions, or ozone modeling data that indicate that Lake and Porter Counties do not contribute to the violation at the Zion monitor. However, based on our analysis of the additional information submitted after the January 31, 2012, letter with the intended designation, EPA now believes that Jasper County does not contribute and is not including it as part of the designated nonattainment area. Further detail regarding our analysis is provided in the final ozone designation TSD for the Chicago area.

Indiana Comment: Indiana expressed its concern with Illinois' apparent rush to certify its 2011 ozone monitoring data (ahead of the May 1, 2012, deadline applied to all states). Indiana argues that Illinois early-certified its 2011 ozone data to preserve its Congestion Mitigation and Air Quality (CMAQ) funding. This course of events makes the Chicago area unique in going from intended attainment of the 2008 ozone NAAQS in December 2011 to intended nonattainment in January 2012. Indiana argues that, given the hurried quality assurance process of Illinois' ozone monitoring data and the variability in accuracy of the monitored ozone data, it is especially important that EPA take more time to consider and act on Illinois' ozone data. The ozone data should undergo careful scrutiny to assure its accuracy. Such review is particularly necessary considering that only 1 in 22 monitors in the Chicago-Naperville-Michigan City, IL-IN-WI CSA violated the 2008 ozone NAAQS, with an exceedance of the ozone standard by only 0.0004 ppm. Indiana argues that there is a question as to the validity of an actual violation of the 2008 ozone NAAQS because EPA's administrative record is missing the raw ozone data from the Zion, Illinois ozone monitor. In addition, Illinois has not made its assessment of the validity of these ozone data available for Indiana's review.

EPA Response: EPA is unaware of any information suggesting that Illinois did not use quality assurance procedures in compliance with monitoring requirements in 40 CFR part 58 for the ozone data for the 2011 ozone season. These procedures were applied during the collection period, well ahead of the State's data certification deadlines. EPA sees no basis for questioning Illinois' data at this time or for delaying action involving the consideration of these data.

Indiana Comment: Indiana argues that EPA is not uniform in its treatment of various areas when deciding ozone nonattainment boundaries. The State notes that, in Indiana, EPA differentially handled Jasper County, which EPA intends to designate as nonattainment in its entirety, and Dearborn County, which EPA intends to designate as a partial nonattainment

county. The State notes that both counties have VOC and NO_x emissions dominated by single large sources, both electrical power plants.

Indiana notes that EPA has proposed to designate Pickaway and Ross Counties, Ohio as attainment even though these county's emissions are similar to those of Jasper County, and are geographically positioned to have significant ozone impacts on the monitored ozone standard violation in the Columbus, Ohio area.

For Point Coupee Parish in Louisiana, Indiana notes that, even though Point Coupee Parish has a coal-fired power plant like Jasper County, with both counties' VOC and NO_x emissions dominated by the emissions from these power plants (Big Cajun 2 in Point Coupee Parish and Northern Indiana Public Service Company-R.M. Schahfer Generating Station (NIPSCO-Schahfer) in Jasper County), EPA has treating these areas differently, designating Point Coupee Parish as unclassifiable/attainment for the 2008 ozone NAAQS and Jasper County as nonattainment for this NAAQS. Indiana notes that EPA found that Point Coupee Parish significantly contributed VOC and NO_x emissions impacting ozone levels in the Baton Rouge, Louisiana area (monitored as nonattainment for the 2008 ozone NAAQS), but, based on "sound science," including a currently localized meteorological analysis and a review of the emission control status of the Big Cajun 2 power plant, decided to designate Point Coupee Parish as attainment. Whereas, EPA, using default CSA boundaries, outdated and non-localized meteorological analyses, and lacking an ozone cause and contribution analysis, decided to designate Jasper County as nonattainment for the 2008 ozone NAAQS.

Indiana cites Roane County, Tennessee as being similar to Jasper County, with a single coal-fired power plant, and Roane County with a high proportionate population (percent of the CSA population total) and high VMT levels. Nonetheless, EPA designated Roane County as unclassifiable/attainment for the 2008 ozone NAAQS.

Indiana cites Berks County, Pennsylvania as an example of a single county ozone nonattainment area where EPA only designated as nonattainment the county with a violating ozone monitor. EPA did not designate as nonattainment two bordering counties (Lebanon and Schuylkill Counties) as nonattainment even though both of these counties have high VOC and NO_x emissions.

Indiana cites the ozone designation for Lancaster County, Pennsylvania, noting that the even though a neighboring county (York County) has significantly higher NO_x emissions than an essentially equal VOC emissions to those in Lancaster County and EPA acknowledges that the York County emissions can contribute to the ozone standard violation in Lancaster County, EPA has designated York County as unclassifiable/attainment.

Indiana asserts that, given the adverse consequences associated with an ozone nonattainment designation, EPA should ensure consistency in applying clearly defined criteria for designation purposes. Indiana argues that EPA's treatment of the areas cited above would favor designating Lake, Porter, and Jasper Counties as attainment for the 2008 ozone NAAQS.

EPA Response: As noted below and in the final TSD for the Chicago area ozone designation, EPA has considered newer (2011) VOC and NO_x emissions for the NIPSCO-Schahfer Generating Station power plant and, based on significantly lowered VOC and NO_x emissions from the NIPSCO-Schahfer Generating Station, EPA has determined that Jasper County does not meaningfully contribute to the violation at the Zion monitor and should be designated as unclassifiable/attainment for the 2008 ozone NAAQS.

We disagree with Indiana that EPA's intended designation of Jasper County as nonattainment was inconsistent with intended designations for other areas across the country. Since we have concluded that Jasper County should be designated as unclassifiable/attainment based on updated information recently submitted by the State of Indiana, any concerns about whether a designation of Jasper County would be inconsistent with actions for other areas is moot.

Indiana Comment: Indiana comments that the State, and Lake, Porter, and Jasper Counties in particular, are in full compliance with Indiana's SIP, and the emission control rules in place in Northwest Indiana represent one of the most stringent collections of emission control rules in place in the United States. The State argues that the inclusion of Lake, Porter, and Jasper Counties in the Chicago-Naperville, IL-IN-WI ozone nonattainment area will not result in any additional emission controls, or in advancing attainment of the 2008 ozone NAAQS in the Illinois portion of the nonattainment area. The State argues that it is unreasonable "to punish" Indiana, which is in full compliance with the 2008 ozone NAAQS and with the SIP for the negligence of a neighboring state.

EPA Response: As previously noted, EPA's determination of whether an area should be designated nonattainment is based on whether the area is violating the NAAQS or contributing to a nearby violation of the ozone NAAQS. As provided in the TSD, our analysis supports including Lake and Porter Counties as part of the designated nonattainment area because they contribute to the violation of the ozone NAAQS at the Zion monitor. Our final analysis in the TSD supports a designation of unclassifiable/attainment for Jasper County.

Once an area is designated nonattainment for a NAAQS, the State(s) can consider the emission control status of any portion of the designated nonattainment area in developing plans to attain and maintain the NAAQS.

Indiana Comment: The State argues that EPA's proposed ozone nonattainment designation boundaries are contrary to what regulators have learned about regional transport of pollutants in implementing the CAA and will not facilitate or expedite compliance with the 2008 ozone NAAQS. The CAA does not make provisions for the 8-hour ozone NAAQS. Issuing designations for the 2008 8-hour ozone NAAQS based on guidance developed for the 1-hour ozone standard is not supported by the current science or the regional nature of emissions transport. Reducing ozone precursor emissions regionally has a much greater impact on ground-level ozone concentrations than do emission reductions achieved locally. Designating adjacent counties or portions of counties as nonattainment just because major stationary sources are located within them serves no purpose for improving air quality. The inclusion of adjacent counties in the nonattainment area based on potential to nominally contribute to monitored

standard violations contradicts the Federal and state emission control strategies being deployed today based on proper scientific evaluation.

EPA Response: We disagree with the commenter. While over the past two decades we have recognized the significant role of regional transport, this does not discount the role that local emissions also play in contributing to nonattainment. The designation provisions of the CAA focus on including as part of the nonattainment area the local areas that are violating or contributing to a nearby (i.e., local) violation. As provided in more detail in our RTC³, the CAA has separate provisions for addressing longer-range transport and EPA has issued several rules to address this problem.

Indiana Comment: The State argues that a modeling analysis conducted by the Indiana Department of Environmental Management (IDEM) shows that the emissions volume of a county is less important than the geographic origin (geographic location relative to the location of a monitored ozone standard violation) of the emissions and whether meteorology enables those emissions to contribute to ozone formation at a specific downwind location. The State argues that IDEM's conclusions are supported by stationary source emission inventories that demonstrate that the overall emissions contribution to the Chicago nonattainment area from Lake, Porter, and Jasper Counties is relatively insignificant compared to those from Illinois counties. Illinois counties contribute 73 percent of the total NOx emissions and 86 percent of the total VOC emissions that build up over Lake Michigan to return to shore at a later time. By comparison, Lake County, Indiana contributes only 13 percent of the NOx emissions and 8 percent of the VOC emissions, and Porter County contributes 7 percent of the NOx emissions and 3 percent of the VOC emissions in this area. Jasper County contributes 5 percent of the NOx emissions and 2 percent of the VOC emissions in this area.

EPA Response: We believe that both the emissions factor and the meteorology factor are important for determining whether a county contributes to a nearby violation of the NAAQS. Based on our analysis in the TSD, we do not consider the NOx and VOC emission contributions from Lake and Porter Counties to be insignificant.

As discussed in the final ozone designation TSD for the Chicago area, EPA has considered area-specific and source category-specific ozone contribution data modeled by LADCO and supplied by Indiana in making its final ozone designation decision for the Chicago-Naperville, IL-IN-WI ozone nonattainment area under the 2008 ozone NAAQS. These ozone contribution data show that Lake and Porter Counties contribute to the Zion, Illinois ozone monitoring sites, on the order of 0.002 to 0.004 ppm (2-4 ppb). EPA considers these ozone contribution levels to be significant, and in keeping with prior area selection criteria used by EPA for selection of areas to be included in regional emission control programs. On the other hand, these ozone modeling results demonstrate that the ozone contribution potential of Jasper County, Indiana is relatively

³ See "Responses to Significant Comments on the State and Tribal Designation Recommendations for the 2008 Ozone National Ambient Air Quality Standards (NAAQS)," Document No. EPA-HQ-OAR-2008-0476-0675, U.S. Environmental Protection Agency, April 2012, available in Docket No. EPA-HQ-OAR-2008-0476 at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2008-0476;dt=FR%252BPR%252BN%252BO%252BSR>.

small, on the order of 0.0005 ppm (0.5 ppb) or less, supporting the exclusion of Jasper County from the Chicago-Naperville, IL-IN-WI ozone nonattainment area for the 2008 ozone NAAQS.

Indiana Comment: Indiana asserts that the State had reviewed the trends of the annual fourth-high daily maximum 8-hour ozone concentrations and ozone design values for selected monitors and that the trend analysis results show general downward trends in peak ozone concentrations and ozone design values. Indiana asserts that only the Zion, Illinois ozone monitor has shown an upward trend in the recent years (2008-2011). Indiana asserts that this ozone nonattainment problem is isolated and possibly due to local emissions. Indiana argues that emissions from Jasper, Lake, and Porter Counties would be expected to more significantly impact ozone monitors in Indiana and near the Indiana/Illinois border, where attainment of the 2008 ozone NAAQS is being monitored.

EPA Response: As discussed in EPA's final ozone designation TSD, the ozone modeling analyses for high ozone periods generated by LADCO, provides a historical perspective supporting the conclusion that emissions from Northeastern Illinois, Northwestern Indiana, and Southeastern Wisconsin transport over Lake Michigan forming layers with relatively high ozone concentrations (due to low vertical dispersion and lack of NO_x emissions that can chemically scavenge local ozone). Under lake breezes, which can produce moving air transporting high ozone air from above Lake Michigan to the western shoreline of Lake Michigan on high temperature, sunny days (meteorological conditions associated with high ozone concentrations in Northeastern Illinois and Southeastern Wisconsin, per the conceptual model developed by LADCO), high ozone concentrations result at the Zion, Illinois monitoring site. Note that meteorology and ozone distribution data for the 2009-2011 high ozone days at the Zion, Illinois monitoring site and documentation supplied by Indiana in its ozone designation comment letter supports LADCO's conceptual model for ozone formation and transport in the Lake Michigan area. This conceptual model, general transport patterns in the Lake Michigan area during high ozone periods, and consideration of relative county-specific emissions data lead the EPA to conclude that Lake and Porter Counties contribute to the high ozone concentrations monitored at Zion, Illinois and should be included as part of the designated nonattainment area.

With regard to ozone trends, EPA agrees with Indiana that ozone monitors in the Chicago area have generally shown downward trends in peak ozone concentrations over the last decade. It is also noted, however, that both the Zion, Illinois and Chiwaukee Prairie (Wisconsin) ozone monitoring sites have shown upward trends in ozone design values during the period of 2008-2011. Even though the upward ozone trends for these monitors is different from the ozone design value trends at other monitoring sites in the Chicago area, as supported in the TSD and explained above, EPA cannot conclude that such differences in ozone design value trends proves that the high ozone concentrations at the Zion, Illinois monitoring site are due to emissions from only the Illinois portion of the Chicago-Naperville-Michigan City, IL-IN-WI CSA.

Indiana Comment: The State argues that ozone modeling conducted by LADCO for the Zion, Illinois ozone monitoring site using the CAMx modeling system and Ozone Source Apportionment Technology (OSAT) modeling analyses shows for the day(s) modeled (modeled dates not specified) that Jasper County contributed 0.0005 ppm (0.5 ppb), Porter County

contributed under 0.002 ppm (2 ppb), and Lake County contributed approximately 0.004 ppm (4 ppb) to the modeled peak ozone concentrations at the Zion, Illinois monitoring site. The remainder of Indiana contributed approximately 0.002 ppm (2 ppb) to the modeled peak ozone concentrations. In comparison, the Illinois portion of the Chicago area contribute approximately 0.027 ppm (27 ppb), the State of Illinois (less the Illinois portion of the Chicago area) contributed 0.006 ppm (6 ppb), and Kenosha County contributed approximately 0.003 ppm (3 ppb) to the modeled peak ozone concentration at this ozone monitoring site. The State argues that the ozone contributions from Jasper and Porter Counties are below the thresholds used by EPA to select areas for the control of transported pollutants in recent years.

EPA Response: EPA agrees with Indiana that ozone contribution modeling data generated by LADCO for the Zion, Illinois monitoring site, as discussed in EPA's final ozone designation TSD for the Chicago area, supports the conclusion that Jasper County may contribute relatively low ozone levels to the Zion, Illinois monitoring site. EPA disagrees with Indiana's conclusion regarding the ozone contribution of Porter County emissions. An ozone contribution of 0.002 ppm (2 ppb), as modeled for Porter County at the Zion, Illinois monitoring site is not considered to be insignificant.

Indiana Comment: The State notes that, although the Chicago area is generally flat, the presence of Lake Michigan results in unique meteorological patterns that impact ozone formation and transport. The "Lake effect" presents unique challenges for ozone mitigation because elevated ozone levels can be isolated (to an isolated monitoring location) and occur randomly with no consistent pattern or controlling monitor. The State notes that the Zion monitor has never previously been a controlling monitoring site (site with the highest peak ozone concentrations in this general area).

EPA Response: EPA agrees with Indiana that the "Lake effect" (the inshore flow of polluted air over Lake Michigan in afternoon hours under the effect of a land-lake breeze due to temperature differences between the Lake surface and the onshore surface) can significantly complicate the analysis of ozone formation and transport in this area. This effect can significantly affect the distribution of high ozone concentrations in the area, making it difficult to determine the source of the monitored high ozone concentrations. LADCO, however, has modeled meteorology, emissions, and ozone formation and transport in the Lake Michigan area over multiple day high ozone events. These ozone modeling analyses have led to LADCO's ozone modeling analysis of ozone contribution levels for specific areas, specific monitoring sites, and specific source categories. As discussed in EPA's final ozone designation TSD for the Chicago area, LADCO's ozone contribution modeling, OSAT analysis, shows that the high ozone concentrations at the Zion, Illinois monitoring site can be attributed to NO_x and VOC emissions from a large source area, including Northwest Indiana, and that emissions in Lake and Porter Counties are significant contributors to the high ozone concentrations monitored at these monitoring sites.

It is true that the Zion, Illinois monitoring site has not historically been the site with the highest ozone design value in the Chicago area, this distinction goes to the Chiwaukee Prairie monitoring site in Wisconsin. Analysis of the ozone design value trends at the Zion, Illinois and Chiwaukee Prairie monitoring sites, however, shows that the gap between the Zion, Illinois

ozone design values and Chiwaukee Prairie ozone design values has been narrowing over time until 2010, when both monitors had the same ozone design value. The ozone design values have been generally trending downward, and both demonstrated attainment of the 2008 ozone NAAQS during the period of 2008-2010. However, the downward trend in ozone design values has not been constant, and during the period of 2009-2011 both sites recorded violations of the 2008 ozone NAAQS.⁴ EPA cannot predict the future trends of ozone design values at these two sites based on historical ozone design value trends.

Indiana Comment: The State notes that CSAPR modeling - modeling performed in 2011 with results reported in EPA's "Air Quality Modeling - Final Rule Technical Support Document" shows that the 2014 modeled future year ozone design value for the Zion, Illinois monitor is in attainment of the 2008 ozone NAAQS at 0.072 to 0.073 ppm. The State notes that EPA used the modeling to determine the ozone contribution from each state. The entire Indiana contribution to the Zion, Illinois ozone modeling receptor was 0.01096 ppm (10.96 ppb), or 14.8 percent of Zion's peak modeled ozone concentration. Indiana believes that this demonstrates that Indiana's ozone contribution to the Zion, Illinois monitoring site is minor.

Indiana notes that CSAPR controls were not reflected in the 2005 emissions considered by EPA in its ozone designation TSD for the Chicago area. The State argues that, if current ozone design values were used in the CSAPR modeling, modeled future ozone design values would be 0.014 ppm lower, with all modeled peak ozone levels in the Chicago area being below 0.075 ppm.

EPA Response: The implementation year for CSAPR is after 2005, so it would have no effect on the 2005 (or 2008) emission inventory for the State of Indiana. Indiana is not correct in their assertion that current ozone design values matched with CSAPR modeling would result in a decrease in contribution of 14 ppb for the State of Indiana. The contribution for the State of Indiana of 10.96 ppb to the Zion monitor is far above the level designated as a significant State-to-State contribution under CSAPR. Ozone contribution modeling submitted by the State of Indiana and performed by LADCO for the summer of 2007 indicates contribution to the Zion monitor from Lake County, Indiana to be 3.6 ppb and Porter County, Indiana to be 1.6 ppb. US EPA considers these contributions to be significant.

Indiana Comment: The State comments that, in the case of Jasper County, EPA focused on the combined total emissions from Jasper, Lake, and Porter Counties as the basis for the inclusion of these counties in the Chicago-Naperville, IL-IN-WI ozone nonattainment area. The State argues that EPA should consider each county on its own merits to fairly assess contributions to a monitored violation of the 2008 ozone NAAQS that results in a nonattainment designation for the county.

⁴ Certified data submitted on May 1, 2012 by Wisconsin for 2011 now indicate that the ozone design value at the Chiwaukee Prairie monitoring site exceeded the ozone design value at the Zion, Illinois monitoring site by 0.001 ppm (1 ppb) for the 2009-2011 period. Although EPA did not receive this certified information from Wisconsin in sufficient time to consider it for purposes of determining whether other nearby areas were contributing to the violation at the Chiwaukee monitor, we recognize that this violation further supports the boundaries of the designated nonattainment area based on the violation at the Zion monitor.

EPA Response: The commenter is incorrect. In preparing the draft TSD to support the January 31, 2012, 120-day letters to the Governors of Illinois, Indiana, and Wisconsin, EPA considered the NOx and VOC emission fractions contributed by each county in the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The final ozone designation TSD for the Chicago area also is clear that EPA considered each county individually for purposes of determining whether it should be included as part of the final ozone nonattainment area for the 2008 ozone NAAQS. Notably, after considering updated information submitted after the January 31, 2012 letter, EPA determined in the final TSD that Jasper County does not meaningfully contribute to the violation at the Zion monitor and should not be included as part of the designated nonattainment area. EPA assessed Lake and Porter Counties independent from each other and concluded that both contributed to violations of the 2008 NAAQS at the Zion monitor and determined in the TSD that each should be included as part of the designated nonattainment area.

Indiana Comment: The State expresses a concern that Jasper County is not within the jurisdiction of a MPO and has not been subject to transportation conformity to date. The State argues that, therefore, excluding Jasper County from the nonattainment area poses no inconsistency with existing jurisdictional boundaries. (Consideration of jurisdictional boundaries is one of the factors to be considered by EPA in the setting of ozone nonattainment boundaries.) The State also argues that excluding Lake and Porter Counties from the ozone nonattainment area does not present a challenge with regard to consideration of transportation conformity or SIP development.

EPA Response: As provided in the TSD, EPA has determined that Jasper County does not meaningfully contribute to the violation at the Zion monitor and is designating the county unclassifiable/attainment. This renders the State's concerns about transportation conformity and Jasper County moot. The issues raised with regard to Lake and Porter County are not relevant for purposes of determining whether those counties contribute to a violation at the Zion monitor. The TSD supports EPA's determination that they do and that they, therefore, should be included as part of the nonattainment area.

Indiana Comment: IDEM agrees that EPA's approach of using mass emissions for the purposes of determining a county's contribution to high ozone concentrations is a reasonable way to begin the analysis, but argues that the results of such an analysis are inconclusive unless supplemented through independent analysis of other ozone formation and transport factors. Without quality emission analyses and ozone modeling, IDEM asserts that mass emissions should not be the primary means of designating areas under the 2008 ozone NAAQS. In addition to ozone monitoring data, scientifically sound ozone modeling, emissions, and meteorological analyses should be used to justify area nonattainment designations.

The State argues that ozone nonattainment designations should be conducted on a nationally consistent basis using sound science and "real-world air quality drivers weighted and applied fairly."

EPA Response: EPA agrees with IDEM that emissions alone should not be the only factor considered when establishing ozone designations. That is why EPA has used a multi-factor

analysis to assess whether specific counties should be included in or excluded from potential ozone nonattainment areas.

EPA also agrees that sound science should be used in assessing the available data used to establish nonattainment boundaries. EPA, however, does not agree with the State that using a limited set of data, including available emissions data and limited meteorological data, where such data are all that is available, is bad, unsound science. The science of ozone formation is fairly well-established, and the science indicates that the ozone formation potential for an area is closely related to the area's level of NO_x and VOC emissions. We believe that consideration of county-specific emissions and the total NO_x and VOC emissions of a large urban source area (the type of area most closely related to most monitored ozone standard violation locations) when selecting ozone nonattainment areas is sound science when considered in the context of the full five-factor analysis.

EPA also agrees that available ozone modeling data and meteorological data analyses should be used to assess the possible relative ozone impacts of individual counties. In making decisions about whether an area should be included as part of a designated nonattainment area, EPA must weigh these and other factors based on the unique situation of each area across the country. EPA strives for consistency in the designation process, but there is no magic formula that it can apply that would account for the variability across the country. For example, even assuming that two areas located in different parts of the country had counties with relatively similar emissions characteristics, other factors, such as geography or wind patterns could result in different decisions for the two areas.

Indiana Comment: The State argues that the treatment of Jasper, Lake, and Porter Counties resulting from "last-minute," non-air quality-related decisions by Illinois is an example of unjust inconsistencies exhibited in EPA's intended ozone designations. The State argues that no other area in the country has been put in the situation of being proposed as attainment one month and nonattainment the next month due to a neighboring state's action to preserve CMAQ funding.

EPA Response: We agree with the State of Indiana that the ozone designation situation that has developed for the Chicago area is unique. No other State early certified 2011 ozone data that supported a change in designation from attainment (based on 2008-2010 data) to nonattainment (based on 2009-2011 data). However, the fact that the situation is unique does not make it unjust. While it is unfortunate that the certified data were submitted only two days before the December 9, 2011, intended designations were sent to the States and, thus, could not be considered for the purpose of those letters, EPA could not simply ignore the certified data indicating that the area is violating the ozone NAAQS. To meet the statutory requirement to notify States of any intended modification to the State's recommendation, EPA sent new 120-day letters to the States of Illinois, Indiana and Wisconsin on January 31, 2012. We note that we acted consistently in considering all certified air quality data for 2011 submitted by States on or before February 29, 2012. The Illinois data, however, were the only data for which we were required to send revised 120-day letters.

Indiana Comment: Indiana argues that, at minimum, EPA should consider the size of any facility or power plant and the extent of its emission control effectiveness for a county EPA feels may be contributing to a monitored downwind ozone standard violation. The only significant source of NO_x and VOC emissions in Jasper County is the NIPSCO-Schahfer power plant. NIPSCO-Schahfer has NO_x emission controls, installed since 2008. In 2008, NIPSCO-Schahfer emitted 17,324 tons of NO_x. In 2011 and subsequent to the implementation of NO_x emission controls, NIPSCO-Schahfer emitted 7,237 tons of NO_x.

The State points out that EPA took into account the amount of emissions control in place at the Big Cajun 2 power plant in Point Coupee Parish in Louisiana in making its decision to not designate Point Coupee Parish as nonattainment for the 2008 ozone NAAQS. EPA considered the NO_x and VOC emissions for the Big Cajun 2 power plant recorded in the Clean Air Markets Division emissions database. EPA did not consider this type of data for the NIPSCO-Schahfer power plant in Jasper County even though NIPSCO-Schahfer power plant has employed the same type of NO_x emission controls as the Big Cajun 2 power plant.

NIPSCO-Schahfer has entered into a consent decree with EPA to obtain greater emission control efficiency for its Selective Catalytic Reduction (SCR) emission control system on Unit 14. In addition, there is a cap on emissions on all three of NIPSCO's power plants in Northwestern Indiana, which will further reduce emissions through 2016.

Indiana notes that NIPSCO-Schahfer ozone season NO_x emissions (3,605 tons NO_x in 2011) are less than those of Big Cajun 2 (5,102 tons NO_x in 2011). In addition, NIPSCO-Schahfer NO_x emissions are below its CSAPR NO_x emission allocation. Therefore, the State argues that NIPSCO-Schahfer NO_x emissions are well controlled. The State argues that this supports the dropping of Jasper County from the ozone nonattainment area for the 2008 ozone NAAQS.

EPA Response: EPA relied on the updated emissions information submitted by the State of Indiana to evaluate emissions for Jasper County. As provided in the TSD, EPA has determined that Jasper County should not be included as part of the Chicago nonattainment area and EPA is designating Jasper County unclassifiable/attainment. See the final ozone designation TSD for the Chicago area.

3.2.5.1.3. State of Wisconsin Comments

Wisconsin Comment: The State comments that Kenosha County should be designated as attainment of the 2008 ozone NAAQS based on 2008-2010 ozone data. During this time Kenosha met the 2008 ozone NAAQS with an ozone design value of 0.074 ppm.

EPA Response: EPA is required to designate as nonattainment any area that is violating the ozone NAAQS or that is contributing to a violation of the ozone NAAQS in a nearby area. As provided in the TSD, EPA has determined that two townships in Kenosha County should be included as part of the Chicago nonattainment area because they contribute to the violation as the Zion monitor.

Wisconsin Comment: The State argues that, from a standpoint of national consistency, EPA should not allow individual states to select the 3-year period that suits their individual situations when comparing monitored ozone concentrations to the ozone standard. The State objects to EPA's decision to base the ozone attainment status of the entire Chicago-Naperville-Michigan City, IL-IN-WI CSA on Illinois' sole decision to early certify 2011 ozone data. The State argues that use of 2008-2010 ozone data is consistent with the data considerations in most areas in the United States. Kenosha County (Chiwaukee Prairie) attained the 2008 ozone NAAQS based on 2008-2010 ozone data, and, therefore, should be designated as attainment for the 2008 ozone NAAQS. Kenosha County should not be designated nonattainment based on monitoring in another state and on another state's air quality over which the State of Wisconsin has no control or authority.

EPA Response: States were not required to submit certified air quality data for 2011 until May 1, 2012. EPA notified States that, if they wished EPA to use 2011 data for designations, such data must be certified early, no later than February 29, 2012. Illinois, like several other States, submitted early certified 2011 data. As noted above, EPA has included two townships in Kenosha County as part of the designated nonattainment area because they contributed to the ozone standard violation at the Zion monitor.

Wisconsin Comment: The State argues that in 2008 Kenosha County only contributed 1.72 percent of the total NO_x emissions and 1.89 percent of the total VOC emissions in the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The State notes that emissions in Kenosha County have declined subsequent to 2008, possibly reducing Kenosha County's relative emissions contribution in the Chicago-Naperville-Michigan, IL-IN-WI CSA. The State also notes that EPA has acknowledged in the ozone Technical Support Document (TSD) used to support EPA's intended area designations for the 2008 ozone NAAQS that Kenosha County's NO_x and VOC emissions are relatively low and, based on Illinois' and Wisconsin's wind direction analyses, did not significantly contribute to the monitored ozone standard violation at the Zion, Illinois monitoring site. These conclusions support the designation of Kenosha County as attainment for the 2008 ozone NAAQS.

EPA Response: As provided in more detail in the final TSD, EPA determined that it is appropriate to include part of Kenosha County in the designated nonattainment area. While the TSD for the intended designations suggested that Kenosha County emissions contributions to ozone levels at the Zion, Illinois monitor were likely relatively small due to low emissions and wind direction analyses, Indiana provided a more thorough analysis of contribution developed by LADCO. We believe this analysis supports the conclusion that two townships in Kenosha County do in fact contribute to elevated ozone levels at the Zion, Illinois monitor.

Wisconsin Comment: The State objects to EPA's conclusion that a reason for including Kenosha County in the Chicago-Naperville, IL-IN-WI ozone nonattainment area is because Kenosha County has historically been the high downwind ozone monitoring site for the Chicago region. The State argues that, given the potential economic burdens associated with nonattainment of the ozone standard, Kenosha County should not be designated as nonattainment of the 2008 ozone NAAQS solely on the basis of monitoring another state's air pollution, over

which the State of Wisconsin has no control. EPA should consider any regulatory relief that can be given to Kenosha County since the majority of its ozone is transported into Kenosha County from out of state.

EPA Response: As provided in the TSD, we did consider the long standing relationship between Kenosha County and the Chicago nonattainment area (as evidenced by the Chiwaukee monitor being historically used as the design value monitor for the Chicago nonattainment area) as one of the factors in determining to include Kenosha County as part of the designated nonattainment area.⁵ While we agree that this represents that ozone is transported from portions of the Chicago area to the Chiwaukee monitor, it does not address whether ozone from Kenosha County may also be transported to monitors, such as the Zion monitor, in counties that have historically been included in the Chicago nonattainment area. For the 2008 ozone NAAQS, the only violating monitor in the Region for which we had certified data for consideration, prior to the January 31, 2012, 120-day letters and prior to the February 29, 2012, deadline for the early certification of 2011 ozone data, was the Zion monitor.⁶ Based on our analysis, we have determined that two townships in Kenosha County should be included as part of the designated nonattainment area because they contribute to the nearby violation at the Zion monitor. Thus, we did not consider the role of emissions transported to Kenosha County in determining to designate a portion of Kenosha County as part of the nonattainment area.

EPA is not insensitive to economic concerns. However, EPA cannot exclude from the designated nonattainment area a county (or portion of a county) that contributes to a nearby violation based on that concern.

Wisconsin Comment: The State comments that, if EPA cannot designate Kenosha County as attainment of the 2008 ozone NAAQS, EPA should designate as small a portion of Kenosha County as feasible as nonattainment and that this nonattainment area be included as part of the “Chicago-Naperville-Michigan City, IL-IN-WI Combined Statistical Area (CSA).” The State argues that this approach is supported by the fact that the majority of the ozone recorded in Kenosha County at the Chiwaukee Prairie site originates in the Chicago metropolitan area and is consistent with EPA policy for setting nonattainment area boundaries. This approach recognizes that Kenosha County is a receptor county rather than a contributing county for ozone.

The State argues that the reduced ozone nonattainment area for Kenosha County should extend from the shore of Lake Michigan to no further west than Sheridan Road. To support Sheridan Road as the western boundary of the ozone nonattainment area in Kenosha County, the State

⁵ EPA included Kenosha County in the Milwaukee-Racine nonattainment area in previous nonattainment designations for both the 1-hour and 1997 8-hour ozone NAAQS. The fact that Kenosha has been included as part of a different designated nonattainment area for the 1-hour and 1997 8-hour ozone NAAQS is not an indication that it does not contribute to violations in Chicago. Rather, EPA recognized that Kenosha County was more closely aligned with those other designated nonattainment areas.

⁶ We note that on May 1, 2012 we received certified 2011 air quality data from the State of Wisconsin. Based on air quality data from 2009-2011, the Chiwaukee monitor is violating the 2008 ozone NAAQS. However, since we did not have that information in sufficient time to consider it for designations, we are not designating Kenosha County nonattainment based on that monitor violation.

notes that the average ozone design values at two ozone monitoring sites, one on Sheridan Road and one on Wood Road west of Sheridan Road, during the period of 1999-2003 were 6.0 percent and 9.3 percent, respectively, lower than the average ozone design values for the Chiwaukee Prairie monitor during the same period. The Sheridan Road monitor was located 3/4 miles west of the Lake Michigan shore, and the Wood Road monitor was located within 2 miles of the Lake Michigan shore. In addition, a monitor located in Racine County, 1 mile from the Lake Michigan shore, recorded ozone design values averaging 5.8 percent lower than the Chiwaukee Prairie monitor during the period of 2003-2010. These monitoring results support a very narrow ozone nonattainment area in Kenosha County at and near the Lake Michigan shoreline.

EPA Response: EPA agrees with the State of Wisconsin that the 1999-2003 ozone data for the three discussed ozone monitoring sites (Chiwaukee Prairie, Sheridan Road, and Wood Road) demonstrate a rapid drop-off in peak ozone concentrations on high ozone days as one moves from the shoreline of Lake Michigan west into Kenosha County. However, our decision to include portions of Kenosha County as part of the nonattainment area is not based on ozone levels at those three monitoring sites, which were attaining the ozone standard based on the most recent three years of certified data that EPA had before it (2008-2010) for purposes of making its designation decision.

As provided in more detail in the TSD, our refined evaluation that considered the LADCO analysis supports inclusion of only the two easternmost townships in Kenosha County as part of the designated nonattainment area. We disagree with Wisconsin's suggestion to include a much narrower sliver of land bounded to the west by Sheridan Road. Sheridan Road ranges from mere feet to approximately 3/4 of a mile from Lake Michigan. We believe that this narrow band of land does not capture most of the sources of NO_x and VOC emissions in the area nor does it address a large portion of the population (which we believe is necessary to address mobile and area source emissions). The two lakeshore townships of Somers and Pleasant Prairie, which we are designating as nonattainment, contain approximately 77 percent of Kenosha County's population, 91 percent of its NO_x emissions, and 86 percent of its VOC emissions.

Wisconsin Comment: The State notes that EPA's ozone designation TSD recognizes that Kenosha County's population comprises only 1.7 percent of the total population in the Chicago-Naperville-Michigan City, IL-IN-WI CSA and that Kenosha County has moderately low 2010 population compared to those of higher populated counties in the CSA. In addition, Kenosha County has a relatively low population density. These facts strongly indicate that population-related emissions in Kenosha County area were not likely significant contributors to the ozone standard violation monitored in Lake County, Illinois or to the high ozone concentrations monitored in Kenosha County, Wisconsin.

EPA Response: Our final TSD includes the same population levels to those presented in the TSD that accompanied our intended designation. However, we disagree with the State that this indicates that population-related emissions in Kenosha County are not significant contributors to the violation at the Zion monitor. As discussed in greater detail in the TSD, the LADCO analysis supports our conclusion that two townships in Kenosha County should be included as

part of the designated nonattainment area because they contribute to the violation at the Zion, Illinois monitor.

Wisconsin Comment: The State notes that traffic and commuting pattern information contained in EPA's ozone designation TSD supports the fact that Kenosha County Vehicle Miles Travelled (VMT) is only 1.9 percent of the total VMT for the Chicago-Naperville-Michigan City, IL-IN-WI CSA, further supporting the State's argument that Kenosha County should be designated as attainment for the 2008 ozone NAAQS.

EPA Response: While Kenosha County VMT may seem relatively low as compared to the entire Chicago-Naperville-Michigan City, IL-IN-WI CSA, as provided in more detail in the TSD, we have concluded that two townships in Kenosha County should be included as part of the designated nonattainment area because they contribute to the violation at the Zion, Illinois monitor.

Wisconsin Comment: The State argues that ozone concentrations monitored at the Chiwaukee Prairie ozone monitor, located in the southeastern corner of Kenosha County near the Illinois/Wisconsin border and near the Lake Michigan shoreline, should not be used for regulatory purposes for Kenosha County, Wisconsin. Citing a January 18, 2011, letter to the EPA, the State notes that this point has been previously raised with the EPA, when the State considered relocating this ozone monitor. The State believes that this monitoring site does not meet EPA monitoring guidelines for regulatory compliance because this monitor is not located in a high population density area and is not located downwind of any emission sources located in Kenosha County.

The State contends that relocating the Chiwaukee ozone monitor would have little or no impact on the measurement of "regional ozone concentrations" for the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The State contends that ozone concentrations monitored at the Chiwaukee Prairie site are redundant with ozone concentrations monitored at Illinois' Zion monitoring site, located approximately 2.5 miles south of the Chiwaukee Prairie monitoring site. The redundancy of the ozone monitoring concentrations was confirmed by a correlation analysis using 5 years of ozone data, which showed the ozone data for the two ozone monitoring sites to be highly correlated, with a correlation factor of 0.97 and an average relative difference of 0.070. The State argues that recent correlation analyses show the ozone data for the two monitoring sites to be even more correlated than indicated in EPA's ozone designation TSD for the 2008 ozone NAAQS, with greater correlation brought about by implemented NO_x emission control measures in this region.

The State's preference is to relocate the Chiwaukee Prairie ozone monitor, but lacking this, the State contends that the ozone monitoring data collected from the Chiwaukee Prairie monitor should be used to determine compliance with the 2008 ozone NAAQS for only Illinois counties in the Chicago-Naperville-Michigan City, IL-IN-WI CSA and not for Wisconsin counties. The State argues that this approach is consistent with the original rationale for placing the ozone monitor at the Chiwaukee Prairie monitoring site.

EPA Response: While we disagree with the State's view that this monitor should not be used for regulatory purposes, that issue is not raised by the action being taken today.⁷ We are not basing our nonattainment designation for the Chicago area on violations of the ozone standard at the Chiwaukee monitor, which was attaining the standard based on the most recent three years of data (2008-2010) that we considered for purposes of our designation decision.

Wisconsin Comment: The state expresses concerns with comments submitted to EPA by Indiana which indicate that Kenosha County contributes approximately 3 parts per billion (ppb), the Milwaukee area contributes approximately 5.5 ppb, and the remainder of Wisconsin contributes 8 ppb to the ozone concentrations recorded at the Zion, Illinois ozone monitor, thus resulting in a total Wisconsin contribution of 16.5 ppb or 21.7 percent of the total design value. The state points out that CSAPR modeling indicated that Wisconsin only contributed 2.1 ppb or 2.9 percent of the 2012 base case ozone maximum design value of 74.1 ppb. The percent contribution for the entire state indicated by CSAPR modeling is less than that suggested in IDEM's comments for Kenosha County alone (3.9 percent). The state contends that suggesting that Wisconsin contributes more than one-fifth of the ozone to a monitor south of our border is counter to years of forecasting and modeling experience, which confirms that high ozone concentration days occur under southerly wind direction regimes i.e., the precursor pollution comes from Illinois, Indiana and other areas south.

The state also notes that significant emission reductions have occurred in Kenosha County over the last decade. Stationary source nitrogen oxide (NO_x) emissions have dropped from a maximum of 18,758.77 tons in 2001 to 3,012.35 in 2010, an 84 percent decrease. IDEM's contribution modeling relied on a 2007 emissions inventory. Stationary source volatile organic compound (VOC) emissions have dropped from 534.97 tons in 2007 to 218.09 tons in 2010, a 59 percent decrease. In addition, stationary source NO_x emissions have dropped from 3,127.60 tons in 2007 to 3,012.35 tons in 2010, a 3.7 percent decrease in Kenosha County.

EPA Response: EPA disagrees that the contribution modeling done by EPA for the CSAPR Rule can be directly compared to the source contribution modeling done by Lake Michigan Air Directors Consortium for the States of Wisconsin and Indiana and submitted by the State of Indiana. The source contribution done by EPA is evaluated against a different level of the ozone NAAQS than the LADCO/Wisconsin source apportionment modeling. EPA averaged the contributions over modeled days with 8-hr ozone greater than 85 ppb during the summer of 2005 while LADCO/Wisconsin's modeling averaged contributions over modeled hours with 8-hr ozone greater than 75 ppb during the summer of 2007.

EPA disagrees with Wisconsin's assertion about meteorology associated with high ozone in the Lake Michigan region. It is well known historically that complex land-lake breeze meteorology contributes to elevated ozone concentrations and does not follow a strict south to north flow pattern. The year-to-year variability in this type of micro-scale meteorology that is important for ozone formation is likely one of the large contributing factors for the differences in contribution

⁷ EPA views this monitoring site to be an acceptable ambient monitoring location for ozone. EPA's policy for relocating an ozone monitor, particularly as it applies to the Chiwaukee Prairie site, has been discussed in a March 24, 2011, letter from EPA to John H. Melby, Jr.

estimates for Kenosha County to the Zion, Illinois monitor. It is likely that the contribution fluctuates from year to year.

EPA disagrees with Wisconsin's characterization of the change in total emissions for the county of Kenosha. The State of Wisconsin ignores emissions changes for large source sectors within the county including on-road mobile sources. Emissions inventory estimates for the county of Kenosha for 2010 are not documented and cannot be verified based on the information provided by Wisconsin.

EPA sees no reason to discount the contribution estimates from the ozone source apportionment modeling conducted by LADCO on behalf of the State of Wisconsin and other member states. The State of Wisconsin actively supports and oversees all technical work done by LADCO. Wisconsin DNR's air director is part of the board of directors for LADCO. Two members of Wisconsin DNR participate on the 'project team' that directs and reviews technical work done by the organization on behalf of member States. Wisconsin DNR has two staff members participating on the 'modeling team' for LADCO that performed this technical analysis.

A briefing on "Lake Michigan Area (Midwest) Air Quality Weather Forecasting Issues" by the Wisconsin Department of Natural Resources (September 14, 2010) describes the meteorology related to elevated ozone in the Lake Michigan region which is used as the basis of forecasting high ozone days in the Lake Michigan area,
http://alg.umbc.edu/aqpg/presentations/adamski_lmi_forecasting_aqpg_workshop_20100914.pdf
. In this presentation, land-lake breeze recirculation patterns and low winds speeds are related to high ozone in the Lake Michigan region, not simply "south to north" winds. Many research papers published in peer review journals dating to the mid 1990s also support the idea that elevated ozone in the Lake Michigan area is the result of complex land-lake interaction rather than steady south to north wind flow.⁸

3.2.5.1.4. Public Comments

Comment: Several commenters requested the consideration of 2011 data for Illinois and/or requested EPA to reconsider the intended attainment designation for Chicago.

Many commenters urge EPA to consider the Illinois State-certified 2011 ozone monitoring data in making its decision on the ozone attainment status for the Chicago area. These commenters argue that the 2011 ozone data provide a more current, truer picture of the ozone attainment status of this area, and that the 2008-2010 ozone data falsely indicate that this area has attained the 2008 ozone NAAQS. Some of these comments add that additional transportation

⁸ Dye, T.S., Roberts, P.T., Korc, M.E., 1995. OBSERVATIONS OF TRANSPORT PROCESSES FOR OZONE AND OZONE PRECURSORS DURING THE 1991 LAKE-MICHIGAN OZONE STUDY. *Journal of Applied Meteorology* 34, 1877-1889.

Foley, T., Betterton, E.A., Jacko, P.E.R., Hillery, J., 2011. Lake Michigan air quality: The 1994-2003 LADCO Aircraft Project (LAP). *Atmospheric Environment* 45, 3192-3202.

Lennartson, G.J., Schwartz, M.D., 2002. The lake breeze-ground-level ozone connection in eastern Wisconsin: A climatological perspective. *International Journal of Climatology* 22, 1347-1364.

improvements are needed in the Chicago area and that the financing of these transportation improvements will be hampered or disrupted if the Chicago area is designated as attainment for the 2008 ozone NAAQS.

Many commenters argue that using the 2008-2010 ozone data only would mistakenly open the door to undoing the emission controls that have helped improve the Chicago area's air quality, and could prompt various parties to urge withdrawal of current emission controls. The commenters believe that these emission controls are essential to improving the air quality and health of the citizens in this area.

Many commenters argue that designating the Chicago area as attainment for the 2008 ozone NAAQS will result in the loss of Congestion Mitigation and Air Quality (CMAQ) funds needed in the area to support needed transportation improvement projects, meant to improve air quality. Some commenters note that CMAQ funds are needed to support Illinois' adopted GO TO 2040 program, adopted in 2010, which provides for sustainable progress and future air quality improvement. These commenters also note that CMAQ funds are critical to the support of Metra, Chicago's mass transit rail system, and the Chicago area's Diesel Emissions Reduction Program.

A commenter argues that, if EPA does not consider the 2011 ozone data for the designation of the Chicago area under the 2008 ozone NAAQS and designates the Chicago area as attainment, the high ozone concentrations in 2011 would cause the Chicago area to revert to nonattainment of the ozone standard under a more restrictive ozone standard, which the commenter expects EPA to consider in 2013. The commenter argues that it is more intuitive to consider the 2011 ozone data in making decisions on the ozone attainment status of the Chicago area under the 2008 ozone NAAQS.

A commenter requests EPA to reconsider its intention to designate the Chicago area as attainment for the 2008 ozone NAAQS. This commenter contends that the effects of bad air quality are evident throughout the Chicago area.

A commenter argues that unusual weather in 2008 led to atypically low peak ozone concentrations in 2008 and to EPA's incorrect assumption that the Chicago area has attained the 2008 ozone NAAQS based on 2008-2010 ozone air quality data. This commenter requests EPA to consider 2009-2011 ozone data, which the commenter believes more typically represents the true ozone air quality of the Chicago area.

A group of commenters (in a single comment submittal) argue that EPA's intended designations for the "Greater Chicago area" are not lawful. The commenters argue that EPA has violated its own ozone designation policy because the consideration of the 2008-2010 ozone data as reflected in EPA's December 9, 2011, 120-day letters to the Governors (of Illinois, Indiana, and Wisconsin) fails to consider 2011 ozone data. The commenters argue that the 2011 ozone data, especially when viewed in the context of ozone air quality trends during the last decade, demonstrate that the Chicago area has not attained the 2008 8-hour ozone standard. The commenters argue that, if this area "improperly" designated as attainment, it will lose essential

tools for continued air quality improvement, including the loss of CMAQ funds, which could disrupt air quality progress for many years to come. To further substantiate and expand on this comment, these commenters raise the following points/objections:

- a. The air quality regulations, at 40 CFR part 50, Appendix P, make it clear that EPA must use ozone data from the most recent three-year period to make decisions on area ozone designations. The commenters note that EPA is aware of certified 2011 ozone data from the State of Illinois and objects to EPA's December 9, 2011 letter to Governors that only considers ozone data for the period of 2008-2010 and specifies that EPA intends to designate the Chicago area as attainment for the 2008 8-hour ozone standard based on the 2008-2010 ozone data. The commenters urge EPA to reconsider the intended ozone designation of the Chicago area using the 2011 ozone data.
- b. The commenters argue that EPA's failure to consider the 2011 ozone data certified by the State of Illinois could hinder further progress in the Chicago area toward attainment of the ozone standard. The commenters believe that the recent trend of the Chicago area toward improving ozone concentrations has resulted, in part, from the area's designation as an ozone nonattainment area. The commenters believe that the ozone nonattainment designation has provided this area with a number of "tools" that can be used to lower emissions and improve air quality, including CMAQ funds. The commenters argue that these tools will not be available to the area if EPA designates it as attainment for the 2008 8-hour ozone standard and also revokes the 1997 8-hour ozone standard. In particular, in this situation, the Chicago would no longer qualify for the CMAQ funding.
- c. The commenters assert that data from the previous decade show air quality improvement, but do not demonstrate consistent attainment of the ozone air quality standard. These commenters also believe that the data demonstrate that the 2008-2010 period, when the Chicago area attained the 2008 8-hour ozone standard based on ozone air quality data, is a statistical outlier. The commenters believe that the 2009-2011 period ozone data are a better indicator of the ozone air quality status for the Chicago area, demonstrating that this area continues to violate the 2008 8-hour ozone standard.

To demonstrate that the 2008-2010 period was an outlier for ozone, the commenters considered the trend in ozone standard exceedances for the 2008 8-hour ozone standard and the fourth-high daily maximum 8-hour ozone concentrations in 2011 at four monitoring sites in Illinois: Cook County – Chicago – South Water Filtration Plant (SWFP); Cook County – Evanston; Cook County – Northbrook; and, Lake County – Zion. The ozone standard exceedance data only show zero (0) site-exceedances for 2007-2009 and 2008-2010, with 1 site-exceedance recorded in 2009-2011. Therefore, the data do not show consistent attainment of the 2008 8-hour ozone standard. In addition, fourth-high daily maximum 8-hour ozone concentrations

exceeding the 2008 8-hour ozone standard in 2011 at four monitoring sites show that the Chicago area is not consistently attaining the 2008 8-hour ozone standard.

EPA Response: As noted in EPA's January 31, 2012, 120-day letters to the Governors of Illinois, Indiana, and Wisconsin and in EPA's final TSD for the ozone designation of the Chicago area under the 2008 ozone NAAQS, EPA based its designation decision on the most recent certified air quality data it had as of February 29, 2012 for the three States with counties located in Chicago CSA. We considered air quality data from 2008-2010 for Indiana and Wisconsin, because those two States had not certified their 2011 air quality data by February 29, 2012. We relied on air quality data from 2009-2011 for Illinois because Illinois submitted certified 2011 data on December 7, 2011.

The preservation of CMAQ funding is not pertinent for determining whether an area violates the NAAQS or contributes to a violation in a nearby area; thus, we did not consider this for purposes of making our designation decision. However, we recognize that this funding is important for many areas and we agree that a designation of attainment for the Chicago area could have resulted in a loss of CMAQ funding.

Comment: Several commenters believe that 2011 data should be considered for the entire state of Wisconsin.

A commenter argues that EPA should consider 2011 ozone data when designating all areas in Wisconsin. The commenter argues that Federal regulation in 40 CFR 50.15, Appendix P requires EPA to use the most recent three years of data available to the EPA, which the commenter believes includes 2011 ozone data for Wisconsin. The commenter acknowledges that the State of Wisconsin has not certified the 2011 ozone data, but argues that the State has quality assured the data, and, therefore, EPA should consider these data in its ozone designations for the State of Wisconsin. In addition, the commenter notes that Federal regulation in 40 CFR 58.15 requires the state-certification of 2011 ozone monitoring data by May 1, 2012, which is likely to follow closely behind EPA's planned timing for ozone designations for the 2008 ozone NAAQS. If the 2011 data are considered, the commenter notes that 2009-2011 ozone data show a violation of the 2008 ozone NAAQS at monitoring sites in Kenosha, Manitowoc, and Sheboygan Counties, Wisconsin. Therefore, the commenter believes that, in addition to Sheboygan County (included as an intended ozone nonattainment area in EPA's December 9, 2011. Letter to Governor Scot Walker of Wisconsin), Kenosha and Manitowoc Counties should also be considered for designation as nonattainment areas for the 2008 ozone NAAQS.

A commenter argues that past trends in ozone air quality do not support an attainment designation for either Kenosha County or Manitowoc County, Wisconsin, despite attainment of the 2008 ozone NAAQS during the period of 2008-2010. The commenter argues that, even though the ozone air quality trend in these counties has shown progress toward better ozone air quality, the ozone trend data do not show that these counties have consistently attained the ozone air quality standard. The commenter argues that the ozone trend data suggest that the 2008-2010 period is an "outlier," particularly influenced by low ozone levels in 2008. The commenter argues that the 2009-2011 ozone design values for these counties reflect a more accurate picture

of the ozone attainment status of these counties, and show that these counties continue to violate the 2008 8-hour ozone standard.

A commenter notes that EPA has revised its intended ozone designation for Kenosha County, Wisconsin to “nonattainment” of the 2008 8-hour ozone standard in a January 31, 2012, letter to Governor Scott Walker based on certified Illinois ozone monitoring data. The commenter argues that the 2011 ozone data for Kenosha County itself also supports this ozone designation. In addition, the commenter argues that, since the State of Wisconsin has until May 2012 to respond to EPA’s revised intended ozone designation for Kenosha County, at which point certified ozone data for 2011 should be available for Wisconsin, EPA should also consider the 2011 ozone data for Kenosha County. Therefore, as a practical matter, EPA should also consider 2011 ozone data when designating all portions of the State of Wisconsin.

EPA Response: The EPA is basing these final designations primarily on air quality monitoring data for the 2008-2010 time period because this was the most recent certified data available in early December 2011, at the time EPA notified states of any intended revisions to the states’ designation recommendations. Under 40 CFR part 58.15(a)(2) regarding the deadline for annual air monitoring certification, states are required to submit the certified 2011 air quality monitoring data by May 1, 2012, and, thus, states generally had not submitted such data at the time EPA notified states. Moreover, such data, if submitted on May 1, 2012, would not be available in sufficient time for the EPA to complete the 120-day notice process required by the CAA prior to the EPA’s deadline for designating areas pursuant to a Consent Decree. See *WildEarth Guardians v. Jackson* (D. Ariz. No. 2:11-CV-1661)). In certain cases, states included as part of their designation recommendation a request that EPA consider monitoring data from 2009-2011 in making final designation decisions, indicated to EPA what they anticipated that certified data would show regarding whether an area was attaining the standard, and committed to certifying their 2011 data earlier than required for designation purposes. Thus, for those areas, EPA considered the information submitted by the state in sending the 120-day notification letter. Additionally, in the letters responding to these states’ recommendations, EPA indicated that for the EPA to be able to consider 2011 air quality monitoring data, the state must submit the certified 2011 data for an area by February 29, 2012. EPA established this deadline for states to submit any additional information to ensure that the agency would have adequate time to evaluate the new technical information and complete the interactive process between the EPA and the states, as contemplated by the Act, as it moved forward to determine the final designations.

On April 30, 2012, EPA issued ozone designations for all areas of the country except those areas being considered for inclusion as part of the Chicago-Naperville, IL-IN-WI nonattainment area. For Wisconsin, that final action applied to all counties in the State except Kenosha County. Wisconsin did submit certified air quality data for 2011 on May 1, 2012. Considering that data, the Chiwaukee Prairie monitor in Kenosha County is violating the ozone standard based on 2009-2011 data. We did not have that information in sufficient time to complete the 120-day notification process that would be required if we intended to designate an area nonattainment based on the violation at the Chiwaukee Prairie monitor; we would need to consider the appropriate boundaries for such an area and would be required to notify the State 120 days in

advance if we planned to designate an area as nonattainment that the State recommended as attainment.

As to whether 2008 is an outlier in terms of unusually low ozone levels, we note that year-to-year changes in meteorology can affect peak ozone levels. Because of such year-to-year changes, including year-to-year fluctuations in emissions, EPA considers ozone data averaged over three-year periods when designating and redesignating areas for ozone.

Comment: Several commenters believe that Jasper County should not be designated nonattainment as part of the Chicago-Naperville, IL-IN-WI nonattainment area.

A commenter notes that Jasper County, Indiana has not historically been included in the Chicago-Gary-Lake County, IL-IN ozone nonattainment area for the 1-hour or the 1997 8-hour ozone standards. The commenter notes that the EPA is proposing to expand the nonattainment area by the inclusion of Jasper County. The commenter asserts that conditions have not sufficiently changed in Jasper County to justify its addition to the ozone nonattainment area. This includes the addition of the R.M. Schahfer Generation Station, the largest NO_x source in Jasper County, to the prior ozone nonattainment area. The commenter encourages the EPA to revise its proposed area designation to exclude Jasper County from the proposed ozone nonattainment area.

A commenter notes that the ozone monitor in the Chicago area that has been found to violate the 2008 8-hour ozone standard based on 2009-2011 ozone data is located approximately 90 miles or more north-northwest of the nearest portion of Jasper County. In addition, the prevailing winds in northwest Indiana, including Jasper County, are southerly or southwesterly. Because the 2009-2011 ozone design value at the Zion, Illinois monitor (0.076 ppm) barely exceeds the ozone standard (0.075 ppm) and Jasper County is rarely, if ever, upwind of the Zion monitor, it is unreasonable to believe that the sources in Jasper County had a significant, if any, contribution to the Zion monitor ozone design value.

A commenter asserts that including Jasper County in the Chicago-Naperville, IL-IN-WI ozone nonattainment area would require the Indiana Department of Environmental Management to develop a State Implementation Plan (SIP) that would likely result in a requirement to install additional, expensive emissions control equipment to the electric generating units at the R.M. Schahfer Generating Station. Requiring Northern Indiana Public Service Company (NIPSCO) to install additional emission control equipment because of the ozone nonattainment designation may increase electricity rates in Indiana disproportionately to the associated corresponding environmental benefit. This would impose an arbitrary and unnecessary hardship on NIPSCO's customers.

A commenter states that they support the expected efforts of the State of Indiana to convince the EPA to exclude Jasper County from the proposed ozone nonattainment area for the 2008 8-hour ozone standard.

EPA Response: For the reasons provided in the TSD, we are designating Jasper County, Indiana as unclassifiable/attainment.

Comment: A commenter opposes EPA's revised decision to designate 12 counties in Illinois, Indiana, and Wisconsin as nonattainment for the 2008 8-hour ozone standard based "on a slight violation" of the standard at one individual monitoring site. The commenter considers this to be a drastic change of course on the part of the EPA, placing the entire Chicago area in nonattainment of the ozone standard, and believes this change to be unreasonable. The commenter contends that all of the "updated" 2009-2011 8-hour ozone concentrations in Illinois are well below the 2008 8-hour ozone standard, except for those at a single monitoring site, whose ozone design value only exceeded the ozone standard by a small margin 0.001 ppm (1 ppb). The commenter argues that, although EPA provided a supplemental technical support document to justify its revised response, EPA failed to offer a reasoned policy rationale for designating the entire Chicago metro area as nonattainment given the small ozone standard violation at one monitoring site for the 2009-2011 period. The commenter argues that this small ozone standard violation is insufficient to justify EPA's reversal.

EPA Response: Section 107(d) of the CAA requires EPA to designate as nonattainment any area that does not meet a primary or secondary air quality standard or any area that contributes to a violation of a primary or secondary air quality standard in a nearby area. The State of Illinois submitted certified air quality data for 2011 in sufficient time for EPA to consider that information in making designation decisions. EPA cannot ignore this violation of the standard for which EPA has had sufficient time to evaluate contribution and to provide the requisite 120-day notices to the States. Our TSD provides the full analysis for our decision on which areas to include as part of the designated nonattainment area.

Comment: Several commenters assert that significant uncertainty impairs EPA's proposed ozone nonattainment designation for the Chicago-Naperville, IL-IN-WI area and particularly for Lake, Porter, and Jasper Counties in Indiana. The commenters object to EPA's intended ozone nonattainment designation for this area because it is based on a single ozone monitor recording an ozone design value just 1 part per billion (1 ppb) (0.001 ppm) over the ozone standard. The commenters assert that the breadth of EPA's intended ozone nonattainment designation is particularly troubling given the "significant variability in accuracy" of monitored ozone concentrations. The commenters claim that such accuracy concerns have been acknowledged in EPA's requirements "automated" ozone monitors, citing 40 CFR 58, Appendix A.2.3.1.2, which references an upper confidence limit of 35 percent, absolute bias of 7 percent. The commenters argue that, with a measured exceedance of only 1 ppb at just one monitor, the very existence of nonattainment in the first place is "in fundamental question."

The commenters also assert that additional doubt exists in this case because the administrative record is missing the raw data from the Zion, Illinois monitor and Illinois' related assessment of the validity of the key data. The commenters assert that EPA must provide these data and documentation of how Illinois evaluated the ozone data from this monitoring site for compliance with EPA data quality assurance requirements to the regulated public with an opportunity of a full review of this information. The commenters argue that EPA's failure to include this ozone

monitoring-related information in the record for the ozone designations makes EPA's attempt to revise its intended ozone designation for this three-state area, as reflected in the December 9, 2011, Governor letters, inappropriate.

EPA Response: As noted above, EPA has concluded that Illinois has applied appropriate quality assurance techniques to the ozone data collected at the Zion, Illinois monitoring site. Therefore, EPA has no reason to disqualify or discount EPA's 2009-2011 ozone data that shows that the 2008 ozone NAAQS has been violated at this monitoring site. EPA relies on the processed, quality assured air quality data certified by the states and placed in EPA's AQS to make decisions. Since the data are quality assured in accordance with EPA's data handling requirements, EPA does not adjust the data or take the uncertainty of the data into account when considering whether a violation of the ozone NAAQS has occurred regardless of the magnitude of the ozone standard violation. While the raw data have not been placed into the administrative record for this decision, they may be accessed on EPA's Air Data site at <http://www.epa.gov/airquality/airdata/>.

Comment: Several commenters assert that EPA's ozone nonattainment designations for Lake, Porter, and Jasper Counties, Indiana are arbitrary and capricious. The commenters claim that this assertion is based on the fact that EPA's supplement to the ozone designation Technical Support Documents (TSDs) for Illinois, Indiana, and Wisconsin (the Supplemental TSD) does not contain a "proper and consistent" ozone contribution analysis which supports EPA's conclusion. The commenters argue that the results for the five factors considered by EPA in its supplemental TSD are either neutral or cut against the proposed conclusion that Lake, Porter, and Jasper Counties "contribute meaningfully" to ozone nonattainment at the Zion, Illinois monitor as defined in EPA's Designation Guidance ("Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards (NAAQS)," December 4, 2008, Attachment 2). For each of EPA's analysis factors, the commenters raise the following objections/points:

- a. **Air Quality Data:** The commenters argue that EPA's consideration of air quality data in the Supplemental TSD is "fundamentally inconsistent." The commenters argue that EPA failed to consider the air quality data for most monitors in the Chicago area, although such a consideration was promised in the Supplemental TSD, noting that such a consideration was only provided for one monitor in Kenosha County, documenting a detailed comparison between ozone concentrations at the Chiwaukee Prairie monitoring site (Kenosha County, Wisconsin) and at the Zion, Illinois monitoring site. The commenters object to the fact such an analysis was not conducted for ozone monitors in Lake and Porter Counties, Indiana. The commenters argue that such an analysis would cut against EPA's "contribution" finding because such an analysis would demonstrate that all ozone monitors in Lake and Porter Counties are monitoring attainment of the 2008 8-hour ozone standard, with ozone design values well below the standard. This conclusion is even more valid for Jasper County, which lacks an ozone monitor.

The commenters assert that the Supplemental TSD provides no explanation of how counties with ozone values well below the standard (or with no ozone data) could be contributing to the ozone standard exceedances more than 60 miles away. The lack of

such an analysis and ozone monitoring data attaining the NAAQS supports an ozone attainment designation for Lake, Porter, and Jasper Counties.

- b. **Emissions Data:** The commenters contend that EPA improperly considered the emissions for Lake, Porter, and Jasper Counties. The commenters argue that the emissions analysis in the Supplemental TSD is arbitrary for two reasons: (a) it disregards a Combined Statistical Area (CSA) analysis by basing comparisons on only Indiana emissions; and, (b) it improperly considers Lake, and Porter, and Jasper Counties as a group when comparing these emissions with the CSA total emissions. The commenters believe that EPA has improperly overemphasized the relatively magnitude (relative to the total emissions from the Chicago-Naperville-Michigan City, IL-IN-WI CSA) of the emissions in Lake, Porter, and Jasper Counties by grouping them together as a whole and by only comparing individual county emissions with the total emissions in the Indiana portion of the CSA only.

The commenters point out that, in terms of the CSA total emissions, the NO_x and VOC emissions from Lake, Porter, and Jasper Counties are the percentages given in the following table. The commenters believe that these emission percentage are small, justifying the exclusion of these counties from the Chicago ozone nonattainment area. They argue that, on an individual county-basis, the emission percentages are low, and collectively, these emissions are dwarfed by the emissions from Cook County, Illinois. They also argue that the ozone impact of these emissions is much smaller than that of other counties in Illinois because they are located farther from the Zion, Illinois ozone monitoring site.

County	Percentage of CSA NO _x Emissions	Percentage of CSA VOC Emissions
Jasper	5	1
Lake	12	7
Porter	7	3

- c. **Traffic and Commuting Data:** The commenters argue that the Supplemental TSD improperly compares the population, traffic, and commuting data of Lake, Porter, and Jasper Counties to other Indiana counties in the CSA rather than to the CSA as a whole, resulting in an over-emphasis of the population, traffic, and commuting levels in Lake, Porter, and Jasper Counties.
- d. **Meteorological Data:** The commenters contend that the limited meteorological data made available in the Supplemental TSD does not support the proposed ozone designations for Lake, Porter, and Jasper Counties. The commenters argue that EPA has unacceptably not considered meteorological data representative of northwestern Indiana. EPA has unacceptably only considered meteorological data from Kenosha County, Wisconsin and Alsip (Cook County), Illinois. Therefore, EPA's argument that the

meteorological data support transport of ozone and ozone precursors from northwestern Indiana is arbitrary and capricious. The commenters argue that weather data collected from sites located over 80 miles from northwestern Indiana cannot be used to establish pollutant transport from this area.

The commenters have also noted that EPA has also indicated that high ozone concentrations generally occur on sunny days with high temperatures and low wind speeds. The commenters argue that, if low wind speeds are so critical for high ozone concentrations, the transport of ozone/ozone precursors from northwestern Indiana all the way to the Zion, Illinois ozone monitoring site cannot be culpable for the high ozone monitored at this site.

- e. **Topography and Geography:** The commenters argue that EPA's conclusions for this factor are neutral, neither favoring nor opposing EPA's ozone designations analysis for the Chicago area.
- f. **State Jurisdictional Boundaries:** The commenters assert that EPA's analysis does not give appropriate weight to Indiana's jurisdictional boundaries given the minimal nature of the monitored ozone standard violation. The commenters argue that the NAAQS requirements are designed around the premise that the states can most effectively identify and address nonattainment issues on a localized basis. This approach avoids needless burdens of statewide and national emission control regulations. The commenter contend that, even though EPA echoed this fact in the Supplemental TSD, it ignored this principal by including Lake, Porter, and Jasper Counties in the intended ozone nonattainment area over the objections of the State of Indiana. The commenters contend that state boundary information is particularly important because Illinois chose to early certify 2011 ozone data showing the violation of the 2008 8-hour ozone standard at the Zion, Illinois site, whereas no other state has done so. The commenters assert that EPA has now attempted a last-minute change to the ozone designations for the State of Indiana based on an "apples and oranges" comparison of ozone monitoring data for different years (2009-2011 versus 2008-2010) amongst the states. This problem is made more acute by the very small margin of the ozone standard violation at the Zion, Illinois site.

EPA Response: EPA agrees with the commenter that the Topography and Geography factor is neutral, neither favoring nor opposing EPA's ozone designations analysis for the Chicago area. However, EPA disagrees with the other points raised by the commenter, as provided below.

First, the commenter is incorrect in claiming that EPA did not consider all state-certified ozone air quality data for all ozone monitoring sites in the Chicago-Naperville-Michigan City, IL-IN-WI CSA. As noted in the January 31, 2012, TSD, all monitoring sites in this area, with the exception of the Zion, Illinois monitoring site were monitoring attainment of the 2008 ozone NAAQS based on the three most recent years of quality assured, state-certified monitoring data. The recorded violation of the 2008 ozone NAAQS at the Zion, Illinois monitoring site confirms that the Chicago-Naperville-Michigan City, IL-IN-WI CSA has violated the 2008 ozone NAAQS. The fact that monitors in other areas were monitoring attainment indicated that such

counties were not designated nonattainment on the basis that such counties were violating the standard; rather, for those other counties, EPA performed the five-factor analysis to determine whether they should be included as part of the designated nonattainment area based on their contribution to the violation at the Zion monitor. We note that in the final TSD, newly submitted information from Wisconsin, which was not available in sufficient time to consider for the designations, indicates that the Chiwaukee monitor is violating the 2008 ozone standard based on 2009-2011 data.

Second, EPA considered VOC and NO_x emission levels for each county in the Chicago-Naperville-Michigan City, IL-IN-WI CSA and compared those emission levels to those of all other counties to determine which counties were the most significant emitters of VOC and NO_x and, therefore, the most likely source areas for contribution of ozone to the monitored ozone standard violations. Thus, we disagree with the comment that we only considered the three Indiana Counties as a group. We did not take the relative geographical location of these counties into consideration in this factor. We do consider geography as part of the meteorology factor, which considers the directional transport of emissions. In general, past observations in urban areas of the United States suggests that high ozone levels generally result from VOC and NO_x emissions occurring over relatively large source areas. EPA assumes that VOC and NO_x emissions occurring anywhere in the CSA are close enough potentially to contribute to high ozone concentrations monitored at the peak ozone monitoring sites. Of course, this factor must be considered with the other factors in making a decision about whether an area should be included based on contribution. As to the Chicago area, we note that past ozone modeling and other ozone and meteorology analyses conducted by LADCO has shown that high ozone levels monitored at the peak ozone monitoring sites in this area are due to emissions from a large geographical area including all parts of this CSA.

Third, With regard to population and traffic data, EPA considered such data for each county separately and did not lump the data for all Indiana counties as stated by the commenter. Additionally, the data for the Indiana counties were compared to those for other counties in the CSA, including comparison of data for Indiana counties with data for Illinois counties, to derive a conclusion as to which counties relatively had the largest population-related and vehicle-related emissions.

Fourth, we disagree that the meteorological data we have relied on is insufficient. We relied on the best data we had available at the time we notified the States of our intended designation of the Chicago area in January 2012. At that time, we generally relied on meteorology analyses conducted by Illinois and Wisconsin for high ozone days. For purposes of our final decision, we also rely on LADCO meteorology analyses submitted by the State of Indiana. The LADCO analyses were performed for high ozone periods and have led to a conceptual model of ozone formation and transport in the lower Lake Michigan area. These analyses and data support EPA's conclusion that high ozone levels at the Zion, Illinois monitoring site are generally due to winds from the southeast through southwest, which points to the Northeastern Illinois and Northwestern Indiana areas as likely source areas for the high ozone. Note that the LADCO ozone source apportionment modeling provided by the State of Indiana also supports this conclusion. The LADCO ozone modeling used for ozone source apportionment considers

meteorology for a large modeling domain, including the Northwest Indiana area. The results of LADCO's ozone modeling shows that emissions in Northwest Indiana can react to form ozone that is transported to the Zion, Illinois area. In addition, the meteorology data and air pollutant transport trajectories generated by the State of Indiana indicate that emissions from Lake and Porter Counties can contribute to violations at the Zion, Illinois monitoring site. See the final TSD for a more detailed discussion of the LADCO ozone source apportionment modeling submitted by Indiana and meteorological data submitted by and meteorological analyses conducted by Indiana.

Fifth, we disagree with the comment suggesting that we should give weight to the jurisdictional boundary of the State of Indiana because the violation is "minimal" and local controls (presumably meaning Illinois-only) are most effective at addressing the ozone problem. For purposes of determining the extent of a nonattainment area, as we have repeatedly explained, we consider the CSA as the starting point. We believe that this is presumptively the "local" area that would be best able to address pollution (through the planning provisions applicable to nonattainment areas) that does not result from long-range transport. In many cases, these local areas include portions of two or more states. Both historically and for the 2008 ozone NAAQS, many nonattainment areas are comprised of counties from two or more states. The fact that Illinois chose to early certify the 2011 data is not relevant for purposes of determining the boundaries of the nonattainment area and does not give any extra weight to the jurisdictional boundaries factor.

Comment: A commenter argues that ozone data showing attainment of the 2008 8-hour ozone standard at ten monitors between northwest Indiana and the violating ozone monitor at Zion, Illinois strongly supports the view that emissions in Lake, Porter, and Jasper Counties are not significantly contributing to the monitored ozone standard at the Zion site.

EPA Response: As discussed in EPA's final TSD for the Chicago area ozone designations, EPA has reviewed a number of factors, including emissions and ozone source apportionment modeling results, that indicate that Lake and Porter Counties are significant source areas of VOC and NO_x emissions that contribute to the ozone standard violation monitored at the Zion, Illinois monitoring site. As we have explained, and as also discussed by Indiana, LADCO modeling and air quality/meteorology analyses have led to a conceptual model of how ozone forms and transports in the lower Lake Michigan area. Analyses show that VOC and NO_x emissions from Northeastern Illinois, Northwest Indiana, Southeastern Wisconsin, and other upwind areas transport over Lake Michigan, complete reactions to form relatively high ozone concentrations, and ultimately undergo advection to the Lake Michigan shoreline, where land-lake breezes can transport ozone at high concentrations at certain shoreline locations. This transport pattern can lead to isolated onshore areas with relatively high ozone concentrations, while leaving other areas with relatively low ozone concentrations. Indiana has supplied several ozone isopleth maps for high ozone days during 2009-2011 demonstrating such behavior.

EPA has concluded that Jasper County is not contributing the violation at the Zion monitor.

Comment: A commenter argues that available meteorological data not considered by EPA supports the absence of any causal relationship between Indiana counties and the Zion, Illinois ozone monitor. The commenter points out that EPA acknowledges that it did not consider meteorological data from or near northwest Indiana. EPA only considered meteorological data from Kenosha County, Wisconsin and Cook County, Illinois. The commenter asserts that, without considering meteorological data for northwest Indiana, EPA cannot draw any conclusions regarding transport of pollutant between northwest Indiana and the Zion ozone monitoring site. The commenter presents meteorological data collected at the Porter County Municipal Airport to support the contention that there is no causal relationship between the northwest Indiana counties and the Zion, Illinois monitor. The commenter discusses meteorological data for several days in 2011 when ozone levels were high at the Zion monitoring site, noting that winds were blowing from the southwest, whereas the Zion monitor is northwest of the northwest Indiana counties. The commenter believes that this proves that the high Zion ozone concentrations are a local problem, and do not result from transport of pollutants from northwest Indiana.

EPA Response: This commenter supplied in excess of 300 pages of raw meteorological data to support the commenter's argument that Indiana VOC and NOx emissions do not contribute to high ozone concentrations in the northern part of the Chicago-Naperville, IL-IN-WI ozone nonattainment area. The commenter provided no analyses using these raw meteorological data to support the commenter's assertion. The supplied data could be analyzed using many different types of analyses and EPA did not have sufficient time or resources to evaluate the information and determine what analyses might be appropriate and then to further evaluate and consider the outcome of any such analyses.

Comment: A commenter contends that the emissions data for Porter and Jasper Counties, Indiana support an ozone attainment designation for these counties. The commenter notes that for VOC, the Porter County emissions are only 2.8 percent of the total VOC emissions for the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The Jasper County VOC emissions are only 1 percent of the total VOC emissions for the CSA. Similarly, the commenter argues that NOx emissions from Porter County and Jasper County, on a per-county basis, are only a small fraction of the total NOx emissions for this CSA. The commenter argues that, on a percentage basis, the VOC and NOx emissions are significantly larger for Cook, DuPage, Kane, Lake, and Will Counties, Illinois. In addition, the Illinois counties are much closer to the Zion, Illinois monitoring site than are Porter and Jasper Counties.

EPA Response: EPA agrees with the commenter that the VOC and NOx emissions from Cook, Lake, DuPage, Kane, Lake, and Will Counties in Illinois exceed those of Porter and Jasper Counties. Nonetheless, it is noted that the VOC and NOx emissions of Porter County (8,100 tons VOC per year and 27,055 tons NOx per year in 2008) are relatively high compared to the 2008 VOC and NOx emissions of other counties in the Chicago-Naperville-Michigan City, IL-IN-WI CSA that EPA has decided to designate as unclassifiable/attainment for the 2008 ozone NAAQS. See EPA's final TSD for the designation of the Chicago area for the 2008 ozone NAAQS.

Based on updated emissions information submitted by Indiana, EPA has determined that the VOC and NO_x emissions in Jasper County are relatively small, on the order of the VOC and NO_x emissions for the CSA counties to be excluded from the Chicago-Naperville, IL-IN-WI ozone nonattainment area. We are designating Jasper County as unclassifiable/attainment for the 2008 ozone NAAQS.

Comment: A commenter asserts that populations and population densities of Porter and Jasper Counties are much smaller than those of the Illinois counties contained in EPA's intended ozone nonattainment area and are comparable to those of the counties (Kankakee and DeKalb Counties, Illinois and La Porte County, Indiana) that EPA intends to leave out of the ozone nonattainment area.

EPA Response: EPA agrees with the commenter that the population and population density of Jasper County are relatively small and that this county is very rural in nature. As noted, EPA is designating Jasper County as unclassifiable/attainment.

EPA disagrees with the commenter's assertion regarding the population and population density of Porter County. This County's population and population density is comparable to those of Kendall and Grundy Counties in Illinois, portions of which are included in the Chicago-Naperville, IL-IN-WI ozone nonattainment area. As described in more detail in the TSD, this factor, along with consideration of other factors, such as VOC and NO_x emissions, supports inclusion of Porter County in the nonattainment area. Even assuming that Porter County had low population/population density, that alone would not be sufficient justification for excluding a county from an ozone nonattainment area. In making its decision regarding the designated nonattainment area, EPA considers and weighs all five factors.

Comment: A commenter argues that the Vehicle Miles Traveled (VMT) and commuting patterns in Porter and Jasper Counties do not support an ozone nonattainment designation for this area. The commenter argues that Porter County has only 2.3 percent of the total VMT in the Chicago-Naperville-Michigan City, IL-IN-WI CSA, and that Jasper County has only 1 percent of the total CSA VMT. The commenter notes that the VMT for Porter and Jasper Counties are similar to those for Kankakee and DeKalb Counties, Illinois and La Porte County, Indiana, all of which EPA intends to exclude from the ozone nonattainment area. The commenter notes that the VMTs are much larger for Will, Kane, Lake, DuPage, and Cook Counties, Illinois than those of Porter and Jasper Counties.

EPA Response: As previously noted, EPA is designating Jasper County as unclassifiable/attainment for the 2008 ozone NAAQS.

Porter County has a relatively low VMT compared to those of other counties to be included in the Chicago-Naperville, IL-IN-WI ozone nonattainment area. As explained in the TSD, however, EPA weighed all five factors in making its decision to include Porter County as part of the designated nonattainment area.

Comment: Several commenters argue that Illinois' 2011 ozone data for the Illinois portion of the Chicago-Naperville-Michigan, IL-IN-WI CSA should only be considered if EPA is also able to review and analyze state-certified 2011 ozone data from Indiana and Wisconsin. The commenters' rationale for this argument is the following:

- a. Illinois' ozone data for the Chicago area show a violation of the 2008 8-hour ozone standard for only one monitoring site amongst 16 monitoring sites, and the violating monitoring site only showed a 1 ppb violation of the ozone standard. This is the first violation of this ozone standard at the Zion, Illinois monitoring site since 2005-2007, when an ozone design value of 0.079 ppm was recorded. During the 2005-2007 period, eight of the 16 monitoring sites recorded a violation of the 2008 8-hour ozone standard.
- b. The commenters contend that it would be difficult to perform a proper analysis of the attainment status of the Chicago area without certified 2011 data from the relevant sites in Indiana and Wisconsin and without the type of technical analysis EPA relies on in such a situation.
- c. The commenters contend that because the standard is violated at only one monitor and only by 1 ppb, a detailed analysis of "relevant data" is necessary to properly evaluate the air quality status of the Chicago area in regard to the 2008 8-hour ozone standard. The commenter argues that it would be improper to simply conclude, on the basis of the one marginal ozone standard violation that the entire Chicago area should be designated nonattainment for the 2008 8-hour ozone standard.
- d. The commenters contend that EPA should make available for public comment any subsequent technical analysis it conducts for the Chicago area regarding its attainment status.

EPA Response: EPA disagrees with the commenter that it must wait for state-certified 2011 ozone data from Indiana and Wisconsin to make its decision regarding the ozone attainment status of the Chicago-Naperville-Michigan City, IL-IN-WI CSA. EPA notes that a designation of nonattainment for the ozone NAAQS can be based on as little as one monitoring site with a quality assured, state-certified violation of the ozone NAAQS. Since such a violation of the ozone NAAQS has been recorded at the Zion, Illinois monitoring site, EPA must conclude that some portion of the Chicago-Naperville-Michigan City, IL-IN-WI CSA must be designated as nonattainment for the 2008 ozone NAAQS. The TSD provides our full analysis of the appropriate areas to include as part of the nonattainment area either because they are violating the standard or are contributing to the violation at the Zion monitor. The lack of 2011 state-certified ozone data from Indiana and Wisconsin does not prevent a consideration of the five factors.

EPA disagrees with the commenter that it should discount the ozone NAAQS violation at the Zion, Illinois monitoring site because this is the first monitored ozone standard violation to occur at this monitoring site since 2005-2007. EPA notes that trends in ozone design values (directly comparable to the ozone NAAQS and a measure of whether a monitor has recorded violations of

the 2008 ozone NAAQS) are not fixed in direction. Both meteorology and VOC/NO_x emissions change in an area over time, affecting the trends in ozone design values for any given monitoring site. Just because the ozone design values for the Zion, Illinois have shown an upward trend since 2008 does not mean that EPA should ignore the ozone NAAQS violation that has been recorded at this monitoring site. Our full analysis for the Chicago-Naperville-Michigan City, IL-IN-WI CSA is located in EPA's final TSD for the Chicago area ozone designation under the 2008 ozone NAAQS.

Comment: A commenter argues that EPA's proposed (intended) designation of nonattainment for the Chicago-Naperville, IL-IN-WI area for the 2008 8-hour ozone standard "does not comport" with President Obama's message on September 2, 2011, requesting EPA not to pursue a tighter ozone standard "to underscore the importance of reducing regulatory burdens and regulatory uncertainty" also recognizing that a new ozone standard review would begin in 2013. The commenter believes that EPA is rushing to judgment in its analysis of incomplete ozone data for the Chicago area, and that this will result in regulatory instability.

EPA Response: Once EPA promulgates a new or revised NAAQS, EPA is required to designate areas for that standard. This process was slowed because EPA was initially reconsidering the 2008 ozone standard. At this point, however, EPA now must move forward to implement the current health-protective standard. We do not agree with the commenter that there is "incomplete" ozone data for the Chicago area. We have and are relying on certified air quality data from 2008-2010 for Wisconsin and Indiana and data from 2009-2011 for Illinois. The commenter is not clear in terms of what "regulatory uncertainty" will result from designation of the Chicago area. In any event, such a vague argument does not justify ignoring our statutory obligation to designate areas.

Comment: A commenter believes that all of the certified ozone data for the Chicago area should be included in the ozone designation assessment and that the data precision and bias should be reviewed as well to "make a proper assessment." The commenter believes that EPA has not had sufficient time between its December 9, 2011, proposed attainment designation for the Chicago area and its January 31, 2012, revised proposed nonattainment designation for the Chicago area to conduct a thorough analysis of Illinois' ozone data, let alone Indiana's and Wisconsin's ozone data. EPA's approach in this case is without precedent and appears to be biased in favor of issuing a nonattainment designation for this area. In addition, the commenter objects to EPA's statistical analysis of Wisconsin's Chiwaukee Prairie ozone data in comparison to the Zion, Illinois ozone data as an attempt to use Wisconsin's uncertified ozone data. The commenter argues that, if EPA proposes to "compute nonattainment values using statistical techniques" it should incorporate the data precision and bias values from these monitoring sites to determine the probability of an exceedance of the standard.

EPA Response: EPA has already conducted reviews of Illinois' quality assurance information for ozone data collected during the ozone season (April-October) in 2011. All 2011 ozone data that support the violation of the ozone standard at the Zion, Illinois monitoring site were quality assured by the State of Illinois and reviewed by the EPA prior to the entry of the data into EPA's Air Quality System by the last quarter of 2011. Therefore, EPA has had sufficient time to review

the quality of the critical ozone data for this monitoring site (the State of Illinois has quality assured and EPA has reviewed the quality assurance information for 2009 and 2010 ozone data that are also included in the ozone standard violation data for this monitoring site) that supports the conclusion that this monitoring site has recorded a violation of the 2008 ozone NAAQS for the period of 2009-2011.

EPA's approach for this area is consistent with the approach taken in other areas designated as nonattainment for the 2008 ozone NAAQS and is consistent with guidance EPA has provided to all states regarding the "early certification" of 2011 ozone data. EPA has made it clear to the states that it would consider 2011 ozone data certified by the states prior to February 29, 2012. Therefore, EPA disagrees with the commenter's assertion that its approach taken with regard to the Zion, Illinois 2011 ozone monitoring data (and the 2009-2011 ozone design value for this monitoring site) is inconsistent with that taken for other areas.

With regard to EPA's statistical analysis of Zion, Illinois versus Chiwaukee Prairie, Wisconsin ozone monitoring data, it is noted that this statistical analysis has no bearing on EPA's conclusion that a violation of the 2008 ozone NAAQS occurred at the Zion, Illinois monitoring site. As noted in the final TSD for the designation of the Chicago-Naperville, IL-IN-WI ozone nonattainment area, the correlation of daily peak ozone data has been considered to demonstrate that both Zion, Illinois and Chiwaukee Prairie, Wisconsin ozone monitoring sites are experiencing similar meteorology and ozone impacts on high ozone days.

Comment: A commenter notes that the sole violating ozone monitoring site in the Chicago area violated the ozone standard by only 1 ppb and had last violated the ozone standard in 2005-2007, when an ozone design value of 0.079 ppm had been recorded at the Zion, Illinois ozone monitoring site. This monitoring site is located only 0.75 miles from the Lake Michigan shoreline. The commenter argues that the high ozone concentrations are likely to occur as the result of lake breezes, which transport ozone-laden air from over Lake Michigan inland. The commenter contends that this nonattainment situation is significantly different from the circumstances that existed when the Chicago area was designated as a severe nonattainment area under the 1-hour ozone standard and exceeded the ozone standard throughout the area, and that, similarly, circumstances are now different than when the area violated the 1997 8-hour ozone standard. The commenter notes that EPA has proposed to approve the redesignation of the Chicago area to attainment of the 1997 8-hour ozone standard.

The commenter argues that it should be clear that much has changed in the Chicago area in the last 20 years regarding ozone, including the magnitude of peak ozone concentrations and the character of emission sources. Because of this and because the "complex mechanisms of the area have been studied extensively and are better understood than ever before ...", it is inappropriate for EPA to take the approach it is taking, making a snap decision based on partial information. EPA should provide a more robust assessment of the most current, complete data to determine whether it is reasonable to designate the Chicago area as nonattainment, and, if so to determine the extent of the actual nonattainment area and as precisely as possible. EPA's tendency of falling back on (starting with) the Chicago-Naperville-Michigan City, IL-IN-WI CSA may no longer be appropriate. Until EPA is able to complete an analysis on the full 2009-

2011 data set, it should only rely on its review of the 2008-2011 data and follow through with its initial proposal to designate the Chicago area as unclassifiable/attainment for the 2008 8-hour ozone standard.

EPA Response: EPA cannot designate as attainment an area for which it has certified data showing a violation of the NAAQS and for which it has provided the appropriate 120-day notice to the States about its intended designation. With regard to the adequacy of information we have before us, we note that various studies conducted in the United States over the past several decades have allowed EPA to develop a general view of ozone formation and transport. In addition, with regard to the Chicago area specifically, LADCO has conducted extensive ozone formation and transport analyses in the Lake Michigan area. These studies contravene the commenter's statement that the nature of ozone formation and transport has significantly changed as EPA has transitioned from the 1-hour ozone standard to the 2008 ozone NAAQS. We continue to believe that beginning our analysis of appropriate nonattainment area boundaries using the CSA is a sound approach. Many of the factors that influence the definition of the CSA are also important considerations for determining what areas might affect ozone levels. We note to the extent the commenter is raising these broad technical concerns, the same arguments could be made regarding the use of 2008-2010 data and thus do not support ignoring the 2011 certified data.

Comment: A commenter notes that some of the comments that EPA has received regarding the Chicago area have been in regard to the loss of CMAQ funds. The commenter argues that these public comments should not be the basis for the EPA to decide that the Chicago area should be designated nonattainment for the 2008 8-hour ozone standard. The commenter believes that there are provisions under the Clean Air Act to prevent such anti-backsliding. The commenter notes that they support the "social, economic, and political" benefits of these funds, however, they do not believe that the environmental benefits of these funds are relevant to EPA's decision on the ozone attainment status of the Chicago area. In addition, the commenter believes that the air quality benefits of the CMAQ funds are not substantial and are not cost-effective from an emission reduction perspective.

EPA Response: Trying to prevent the loss of CMAQ funds for the Chicago area is not a factor in EPA's designation of the Chicago-Naperville, IL-IN-WI area as nonattainment for the 2008 ozone NAAQS, which is strictly driven by consideration of current ozone air quality data and consideration of ozone-related factors, such as county-specific emissions and the transport of air pollutants in the Lake Michigan area.

Comment: A commenter does not support EPA's decision to revise its intended Chicago area ozone designation from unclassifiable/attainment based on 2008-2010 ozone data to nonattainment based on 2009-2011 ozone data. The commenter asserts that, should EPA proceed with this ozone designation revision, the following should be addressed:

- a. Why was the revised designation recommendation published prior to the completion of the extended public comment period for EPA's initial ozone designation proposal?

- b. A new 30-day comment period is required as part of the revised 120-day notice period to allow a more detailed response to EPA's revised proposed ozone designation for the Chicago area.
- c. A new comment period is required to allow a more detailed review of EPA's technical data used to support the revised proposed area ozone designation.
- d. EPA must allow discussion on how a regional planning organization, such as CMAP, can approve a 2012-2016 budget based solely on a perceived ozone nonattainment for the Chicago area, when, in fact, the area was in attainment of the ozone standard.
- e. Discuss why CMAP only dealt with VOC emission reductions, when the Chicago area issue of concern is NO_x emissions. EPA acknowledged this when they highlighted the Jasper County, Indiana NO_x emissions as the sole reason for including Jasper County in the intended nonattainment area for the Chicago region. And,
- f. EPA should use consistent data and policies on a national basis when recommending ozone area designations.

EPA Response: This comment was made before EPA opened an additional 30-day comment period for EPA's planned designation of the Chicago-Naperville, IL-IN-WI area as nonattainment for the 2008 ozone NAAQS. We note that the CAA does not provide an opportunity for public comment on designations (specifically exempting the designations from the notice-and-comment provisions of the Administrative Procedures Act). However, as we did with the initial letters sent in December 2011, we provided more than 30 days for the public to review and comment on the revised intended designation letters that we sent to Illinois, Indiana and Wisconsin on January 31, 2012. The States and public have been given an adequate opportunity to comment on EPA's intended ozone nonattainment designation for this area.

Discussion of the intent of CMAP to control VOC rather than NO_x emissions is irrelevant to EPA's decision on the area designations for the 2008 ozone NAAQS. Note, however, that EPA is concerned about VOC emissions as well as NO_x emissions in selecting areas that contribute to downwind ozone standard violations. When EPA sent its intended designation decision in January 2012, we noted that Jasper County was a concern for NO_x emissions because the NIPSCO-Schahfer Generating Station, which is located in Jasper County, Indiana, was a significant source of NO_x emissions in 2008. EPA included counties in the intended ozone nonattainment area if these counties were significant sources for either VOC emissions and/or NO_x emissions.

Comment: A commenter notes that EPA is adding counties in Wisconsin and Indiana to the intended Chicago ozone nonattainment area. The commenter is opposed to the addition of nonattainment areas, and urges EPA to reconsider this expansion of ozone nonattainment areas (including expansion of ozone nonattainment areas other than the Chicago area) in the face of improving air quality. The commenter is concerned about the expansion of areas requiring mandatory emission control measures, arguing that such emission control measures may be

ineffective and unnecessary for timely attainment of the ozone standard. Because states have primary responsibility for implementing the air quality standard, EPA should defer their judgment concerning the appropriate extent of ozone nonattainment areas. In addition, the commenter notes that states and local agencies have tools and technical analysis capability to address culpable sources even if the sources are not in nonattainment areas.

EPA Response: We note that the designations for areas for the 2008 ozone NAAQS are new designations and thus do not “expand” (or “contract”) any existing area. However, we recognize that the intended designation we issued in January 2012, would have included Jasper County, Indiana, which was not part of the Chicago nonattainment area for either the 1-hour or the 1997 8-hour ozone NAAQS. It would also include Kenosha County, which was designated nonattainment for both the 1-hour and 1997 8-hour NAAQS, but as part of a different area than the Chicago nonattainment area. As provided in the TSD, EPA is designating Jasper County as unclassifiable/attainment for the 2008 ozone NAAQS.

As to Kenosha County, Wisconsin, the commenter’s concerns about the expansion of mandatory measures for the area are unfounded since Kenosha County has previously been designated nonattainment for both the 1-hour and 1997 8-hour ozone NAAQS. This county was grouped with the Milwaukee ozone nonattainment area for both of the previous ozone NAAQS (even though Kenosha County has generally been part of the Chicago-Gary-Lake County, IL-IN-WI Consolidated Metropolitan Statistical Area, the predecessor to the CSA). Kenosha County has always been subject to the same mandatory emission controls as the Chicago ozone nonattainment area. Therefore, adding Kenosha County to the Chicago nonattainment area for the 2008 ozone NAAQS will not result in an expansion of requirements for mandatory emission controls.

Comment: A commenter is concerned that EPA could alter the preliminary determinations regarding area designations based on the certified 2011 air quality data and not provide the public with an opportunity to review and comment on the altered intended ozone nonattainment area prior to finalizing this area. The commenter urges EPA to complete the designation of areas as proposed on December 20, 2011, and, if necessary, revise area designations at a later time through another rulemaking action with the appropriate opportunity for public participation.

EPA Response: As previously noted, the CAA specifically provides that the designations are not subject to the public notice-and-comment procedures of the Administrative Procedure Act, so any comments about inadequate public review are not supportable. However, EPA has provided an additional 30-day public comment period for the designation of the Chicago area based on consideration of the 2011 ozone monitoring data in Illinois. As previously stated, EPA does not believe that it can ignore the certified data submitted by Illinois in December 2011 indicating a violation of the 2008 NAAQS and designate the area as attaining that standard.

Comment: Several commenters object to other commenters’ concerns that designating areas as “attainment/unclassifiable,” such as the case for EPA’s initial intended designation for the Chicago area, could result in a deterioration of air quality and discontinuation of certain programs intended to improve and/or maintain air quality. The commenters assert that, as EPA

is aware, the Clean Air Act contains provisions to prevent the deterioration of air quality. Further, the commenter objects to other commenters' recommendations of nonattainment for the Chicago area based on a desire for a particular regulatory program and/or maintenance of Federal funding. The commenter asserts that this approach is inconsistent with the Clean Air Act.

The commenters are of the belief that the negative impact of an ozone nonattainment designation for the Chicago area, due to additional regulatory costs and competitive disadvantages for area sources, outweighs the loss of CMAQ funds, as feared by the commenters supporting an ozone nonattainment designation for the Chicago area. The commenters note that \$411 Million of CMAQ funding from 2012 to 2016 is expected to produce only a 709.8 kilograms per day (kg/day) reduction in area VOC emissions, making CMAQ funding not very cost-effective at reducing area VOC emissions.

EPA Response: EPA agrees with the commenters that the CAA contains anti-backsliding provisions. Although this concern about dropping control measures or deteriorating air quality has been raised by certain commenters, as EPA notes in our response to those comments, that concern is not a valid basis for EPA decisions to designate areas as nonattainment of the 2008 ozone NAAQS. Section 107 of the CAA governs which areas should be designated nonattainment and provides for that designation for areas that violate the standard or contribute to a nearby violation. EPA uses its five-factor analysis to meet this statutory designation provision. Similarly, EPA does not consider the availability of CMAQ funding or "regulatory costs" and "competitive disadvantages" in making designation decisions.

Comment: A commenter argues that, if EPA determines that it is appropriate to move forward with the ozone designation based on Illinois 2011 ozone data only, there are a number of uncertainties regarding the conclusions to be drawn from the data that EPA should evaluate to assure a proper conclusion. The following discusses these uncertainties:

- a. The Zion, Illinois site's monitored 2009-2011 ozone design values exceeds the 2008 8-hour ozone standard by only 1 ppb, 1.3 percent of the ozone standard. This 1.3 percent exceedance could be within the range of precision and accuracy for the ozone monitor, which merits further analysis before a designation for Chicago area is issued.
- b. In the absence of having certified 2011 ozone data from Wisconsin and Indiana, EPA's ozone designation TSD relies on a correlation between the historical ozone monitoring data between the Chiwaukee monitor in Kenosha County and the Zion monitor in Zion, Illinois. While the plot of ozone data shows an increase of ozone design values for these monitors in the 2009-2011 period, the monitoring data for the sites show a declining trend in the ozone design values and the magnitude of the difference between the ozone design values for the two monitoring sites during the 2003-2010 period. If this trend had continued, one would expect the Chiwaukee ozone design value to be below the Zion ozone design value in later years. It would be prudent for EPA to delay making a final decision on the Chicago area designation until it possesses all of the relevant information, i.e. the 2011 certified ozone air quality data for Wisconsin and Indiana.

EPA Response: Please see our previous response to similar comments. As to the commenter's conclusion regarding projection of future ozone design values based on past trends, we disagree. Although ozone design values are generally trending downward in many areas as a result of the implementation of local and regional emission controls, such trends are not constant over time. Inspection of the ozone design value trends for both Zion, Illinois and Chiwaukee Prairie show periodic reversals in the year-to-year trends. We can draw no conclusion that the ozone design value for the Chiwaukee Prairie site should have continued its downward trend taking the ozone design value for Chiwaukee Prairie below the ozone design value of Zion, Illinois. In fact, the ozone design values for both sites have been trending upward since 2009.

Regardless of the trend in the ozone design values for the Chiwaukee Prairie monitoring site, as we have noted previously, we cannot ignore the violation at the Zion monitor and delay designating as nonattainment the area violating the NAAQS or contributing to the violation at the Zion monitor. It takes only one monitoring site in an area with a violation of the NAAQS to establish the validity of defining the area as nonattainment for the NAAQS. Regardless of the level of the 2011 ozone design value for the Chiwaukee Prairie monitoring site, we are required to move forward with the nonattainment designation based on the violation at the Zion monitor.

Comment: A commenter notes that Kenosha County, Wisconsin has embraced a very proactive approach to environmentally responsible development, and that Wisconsin Energy's Pleasant Prairie Power Plant, the County's primary source of emissions, has greatly reduced its emissions. In addition, Chrysler's Kenosha Engine Plant was closed permanently in the Fall of 2010. The commenter is very concerned about Kenosha County's economic development future, which will be impacted negatively by EPA's proposed ozone nonattainment designation for the 2008 8-hour ozone standard.

EPA Response: We recognize that Kenosha has taken significant steps to reduce emissions and improve air quality in the region. However, for the reasons provided in the TSD, we have determined that the two eastern townships in Kenosha County should be included as part of the designated nonattainment area. As we have previously explained, we cannot consider the effects of the designation on future economic development in making designation decisions.

Comment: A commenter is opposed to EPA's intended ozone nonattainment designation for Kenosha County, Wisconsin because the commenter believes that Kenosha County does not meet either of the two Clean Air Act criteria for such a designation: (1) an area does not meet the air quality standard; and/or, (2) the area contributes to a violation of the air quality standard in a nearby area. The commenter argues that the state-certified 2008-2010 ozone data for Kenosha County does not violate the 2008 8-hour ozone standard. The commenter also argues that there is "minimal evidence that sources located in Kenosha County itself contribute to ozone standard violations in the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The commenter notes that the emission levels in Kenosha County are not significantly higher than the emission levels in the six counties in the Chicago-Naperville-Michigan City, IL-IN-WI CSA that EPA intends to designate as attainment for the 2008 8-hour ozone standard. In addition, Kenosha is downwind from the rest of this CSA. These conclusions are supported on the following:

- a. The 2008-2010 ozone design value for Kenosha County's only ozone monitor at Chiwaukee Prairie was 0.074 ppm, below the 2008 8-hour ozone standard. Since the 2011 ozone data do not have to be certified until May 1, 2012, the commenter believes that it is inappropriate for EPA to consider the 2011 data from this monitoring site.

The commenter objects to EPA's reliance on a correlation between the ozone data at the Chiwaukee Prairie, Wisconsin and Zion, Illinois monitoring sites, and EPA's use of 2011 ozone monitoring data for the Zion monitoring site to imply that the ozone standard may be violated in Kenosha County. The commenter argues that this approach undercuts the Wisconsin's ozone data certification process. In addition, the commenter argues that it is inappropriate to project the 2009-2011 ozone standard violation at the Zion monitor onto Kenosha County.

The commenter argues that, even if EPA considers Kenosha County's un-certified 2011 ozone data (which, together with earlier ozone data, show a 2009-2011 ozone design value of 0.077 ppm), the commenter argues that 2011 was a high ozone year and stands in contrast to the steady decrease in 8-hour ozone design values for southeast Wisconsin over the past decade.

- b. The commenter argues that EPA's ozone designation TSD recognizes that the VOC and NOx emissions from Kenosha County are relatively small. Kenosha County accounted for only 1.9 percent of the VOC emissions and 1.7 percent of the NOx emissions from the Chicago-Naperville-Michigan City, IL-IN-WI CSA in 2008. In addition, the commenter notes that ozone modeling indicates that 39.6 percent of the average 1-hour ozone concentrations in Kenosha County are attributable to Chicago area emissions. There is no evidence that Kenosha County emissions have a similar impact on ozone concentrations in the Chicago area. Moreover, air quality analyses indicates that Kenosha County is generally downwind of the Chicago area on high ozone days, making it unlikely for Kenosha County emissions to contribute significantly to high ozone concentrations in the Chicago area.
- d. The commenter argues that EPA's ozone designation TSD recognizes that Kenosha County's population is only 1.7 percent of the total population of the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The commenter, however, objects to EPA's conclusion that Kenosha has a relatively high population density of 600 people per square mile, particularly when population densities are much higher in the Chicago area. The commenter argues that Kenosha County's population density is moderate in comparison to those for other counties in the CSA.
- e. The commenter argues that EPA's ozone designation TSD recognizes that Kenosha County's traffic levels are relatively low at 1.9 percent of the total Vehicle Miles Traveled (VMT) for the entire Chicago-Naperville-Michigan City, IL-IN-WI CSA. The commenter objects to EPA's comparison of VMT levels in Kenosha County with those of Porter County. The commenter argues that Kenosha County VMT levels are relatively

low and that VMT-related emissions are downwind of the violating Zion, Illinois monitor, and, therefore, do not contribute to this ozone standard violation.

- f. The commenter notes that EPA's ozone designation TSD did not discuss population growth rates for Kenosha County, but notes that Kenosha County's population growth rate of 11 percent for 2000-2010 is near the median for the Chicago-Naperville-Michigan City, IL-IN-WI CSA. This "moderate" growth rate, when coupled with a low county population and moderate population density, suggests that populated-related emissions will not be a significant contributor to high ozone levels in the CSA. In addition, the commenter notes that EPA intends to designate some counties (in other areas of the United States) with even higher population growth rates as attainment for the 2008 8-hour ozone standard.
- g. The commenter notes that the prevailing winds in the Chicago area during warm weather conditions favoring high ozone levels is from a southerly direction, making Kenosha County downwind of most of the Chicago-Naperville-Michigan City, IL-IN-WI CSA. The commenter notes that on days when the 1-hour ozone concentrations at the Chiwaukee Prairie monitoring site exceed 0.075 ppm, 57.9 percent of wind directions are from the southeast through south and 15.8 percent of the wind directions are from the southwest, based on 2006-2008 data. A similar analysis for high ozone days for Cook County, Illinois shows wind directions from the south through southwest. These data clearly indicate that Kenosha County emissions occur downwind of the high ozone concentrations in the Chicago area.
- h. The commenter argues that three important jurisdictional boundaries support the exclusion of Kenosha County from the Chicago ozone nonattainment area. First, Kenosha County is the only Wisconsin county considered for inclusion in the Chicago-Naperville, IL-IN-WI ozone nonattainment area. Second, unlike other counties considered for inclusion in the ozone nonattainment area, Kenosha County is part of the Southeast Wisconsin Regional Planning Commission (SEWRPC), the Milwaukee-area metropolitan planning organization. Third, Kenosha County has historically been considered to be part of the Milwaukee ozone nonattainment area and not part of the Chicago ozone nonattainment area. The commenter argues that these jurisdictional boundaries demonstrate that Kenosha County's strategic planning is more closely tied to the southeast Wisconsin region than to Chicago. Inclusion of Kenosha County in the Chicago nonattainment area would necessitate the involvement of the Wisconsin Department of Natural Resources and SEWRPC, which would significantly complicate the process of developing ozone attainment plans. EPA has recognized the importance of considering jurisdictional boundaries when considering ozone nonattainment area boundaries. Therefore, EPA must consider these jurisdictional boundaries as favoring the exclusion of Kenosha County from the Chicago ozone nonattainment area.

The commenter points out that Illinois' decision to early certify 2011 ozone data and Wisconsin's decision not to do so is a case in point of how different jurisdictions take different approaches to Clean Air Act compliance. The commenter notes that Illinois'

decision will have a significant impact on the retention of CMAQ funds for Illinois, but will have a much smaller impact on the retention of CMAQ funds for Wisconsin, with only a small share of these funds to be used in Kenosha County. The commenter argues that the uneven distribution of CMAQ funds - an important consequence of ozone nonattainment designations - illustrates the practical difficulty with linking Kenosha County with the Chicago ozone nonattainment area.

- i. Since Kenosha County is downwind of the Chicago area, ozone levels in Kenosha County are largely determined by emissions occurring upwind in the Chicago area. Therefore, the commenter argues that imposing nonattainment area-level emission controls on Kenosha County would have little or no impact on peak ozone levels in the Chicago-Naperville-Michigan City, IL-IN-WI CSA, including in Kenosha County itself.

EPA Response: We agree with the commenter that based on 2008-2010 data, the Chiwaukee monitor is not violating the 2008 ozone NAAQS. As provided in the TSD, we are including two townships in Kenosha County as part of the designated nonattainment area because we have determined that they are contributing to the violation of the NAAQS at the Zion monitor. Our TSD addresses issues related to the five factors as discussed in many of the bulleted comments.

As to the comment regarding our evaluation of the Chiwaukee monitor, we note that when making boundary determinations for the area with respect to Kenosha County, EPA evaluated the Chiwaukee Prairie monitoring site in Kenosha County, Wisconsin, which is located along Lake Michigan, approximately six miles from the Zion monitor. Historically, Chiwaukee Prairie has been the design value site for the Chicago area. As discussed in greater detail in the TSD, there is a strong correlation between the peak ozone concentrations at the Chiwaukee Prairie and Zion monitoring sites, with peak ozone concentrations at the Chiwaukee Prairie monitoring site consistently exceeding those at the Zion monitoring site. Although we are not relying on this information for the final designation as explained previously, we note that certified 2011 monitoring data for Chiwaukee Prairie are now available and the data show a violation of the 2008 8-hour ozone standard at this monitor for the 2009-2011 time period.

With respect to jurisdiction, we acknowledge that, under the 1-hour and 1997 8-hour ozone standards, Kenosha County was included as part of the Milwaukee-Racine, WI area (Milwaukee area) rather than as part of the Chicago-Gary-Lake County, IL-IN area (Chicago area). However, under both the 1-hour and 1997 8-hour ozone standards, the Chicago area and the Milwaukee area both used the Chiwaukee Prairie monitor in Kenosha County as the design value site. Furthermore, Kenosha County is, in fact, part of the Chicago-Naperville-Michigan City, IL-IN-WI Combined Statistical Area (CSA). EPA disagrees that the fact that Kenosha County is part of the Southeast Wisconsin Regional Planning Commission (SEWRPC) is a jurisdictional impediment to including Kenosha County within the Chicago-Naperville area. Historically, there have been numerous multistate nonattainment areas across the United States that have met CAA requirements while working with multiple regional planning organizations. EPA does not agree that this is a sufficient reason for not including the Kenosha County as part of the Chicago-Naperville, IL-IN-WI area. We note that such a jurisdictional boundary might be given greater weight for designating Kenosha County as part of a different nonattainment area, if that issue

were before us as it was for the 1-hour and 1997 8-hour NAAQS. However, the jurisdictional factor carries much less weight where the issue is whether to designate the area as attainment rather than including it as part of the designated nonattainment area.

Comment: A commenter echoes the State of Wisconsin arguments that, because recent state-certified ozone data do not show a violation of the 2008 ozone NAAQS, because Kenosha County emissions have little if no impact on peak ozone levels in the Chicago area, and because jurisdictional boundaries do not support the inclusion of Kenosha County in the Chicago ozone nonattainment area, Kenosha County should be designated as attainment for the 2008 ozone NAAQS.

EPA Response: See our previous response to this similar comment raised by the State.

Comment: A commenter argues that, if EPA determines that available ozone data indicate a health risk near the Chiwaukee Prairie, Kenosha County, monitoring site based on a violation of the 2008 ozone NAAQS, the commenter supports a partial-county ozone nonattainment designation for Kenosha County as a preferred alternative. Similar to the State of Wisconsin, the commenter notes that 1999-2003 ozone monitoring for two monitoring sites located at or just west of Sheridan Road show ozone concentrations consistently lower than those monitored at the Chiwaukee Prairie monitoring site. In particular, the commenter provides data showing that a Sheridan Road monitoring site monitored ozone design values averaging 5.8 parts per billion lower than those monitored at the Chiwaukee Prairie monitoring site. Acknowledging that the Chiwaukee Prairie monitor recorded an ozone design value of 77 parts per billion during the period of 2009-2011, the commenter argues that one could project the 2009-2011 ozone design value at the Sheridan Road monitoring site to be below 75 parts per billion, below the 2008 ozone NAAQS. The commenter argues that this supports an attainment designation for Kenosha County west of Sheridan Road.

EPA Response: See our previous response to the similar comment submitted by the State. Our TSD provides our full analysis for including the two eastern townships in Kenosha County as part of the designated nonattainment area.

Commenter: A commenter supports a Wisconsin Department of Natural Resource's installation of a new ozone monitor at the University of Wisconsin-Parkside or some other location west of Sheridan Road, while maintaining the current Chiwaukee Prairie monitor. The commenter recognizes the value of the Chiwaukee Prairie monitoring site, which historically has been used to show the ozone contribution of Illinois sources to ozone concentrations in Kenosha County. The commenter believes that the University of Wisconsin-Parkside ozone monitoring data would allow the State of Wisconsin to make better decisions regarding the emission controls needed to attain the ozone standard in Kenosha County.

EPA Response: EPA will work with Wisconsin if the state is interested in adding an ozone monitor in Kenosha County.