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Responses to Significant Comments on the State and Tribal Designation Recommendations for the 2008 Ozone National Ambient Air Quality Standards (NAAQS)

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

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List of Acronyms

APCD	Air Pollution Control District
AQS	Air Quality System
CAA	Clean Air Act
CBSA	Core Based Statistical Areas
CAMD	US EPA's Clean Air Markets Division
CFR	Code of Federal Regulations
CSA	Combined Statistical Area
CSPAR	Cross-state Air Pollution Rule
DFW	Dallas-Fort Worth, Texas
EGU	Electric Generating Unit
EPA	Environmental Protection Agency
FR	Federal Register
GA EPD	Georgia Environmental Protection Division
HGB	Houston-Galveston-Brazoria, Texas
HYSPLIT	Hybrid Single Particle Lagrangian Integrated Trajectory Model
IEPA	Illinois Environmental Protection Agency
I/M	(Vehicle) Inspection and Maintenance
LAER	Lowest Achievable Emission Rate
LRBOI	Little River Band of Ottawa Indians
MACT	Maximum Achievable Control Technology
MDEQ	Mississippi Department of Environmental Quality
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NESHAP	National Emission Standards for Hazardous Air Pollutants
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standard
NEI	National Emissions Inventory
NFR	Notice of Final Rulemaking
NLLJ	Nocturnal Low Level Jet
NOAA	National Oceanic and Atmospheric Administration
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standards
NSR	New Source Review
OAQPS	EPA Office of Air Quality Planning and Standards
OMB	Office of Management and Budget
OTR	Ozone Transport Region
PPB	Parts Per Billion
PPM	Parts Per Million
PSD	Prevention of Significant Deterioration
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RACT	Reasonably Available Control Technology
RFP	Reasonable Further Progress
RICE	Reciprocating Internal Combustion Engine

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SC DEHC	South Carolina Department of Health and Environmental Control
SIP	State Implementation Plan
SLAMS	State and Local Air Monitoring Stations
Stage II	Stage II gasoline vapor recovery (mobile sources)
TAZ	Transportation Analysis Zone
TCEQ	Texas Commission on Environmental Quality
TPY	Tons per Year
TSD	Technical Support Document
TVA	Tennessee Valley Authority
UGRB	Upper Green River Basin
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

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1.0 Introduction

This document, together with the preamble to the final rule, and the Technical Support Documents (TSDs) for the designations, presents the responses of EPA to the significant comments we received on our proposed designations. The responses presented in this document are intended to augment the responses to comments that appear in the preamble to the final rule and the TSD or to address comments not discussed in those documents.

2.0 Background

On March 12, 2008, the Environmental Protection Agency (EPA) revised the National Ambient Air Quality Standards (NAAQS) for ozone to provide increased protection of public health and welfare from ozone pollution. The EPA lowered the primary 8-hour ozone standard from 0.08 parts per million (ppm) to 0.075 ppm to protect against health effects associated with ozone exposure, including a range of serious respiratory illnesses and increased premature death from heart or lung disease. The EPA revised the secondary 8-hour ozone standard, making it identical to the primary standard, to protect against welfare effects, including impacts on sensitive vegetation and forested ecosystems.

History shows us that better health and cleaner air go hand-in-hand with economic growth. Working closely with the states and tribes, the EPA is implementing the 2008 ozone standards using a common sense approach that improves air quality and minimizes the burden on state and local governments. As part of this routine process, the EPA is working with the states and tribes to identify areas in the country that meet the standards or do not have data indicating whether they meet the standards and those that need to take steps to reduce ozone pollution to address unhealthy air quality. Within one year after a new or revised air quality standard is established, the Clean Air Act (CAA) requires the Governor of each state to submit to the EPA a list of all areas in the state, with recommendations for whether each area meets the standard. As a first step in implementing the 2008 ozone standards, the EPA asked states to submit their designation recommendations, including appropriate area boundaries, by March 12, 2009. In September 2009, the EPA announced it was reconsidering the 2008 ozone standards. The EPA later took steps to delay by one year the designation process for the 2008 ozone standards to allow completion of the reconsideration process. However, in September 2011, the Office of Management and Budget returned to the EPA the draft final rule addressing the reconsideration of the 2008 ozone standards. On September 22, 2011, the EPA restarted the implementation effort by issuing a memorandum outlining plans for moving forward to implement the 2008 ozone standards. The EPA indicated that it would proceed with initial area designations for the 2008 standards, and planned to use the recommendations states made in 2009 as updated by the most current, certified air quality data from the years 2008 through 2010. While the EPA did not request that states or tribes submit updated designation recommendations, the EPA provided the opportunity for them to do so.

On December 9, 2011, the EPA sent letters to state and tribal representatives responding to their recommendations and identifying those areas anticipated to be designated as

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meeting the 2008 ozone standards or not having sufficient air quality to support whether the area is meeting the standard and those that do not. States, tribes, and the public had the opportunity to comment on the EPA's proposed decisions before the agency issues final area designations, and to provide new information and analyses to the EPA, if appropriate. Following are summaries of significant comments received on the 2008 ozone designation recommendations and the EPA's responses to those comments.

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3.0 Responses to Significant Comments on the State and Tribal Designation Recommendations for the 2008 Ozone National Ambient Air Quality Standards (NAAQS)

The following sections address the state, tribal, and public comments received by the EPA on the state and tribal ozone designation recommendations for the 2008 Ozone NAAQS. Comment summaries and responses are presented below. EPA has provided additional detail for specific nonattainment areas in the Technical Support Document (TSD) for that area. Commenters can find TSDs in the electronic docket for this action (www.regulations.gov, docket number EPA-HQ-OAR-2008-0476) and at EPA's Ozone Designations Web Page (www.epa.gov/ozonedesignations).

3.1 General Issues

3.1.1. Consideration of 2011 Data

Comment: Several commenters said EPA should designate areas based on 2009-2011 air quality monitoring data, noting that states are required to submit certified ozone air quality data by May 1, 2012.

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.

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Comment: One commenter provided a list of areas that EPA's ozone designation webpage indicated EPA did not intend to designate nonattainment, but which the commenter says have 2009-2011 design values above the standard or which do not have three years of data but which data indicate should still be designated nonattainment. Commenter noted that these areas should be designated as nonattainment.

EPA Response: For each of the areas the commenter identified as having a 2009-2011 design value above the standard, the EPA notes that the design values are not official design values because the air quality information on which the posted design values were based was not certified information. As provided in the previous response, we are relying on the most recent three years of certified data to designate areas for the 2008 ozone NAAQS.

The commenter further identifies a second list of areas with incomplete three years of data but with preliminary data indicating nonattainment. For these areas the commenter provided calculations indicating a design value above the NAAQS. The EPA notes that the commenter's list of areas and calculated design values are based on an "estimated exceedances" form of the standard which includes an upward adjustment of the observed exceedances of the standard to account for missing data. The method used by the commenter to calculate these design values appears to be based on methods for the 1-hour ozone NAAQS, which was revoked by EPA in 2005. See 40 CFR part 50, Appendix D. For the 2008 ozone NAAQS, this method is not applied for purposes of accounting for missing data. As provided in 40 CFR part 50, Appendix P:
The primary and secondary O_3 ambient air quality standards are met at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average O_3 concentration is less than or equal to 0.075 ppm. This comparison shall be based on three consecutive, complete calendar years of air quality monitoring data. This requirement is met for the 3-year period at a monitoring site if daily maximum 8-hour average concentrations are available for at least 90% of the days within the O_3 monitoring season, on average, for the 3-year period, with a minimum data completeness requirement in any one year of at least 75% of the days within the O_3 monitoring season. Thus, the commenter's suggestion "that there is no justification for applying an attainment designation" in areas where "the states failed to monitor for the minimum number of days required" is unwarranted, because each of the specific areas listed by the commenter have monitoring data for 2008-2010 showing attainment of the standard and meeting the minimum completeness requirements set forth in the March 2008 8-hour Ozone NAAQS rulemaking.

3.1.2. Super-Regional Areas

Comment: Several commenters support the request from some States (e.g., Maryland, Delaware, Connecticut, and the District of Columbia) to create a super-regional nonattainment area (i.e., large nonattainment area comprised of multiple states) that recognizes regional sources of pollution that contribute to nonattainment in the eastern States. Commenters further recommended that EPA designate an entire collection of States as a large "super regional" multi-state nonattainment area, including a significant

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portion of the eastern United States. Each of the previously mentioned states submitted factor analyses to support a super-regional nonattainment area.[1]

EPA Response: The EPA does not believe that creation of a super-regional nonattainment area to address pollution transport is the appropriate approach. As an initial matter, section 107(d)(1) provides that areas designated nonattainment should include any "nearby" area contributing to a violation of the NAAQS. We believe that broad super-regional areas go beyond this by including areas that are not necessarily "nearby" but contribute to nonattainment through long-range transport. The CAA has separate provisions in the Act to address this phenomenon. Section 110(a)(2)(D) requires states to address ozone transport that contributes to a violation of the NAAQS in another State. In addition, section 184, creates the northeast ozone transport region and also grants EPA authority to establish additional transport regions, as appropriate. Finally, we note that the approach taken by EPA is consistent with the approach Congress specified for serious and above areas for the 1-hour NAAQS, where in section 107(d)(4)A), Congress set the CMSA boundaries as the presumptive boundaries of the nonattainment area. In *Catawba Co. v. EPA*[2], the Court upheld that "contribute" under §107(a)(1)(A) of the CAA does not necessarily mean "any contribution" to nonattainment but rather a *degree of contribution sufficient to deem an area nonattainment,* that is, sufficient enough to warrant designation as nonattainment. "Section 107(d) is ambiguous as to how EPA should measure contribution and *what degree of contribution is sufficient to deem an area nonattainment…" Catawba County v. EPA*, 571 F.3d 20, 39 (D.C. Cir. 2009) (Internal citation omitted but with emphasis added). "Thus, reasonably exercising the discretion that Congress delegated to it, EPA interpreted "contribute" to mean "sufficiently contribute," and then applied the C/MSA presumption and nine-factor test precisely to identify those areas that meet that definition." *Id.*

EPA's analyses supporting boundaries for individual nonattainment areas are provided in the TSD for the area in question.

Comment: One commenter suggested that the EPA should create a large, regional nonattainment area based on EPA's own findings and publicly solicited proposals.

EPA Response: As noted in the previous response, other provisions of the Act address longer-range ozone transport and the designation process requires only that "nearby" areas that contribute to violations of the NAAQS be included as part of the nonattainment area.

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[1] See document numbers EPA-HQ-OAR-2008-0476-0123, EPA-HQ-OAR-2008-0476-0125, EPA-HQ-OAR-2008-0476-0490, EPA-HQ-OAR-2008-0476-0518, EPA-HQ-OAR-2008-0476-0539 from Delaware, Connecticut, Maryland, and the District of Columbia in the ozone designations docket EPA-HQ-OAR-2008-0476.

[2] *Catawba County v. EPA*, 571 F.3d 20, (D.C. Cir. 2009)

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***Comment*:** One commenter suggested that the EPA's designation of nonattainment areas should include all the counties within any metropolitan statistical area, consolidated metropolitan statistical area, or combined statistical area if any county in that area fails to attain the subject NAAQS.

EPA Response: Consistent with the approach Congress adopted in 1990 for areas classified as serious or higher for the 1-hour ozone NAAQS, EPA recommended to states that they use (and EPA indicated in guidance that it would use) Core Based Statistical Areas (CBSAs) or Combined Statistical Areas (CSAs) as a starting point or "presumptive" boundary for considering the geographic boundaries for ozone nonattainment area for the 2008 ozone NAAQS. This "presumptive" boundary could be adjusted to either include additional areas or exclude areas based on EPA's analysis of nine factors, later consolidated to five factors, to evaluate nearby contribution to the violating monitors.[3] EPA believes that factor analysis is a logical way of assessing nearby contribution and thus determining whether specific areas should included as part of the designated nonattainment area. Including all counties within the metropolitan statistical area, consolidated metropolitan statistical area, or combined statistical area would not give proper weight to these considerations.

Delaware Comment: EPA's methodology does not consider the air quality in any county that does not have an ozone monitor. Counties without monitors that are adjacent to counties with violating monitors should be designated as nonattainment, and counties adjacent to those counties should be included in EPA's contribution analysis.

EPA Response: EPA disagrees with the commenter that EPA's methodology does not consider air quality in counties without ozone monitors. As stated in the previous response, EPA uses CBSA or CSAs as a starting point or "presumptive" boundary for considering the geographic boundaries for ozone nonattainment area for the 2008 ozone NAAQS and recommended that states use this same approach when developing and submitting their recommendations to EPA. Many counties in a CSA/CBSA do not have ozone monitors, but are included in EPA's factor analysis to evaluate nearby contribution to the violating monitors. EPA refers the commenter to the TSDs for this action, specifically Dallas-Fort Worth, TX and Atlanta, GA, for examples of where EPA followed the methodology identified by the commenter.

Comment: The state of Maryland and the District of Columbia (the District), as well as one public commenter, suggested that the Baltimore MD and the Washington, DC–MD-VA areas be combined into one nonattainment area as they represent one recognized and interconnected, consolidated metropolitan area.

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[3] EPA has used area-specific analyses to support nonattainment area boundary recommendations and final boundary determinations by evaluating factors such as air quality data, emissions data, population density and degree of urbanization, traffic and commuting patterns, meteorology, and geography/topography.

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EPA Response: EPA recognizes that the Baltimore and Washington DC areas are part of one large CSA and evaluated whether to create one larger nonattainment area or whether to designate the areas as separate nonattainment areas as it had done for both the 1-hour and 1997 ozone NAAQS. While many of the factors EPA considered would support creating one large nonattainment area, we ultimately relied on the jurisdictional boundary (e.g., counties, air districts, existing nonattainment areas, Reservations, metropolitan planning organizations (MPO's)) factor to keep these two areas as separate nonattainment areas. We note that Maryland and Washington DC both supported creating one large nonattainment area while Virginia supported creating two separate areas. Where all areas will be designated nonattainment, EPA gives greater weight to states' preferences in how to establish the boundaries for one or more nonattainment areas. Because it is important for all states that are part of a multi-state area to work well together, we gave weight to the historical fact that these areas have not had to work together to address nonattainment issues and the fact that Virginia was opposed to being included in a broader area. We believe designating these areas as separate areas will reduce the burden on state and local governments, which have organizations such as their MPOs in place, but would have to reconfigure such organizations for a larger area. However, we note that over the years the Washington-Baltimore area has become more integrated and for any future NAAQS we may determine that there is a greater need to designate these areas as one large area. We plan to work with the states to assist efforts to address ozone pollution for these two areas and to encourage cooperative efforts among the states and the District of Columbia

Delaware Comment: Delaware noted that EPA's intended approach for the three counties in Delaware (i.e., New Castle County included as part of the Philadelphia nonattainment area; Sussex County to comprise the Seaford, DE nonattainment area; and Kent County as a separate unclassifiable/attainment area) subjects Delaware, the second smallest state in the nation, to three different sets of State Implementation Plan (SIP) requirements, without a basis that the approach would assist Delaware in attaining and maintaining the NAAQS. Delaware also asked the following three questions in their comments:

- How does EPA's common sense approach improve air quality?
- How does EPA's common sense approach minimize the burden on Delaware?
- How does EPA's common sense approach identify areas in the country that need to take steps to reduce ozone pollutants?

EPA Response: In March 2009, the State of Delaware recommended a large, multi-state nonattainment area, covering the entire States of Delaware, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia, plus the District of Columbia. Alternatively, Delaware recommended that the entire State of Delaware be designated as a stand-alone nonattainment area. In October 2011, Delaware updated its recommendations to expand its recommended large multi-state nonattainment area to include those previously identified plus the states of Kentucky, Indiana, Illinois, Missouri, Tennessee, and Wisconsin. In addition, in its October 2011 letter, Delaware specified that if EPA did not accept either of its designation options, then EPA should not designate Kent County as nonattainment.

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For the reasons provided previously, EPA is not designating a super-regional nonattainment area. Other provisions in the Act address long-range transport from one state to another.

In its 120-day letter and the associated Delaware technical support document (TSD), EPA proposed that the Philadelphia nonattainment area include 16 counties in Delaware, Maryland, New Jersey, and Pennsylvania as nonattainment for the 2008 ozone NAAQS. EPA identified New Castle County, Delaware as a nearby, contributing county to the Philadelphia nonattainment area. Because of a violating monitor in the Seaford micro area in Sussex County, EPA also identified the Seaford area as nonattainment. EPA further accepted the Delaware recommendation that Kent County should not be designated nonattainment because it has limited contribution to the Seaford area and to the Philadelphia area.

EPA through the regional staff and in communication with state staff attempted to propose in the 120 letter areas that minimized the burden on Delaware while also ensure that all appropriate areas were designated nonattainment. The TSD for the Delaware area fully explains the basis for EPA's decisions regarding the three Delaware counties.

Maryland Comment: "Maryland's 20 year ozone research program clearly shows through measured (not modeled) monitoring data, that ozone is being transported into Maryland from upwind states at levels already above the 75ppb ozone standard."

EPA Response: Issues related to the long-range transport of ozone and its precursors are not appropriate for the designation process. However, EPA acknowledges that a large part of the ozone problem for eastern states like Maryland, Delaware, and others is due to long range transport of ozone that comes from upwind states in the mid-west and south. The Cross-State Air Pollution Rule (currently stayed by the court) is a federal program that will reduce ozone and PM precursors regionally, and provide air quality benefits to downwind states. Other national rules that address SO2 and NOx will provide additional benefits. EPA recognizes that these states have aggressively pursued control measures for sources within their states. In the case of Baltimore, for example, while there are certainly local contributions to the ozone problem, EPA recognizes that a significant portion of the air quality problems come from outside the urban area.

Maryland and Washington, DC Comment: Questions from both agencies ask in the "real world timeframe for policy and regulation development and pollution control design and installation, how current EPA efforts and other provisions of the Clean Air Act could possibly allow Maryland, Connecticut, Delaware and [Washington, DC (the District)] to attain the 75 ppb standard by the attainment dates mandated in the Act."

EPA Response: The Clean Air Act sets the timelines for attainment of the NAAQS. EPA's analyses of whether areas are likely to attain the 2008 NAAQS by the attainment date for the area's classification is in the docket for that rulemaking (see docket number EPA-HQ-OAR-2010-0885).

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Delaware Comment: Delaware commented that downwind nonattainment areas that have already controlled their emission sources are unfairly burden, compared to upwind areas. Delaware further commented that these nonattainment areas will have trouble attaining. Delaware also questioned how Delaware can use CAA sections 110(a)(2)(D), 126, and 184 to help its nonattainment areas attain the 2008 8-hour ozone NAAQS within the time frames set out in the CAA.

EPA Response: EPA expects continuing reductions of emissions that form ozone over broad regions due to federal measures already completed including rules controlling emissions from power plants such as the Cross-State Air Pollution Rule (currently stayed by the court) and the Mercury and Air Toxics Rule; and reductions from both onroad cars and trucks and nonroad engines as older engines and vehicles are being replaced by newer, cleaner engines. EPA will continue to consider the potential impacts of transported pollution to states' ability to attain the standard and we will work with states on challenges to attaining the standard where transported pollution may be an issue.

3.1.3. Meteorology

Comment: Several commenters state that, although longer-range transport can affect concentrations in downwind areas, the use of wind roses to determine transport linkages and contributions is inconsistent with current science.

EPA Response: Meteorological analyses address only one of several factors that must be considered in determining designation boundaries. The adequacy of a particular meteorological analysis cannot be determined generically, but must be determined as one part of the multi-factor process used for each individual region under consideration. However, EPA agrees that using wind roses as the sole indicator of atmospheric transport is not the preferable approach because using additional analyses may provide a more comprehensive assessment of regional wind flow patterns. Many of the meteorological analyses conducted as part of this portion of the boundary determination did use more sophisticated techniques (e.g., trajectory analyses) to better assess potential transport patterns. In those cases where timing constraints and the lack of additional information prevented a more detailed assessment, EPA believes that the default wind rose analyses, in conjunction with the remainder of the multi-factor analysis, can provide an adequate assessment of appropriate boundaries.

Further, EPA agrees with the comment that regional and longer-range ozone transport can affect concentrations in downwind areas. EPA has taken steps to reduce these contributions over the past decade (e.g., the NOx Budget Trading Program, the Cross-State Air Pollution Rule (currently stayed by the court), various regulations on mobile source emissions, etc.) and will continue to address regional ozone transport in the future as part of the overall effort to attain the NAAQS.

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Comment: Use of NOAA Single Particle Lagrangian Integrated Trajectory Model (HYSPLIT) was unsoundly applied for expanding the Houston and Dallas nonattainment areas. HYSPLIT does not calculate pollutant concentrations, the types of pollutants added along the transport path, dispersal rates along the transport path, or ozone formation rates that may result from different pollutant interactions. Further, HYSPLIT cannot provide evidence directly linking emissions from one area to ozone formation in another area.

EPA Response: EPA agrees that the HYSPLIT wind trajectory model computes simple air parcel trajectories. EPA believes, however, that simple trajectory analyses of local transport patterns on high ozone days, in conjunction with the remainder of the multi-factor analysis, can inform an adequate assessment of appropriate boundaries. EPA's analysis supporting the boundaries for the Houston and Dallas areas, which was based on the full five factor analysis, is in the TSDs for those areas.

3.1.4. Tribal Considerations

Comment: One commenter stated that EPA should give the jurisdictional boundaries factor (one of the five factors included in a multi-factor analysis for the 2008 ozone standards) greater weight when considering tribal recommendations for separately designated areas of Indian country. The commenter cited EPA's new *Policy for Establishing Separate Air Quality Designations for Areas of Indian Country* (December 20, 2011) and stressed the importance of following this policy for the ozone designations process.

EPA Response: The jurisdictional boundaries factor is one of five factors that are being considered as part of the designations decision-making process for ozone. EPA is carrying out its *Policy for Establishing Separate Air Quality Designations for Areas of Indian Country* to designate areas of Indian country for the 2008 ozone standards. The policy stresses the importance of recognizing tribal sovereignty and the jurisdictional status of Indian country in the decision-making process. It also clearly articulates the circumstances under which the jurisdictional boundaries factor could bear more weight when evaluating a tribe's multi-factor analysis.

3.1.5. Other General Issues

Comment: Multiple commenters noted that the regulatory burden associated with EPA's process of designating nonattainment areas will cause affected areas economic harm.

EPA Response: Under section 107(d) of the CAA, EPA is required to designate as nonattainment an area that is violating a new or revised national ambient air quality standard or that contributes to a nearby violation. EPA determines an ozone violation based on certified quality assured monitoring data. Ozone is a regional pollutant and is readily transported both short and long distances. To determine whether a nearby area is contributing to a violation, EPA recommended that states conduct a technical analysis

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based on a number of factors listed in the designation guidance for the 2008 ozone NAAQS, including air quality, emissions and emissions-related data, meteorology, and geography/topography. In evaluating whether to modify a state's designation recommendation, EPA also considered those factors. The justification for including [ ] in the [ ] nonattainment area is provided in EPA's technical support document for the area. In determining whether an area should be designated nonattainment, EPA did not consider economic impacts because that is not relevant for determining whether an included area is violating the NAAQS or is a nearby area that is contributing to a violation as provided under CAA section 107(d).

The implementation rulemaking for the 2008 ozone NAAQS will address the control obligations for areas designated nonattainment. As EPA considers the required elements of implementation for the 2008 ozone NAAQS, it is our goal to propose approaches that provide flexibility and opportunity for efficiency to the extent such approaches are consistent with the CAA and will not jeopardize expeditious attainment of the public health and welfare goals of the CAA. In addition, we are exploring ways in which the EPA could provide assistance to the states. Finally, to the extent the CAA does not mandate specific control measures, states may consider economic concerns in development of their state implementation plans to address air quality.

Comment: A commenter contends that, if the EPA cannot support the creation of a super-regional nonattainment area, the EPA must at least not define the nonattainment areas too narrowly. At minimum, the EPA should include all counties within any metropolitan statistical area, consolidated metropolitan statistical area, or combined statistical area that includes any county that fails to attain the 2008 8-hour ozone standard.

EPA Response: Section 107(d)(4)(A)(iv) and (v) address the use of statistical areas as the presumptive starting point for nonattainment area boundaries for serious, severe, and extreme areas. These provisions directly applied only for purposes of the initial designations for the 1-hour standard at the time the CAA was amended in 1990. While these provisions do not directly apply to designations for a new or revised NAAQS under section 107(d)(1), we have adopted the approach of using the OMB statistical area boundaries as a starting point for analyzing nonattainment areas for all areas designated nonattainment for both the 1997 NAAQS and now the 2008 ozone NAAQS. Although we begin our analysis by looking at all counties within the relevant statistical area, in most cases the designated area is smaller because the five factor analysis that we perform (and that we encourage states to use for their recommendations) typically indicates that there is not a strong basis to conclude that some of the counties or parts of counties within the statistical area contribute to violations of the NAAQS within the area. We believe that using the statistical areas as a starting point for our evaluation is a reasonable means to ensure that the "nearby" counties most likely to contribute to a violation of the NAAQS are evaluated and it also provides a consistent and certain starting point for evaluating areas across the country. Although we use these statistical areas as the starting point, we believe it would be arbitrary and not consistent with the Congressional precedent we are relying on to mandate that all counties within such area must be

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included as part of the nonattainment area. For purposes of the 1-hour standard in place at the time of the 1990 Amendments, Congress established the presumptive, but also provided an opportunity for the Governor of each state to provide technical information supporting the exclusion of areas within the statistical area from the designated nonattainment area. Specifically, section 107(d)(4)(A)(v) provides that in the process of determining whether areas within the CSA should be excluded from the designated area, the Governor and EPA "shall consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions, and pollution transport. These considerations are consistent with the 5-factor analysis we apply.

Our 5-factor analysis for each of the counties in a given CSA is provided in the appropriate TSD.

3.2 Area-Specific Issues

3.2.1. EPA Region I

Connecticut Comment: "EPA's decision to maintain Connecticut's current nonattainment boundaries, while procedurally practical, does nothing more than to safeguard the status quo. In responding to Connecticut's super-regional recommendation, EPA stated that it was 'using a common sense approach that improves air quality and minimizes the burden on state and local governments.' But the status quo maintained by EPA's current approach does not address the existing and potentially worsening public health risks and economic burdens from transported pollution on downwind states like Connecticut. Further, as support for its decision, EPA stated that 'most of the states that Connecticut seeks to include as part of this large nonattainment area did not make a similar request.' It should come as no surprise to EPA that states unburdened by the requirements necessary to achieve and maintain ozone NAAQS compliance are not themselves volunteering to be more stringently regulated. The CAA requirements with respect to the attainment of NAAQS are not predicated upon state consent. The science behind ozone transport speaks emphatically for the adoption of a regional approach, even when the states in Connecticut's proposed region are silent."

EPA Response: As provided in our response in section 3.1.2, we believe other provisions of the Act more appropriately address the long-range transport of pollution.

Comment: One commenter disagrees with EPA's proposal and Massachusetts' recommendation that EPA designate Dukes County, consisting of islands off the coast of Massachusetts without sources of pollution, as an isolated nonattainment area. The commenter asks that EPA reexamine the likely source of the transported pollution that is impacting Dukes County and include the county in the appropriate larger nonattainment area, which "…appears to be the greater New York-Newark-Bridgeport, NY-NJ-CT-PA area."

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EPA Response: EPA's five factor analysis for the Dukes County nonattainment area, presented in more detail in the area TSD, supports EPA's designation of the county alone as the nonattainment area. Although, transported ozone likely influences the air quality in Dukes County, as discussed in greater detail in section 3.1.2, other provisions of the Act address longer-range ozone transport and the designation process requires only that "nearby" areas that contribute to violations of the NAAQS be included as part of the nonattainment area. In addition, if EPA where to include Dukes County in the New York-N. New Jersey-Long Island, NY-NJ-CT nonattainment area, the "larger" area would be a discontinuous area, since it would not include any portion of Rhode Island, which is in between New York and Dukes County. EPA strongly discourages discontinuous nonattainment areas.

3.2.2. EPA Region II

Comment: One commenter asked that EPA designate all of the Allentown, PA CSA area as nonattainment, including Warren County, NJ. Warren County was previously part of the CSA that includes New York City, but the latest OMB classification includes the county in the Allentown MSA.

EPA Response: New Jersey requested in their recommendation to EPA that EPA continue to include Warren County, NJ in the New York-N. New Jersey-Long Island, NY-NJ-CT (New York) nonattainment area. EPA agrees with New Jersey's request and refers the commenter to the New York TSD. The commenter makes no argument supporting re-aligning New Jersey's proposed nonattainment boundaries.

Comment: Two commenters contend that, if the EPA cannot support the creation of a super-regional nonattainment area, the EPA must at least not define the nonattainment areas too narrowly. At minimum, the EPA should include all counties within any metropolitan statistical area, consolidated metropolitan statistical area, or combined statistical area that includes any county that fails to attain the 2008 8-hour ozone standard. Specifically, the commenters request that EPA include Dutchess, Orange, Putnam and Ulster Counties in the New York City nonattainment area.

EPA Response: Dutchess, Orange, Putnam and Ulster Counties are part of the New York -Northern New Jersey-Long Island, NY-NJ-CT-PA CSA. As such, EPA included these counties in its five-factor analysis for the New York nonattainment area, the details of which are presented in the area TSD. EPA's five factor analysis for the New York nonattainment area indicated that inclusion of the identified counties in the New York area is not warranted.

3.2.3. EPA Region III

3.2.3.1. Baltimore, MD and Washington, DC-MD-VA

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The District Comment: The District understands that certain counties and cities in the CSA, but not within either the current Baltimore or Washington DC-MD-VA ozone nonattainment areas under the 1997 ozone standard, are in the Ozone Transport Region (OTR). The District qualified its statement by stating the District is not clear on whether Virginia and West Virginia counties and cities that are not in the Washington DC-MD-VA nonattainment area are technically still part of the OTR. The District identified these counties and cities as: Queen Anne's and St. Mary's Counties in Maryland; the Counties of Clark, Culpeper, Fauquier, Frederick, Spotsylvania, Stafford and Warren and the Cities of Fredericksburg and Winchester in Virginia; and, Jefferson and Hampshire Counties in West Virginia. Therefore the District assumed all of these may already comply with most nonattainment requirements of CAA §184, and these jurisdictions need to implement the major source Reasonably Available Control Technology (RACT) and vehicle inspection and maintenance (I/M) programs.

EPA Response: The EPA interprets the scope of section 184(a) to include only those states specified by name: the District of Columbia and those portions of other States which shared the same statistical area as the District as of November 15, 1990. See for example, 40 CFR 51.120 (60 FR 4712, Jan. 24, 1995) which related to a SIP call on all the OTR States.

Therefore, with respect to Maryland, since all of Maryland is in the OTR, Queen Anne's and St. Mary's Counties are in the OTR established under CAA section 184(a).

With respect to Virginia, only the Counties of Arlington, Fairfax, Loudoun, Prince William and Stafford and the Cities of Fairfax, Falls Church, Manassas, Manassas Park, and Alexandria are in the OTR established under CAA section 184(a).

No counties in West Virginia are in this OTR.

The District Comment: The District advocated a "super-regional" nonattainment area boundary that encompasses all contributing states because such an area would get at the heart of the nonattainment in the District and throughout the OTR due to transport. The District asserted that EPA should "…consider revisiting its interpretation or use of the term 'nearby' to delineate nonattainment boundaries for the ozone NAAQS (i.e., such as one county out from a violating monitor, as EPA has typically used as a basis for whether or not to include a county in a nonattainment area)." The District further stated, "It is widely acknowledged that precursor emissions of ozone travel distances much farther than previously believed."

Additionally, the District noted that in its comment submitted February 3, 2012[4], that the District shares the concerns regarding ozone transport that lead the states of Maryland, Connecticut, and Delaware to seek establishment of large nonattainment areas as a way to

[4] See document number EPA-HQ-OAR-2008-0476-0448 in the ozone designations docket (EPA-HQ-OAR-2008-0476).

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ensure that upwind states are held accountable for their contribution to the high ozone levels that are measured throughout the Northeast and Mid-Atlantic States. The District asserted that most of the areas upwind of the District would be classified as a "marginal" or an "attainment" area, which means that no additional controls would be required and that without additional controls to reduce transported pollution, it is unlikely that the District will achieve the 2008 ozone standard by the 2015 attainment date.

The District identified two groups of other states for which the District stated EPA's Cross-State Air Pollution Rule showed contributed at least 74 percent or 56.6 ppb of a 76.9 ppb base case average, to the highest reading ozone monitor in the District. The first group were those that the CSAPR modeling showed had an individual contribution of at least 0.7 parts per billion (ppb) or at least one percent of the NAAQS. This group was identified as Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia. The District claimed that the CSPAR modeling showed that the effect on the highest reading ozone monitor in the District could be in the range of49 parts per billion (Ppb) to 52 ppb. The District identified a second group for which the CSAPR modeling showed had an individual contribution of less than 0.7 parts per billion (ppb). The District said adding the total contribution of the second group to that of the first group results in the 74 percent and 56.6 ppb contribution. The second group of states consisted of Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Iowa, Kansas, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, North Carolina, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Texas, Vermont and Wisconsin.

EPA Response: While we agree with the comment that EPA's modeling shows long-range transport from a number of states distant from Washington DC, as provided in our response in section 3.1.2, we believe other provisions of the Act are the appropriate provisions to address this concern.

EPA does not agree with the District's comment that because most areas upwind of the Washington, DC-MD-VA nonattainment area may be "attainment/unclassifiable" areas or "marginal" nonattainment areas there will not be additional reductions in such areas. Numerous EPA regulations for new motor vehicles and other on-road and non-road mobile source engines will continue to produce reductions in ozone and ozone precursors in all areas of the country before the District of Columbia's attainment date. See, 77 FR 8197 at 8202, February 14, 2012. In addition, States are required under CAA section 110(a)(2)(D) to submit SIPs to address ozone transport to other states. EPA has issued several rules under that provision requiring States to address ozone transport.[5]

[5] "Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone And Correction of SIP Approvals," August 8, 2011; 76 FR 48208.

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The District Comment: The District asserted that extending the nonattainment area boundaries beyond the current boundaries of the Washington, DC-MD-VA intended nonattainment area to include both the Baltimore, MD nonattainment area and other nearby areas would create "regulatory parity" by extending the regulatory requirements associated with a "moderate" nonattainment area to additional jurisdictions.[6] Specifically, the District notes that all areas would be subject to demonstrating conformity of transportation plans under section 176 and would be required to implement the following measures under CAA section 182(b):

- Major source Reasonably Available Control Technology (RACT)
- New Source Review (NSR)
- Vehicle Inspection and Maintenance (I/M)
- Stage II gasoline vapor recovery

The additional regulation in areas contributing to poor air quality in Washington, DC-MD-VA would aid the District in achieving its air quality improvement goals for the 2008 ozone NAAQS.

EPA Response: We agree with the commenter that all counties included as part of a nonattainment area that includes Harford County would be classified as moderate and would be subject to moderate area requirements such as those listed by the commenter. Our analysis supporting the boundaries for the Washington DC and Baltimore nonattainment areas is provided in the TSDs for those areas. We note that we typically do not consider the possible classification of an area for purposes of determining appropriate boundaries.

The District Comment: In support of its position seeking a larger ozone nonattainment boundary than the Washington, DC-MD-VA area, the District cites the analyses presented in EPA's preliminary TSD for the District.[7] The District notes that EPA's analyses appear to indicate that Prince George's and Frederick Counties in Maryland could be included in either the Washington DC-MD-VA or the Baltimore nonattainment area. The District claimed that because these 2 counties are both in the Washington-Baltimore-Northern Virginia, DC-MD-VA-WV CSA, they should also be in the same nonattainment area.

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[6] Given that the District desired that a single nonattainment area boundary comprising at a minimum of Washington-Baltimore-Northern Virginia DC-MD-VA-WV CSA, the design value for such an area would be set by the monitors in Harford County, MD. The highest 2008 to 2010 design value for Harford County was 0.089 ppm. This comment appears to be premised that the resulting classification would be moderate in accordance with the proposed classification rule, 77 FR 8197, February 14, 2012.

[7] Refer to Preliminary Technical Support Document, December 2011, entitled, District of Columbia Area Designations for the 2008 Ozone National Ambient Air Quality Standards, prepared by the Region 3 USEPA Supporting & Related Material, item number EPA-HQ-OAR-2008-0476-0231 in the docket for this action.

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In addition to jurisdictional considerations supporting a larger ozone nonattainment area, the District further suggests that EPA should place more emphasis on the influence of the entire region's mobile sector emissions. The District interpreted that in the TSD accompanying the December 9, 2011 letter from EPA "traffic and commuting patterns" were rarely mentioned as factors that influenced EPA's preliminary boundary decisions. The District reiterated that the mobile sector (on-road and off-road) is a major contributor to emissions in urban areas such as the Washington and Baltimore metropolitan areas and controls on the mobile sector provide local air quality benefit.

Finally, the District noted that the Metropolitan Planning Organization's (MPO) travel demand modeling recognizes the undeniable influence of mobile emissions from jurisdictions surrounding the region's current nonattainment areas. The District included a map that delineated this MPO's regionally-determined "model area" – that of the transportation analysis zone (TAZ) used in air quality conformity assessments for the National Capital Region's transportation planning. The model area includes the current Washington DC-MD-VA ozone nonattainment area, Carroll, Howard and Anne Arundel Counties in the current Baltimore ozone nonattainment area and the following additional political subdivisions: St. Mary's County in Maryland; Clarke, Fauquier, King George, Stafford and Spotsylvania (only a portion) Counties and Fredericksburg City in Virginia; and Jefferson County in West Virginia. The District states that vehicle miles traveled (VMT) and the emissions from these "exurban counties" contribute to the National Capital Region's air quality.

EPA Response: EPA analyzes and weighs the five factors in determining the appropriate boundaries for a nonattainment area. EPA acknowledges that the Washington-Baltimore-Northern Virginia DC-MD-VA-WV CSA combines several CBSAs[8] indicating that there is commuting interchange among these CBSAs. To respond to the District's March 12, 2012 letter, Maryland's March 7, 2012 letter and various comments received during the public comment period, EPA re-evaluated the five factors as they relate to designations under the 2008 ozone standard and the Washington-Baltimore-Northern Virginia DC-MD-VA-WV CSA. Based on this analysis, EPA has separately designated as nonattainment Baltimore, MD and Washington, DC-MD-VA. EPA's analysis is provided in the TSD for this area.

The District Comment: The District disagreed with EPA's apparent interpretation of Maryland's recommendation. The District stated that in Maryland's March 10, 2009,[9] letter to EPA, Maryland stated that the existing nonattainment areas were recommended

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[8] Namely the following: Baltimore-Towson, MD Metropolitan Statistical Area; Culpeper, VA Micropolitan Statistical Area; Lexington Park, MD Micropolitan Statistical Area; Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area; and the Winchester, VA-WV Metropolitan Statistical Area.

[9] See document number EPA-HQ-OAR-2008-0476-0584 in the ozone designations docket ([EPA-HQ-OAR-2008-0476).

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"if EPA is confident that strong national rules will be in place three years in advance of Maryland's attainment date;" otherwise, the District said in the alternative, Maryland advocated for a large regional nonattainment area. The District particularly cited EPA's weight on Maryland's recommendations for a couple of counties (Prince George's County and Frederick County) in light of EPA's analyses in the preliminary TSD[10] which appear to indicate that these two counties could be included as part of at least two different nonattainment areas.

EPA Response: EPA responded to Maryland's recommendation that was contingent upon the existence of "strong national rules" at some time after the designations are issued. As EPA explained in more detail on pages 3 and 4 of its preliminary TSD[11] for our December 9, 2011 letter to Maryland[12], EPA believes that designation of nonattainment area boundaries cannot be predicated upon the likelihood of future control measures.

Normally EPA gives great weight to a states' recommendation in situations where the issue is which nonattainment area in which to include a county or city and where consideration of the pertinent multi-factor analysis does not dictate modification of the State's recommendation. "First, relying on the primary emphasis it gives to 'the recommendations made by States for the areas within their borders,' ..." "[EPA] points out that New Jersey supported transferring Ocean County to the Philadelphia nonattainment area while Maryland opposed transferring Cecil County to Baltimore. As EPA observes, the CAA gives great deference to governors' recommendations for areas within their states, providing only that EPA '*may*' make any modifications it 'deems necessary.' 42 U.S.C. § 7407(d)(1)(B)(ii)." See, *Commonwealth of Pennsylvania v. EPA* (429 F.3d 1125) (DC Cir. 2005) (emphases in original). In considering Maryland's March 10, 2009, recommendations, EPA notified Maryland in its December 9, 2011, letter that EPA intended to modify its recommendations: EPA stated it did not agree with the recommendation for a large regional nonattainment area encompassing a significant portion of the U.S. East Coast and could not predicate its decision of the likelihood of future control measures. As the District noted, EPA's analyses in the preliminary TSD[13]

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[10] Refer to Preliminary Technical Support Document, December 2011, entitled, District of Columbia Area Designations for the 2008 Ozone National Ambient Air Quality Standards, prepared by the Region 3 USEPA Supporting & Related Material, item number EPA-HQ-OAR-2008-0476-0231 in the docket for this action.

[11] Preliminary Technical Support Document, December 2011, entitled, Maryland Area Designations for the 2008 Ozone National Ambient Air Quality Standards, prepared by the Region 3 USEPA Supporting & Related Material, item number EPA-HQ-OAR-2008-0476-0235 in the docket for this action.

[12] Item number EPA-HQ-OAR-2008-0476-0234 in the docket for this action.

[13] Refer to Preliminary Technical Support Document, December 2011, entitled, District of Columbia Area Designations for the 2008 Ozone National Ambient Air Quality Standards, prepared by the Region 3 USEPA Supporting & Related Material, item number EPA-HQ-OAR-2008-0476-0231 in the docket for this action.

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for several counties in Maryland which straddle the Baltimore and Washington ozone nonattainment areas for the 1997 ozone standard could well have placed each in one of the two areas proposed in our December 9, 2011 letter to Maryland. For those proposals, EPA gave weight to Maryland's March 2009 recommendations but also had to balance Maryland's recommendation with that of Virginia, another State that would be affected by Maryland's recommendation. EPA's basis for the boundaries it has drawn for the Washington DC and Baltimore nonattainment areas is provided in the TSDs for those areas.[14]

Maryland Comment: Maryland provided a 5-factor analysis in support of its recommendation to designate a single nonattainment area comprising 17 States.

EPA Response: For the reasons previously provided, we believe that the designation process is not the mechanism to address long-range transport of ozone. We understand the commenter's concern about timely adoption and implementation of measures to address "significant contribution" and we are continuing to work with states to ensure that the interstate transport of ozone and ozone precursors is addressed as timely as possible.

EPA acknowledges that a large part of the ozone problem for eastern states like the District of Columbia, Maryland, Delaware, and others is due to long range transport of ozone that comes from upwind states in the mid-west and south. The Cross State Air Pollution Rule (currently stayed by the court) is a federal program that will reduce ozone and PM precursors regionally, and provide air quality benefits to downwind states. Other national rules that address SO2 and NOx will provide additional benefits. EPA recognizes that these states have aggressively pursued control measures for sources within their states. In the case of Baltimore, for example, while there are certainly local contributions to the ozone problem, EPA recognizes that a significant portion of the air quality problems come from outside the Baltimore, MD nonattainment area.

Maryland Comment: Maryland disagrees with EPA's view that a large multi-state nonattainment area like the one suggested by Maryland, is "not in keeping with a plain reading of CAA §107(d)" as it relates to contributions from "nearby areas."

Maryland points to *Commonwealth of Pennsylvania v. EPA* (429 F.3d 1125) (DC Cir. 2005) and states that the court did not find that Delaware's request for a large multi-state nonattainment area ranging from Virginia to Maine was prohibited by a plain reading of the Clean Air Act, but, rather, the court deferred to EPA's interpretation that the term "nearby" as it pertained to § 107 to require locally-based nonattainment areas. Maryland notes that in that same case, the court authorized EPA's designation of a multi-state nonattainment area consisting of portions of New Jersey, Pennsylvania and Delaware.

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[14] Letter dated December 1, 2011 from Martin J. O'Malley, Governor of Maryland, to Shawn M. Garvin, Regional Administrator USEPA Region 3, Recommending Revised area Designations for Maryland for the 2008 Ozone NAAQS, item number EPA-HQ-OAR-2008-0476-0492 in the docket for this action.

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For these reasons Maryland disagrees with EPA's judgment in rejecting the designation of a large multi-state nonattainment area comprised of states that significantly contribute to nonattainment in Maryland and other East Coast states.

EPA Response: EPA has not suggested that the court's decision in *Commonwealth of Pennsylvania v. EPA* would bar super-regional nonattainment areas. Rather, in that case, the court deferred to EPA's interpretation of the Act. EPA interprets "nearby" in the context of section 107(d)(4)(A), which established the CMSA as the presumptive boundary for areas classified serious and above for the 1-hour ozone NAAQS under the CAA as amended in 1990. As provided previously, Congress enacted specific provisions in the Act to address the problem of longer range transport from one state to another state and we believe that the designation process is not the appropriate method for addressing long-range transport.

We believe the situation noted by the commenter – the designation of the Philadelphia multi-state area – is not the same as the designation of a large multi-state area encompassing a large swath of states from the Midsouth (Tennessee) and Midwest (as far west as Wisconsin) up through New England.

Maryland Comment: Maryland commented that recent policy decisions on air quality designations for Indian lands[15] undermines EPA's assertion that larger NAAs do not coincide with a plain reading of the CAA in regard to nearby areas. Maryland cited "*Policy for Establishing Separate Air Quality Designations for Areas of Indian Country,*" dated December 20, 2011. Maryland states that this policy memorandum refers to Indian tribal lands and adjacent state lands that are much larger than the state of Maryland. An example, the Navajo Nation is nearly the same size as the state of West Virginia,[16] yet this policy memo uses the words "contributing to non-attainment in the adjacent area" when referring to tribal lands' emissions.

EPA Response: EPA disagrees that the cited December 20, 2011 policy is inconsistent with EPA's other views regarding use of section 107(d). The cited December 20, 2011 policy guidance document covered designating areas of Indian country for all NAAQS including ozone. In that guidance EPA recognized tribal sovereignty in air quality matters affecting their Indian country. Nothing in that guidance precludes EPA from designating portions of one tribe's contiguous Indian country differently just as nothing in the CAA section 107(d) precludes EPA from splitting up one political subdivision of a state into several areas of differing designations and in the case of ozone, different classifications. Such a split would be based upon a full multi-factor analysis. For example, San Bernardino County, California is split between three areas under the 1997

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[15] 20 December 2011 EPA Memorandum, *Policy for Establishing Separate Air Quality Designations for Areas of Indian Country*

[16] Maryland cited http://en.wikipedia.org/wiki/Navajo_Nation which gives an area of 71,0000 square kilometers (27,425 sq mi). Last checked March 15, 2012. West Virginia's land area is 24,038 sq mi. http://quickfacts.census.gov/qfd/states/54000.html, last checked March 15, 2012.

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ozone NAAQS: Part is in the "Los Angeles and San Bernardino Counties (Western Mojave Desert), CA" moderate nonattainment area; part is in the "Los Angeles South Coast Air Basin, CA" extreme nonattainment area; and part is in the "Mojave Desert AQMD" attainment/unclassifiable area. San Bernardino County, CA covers a land area nearly as large as that of the State of West Virginia at 20,056 square miles.[17]

Under this December 20, 2011 policy, EPA would consider a tribe's formal recommendations and/or views during the consultation process for a separate area designation of their Indian country or for separate designations for portions thereof in the same manner EPA considers a state's recommendations and views for separate area designations for portions of that state – typically by county or county equivalent – or for division of a county-equivalent among two or more separate areas with separate designations and classification. In short, because Indian country is no less divisible for designation purposes under section 107(d) than a state or than a county-equivalent political subdivision of a state, EPA disagrees that the cited December 20, 2011 policy is inconsistent with EPA's other views regarding use of section 107(d).

Maryland Comment: Maryland notes that Sections 110(a)(2)(D), §126, and §176 and §184 offer solutions to transported pollution, "if implemented in a timely manner" but states that these provisions have not eliminated the significant contribution to Maryland nonattainment because "these provisions are seldom implemented, or are not adequately implemented to eliminate significant contribution in a timely manner." Maryland asserts that EPA should exercise its responsibility under §110(a)(2)(D) to ensure that each upwind state has an approved State Implementation Plan (SIP) that promptly implements full compliance with §110(a)(2)(D), or EPA should implement a Federal Implementation Plan (FIP) which satisfies that requirement. Maryland points out that state infrastructure and interstate transport SIPs to achieve the new 75 ppb NAAQS for ozone were due by March 20, 2011, and that "not a single state has a fully approved §110(a)(2)(D) SIP" but that EPA's September 22, 2011 guidance memo on designations for the 75 ppb standard states that EPA does not intend to penalize states for late submittal of the SIPs. Maryland believes that EPA should move forward to fulfill all of its statutory obligations as quickly as reasonable and avoid further delay because EPA's delayed implementation leaves Maryland's recommendation for the large nonattainment area "as the more immediate and timely solution."

EPA Response: For the reasons provided above, we believe that the designation process is not the mechanism to address long-range transport of ozone. We understand the commenter's concern about timely adoption and implementation of measures to address "significant contribution" and we are continuing to work with states to ensure that the interstate transport of ozone and ozone precursors is addressed as timely as possible.

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[17] See http://quickfacts.census.gov/qfd/states/06/06071.html, last checked April 6, 2012.

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Maryland Comment: If EPA continues to designate smaller nonattainment areas, then Maryland believes that, at a minimum, EPA should designate the entire Washington-Baltimore Combined Statistical Area (CSA) as a single nonattainment area using its nine (or five) factor analysis. Maryland supplied a 5 factor analysis to support this recommendation.

EPA Response: EPA's analysis supporting the designation of the Baltimore and Washington DC areas as two separate nonattainment areas is provided in the TSD for the nonattainment areas within the Washington-Baltimore-Northern Virginia, DC-MD-VA-WV CSA. EPA considered much of the information and data supplied by Maryland. In an appendix to the TSD for this CSA, EPA provides a summary of Maryland's 5 factor analysis and identifies the data which EPA could consider and that data which EPA could not consider and the reason(s) why not.

Maryland Comment: Maryland asserts that marginal nonattainment areas under the 2008 ozone NAAQS are unlikely to attain by 2015 due to a lack of needed reductions in ozone precursors. Maryland states that modeling shows that large reductions will be needed to attain the 2008 ozone NAAQS and asserts that even EPA's CSPAR modeling results support a conclusion that many marginal areas will not attain the 2008 ozone NAAQS in a timely manner. Maryland notes that marginal areas are not required to develop or submit an attainment demonstration and therefore have no incentive to adopt additional measures to ensure attainment by the marginal area attainment date. Maryland provided its assessment of various national efforts to control NOx emissions for seven top source categories of NOx emissions and concluded that measures do little or nothing in time for nonattainment areas to achieve clean data starting in 2013 for "marginal" areas and 2015 for "moderate" areas. Instead Maryland claims that designation of large, multi-state nonattainment areas will ensure that upwind areas implement effective lower cost programs that have likely already been developed, tested, implemented, and refined, are included in multi-state efforts to attain air quality standards in downwind areas that are not able to reach attainment on their own, thereby focusing limited resources where they are most needed and that upwind and downwind areas implement the same controls, creating equity for businesses in different locations and equity in their work.

EPA Response: To the extent that Maryland has concerns that any marginal nonattainment areas adjacent or those in close proximity to the Baltimore, MD nonattainment area may not attain on time, EPA disagrees that consolidating these into one nonattainment area with the Baltimore, MD nonattainment area as the means to address interstate transport to such marginal nonattainment areas or the likelihood that current measures may not result in attainment. For the reasons previously provided, we believe that the designation process is not the mechanism to address long-range transport of ozone. Rather, EPA believes the CAA prescribes a comprehensive scheme for attainment of a NAAQS which includes options for a voluntary reclassification and the remedy for failure to attain.

The likelihood that an area may or may not attain in a timely manner is not one of the factors EPA considers when designating nonattainment areas. The CAA specifies the remedial actions required for nonattainment areas that fail to attain by the statutorily

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required attainment especially in the case of ozone with the scheme found in section 181(b).

EPA has always cautioned states that for a marginal area that fails to attain on-time could leave the state with a very short timeframe to develop and implement the required plan elements for a moderate area. As early as 1992, EPA stated with respect to the 1-hour ozone NAAQS but the following is equally applicable today: "The EPA believes that marginal areas should carefully consider the consequences of not attaining by November 15, 1993[18], and should take certain preliminary steps to minimize the potential of being subject to possibly unnecessary major control and planning actions." See, 57 FR 13498 at 13507, April 16, 1992 (footnote added for clarity). And also, "EPA, therefore, encourages any area that believes that it will be unable to attain by its applicable deadline, to voluntarily bump-up early enough to maximize the available time for implementing the requirements of the next higher nonattainment level. Early bump-up will help areas avoid sanctions and/or FIP implementation that could result from failure to meet SIP submittal or implementation requirements." See, 57 FR 13498 at 13506, April 16, 1992.

EPA acknowledges that states have a difficult choice with regards to requesting a voluntary reclassification for an area for any classification. On the one hand, such a request may be viewed as a failure of the state to ensure that the state has undertaken sufficient measures to ensure the ambient air meets federal standards in a timely manner. On the other hand, for the case of a marginal area, waiting until the attainment date to pass may leave the state insufficient time to ensure sufficient measures are implemented in time to attain by the new attainment date if the area must be reclassified for failure to attain. EPA would expect states to consider the results of the CSPAR (currently stayed by the court) modeling for 2014 when deciding to request a voluntary reclassification for a marginal area.

A marginal designation need not guarantee a marginal area will attain an ozone NAAQS by the applicable attainment date. In fact, the CAA contemplates that some will not and prescribes the remedial action of a reclassification under section 181(b)(2) to moderate or higher depending upon the area's design value. Nor does EPA expect all marginal areas will attain by the applicable marginal area attainment date – three years after designation. In the February 14, 2012 (77 FR 8197), notice of proposed rulemaking regarding classifications approach and attainment deadlines for the 2008 ozone NAAQS, EPA stated: "Marginal areas are expected to attain the 2008 NAAQS within 3 years of designation (e.g., in 2015) due to reductions of ozone precursors resulting from a number of federal and state emission reduction programs that have already been adopted. … EPA estimates that in about half of the Marginal areas, these reductions in conjunction with other ongoing state and federal controls should be sufficient to bring about attainment. In other areas, additional control measures may be needed for timely attainment." See, 77 FR at 8202, February 14, 2012 and Docket EPA–HQ–OAR–2010–0885.

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[18] This is the applicable attainment date for marginal 1-hour ozone nonattainment areas classified on November 15, 1990.

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If a state believes one of its marginal nonattainment areas will not attain with reductions from measures already promulgated, that state has the choice of at least two options --- wait until the area fails to attain and accept the reclassification to a higher classification or request a voluntary reclassification prior to the attainment date.

Maryland Comment: Maryland stated that under then EPA's current designation proposal,[19] the current Baltimore Nonattainment Area would be the lone moderate nonattainment area on the East coast. Maryland claims that the results of EPA's modeling performed for the CSAPR indicates that 10 or more ppb of an average ozone concentration in Maryland comes from states contiguous to Maryland. Surely a state that is contiguous must satisfy a plain reading of the word nearby. The 10 ppb are not simply attributable to power plant emissions but to emissions from other sectors especially the mobile sector. A large nonattainment area including the contiguous States would require other States to adopt controls for other sectors and thus, decrease imported pollution from other sectors.

EPA Response: EPA disagrees with the commenter. EPA's past practice has generally defined the states' portions of constituent parts of nonattainment areas in terms of whole or partial counties, cities, townships, and other subdivisions of states. At times, an entire state may be designated nonattainment due to its small size, the distribution of violating monitors across that state, the distribution of emissions, and the state's recommendation. However, this does not always result in an entire state being in only one nonattainment area. For instance, all of Connecticut was designated nonattainment under the 1-hour and the 1997 8-hour NAAQS. See 40 CFR 81.307. However, given the sheer physical size of Pennsylvania, Virginia and West Virginia, EPA believes that designating the entirety of these states as nonattainment given the scale of such a nonattainment area and such designation is to remedy an interstate transport problem.

Maryland Comment: Maryland stated that under EPA's current designation proposal, the current Baltimore Nonattainment Area would be the lone moderate nonattainment area on the East coast. Maryland claimed that a large nonattainment area such as a 17 State area will help Maryland in several ways.

EPA Response: EPA disagrees with the comment insofar as to designating a 17 State nonattainment area, although EPA does not disagree that transported ozone and precursors thereto from other states affects ozone concentrations in Maryland. However, EPA notes that section 110(a)(2)(D) only prohibits emissions that "contribute significantly" to nonattainment in another State not any level of contribution to nonattainment in another State, and, EPA believes that under section 107(d)(1)(A) the terms "contribute" to violations in a "nearby" violating a NAAQS does not mean any level of "contribution" but rather a *degree of contribution sufficient to deem or* ***warrant*** designation as nonattainment as stated elsewhere in this document. As discussed above,

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[19] Though no citation was provided, Maryland's statement is consistent with proposed "Table 1" in the February 14, 2012 (77 FR 8197 at 8201) proposed rule.

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EPA believes that designations of nonattainment are not to be used to address interstate transport. EPA does not disagree that Maryland would benefit through the designation of a 17 state ozone nonattainment area. However, those benefits come at the price to 16 other entire States which price is designation as nonattainment.[20]

Maryland Comment: Maryland claimed that it alone would be required to implement more controls at generally more than 4 to 8 times the cost of controls EPA plans to impose on states under the CSAPR.

EPA Response: EPA acknowledges that nonattainment areas have to implement at times costly controls. To the extent that Maryland is commenting on the disparity of the cost of local controls and what should be required to reduce emissions to meet section 110(a)(2)(D)'s prohibition of emissions that "contribute significantly" to nonattainment in other States, EPA believes this is not the forum for such a comment but that rulemakings regarding section 110(a)(2)(D) might be. For the CSAPR (currently stayed by the court), the comment period has closed

Maryland Comment: With regard to the use of the Five Factor Analysis Maryland asserted:

EPA has not been able to promulgate a regulation to control long range transport so that controls are in place to provide improved air quality prior to attainment deadlines. EPA has the discretion to modify the evaluation criteria for designating area boundaries to account for long range transport. The designation process should include such a factor in designating nonattainment areas now and in the future as it is the responsibility of a state to control significant pollution contribution to other areas.

The EPA analysis for ozone nonattainment area boundaries and CSAPR both have the goal of identifying "linkages" and "significant contributions" to an area's ozone problem. For consistency, the EPA should use the same standard as laid out in CSAPR federal regulations, which have gone through the public comment process, should have priority over the interpretation of ozone nonattainment area boundary criteria, which only appear in EPA memoranda to the states. In addition, the CSAPR approach to identifying meteorology-based linkages is consistent with the science of ozone formation and more importantly transport.

EPA Response: EPA disagrees with the commenter. With respect to adapting the factors considered during the designation process to the nature of the pollutant, EPA believes that section 107(d) provides the Agency with discretion to determine how best to interpret the terms in the definition of a nonattainment area (e.g., "contributes to" and

[20] The District of Columbia was one of the 17 Maryland identified for the 17 State area but will designated nonattainment because among other things due to violating monitors within its boundaries.

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"nearby") for a new or revised NAAQS, given considerations such as the nature of a specific pollutant, the types of sources that may contribute to violations, the form of the standards for the pollutant, and other relevant information. In particular, EPA believes that the statute does not require the Agency to establish bright line tests or thresholds for what constitutes contribution or nearby for purposes of designations.[21] Similarly, EPA believes that the statute permits EPA to evaluate the appropriate application of the term ''area'' to include geographic areas based upon full or partial county boundaries, and contiguous or noncontiguous areas, as may be appropriate for a particular NAAQS. EPA has expressed this position in prior designation actions. For example, see, 74 FR 58688 at 58691, November 13, 2009.

Regarding use of an approach for identifying meteorology-based linkages that has gone through notice and comment rulemaking, EPA disagrees. Firstly, section 107(d)(2) of the CAA exempts designations under section 107(d)(1) from notice and comment rulemaking but encourages such process and rulemaking for section 107(d)(1) designations; section 107(d)(1) designations are not one of the types of rule actions listed in section 307(d) of the CAA (setting forth an equivalent process for certain specified types of action). Secondly, EPA did open a comment period for this round of section 107(d)(1) designations "to solicit public comments from interested parties other than states and tribes on the EPA's recent responses to the state and tribal designation recommendations for the 2008 Ozone NAAQS." See, 76 FR 78874, December 20, 2011.

Regarding using the CSAPR (currently stayed by the court) approach to identifying meteorology-based linkages is consistent with the science of ozone formation and more importantly transport, EPA does not dispute that modeling might be used to identify contributor-receptor linkages. But the CSPAR (currently stayed by the court) modeling simply aggregated emissions and subsequent impacts on too coarse a basis – state-wide-- for use in the current section 107(d)(1) designations process. The linkages found under CSAPR (currently stayed by the court) are adequate for determining linkages between upwind States and downwind receptor monitors for the purpose of identifying significant contribution under section 1001(a0(2)(D). However discussed above, EPA believes that designations of nonattainment are not to be used to address interstate transport.

3.2.3.2. Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE

Comment: One commenter asks the EPA to add Luzerne and Schuylkill Counties, in Pennsylvania, to the Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE nonattainment area (Philadelphia area). EPA's analysis omitted any discussion of Luzerne or Schuylkill Counties, even though these counties have very high emissions of ozone precursors in the region, and the wind patterns into the Philadelphia area indicate that pollution from these counties blows into the currently proposed nonattainment counties for much of each year. The commenter alleges that modeling, monitoring, and

[21] This view has been confirmed in *Catawba County v. EPA*, 571 F.3d 20 (D.C. Cir. 2009)

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meteorological data all demonstrate that this pollution impacts the Philadelphia area, and support the inclusion of these counties in the ozone nonattainment area.

EPA Response: Luzerne and Schuylkill Counties are not in the same CSA as the Philadelphia area, nor are these counties adjacent to the nonattainment area. Therefore, EPA did not include these counties in EPA's analysis for the Philadelphia, PA area. EPA did include an analysis of these counties' potential contributions to nonattainment in its analysis for the Allentown-Bethlehem-Easton, PA nonattainment area (Allentown area). The five-factor analysis for the Allentown nonattainment area indicated that the inclusion of the counties in the Allentown area is not warranted. Schuylkill County was also included in the five-factor analysis for the Reading area. Again, EPA's five-factor analysis showed that Schuylkill County should not be included in the Reading nonattainment. The TSDs for these areas provide more detail.

Comment: Luzerne and Schuylkill Counties rank higher in NOx and VOC emissions than some of the counties within the MSA that have been designated nonattainment, or which EPA intends to designate nonattainment.

EPA Response: Luzerne and Schuylkill Counties rank lower in NOx and VOC emissions than all the counties in Pennsylvania that EPA has included in the Philadelphia nonattainment area: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties. Luzerne and Schuylkill Counties also rank lower in NOx and VOC than Berks County, which EPA has included in the Reading nonattainment area. Even assuming that emissions are higher than one or more counties included as part of the nonattainment area, we note that emissions is only one of the factors considered in determining whether to include an area within the boundaries of a particular nonattainment area. EPA's full five-factor analysis for each nonattainment area is provided in the TSD for that area.

Comment: Commenter alleges that the Hunlock power plant in Luzerne County is a coal-fired power plant located approximately 20 miles northwest of the area proposed to be designated nonattainment. The commenter alleges that Hunlock does not have any equipment installed to control its NOx emissions and is emitting NOx in close proximity to a proposed nonattainment area around a highly populated city. The commenter further alleges that wind patterns around Hunlock in Luzerne County support the inclusion of that county in the nonattainment designation of the Philadelphia area. A wind rose showing the average wind direction over a five year period near Hunlock indicates that the wind is blowing in a direction that causes Hunlock's emissions to travel into the proposed nonattainment counties, particularly Carbon County, on about 40% of the windy days. The commenter further alleges that because Hunlock is an uncontrolled source of NOx in a county contiguous to proposed nonattainment counties, the "emissions data" factor weighs heavily towards including Luzerne County in the Philadelphia area.

EPA Response: The EPA notes that the commenter asked EPA to include Luzerne County in the Philadelphia nonattainment area although Luzerne County is located

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adjacent and northwest of Carbon County, which is included in the Allentown area. As noted previously, EPA did not consider including Luzerne County as part of the Philadelphia nonattainment area because it is not part of the Philadelphia CSA and it is not adjacent to any counties that are part of that CSA. Thus, EPA does not consider it "nearby" for purposes of designation. Neither is Luzerne County part of the Allentown-Bethlehem-Easton, PA-NJ MSA. We provide the following details for informational purposes only.

EPA identified two Hunlock power plants in Luzerne County, Hunlock Creek Energy Center (facility ID 3176) and Hunlock Unit 4 (facility ID 56397). The table below summarizes publicly available emissions data from EPA's Clean Air Markets Division (CAMD) Data and Maps website, http://ampd.epa.gov/ampd/QueryToolie.html for the two Hunlock facilities.

Facility Name	Facility ID (ORISPL)	Unit ID	Year	Operating Time	# of Months Reported	NO_x Tons	County	Facility Latitude	Facility Longitude	Operating Status	Fuel Type(s) (Primary)	Fuel Type(s) (Secondary)	NOx Control(s)
Hunlock Creek Energy Center	3176	6	2008	7,996	12	681.7	Luzerne	41.2033	-76.0683	Operating	Coal	Residual Oil	
Hunlock Creek Energy Center	3176	CT5	2011	226	3	17.0	Luzerne	41.2033	-76.0683	Operating (Started 05/31/2011)	Pipeline Natural Gas	Diesel Oil	Water Injection Selective Catalytic Reduction
Hunlock Unit 4	56397	4	2008	407	12	6.9	Luzerne	41.2033	-76.0683	Operating	Pipeline Natural Gas	--	Water Injection
Hunlock Unit 4	56397	4	2011	172	12	2.9	Luzerne	41.2033	-76.0683	Operating	Pipeline Natural Gas	--	Water Injection

Caveat: Hunlock (ORISPL 56397) Unit 4 in Pennsylvania was previously Hunlock Creek Energy Center (ORISPL 3176) Unit 4 in Pennsylvania, and started submitting emissions at the new location in the first quarter of 2006.

As can be seen from the emissions data provided above, in 2008 Hunlock Creek Energy Center was a gas-fired power plant with 681.7 tons of NOx emissions and no NOx controls. However, this facility converted to natural gas in 2011 and installed NOx control, water injection and selective catalytic reduction. These changes to the facility will result in lower NOx emissions. However, only three months of preliminary emissions data has been reported for 2011. Hunlock Unit 4 is a gas-fired facility which had 6.9 tons of NOx emissions in 2008 and only 2.9 tons in 2011. Furthermore, the wind rose that the commenter provided (commenter Exhibit 4) shows that prevailing winds from area in which the Hunlock facilities are located are from the southwest. This indicates potential impacts towards Lackawanna and Wyoming Counties, and not the

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Philadelphia or Allentown areas. The wind rose does show winds from the northwest towards Carbon County, but much less frequently than the prevailing southwesterly wind. Carbon County is to the south and east of Hunlock. Therefore, winds that pass over Hunlock from the northwest would impact Carbon County. EPA does not have the raw data used to develop the commenter's wind rose. However, it appears that, upon visual analysis of the wind rose, that winds from Hunlock carry air towards Carbon County on about 20% of windy days. Thus, considering the low emissions and infrequent winds towards Carbon County, the potential contribution of Hunlock to Carbon County does not warrant inclusion of Luzerne County in the Allentown area.

Comment: Commenter alleges that the WPS Westwood power plant (Westwood) in Schuylkill County, approximately 15 miles northwest of the currently-proposed nonattainment area, has no NOx controls. The commenter further alleges that wind patterns around the Westwood plant indicate that pollution from that plant is significantly impacting the ability of Lehigh and Berks counties to come into attainment or maintain the NAAQS once attained, because the wind patterns for Westwood indicate that wind on 35% of windy days will blow the plant's pollution toward Berks or Lehigh counties. The wind pattern data show that winds are likely contributing to pollution levels in Lehigh and Berks Counties, and indicate that it would be improper to exclude Schuylkill County from the nonattainment designation for the Philadelphia area. The commenter further alleges that because Westwood is an uncontrolled source of NOx in a county contiguous to proposed nonattainment counties, the "emissions data" factor weighs heavily towards including Schuylkill County in the Philadelphia area.

EPA Response: The EPA notes that the commenter asked EPA to include Schuylkill County in the Philadelphia nonattainment area although Schuylkill County is located adjacent and northwest of Lehigh County (in the Allentown area) and Berks County (only county comprising the Reading, PA nonattainment area). As noted previously, EPA did not consider including Schuylkill County as part of the Philadelphia nonattainment area because it is not part of the Philadelphia CSA and it is not adjacent to any counties that are part of that CSA. Thus, EPA does not consider it "nearby" for purposes of designation. Neither is Schuylkill County part of the Allentown-Bethlehem-Easton, PA-NJ MSA or the Reading, PA MSA. We provide the following details for informational purposes only.

The commenter is correct that Westwood is a coal-fired plant with no NOx controls. The table below summarizes publicly available emissions data from CAMD's Data and Maps website, http://ampd.epa.gov/ampd/QueryToolie.html for Westwood. The facility reported emissions of 254.5 tons in 2008 and 219.6 tons in 2011.

Facility Name	Facility ID (ORISPL)	Unit ID	Year	Operating Time	# of Months Reported	NO_x Tons	County	Facility Latitude	Facility Longitude	Operating Status	Fuel Type(s) (Primary)	Fuel Type(s) (Secondary)	NO_x Control(s)
WPS Westwood Generation,	50611	031	2008	7,314	12	254.5	Schuylkill	40.6191	-76.4500	Operating	Coal		

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Facility Name	Facility ID (ORISPL)	Unit ID	Year	Operating Time	# of Months Reported	NO_x Tons	County	Facility Latitude	Facility Longitude	Operating Status	Fuel Type(s) (Primary)	Fuel Type(s) (Secondary)	NO_x Control(s)
LLC													
WPS Westwood Generation, LLC	50611	031	2011	7,148	12	219.6	Schuylkill	40.6191	-76.4500	Operating	Coal	Diesel Oil	

The wind rose that the commenter provided (commenter Exhibit 5) shows prevailing winds from the northwest, with some winds from the south. Therefore, emissions from Westwood may have some potential impact on Lehigh and Berks Counties. However, EPA considered these impacts in the five-factor analyses for the Allentown and Reading areas and determined that the potential impacts did not warrant inclusion of Schuylkill County in either the Allentown or Reading nonattainment areas. The Allentown and Reading nonattainment areas are located between Schuylkill County and the Philadelphia area. Therefore, any impacts on the Philadelphia area from Westwood or otherwise from Schuylkill County would be even less than the impacts on the Allentown and Reading areas.

Comment: Population density and degree of urbanization should be considered when undertaking area-specific analyses to support nonattainment boundary recommendations. Luzerne and Schuylkill counties are contiguous to a densely-populated nonattainment area. This adds to the case that Luzerne and Schuylkill Counties must be included in the nonattainment designation, since they are impacting a large population by contributing to the Philadelphia area's ozone pollution.

EPA Response: As provided previously, Luzerne and Schuylkill Counties are adjacent to the Allentown and Reading nonattainment areas and our analysis of both of these counties for Allentown and Schuylkill for Reading are provided in the TSDs for those areas. We did not consider these counties as part of our analysis for the Philadelphia area because we do not consider them "nearby."

Comment: EPA need not limit itself to the "presumptive" boundaries for a nonattainment area in determining which counties to include. EPA has repeatedly stated that counties outside the presumptive boundary that do not themselves contain violating monitors can still be designated nonattainment areas if they contain emissions sources with the potential to contribute to NAAQS violations in the existing nonattainment area. The commenter listed examples of areas where EPA has included counties outside the presumptive area boundaries in a nonattainment area. EPA's discretion to expand an area beyond the presumptive political, MSA, or CSA boundary has been upheld in the courts. The commenter also cited case law upholding this practice. The commenter concludes that, "with the strong evidence pointing to Luzerne and Schuylkill counties as culprits in the Philadelphia area's ozone problem, it would be arbitrary for EPA not to include them,

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or at a minimum, not to fully analyze the relevant arguments for doing so and the available data."

EPA Response: EPA agrees that the Agency is not limited to the presumptive area boundary for nonattainment area designations. However, we generally do not consider counties that are not adjacent to the MSA or CSA as we do not consider such areas as "nearby." As provided previously, Luzerne and Schuylkill Counties are adjacent to the Allentown and Reading nonattainment areas and our analysis of both of these counties for Allentown and Schuylkill for Reading are provided in the TSDs for those areas.

3.2.3.3. Pittsburgh-Beaver Valley, PA

Comment: One commenter asks EPA to include Preston, Marion, Monongalia, and Marshall Counties in West Virginia as part of the Pittsburgh-Beaver Valley ozone nonattainment area. The commenter argues that these counties contribute to ozone-causing pollution in the nearby Pittsburgh area. The commenter further argues that these counties have some of the highest emissions of ozone precursors in the region, and the wind patterns into the Pittsburgh area indicate that pollution from these counties bordering the Pittsburgh area blows into the proposed nonattainment counties for much of each year. In particular, the commenter argues that Marshall County ranks much higher than many of the counties within the MSA that EPA has recommended for designation as nonattainment. Further, the commenter argues that modeling, monitoring, and meteorological data for all of these counties demonstrate that their pollution impacts the Pittsburgh area.

EPA Response: Preston, Marion, Monongalia, and Marshall Counties in West Virginia are not part of the census-defined 2009 Pittsburgh-New Castle Consolidated Statistical Area that EPA used as its presumptive analytical starting point for evaluating the geographic boundaries for nonattainment for the violating monitor in Allegheny County, Pennsylvania. EPA followed the methods described in its December 4, 2008 memo entitled "Area Designations for the 2008 Revised National Ambient Air Quality Standards" in selecting the Pittsburgh-New Castle CSA as its presumptive starting point for its designations analysis. Of the counties listed by the commenter, only Marshall was designated nonattainment in the past under the 1997 ozone NAAQS (as part of the Wheeling, WV-OH nonattainment area).

As shown in Figure 1of EPA's technical analysis in the Pittsburgh-Beaver Valley (Pittsburgh) TSD, several ozone monitoring stations lie in and between the identified counties and the violating monitor in Allegheny County. These include monitors attaining the 2008 ozone NAAQS in Ohio and Monongalia Counties in West Virginia, and Greene, Washington, Westmoreland, Beaver, and Allegheny Counties in Pennsylvania. Of the four West Virginia counties in question, only Monongalia has an ozone monitor, and that monitor shows attainment of the 2008 NAAQS based on the most recent three-year period.

While the NOx emissions from Marshall County (26,812 tons per year) are high in comparison to some of the counties EPA analyzed for the Pittsburgh area, they are not the

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highest emissions in the area. Both Allegheny and Beaver Counties both have larger NOx emissions (52,399 and 35,714 tons per year, respectively). Monongalia and Preston have relatively lower NOx emissions (13,365 and 3,384 tons per year, respectively). Monongalia County's emissions are similar to those of Washington and Westmoreland Counties in the Pittsburgh-Beaver Valley nonattainment area. Preston County's emissions are the lowest of all counties in the Pittsburgh-Beaver Valley nonattainment area. VOC emissions for Monongalia (4,157 tons per year), Marshall (1,168 tons per year), and Preston (3,384 tons per year) are lower than almost every county in the Pittsburgh-Beaver Valley nonattainment area.

The four West Virginia counties identified by the commenter do not contribute appreciable emissions from non-EGU sources, have relatively low population density, and very low overall VMT. All but Monongalia have low or negative growth in population. While Monongalia County experienced double digit population growth, it continues to have low overall population. None of these counties has appreciable commuter contribution to the Pittsburgh area. After considering this information, we found no compelling reason to include in our analysis of Pittsburgh these West Virginia counties that are outside of the Pittsburgh CSA.

The commenter focuses on these four WV counties because of the significant emissions from coal-fired electric generating units (i.e., the Kammer plant in Marshall County, Albright power station in Preston County, Grant Town and Rivesville power stations in Marion County, and Fort Martin and Morgantown Energy facilities in Monongalia County) and their potential downwind contribution to the violating monitor in Allegheny County. While not pertinent for determining current contribution from these areas, we note that several of these EGUs are now scheduled to shut down. Additionally several have recently installed emissions controls. American Electric Power has announced that the Kammer facility will shut down by Dec. 31, 2014. First Energy/Monongahela Power Company announced that its Albright Power Station (Preston County) and Rivesville Power Station (Marion County) will shut down by September 1, 2012. First Energy/Monongahela Power Company's Fort Martin Power Station in Monongalia County has SNCR controls on both units as of 2004 and installed SO_2 scrubbers in 2009. The commenter notes that the Grant Town power station already has SCR in place.

Comment: One commenter asks EPA to include Indiana and Lawrence Counties in Pennsylvania as part of the Pittsburgh-Beaver Valley nonattainment area. The commenter argues that these counties contribute significantly more ozone-causing pollution in the nearby Pittsburgh area than some of the counties that EPA did recommend for inclusion in the Pittsburgh area. The commenter further alleges that modeling, monitoring, and meteorological data all demonstrate that this pollution impacts the Pittsburgh area, and therefore support inclusion of these counties into the Pittsburgh nonattainment area. Another commenter recommended that EPA include Lawrence County in the Pittsburgh nonattainment area on the basis that it is part of the Pittsburgh CSA.

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EPA Response: Under the 1997 ozone standard, Indiana County was a separate nonattainment area from Pittsburgh, as it was determined then not to be linked to Pittsburgh on the basis of a jurisdiction factor. Indiana County is not part of the census-defined 2009 Pittsburgh-New Castle CSA that EPA used as its presumptive analytical starting point for evaluating the geographic nonattainment boundaries for the violating monitor in Allegheny County, Pennsylvania. EPA followed the methods described in its December 4, 2008 memo entitled "Area Designations for the 2008 Revised National Ambient Air Quality Standards" in selecting the Pittsburgh-New Castle CSA as its presumptive starting point for its designations analysis.

Indiana County was formerly nonattainment under the 1997 ozone NAAQS as part of the Clearfield and Indiana, PA area, but is not violating either the 1997 or 2008 ozone NAAQS based upon the most recent three years of monitoring data. NOx emissions from Indiana County (at 40,012 tons per year) are higher than all the counties in the Pittsburgh CSA, except for Allegheny County; most of the NOx emissions are associated with three major coal-fired electric generating facilities in Indiana County. However, Indiana County is not only outside the Pittsburgh-New Castle CSA, but it is one county removed from the violating monitor. Prevailing winds in Indiana County blow mainly from the east to west, and since Indiana County is located west of the violating monitor, emissions from Indiana County are not likely to be contributing to the violation in Allegheny County. This is demonstrated by both the wind roses presented in Exhibit 5 of the commenter's letter (for the largest of Indiana County's EGUs, Homer City) and by the HYSPLIT modeling presented in EPA's factor analysis for the Pittsburgh portion of the Pennsylvania TSD. The sulfur dioxide dispersion modeling presented in Exhibit 6 of the commenter's letter (for the Homer City Power Station in Indiana County) does not clearly make a case that SO_2 emissions from Homer City cause an impact as far away as the Allegheny County monitor, and it is not clear that this SO2 analysis would demonstrate an impact on ozone in any case since SO2 is not an ozone precursor. Therefore, although EPA did not include Indiana County in its geographic analysis of the Pittsburgh nonattainment area boundaries, for the reasons provided here, we do not believe that emissions from Indiana County contribute to the violation at the Allegheny monitor.

Lawrence County comprises the New Castle MSA, which is part of the Pittsburgh-New Castle Consolidated Statistical Area that was the analytical starting point for EPA's geographic analysis for evaluating the 2008 ozone designations for the violating monitor in Allegheny County. EPA's analysis of Lawrence County and our rationale for excluding this county from the Pittsburgh nonattainment area is presented in the TSD for this action.

Lawrence County has a monitor that is not violating the 2008 ozone NAAQS based on the most recent three years of data. (Both the 2010 and 2011 design values are 66 ppb). Emissions from Lawrence County are 8,960 tons per year of NOx and 3,814 tons per year of VOC, which are similar to those of Washington and Westmoreland Counties in the Pittsburgh nonattainment area, but much lower than the more urban counties of Allegheny and Beaver Counties. A large portion of the NOx emissions in this county come from the coal fired 354 megawatt coal-fired New Castle Power Plant. GenOn Energy, the owner of this plant, has announced that it will shut down this facility by April

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2015, which will result in greatly lower emissions totals for this county. Lawrence County has only moderate population and population density, relatively low vehicle miles of travel and very low commuter contribution to the county with the violating monitor (i.e., Allegheny County). As with most counties in the area of analysis, both VMT and population are in decline (minus 1% and 4%, respectively). EPA's HYSPLIT analysis for the area shows that the wind passes over this county on its way to the violating monitor relatively infrequently, and the commenter's Exhibit 7 to its comment letter shows that winds blow predominantly from the southwest to northeast direction, which would carry pollution away from the violating monitor in Allegheny County. Further, Lawrence County is defined by OMB as part of its own micropolitan statistical area, which is part of the larger Pittsburgh CSA. Pennsylvania points out in its response to EPA's 120-day letter for 2008 ozone designations that this denotes a lower level of social and economic ties to the Pittsburgh area than the counties that are part of the CSA. In the past, Lawrence County has not been included in the geographic boundaries for the Pittsburgh ozone nonattainment area under the prior ozone NAAQS. Finally, Lawrence County is part of a separate air basin from the remainder of the Pittsburgh area (i.e., the Upper Beaver Valley Air Basin), as defined by Pennsylvania in 25 Pa Code §121.1.

Therefore, on the basis of the factor analysis set forth in our TSD, EPA did not designate Lawrence County as part of the Pittsburgh-Beaver Valley nonattainment area.

3.2.4. EPA Region IV

3.2.4.1. Atlanta, GA

Georgia Comment: The Clean Air Act gives EPA the authority to set the National Ambient Air Quality Standards and to make nonattainment designations, and the Act gives states the responsibility to make recommendations on which areas are designated nonattainment and to develop and implement the State Implementation Plan that brings areas into compliance with the NAAQS. In addition, the states know their local emission sources, meteorology and air quality situation better than EPA does. Therefore, EPA should grant deference to the states' boundary recommendations as long as those recommendations are consistent with the Act because states are better situated to know what it takes to bring an area into compliance with a NAAQS than EPA.

EPA Response: EPA agrees with the commenter in that it is the states' responsibility to submit to the Administrator a list of all areas in the State, designating as nonattainment, attainment or unclassifiable. EPA also agrees with the commenter in that it is the states' responsibility to develop and implement the State Implementation Plan that brings areas into compliance with the NAAQS. While EPA does grant some deference to state boundary recommendations, EPA is required to independently assess the recommendations and to notify the States where it disagrees with such recommendations. Under section 107(d), EPA ultimately has the authority and responsibility to promulgate the final designations. After receiving the list of areas from the state, EPA must exercise independent judgment before promulgating the designations, and the statute provides time to do so. Section 107(d)(B)(i) provides that EPA is to promulgate designations

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within one year after receiving the state's recommendations. Significantly, the statute also explicitly authorizes EPA to modify state recommendations and to notify the States 120-days before it promulgates designations of any intended modifications. Section 107(d)(1)(B)(ii) provides that EPA "may make such modifications as the Administrator deems necessary," to both the recommended designations and the boundaries of the recommended areas. EPA would not have this authority were it merely required to defer to State recommendations in all instances. Thereafter, the statute contemplates a period of 120 days within which states have the "opportunity to demonstrate why any proposed modification is inappropriate." Were EPA required merely to defer to state recommendations in all instances, the Act would not be phrased to provide an "opportunity" for states to alter EPA's judgment about proposed modifications nor would it provide a one year period that includes time for EPA analysis of State recommendations as well as the interactive process during the 120-day period. Taken together, these provisions demonstrate that EPA is ultimately responsible to promulgate the designations that it believes are most consistent with the requirements of section 107(d), even if such designations deviate from the preferences of the state affected by the designation. At a minimum, EPA believes that modifications are "necessary" for nonattainment areas when they do not encompass both the areas that are violating, and the nearby areas that are contributing to those violations, based upon the facts and circumstances of each area.

Georgia Comment: The Clean Air Act limits EPA's authority to revise a state's recommended designation (including boundaries) to situations where it is "necessary" to do so.

EPA Response: We agree that the statute provides for EPA to modify state recommendations "as necessary." EPA recommends that States use the five-factor analysis to determine the boundaries of appropriate nonattainment areas as EPA performs such an analysis to determine whether it is necessary to include areas within the designated area. We note that the term necessary is not expressly defined by the statute, but it must be read in light of the definition of a nonattainment areas which is "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet)" the NAAQS. The five-factor analysis is for the purpose of determining which areas are necessary to include as part of a designated nonattainment area.

Georgia Comment: We do not believe that the inclusion of the additional counties that EPA intends to include in the nonattainment area are necessary or appropriate because it imposes significantly more regulatory burden and higher compliance costs without having a material impact on the nonattaining area's ability to comply with the standard in a timely manner.

EPA Response: We do not believe that regulatory burden or compliance costs are pertinent considerations in determining whether an area is violating the NAAQS or contributing to a nearby violation of the NAAQS.

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Georgia Comment: EPA stated that they will be "mindful of the President's and Administrator's direction that in these challenging economic times EPA should reduce uncertainty and minimize the regulatory burdens on state and local governments".

EPA Response: The EPA refers the commenter to section 3.1.5 of this document for a response regarding "economic harm" associated with the ozone designations process.

Georgia Comment: Georgia comments that it is reasonable to interpret "contributes to" in Clean Air Act section 107(d)(1)(A)(i) to mean that EPA can include an area/county as part of a nonattainment area if inclusion would affect the ability of the area to attain the standard.

EPA Response: Nearby counties should be included as part of the NAA if the five-factor analysis supports that they contribute. Inclusion of any single county materially affects the ability of entire area to comply.

Georgia Comment: Including counties where the state has little or no ability to obtain further emission reductions may make it very difficult to meet the Clean Air Act Reasonable Further Progress (RFP) requirement.

EPA Response: As noted previously, we do not consider the adoption of future controls in our analysis of whether an area is currently contributing to a violation of the NAAQS in a nearby area. It is unclear what specific county or area the state may be referring to in this comment. In most cases, we anticipate that an area where there are no or few reductions to be obtained would have very low emissions. The current emissions in the area are a factor that we consider in our analysis, though it is not the sole factor in our five-factor analysis. Unless other factors strongly support inclusion of a county, a county that has few emissions generally would not be included as the nonattainment area in the absence of a violation of the standard in that county. To the extent a county with very low emissions is included as part of a nonattainment area, we note that those emissions would only be a small part of the RFP baseline, which is based on emissions from throughout the area. Finally, we note that the only nonattainment area in Georgia – the Atlanta area – is classified as marginal and we do not interpret the RFP requirements in subpart 1 to require reductions beyond those needed for attainment for marginal areas.[22]

[22] Section 182(a) does not excuse marginal areas from the RFP requirement in subpart 1. However, because of the short period marginal areas have to attain and because of the assumption that such areas should be able to attain based on controls already in place, we do not interpret the RFP requirement to require more than the reductions already scheduled to occur.

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Georgia Comment: Georgia followed EPA's weight-of-evidence approach documented in their preliminary TSD for the Atlanta area, but supplemented EPA's approach by assessing the distance from a county centroid to the violating monitor as evidence supporting a county's inclusion in the nonattainment area.

EPA Response: EPA agrees with the commenter that states can supplement factor analyses with additional information. As presented in the TSD for the Atlanta area, EPA chose to examine the following 5 factors:

1. Air quality data (including the design value calculated for each Federal Reference Method (FRM) or Federal Equivalent Method (FEM) monitors in the area); *See* 40 CFR part 58
2. Emissions and emissions-related data (including location of sources and population, amount of emissions and emissions controls, and urban growth patterns);
3. Meteorology (weather/transport patterns);
4. Geography and topography (mountain ranges or other basin boundaries);
5. Jurisdictional boundaries (e.g., counties, air districts, existing nonattainment areas, Indian country, metropolitan planning organizations (MPOs)).

All data and information used by EPA in this evaluation are the latest available to EPA and/or provided to EPA by states or tribes. Congress required a similar approach in 1990 for areas classified as serious or above for the 1-hour ozone standard and EPA used the same basic approach in the designation process for the 1997 ozone NAAQS. EPA generally agrees that the CSA or CBSA areas are a rational starting place for evaluating what areas violate and contribute to violations of the ozone NAAQS, but they are not outcome determinative.

Georgia Comment: Georgia included data regarding reduced NO_X emissions from two coal-fired power plants as evidence that current (i.e., 2011) NOx emissions in Bartow and Coweta are less than what EPA presented in the preliminary TSD. Georgia provided the data to support excluding these counties.

EPA Response: EPA appreciates actions by these sources to reduce emissions. However, even after considering the noted emission reductions, we have concluded that Bartow and Coweta Counties contribute to violations in nearby areas. Therefore, EPA must include these counties within the boundaries of the Atlanta nonattainment area. During the process of developing the nonattainment area SIP, the state and EPA will closely examine sources within Bartow and Coweta Counties to determine the necessary level of control to assure that these areas attain the ozone NAAQS as expeditiously as practicable. It may, in the end, be determined through the appropriate process that sources within these counties are appropriately controlled for NO_X emissions, so that no additional controls are required by section 172 or other applicable statutory or regulatory requirements.

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Comment: County Commissioners disagree that Barrow County, Newton County, Spalding County and Paulding County should be included in the proposed Atlanta nonattainment area. They defer to the Georgia Environmental Protection Division's (GA EPD) February 29, 2012, response to EPA's preliminary designation to provide their rationale.

EPA Response: EPA's analyses provided in the final TSD for the Atlanta area considered the new information submitted by GA EPD on February 29, 2012.

3.2.4.2. Charlotte-Rock Hill, NC-SC

Catawba Indian Nation Comment: The Catawba Indian Nation commented that currently, no air quality data or violating air quality monitor exists for areas within the geographic boundaries of the Catawba Indian Nation[23] Reservation. They further note that there are no point sources of air quality emissions within or directly adjacent to the boundaries of the Catawba Indian Nation, and, therefore, areas of Indian country should be designated as unclassifiable/attainment.

EPA Response: EPA agrees with the documentation and conclusions provided by the Catawba Indian Nation in their factor analyses. EPA's assessment of the Catawba Indian Nation's analyses is described in more detail in the TSD for the Charlotte-Rock Hill, NC-SC area.

Catawba Indian Nation Comment: The Catawba Indian Nation does not feel that the York County monitor is "properly placed to accurately measure the air quality from within the urbanized portion of York County or the Catawba Indian Nation."

EPA Response: The South Carolina Department of Health and Environmental Control (SC DHEC) is responsible for determining the appropriate monitoring network to monitor air quality within the State of South Carolina. SC DHEC determines the State monitoring network in compliance with the minimum ambient air quality monitoring which is listed in the CFR specifically at 40 CFR part 58, Appendix D. Appendix D lists the factors considered when determining the minimum number of ozone monitors needed in an MSA. Those factors are: 1) MSA population and 2) historical ozone concentration monitoring results for the MSA. SC DHEC monitoring network plans are subject to a 30-day public comment period through the SC DHEC website. EPA approves the South Carolina monitoring network plan based upon the criteria listed in 40 CFR part 58, Appendix D. EPA has approved the most recent monitoring network plan for the State of South Carolina, which includes the Catawba Indian Nation Reservation, as satisfying the minimum ambient air quality monitoring requirements described in 40 CFR part 58, Appendix D. EPA notes that the nonattainment portion of York County was included in

[23] Catawba Indian Nation (aka Catawba Tribe of South Carolina)

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the Charlotte-Rock Hill, NC-SC area due to its contribution to violating monitors in North Carolina.

North Carolina Comment: North Carolina has carefully examined the Charlotte-Rock Hill, NC-SC area and has determined that a number of townships with rural characteristics with little to no emission sources should be designated attainment. North Carolina presents this information in its response to EPA's 120-day letter.

EPA Response: EPA believes North Carolina has provided an adequate rationale for designating partial counties along township boundary lines and references the TSD for the Charlotte-Rock Hill, NC-SC area for our rationale for final designations for the 2008 8-hour ozone NAAQS.

South Carolina Comment: The State commented that the urbanized portion of York County, South Carolina should not be included in the Charlotte-Rock Hill, NC-SC nonattainment area for the 2008 eight-hour ozone standard because all air quality monitors in South Carolina are attaining the 2008 ozone standard. The State encouraged EPA to consider additional evidence presented to EPA by SC DHEC.

EPA Response: EPA considered the data presented by SC DHEC in its analyses provided in the final TSD for the Charlotte-Rock Hill, NC-SC area. Based on EPA's five-factor analysis, EPA included part of York County, South Carolina in the Charlotte-Rock Hill nonattainment area.

South Carolina Comment: During the last 10 years, ozone design values at the York County monitor decreased 24 percent. "The 2011 ozone value in York County is well below the standard at 0.064 parts per million (ppm)."

EPA Response: EPA acknowledges that the ozone monitor in York County is attaining the 2008 8-hour ozone NAAQS with 2009-2011 data at 0.064 parts per million (ppm). The presence of an attaining monitor in York County does not establish whether emissions activity in York County is contributing to violations in nearby counties. EPA believes our technical evaluation of York County shows contribution to the air quality in the Charlotte area. Please see our TSD for further details on our analyses.

South Carolina Comment: The Arrowood monitor (site id 37-119-1005) in Mecklenberg County, NC "...better represents the southern Charlotte metropolitan area and does not represent York County. The ozone concentration gradient map indicates that ozone concentrations decrease rapidly from the southern side of Charlotte to York County." The gradient map indicates ozone concentrations in York County are less than the 2008 ozone NAAQS. The gradient map adds weight to the argument that York

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County, in its entirety, including the Catawba Indian Nation Reservation should be designated attainment.

EPA Response: EPA agrees that spatial analysis of air quality monitoring data can be a useful tool for evaluating ambient air impacts of pollutants. It is clear from an evaluation of the ambient air monitoring data, the highest ozone design values occur at the monitors located closest to the City of Charlotte. However, as indicated in EPA's document titled "*Developing Spatially Interpolated Surfaces and Estimating Uncertainty* (EPA-454/R-04-004)," care must be exercised when interpreting the results of any spatial analysis developed using statistical modeling techniques, such as the kriging done by South Carolina to develop the "Ozone Concentration Gradient" map shown in Figure A-5 of their Response to EPA. It is important to consider the uncertainty associated with interpolating (i.e., kriging) data collected at a limited number of air monitoring sites. South Carolina has not provided an uncertainty analysis for the kriging methodology that was used. Quoting from section 8.3 of EPA-454/R-04-004, "A kriging spatial interpolation surface is expected to provide a reasonable spatial description of the pollution process in general, but to require it to be highly accurate at each specific location may be an unreasonable expectation." Therefore, the location of specific contours on South Carolina's map should be considered estimates and not necessarily highly accurate.

When viewing the Ozone Concentration Gradient map provided by South Carolina, it is also important to recognize concentrations shown on the map are 2009-2011 design values that represent different wind patterns and meteorology that occurred only on specific days over a three year timeframe that go into the design value calculations. Therefore, looking solely at the map to evaluate potential contribution from ozone precursor emissions from sources in York County is difficult. The map should be considered in conjunction with an analysis of meteorology as was done in South Carolina's response. It is important to realize that the map is different from a contoured map of concentrations generated from an air quality model which uses the spatial distribution of air emissions and simulates atmospheric chemistry and transport to provide spatial estimates ozone concentrations.

South Carolina Comment: The EPA's ozone siting guidance states "…the most significant amount of transported ozone and ozone precursors will come from the area where the winds enter the city." Back trajectories indicate that monitors around Charlotte are impacted by local emissions from the Charlotte metropolitan area. Back trajectory analysis of *all* monitors in the Charlotte metropolitan area shows that approximately 80 percent of all air masses on days exceeding the ozone standard passed through the Charlotte metropolitan area suggesting that at least a portion of the ozone measured at the sites was formed locally. Back trajectory analyses indicate that all of the Charlotte area monitors are being impacted by local plumes from Charlotte or are indicative of stagnation with recirculation.

EPA Response: South Carolina has provided a thorough back trajectory analysis developed with NOAA's HYSPLIT model for each of the ozone monitors in the

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Charlotte metropolitan area during episodes when the monitors measured exceedances of the ozone standard (see Appendix A of South Carolina's response). EPA agrees with South Carolina's assertion that many of the back trajectories show air masses passing over Charlotte on ozone exceedance days. However, some of the back trajectories pass over York County indicating the potential for York county emissions to contribute to ozone exceedances during these specific events (e.g., June 8, 2011). Recirculation of emissions from other areas and elevated "aged ozone" from stagnation conditions may contribute to the ozone exceedances during these events, but nothing provided by South Carolina conclusively excludes transport of emissions from York County. Therefore, York County cannot be ruled out as a potential contributor to ozone violations at the Charlotte monitors. See EPA's TSD for additional discussion of this issue.

South Carolina Comment: South Carolina claims that it would cause unnecessary economic burdens for the EPA to designate a portion of York County, including the Catawba Indian Nation "nonattainment" simply because they are a part of a presumptive boundary (CSA/CBSA). The term "Core Based Statistical Area" (CBSA) is a collective term for both metropolitan and micropolitan statistical areas (metro and micro areas). Metro and micro areas are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by Federal agencies in collecting, tabulating, and publishing federal statistics. For EPA to default to a presumptive boundary for "consistency" purposes stifles the creativity to improve air quality as expeditiously as possible."

EPA Response: The EPA refers the commenter to the response in section 3.1.5 of this document for a discussion of EPA's position on presumptive boundaries.

Comment: One commenter supports South Carolina's boundary recommendation requesting that all of South Carolina be designated attainment. They do not support EPA's proposal to include part of York County in the Charlotte-Rock Hill, NC-SC nonattainment area for the 2008 ozone standards and believe EPA should defer to the State's recommendations. The commenter is located within the current 8-hour ozone nonattainment area established for the 1997 standards (which is the same as that proposed for the 2008 ozone standards) and states that they have gone through "extensive" measures to meet the nonattainment NSR requirements, including undergoing Lowest Achievable Emission Rate (LAER) review, obtaining offsets, and installing NOx Continuous Emission Monitoring Systems. They have also stated that they have taken voluntary measures which combined with the required measured reduced emissions. The commenter notes that the offsets increased their capital cost of the project by 5 percent with no financial return.

The commenter also notes that the portion of York County that EPA proposed for nonattainment for the 2008 ozone standards has already undergone Reasonable Available Control Technology (RACT) and nonattainment NSR analysis. They note that an Inspection and Maintenance (I&M) program is not feasible or required on mobile sources, and any new industry locating in this area would be subject to the applicable

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regulations in place such as PSD, Maximum Achievable Control Technology (MACT), New Source Performance Standards (NSPS), and the control of VOC prescribed in SC Regulation 61-62.5, Standards 5 and 5.1, all of which address ozone precursors. The commenter believes that, as a result, there is very little opportunity for emission reductions in this area. The commenter states that a nonattainment designation and the time spent fulfilling its regulatory obligations do not improve air quality, but instead "consumes significant local, state, and federal resources that would have been better utilized for air quality improvements."

EPA Response: As provided in previous responses, EPA does not believe it is appropriate to consider regulatory controls that may apply to an area in determining whether that area is either violating the NAAQS or is a nearby area contributing to a violation of the NAAQS. We note that to the extent the area has already complied with the listed requirements, they may be generally sufficient for purposes of the revised ozone NAAQS.

EPA appreciates that many areas have implemented measures to reduce emissions and commends these efforts. Additionally, EPA notes that there are federal measures that have and will continue to aid areas in achieving attainment of the standards and maintaining these standards. EPA disagrees with the commenter's assertion that nonattainment designation and the time spent fulfilling its regulatory obligations do not improve air quality. To the contrary, EPA believes that efforts to attain the NAAQS as required by the CAA have provided great benefit to the citizens of the areas with air quality that do not meet air quality standards. The process provides the states with the opportunity to evaluate the causes of ozone violations and to focus resources on the types of sources that are contributing to ozone nonattainment. EPA notes that no new requirements beyond those that the commenter has and is currently implementing would be required based on the classification of the Charlotte-Rock Hill, NC-SC as marginal for the 2008 ozone NAAQS; there are no new RACT or I/M requirements that would apply. To the extent measures beyond those already in place are needed to bring the area into attainment by the marginal area attainment date, the States will have significant discretion in determining how to achieve those reductions.

3.2.4.3. Knoxville, TN

Tennessee Comment: Cocke County should not be designated as nonattainment. Cocke County has no significant sources of VOC or NOx and no ozone monitors. It is not adjacent to any counties with violating monitors, and should not be designated nonattainment simply because it contains a portion of the Great Smoky Mountains National Park.

EPA Response: The EPA agrees that Cocke County does not have a monitor that is violating the 2008 ozone NAAQS. NOx and VOC emissions from sources in Cocke County are relatively low and Cocke County's population and VMT data are low in comparison to other counties in the area (see the discussion of Factor 2 in EPA's TSD). Based on an evaluation of the five factors provided in EPA's TSD, EPA has not included Cocke County as part of the Knoxville, TN nonattainment area.

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Tennessee Comment: Anderson County in its entirety should be designated attainment based on 2009-2011 data or in the alternative only a portion of Anderson County should be designated nonattainment. Tennessee notes that the TVA Bull Run Fossil Plant is the largest source of VOC and NO_X emissions in Anderson County, and that the facility is equipped with selective catalytic reduction for NO_X control. Since Anderson County is north of Loudon County and northwest of Blount and Knox Counties, and the winds are climatologically from the southwest, west-southwest, and south-southwest, the State requests a partial nonattainment area for Anderson County limited to the census tracts around the TVA facility. The 2008-2010 and 2009-2011design values for the Anderson County monitor show attainment.

EPA Response: EPA agrees that the air quality data from the 2008-2010 and 2009-2011 timeframes for the Anderson County monitor do not violate the 2008 ozone standard. However, there is a nearby violation of the 2008 ozone standard in Blount County. Based on an assessment of the five factors provided in EPA's TSD, EPA agrees with Tennessee's alternative recommendation of nonattainment for a portion of Anderson County. Figure 1 (under development) shows the census tracts that surround the TVA Bull Run facility which EPA is including in the nonattainment boundary. See EPA's TSD for additional discussion.

Tennessee Comment: Sevier County should be treated as a stand-alone Micropolitan Statistical Area. Sevier County is considered a Micropolitan Statistical Area by itself, and readings from the 2009-2011 monitors are indicating attainment of the ozone NAAQS. The County has little industry with the majority of the VOC and NO_X emissions originating from mobile sources. This is due in part because the area is a heavy tourist destination with many out-of-county vehicles contributing to the VMT in the county.

EPA Response: EPA used CSA boundaries as the starting point for evaluating ozone areas, and for the Knoxville area, it is the Knoxville-Sevierville-La Follette CSA (of which Sevier County is a part). Subsequently, each of the five factors is evaluated for the CSA. The three-year period of the design values utilized for designations will be the same throughout an entire area. Because Tennessee indicated that it would early certify 20011 air quality data and because it submitted such data before February 29, 2012, all we used the 2009-2011 design values as the basis for designating of the Knoxville, TN nonattainment area. Sevier County does not have a violating monitor based on 2009-2011 monitoring data. Based on our five factor analysis, as provided in the TSD, we further determined that the county is not contributing to the violating monitor in Blount County. Therefore, EPA is not including Sevier County in the nonattainment area boundary for the Knoxville, TN nonattainment area.

Tennessee Comment: Because the monitor in Blount County is the only violating monitor in the Knoxville area based on 2009-2011 monitoring data, Tennessee recommends only that portion of Blount County that contains the Great Smoky

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Mountains National Park be designated as nonattainment. Tennessee further asserts that the Blount County monitor is predominately impacted by long range transport.

EPA Response: EPA appreciates the updated technical information that Tennessee provided and has updated our technical support document accordingly to reflect the use of 2009-2011 monitoring data for the Knoxville area. However, EPA disagrees with Tennessee's conclusion that long range transport is the predominate cause of the violation at the Blount County monitor, and believes the technical evaluation of the area shows contribution from nearby counties to the air quality at the Blount County monitor specifically and in the Knoxville area generally. Please see our TSD for further details on our analyses.

3.2.4.4. Greensboro-Winston-Salem-High Point, NC

Comment: One commenter acknowledged that ozone levels in Greensboro-Winston-Salem-High Point, NC (CSA) have improved and that 2011 preliminary data leads to the consideration that that metropolitan area is in attainment. However, they asked that if EPA's review of the preliminary data indicated that the area remains in nonattainment, they wanted EPA to include the entire metropolitan statistical area in the nonattainment designation.

EPA Response: Because North Carolina indicated that it would early certify 2011 data and because it submitted the certified data by February 29, 2012, EPA considered air quality data form 2009-2011 for purposes of the final designation of the Greensboro-Winston-Salem-High Point, NC area. Based on the certified monitoring information, EPA determined that all monitors in the area are attaining the 2008 8-hour ozone standards and we are designating the area as unclassifiable/attainment.

3.2.4.5. General Comments in South Carolina

Comment: One commenter supports SC DHEC's recommendation for attainment, specifically in Spartanburg, Greenville and Anderson counties in South Carolina.

EPA Response: EPA has determined that the Greenville-Spartanburg-Anderson, SC area (CSA), including Spartanburg, Greenville and Anderson counties, is attaining the 2008 8-hour ozone standards based on certified, quality assured 2009-2011 data and is therefore, being designated unclassifiable/attainment.

Comment: A citizen action group expresses concerns about the lack of ozone monitoring in Horry County, SC. The group states that ozone, and its impacts on human health were not taken into consideration when an air monitoring module at the site of a hot mix asphalt plant and nearby concrete batch plant in Conway, SC were established. The group cited ozone precursors, particulates, calm wind conditions for extended periods of time,

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and sunlight and heat during the ozone season in the area. They stated that Horry County is prone to traffic, brush fires, calm periods and fogs. They also stated that the only ozone monitor in Horry County, the Green Sea monitor, which has generated data for one ozone season, is being moved to the Charlotte area. They expressed concern that because no ozone data is reported, citizens are unaware when they may be exposed to ozone's health impacts. They would like ozone alerts at a minimum but also stated that additional research and monitoring of agricultural ozone is required. They also expressed concern about local zoning.

EPA Response: This designation action is not the appropriate place to raise comments regarding the sufficiency of the monitoring network. SC DHEC has the initial responsibility to determine the appropriate monitoring network to monitor air quality within the state of South Carolina annually. SC DHEC determines the State monitoring network in compliance with the minimum ambient air quality monitoring which is listed in the Code of Federal Regulations (CFR) specifically at 40 CFR part 58, Appendix D. Appendix D lists the factors considered when determining the minimum number of ozone monitors needed in a metropolitan statistical area (MSA). Those factors are: 1) MSA population and 2) Historical ozone concentration monitoring results for the MSA. SC DHEC monitoring network plans are subject to a 30-day public comment period through the SC DHEC website (http://www.scdhec.gov/environment/baq/ http://www.scdhec.gov/environment/baq/docs/ambientair/2012/Final_2012_Monitoring_Plan-with_signatures.pdf). Once that process is complete, the EPA reviews the State's monitoring plan to determine if it meets the regulatory criteria listed in 40 CFR part 58, Appendix D. On October 11, 2011, EPA approved the most recent monitoring network plan for South Carolina. The ability for SC DHEC to conduct monitoring beyond what is required in 40 CFR part 58 will depend on the resources available to the State.

3.2.5. EPA Region V

3.2.5.1. Chicago

EPA will be designating the Illinois, Indiana, and Wisconsin counties associated with the Chicago-Naperville, IL-IN-WI area in a separate action, no later than May 31, 2012. For this reason, comments received during the initial public comment period will be addressed in a separate response to comments document for that final action.

3.2.5.2. General Comments in Wisconsin

Comment: A commenter asserts that, although Wisconsin's 2011 data have not yet been certified, these data are already quality assured, and show 2009-2011 ozone design values above the 2008 8-hour ozone standard (75 ppb) for Kenosha, Manitowoc, and Sheboygan Counties. In addition, EPA regulations require these data to be certified by May 1, 2012, which is likely to follow very closely behind EPA's final ozone designations.

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EPA Response: Quality assurance (QA) measures are periodically performed at the monitor locations according to 40 CFR part 58 to ensure that monitors are operating properly. The QA process is different than data certification. Both QA and data certification must be completed to ensure valid data. The EPA refers the commenter to section 3.1.1 of this document for a discussion of EPA's handling of 2011 data for the 2008 ozone designations process.

Comment: Two commenters contend that past trends in ozone air quality do not support designations of attainment for Door, Kenosha, and Manitowoc Counties, despite the low 2008-2010 ozone design values. The available ozone data suggest that the 2008-2010 period is an outlier, with unusually low ozone concentrations, influenced in particular by low ozone levels in 2008. Because the 2009-2011 period appears to be a more accurate reflection of the State's progress toward attainment of the 2008 8-hour ozone standard, it should be considered in EPA's designation of areas for this standard. To support this comment, the commenters have summarized ozone design values[24] for ozone monitors in Door, Sheboygan, Manitowoc, and Kenosha Counties for running three-year periods from 2000-2002 through 2009-2011. The commenters also summarized the annual fourth-highest daily maximum 8-hour ozone concentrations for these counties for 2004 through 2011

EPA Response: Section 107(d)(1)(A) of the Clean Air Act defines as nonattainment "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard…." Procedures for using air quality data to determine whether a violation of the 2008 8-hour ozone standard has occurred are given in 40 CFR Part 50 Appendix P, as revised on march 27, 2008 (73 FR 16511). The 2008 ozone NAAQS are met at a monitor when the annual fourth-highest daily maximum 8-hour average concentration, averaged over 3 years is 0.075 ppm or less. Based on 2008-2010 data (the most recent certified air quality monitoring data available for Wisconsin), the monitor in Sheboygan County is the only monitor violating the 2008 8-hour ozone standard.

Please see section 3.1.1 of this document for additional discussion of EPA's handling of 2011 data for the 2008 ozone designations process.

With respect to Kenosha County, EPA will address the appropriate ozone designation for this county in a separate action as part of the Chicago-Naperville, Illinois-Indiana-Wisconsin area.

3.2.5.3. General Comments in Michigan

[24] Three year averages of the annual fourth-highest daily maximum 8-hour ozone concentrations at individual ozone monitoring sites.

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Comment: A commenter representing the Little River Band of Ottawa Indians (LRBOI) notes that the Manistee, Michigan ozone monitoring site (AIRS: 26-101-0922) is not a State-operated site, but is operated by the LRBOI. The LRBOI requests to be contacted for any future dealings with this monitoring site.

EPA Response: EPA has been in contact with the LRBOI along with other tribes throughout the designation process and has sent letters regarding EPA's intended designations to both states and tribes. We will continue to contact LRBOI directly with respect to issues involving the referenced ozone monitor and its associated data and with respect to the ozone designation of tribal lands.

Comment: A commenter notes that, while all ozone monitoring sites in Michigan have shown attainment of the 2008 8-hour ozone standard based on the 2008-2010 ozone monitoring data, three monitoring sites in Michigan have recorded violations of this ozone standard based on 2009-2011 monitoring data. The violating monitoring sites are: Holland (Allegan County, AIRS: 26-005-0003, 2009-2011 ozone design value of 79 ppb); Warren (Macomb County, AIRS: 26-099-1003, 2009-2011 ozone design value of 78 ppb); and, East Seven Mile (Wayne County, AIRS: 26-163-0019, 2009-2011 ozone design value of 76 ppb). The commenter expects the EPA to designate these monitored counties as nonattainment after Michigan has certified the 2011 ozone data in early summer of 2012.

EPA Response: The EPA refers the commenter to section 3.1.1 of this document for a discussion of EPA's handling of 2011 data for the 2008 ozone designations process. To the extent the commenter is suggesting that EPA redesignate these counties as nonattainment after the initial designations, EPA would need to evaluate a variety of factors before moving forward with any such action. The issue of whether an area's initial designation should be later revised (i.e., the area should be redesignated) that is an issue that would be addressed in a separate rulemaking process and not in this action establishing initial designations.

3.2.6. EPA Region VI

3.2.6.1. Dallas-Fort Worth, TX

The EPA received comments from more than 40 individuals and organizations pertaining to the Dallas-Fort Worth (DFW) area. These comments are available for review in the docket for this rulemaking.

Texas Comment: Texas Governor Rick Perry submitted a letter, dated February 29, 2012, expressing the State of Texas' disagreement with the EPA's preliminary designation of nonattainment for Hood and Wise Counties and requesting that EPA not designate these counties as nonattainment. Texas provided an analysis performed by the Texas Commission on Environmental Quality (TCEQ), which cited insufficient scientific

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justification to support a nonattainment designation for Hood and Wise counties. Specifically, Texas comments stated that these counties do not have monitors measuring a violation of the 2008 standard and, as such, contends that the counties do not significantly contribute to violations in adjacent counties. The Texas comments stated that the EPA has always designated these counties as attainment/unclassifiable for ozone. The Texas comments also stated that significant reductions in emissions of NOx in Hood and Wise counties have occurred in the past eight years. The Texas comments indicated that State permitting and rule requirements, combined with improvements in industrial equipment, are anticipated to cause emissions of NOx to decrease further and, thus, additional rules and programs that would be imposed on citizens and businesses are unnecessary. Governor Perry contends that nonattainment designations for these counties would stifle economic growth while providing little environmental benefit. The analysis performed by the TCEQ included emissions and emissions-related data, including decreasing emissions from oil and gas development and current state rules and permit requirements; meteorological studies; and comprehensive air quality modeling.

EPA Response: We appreciate the comments submitted by Texas. The EPA acknowledges that the air quality monitor in Hood County is not indicating violations of the 2008 ozone standard during 2008 – 2010 for which air quality data was reviewed and that Wise County has no air quality monitor to measure ozone concentrations. However, CAA Section 107(d)(1) requires all areas to be designated nonattainment if they do not meet the standard or if they contribute to ambient air quality in a nearby area that does not meet the standard. Consistent with these CAA requirements for designations, it is appropriate to designate Wise County as nonattainment because emissions from this county contribute to violations of the NAAQS in nearby counties in the DFW area.

Upon consideration of the comments we received from the State of Texas and others, we have determined that Hood County should not be included in the nonattainment area because its contribution to nonattainment does not warrant inclusion. We refer the State of Texas and others to our Technical Support Document (TSD) that provides our reasoning for the inclusion of Wise County and the exclusion of Hood. The EPA made decisions based on criteria set forth in the CAA and in guidance documents. The rationale for our decisions about particular areas is contained in the technical support portion of the docket. The EPA's decisions concerning nonattainment designations for the DFW area are based on technical facts pertaining to these specific counties, information supplied by the TCEQ, and EPA's independent evaluation as explained in the TSD.

Regarding designations under previous ozone standards, the 2008 ozone standard is more stringent than the 1997 (8-hour) and 1979 (1-hour) ozone standards. Thus, while the EPA designated Hood and Wise counties as attainment/unclassifiable under these prior, less stringent ozone standards, it is not reasonable to assume that these areas would not ever contribute to violations of a lower ozone standard.

While we appreciate concerns about the imposition of measures resulting from a nonattainment designation that may harm economic development in affected counties, the CAA requires the EPA to designate as nonattainment any areas which are violating the NAAQS or which contribute to a violation of the NAAQS. We are not able to consider

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economic impacts in our decision to designate counties as nonattainment, as that is not a criterion for designations under section 107(d) of the CAA. Once the designations are made, the CAA outlines the requirements in the areas designated nonattainment. At this point, we are not addressing what CAA requirements will apply. The EPA's final determination for the DFW area, and our supporting analyses, are included in the TSD. In addition, the EPA refers the commenter to section 3.1.5 of this document for additional information regarding "economic harm" associated with the ozone designations process.

Comment: After missing the statutory deadline for ozone designations, EPA is now improperly rushing the process and committing fundamental errors as a result.

EPA Response: We do not agree that we are rushing the process or that we are making errors. It is important to move forward with these designations in order for areas to begin the planning necessary to meet these public health and welfare goals. EPA gave due consideration to the time it would need to designate areas when it entered into a consent decree which requires the Agency to issue designations by May 31, 2012.

Comment: Several commenters stated that EPA's decisions to recommend Hood and Wise counties as nonattainment were made with information that was inaccurate and based on incorrect assumptions, and that the data we used is out-of-date. Some commenters specified that the EPA's analysis of emissions data should incorporate revisions to the 2008 NEI data that the TCEQ submitted to the EPA in October 2011.

EPA Response: The EPA disagrees that our decisions rely on outdated or incorrect data. The commenters did not identify the data they believed to be inaccurate or outdated, nor did they identify the assumptions they believed to be inaccurate.

At the time we sent the 120-day letter to Texas, we relied on the most current information before us at that time. Our initial analysis of emissions data included version 1.5 of the NEI for the 2008 reporting year, as well as the TCEQ's 2009 special inventory of oil and gas-related emissions for the Barnett Shale formation. Subsequent to the 120-day letter, Texas provided additional information on the emissions inventories and we have considered that information for purposes of making our final designation decisions. We agree with commenters who recommended review of the recent emissions data revisions supplied to the NEI by the TCEQ in October 2011, and we evaluated that data before making final decisions for Hood and Wise counties.

We made no changes regarding the air quality data we evaluated. Our analysis of air quality data included ambient air monitoring data for the period from 2008 – 2010, which is the most current certified data submitted to the EPA by the TCEQ. By necessity, the air quality data evaluated must cover a three-year period, since the 2008 ozone NAAQS is based on a running three-year average of the 4th highest ozone concentrations measured each year.

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After considering the most recent data available to us, EPA has decided to include Wise County and exclude Hood County in the Dallas-Fort Worth, TX nonattainment area.

Comment: One commenter suggested that data gathered over the last couple years is skewed by drought-related events, such as wildfires.

EPA Response: The commenter did not identify the particular data believed to be skewed. The TCEQ has not identified any of the 2008-2010 air quality data as being influenced by exceptional events. Thus, we have no basis to determine that such air monitoring data are inaccurate or skewed. Additionally, we relied on emissions data for the years 2008 and 2009, which include emissions from anthropogenic or man-made sources only; these data do not include biogenic or naturally-occurring emissions and this timeframe (2008, 2009) predates recent drought and wildfire events. Therefore, we have no basis to determine that such emissions data are inaccurate or skewed.

Comment: Several commenters opposed the recommended nonattainment designation of Hood County, and, in support of their position, noted a lack of large industrial sources and low agricultural activity in the county.

EPA Response: As discussed in our TSD, we have determined that Hood County should not be included in the nonattainment area.

Comment: One commenter states that EPA did not consider emissions from the natural gas and nuclear power plants in Hood and Wise counties.

EPA Response: The EPA is considering emissions of ozone precursors only (NOx and VOC), as estimated in version 1.5 of the NEI for the 2008 reporting year, as well as the TCEQ's 2009 special inventory of oil and gas-related emissions for the Barnett Shale formation. We reviewed the NEI for electric generation units (EGUs) in Hood County and found that emissions had been reported for the Luminant Decordova Steam Electric Station and the Wolf Hollow EGU; in Wise County we found that emissions had been reported for the Wise County Power Company, LLC Plant. These three EGUs reported NOx and VOC emissions. The Luminant Comanche Peak nuclear power plant did not report emissions of NOx or VOC to the NEI.

Comment: A number of organizations and individuals submitted comments that Hood and/or Wise Counties should not be designated as nonattainment because there are no recorded violations of the ozone standard in those counties for the 2008 – 2010 period, which is the air quality basis for these designations. Some of these commenters noted the "good" air quality in these counties and one commenter also stated that recent regulations affecting fuel and automobile emissions have lowered pollutant levels.

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EPA Response: The EPA acknowledges that the air quality monitor in Hood County is not indicating a violation of the 2008 ozone standard during the 2008 – 2010 period and that Wise County has no air quality monitor to measure ozone concentrations. However, CAA Section 107(d)(1) requires all areas to be designated nonattainment if they do not meet the standard or if they contribute to ambient air quality in a nearby area that does not meet the standard. We agree that federal engine rules have reduced automobile emissions. However, as detailed in the TSD and consistent with the CAA requirements for designations, it is appropriate to designate Wise County as nonattainment because emissions from this county contribute to violations of the NAAQS in nearby counties in the DFW area. Upon considering additional information supplied by the State of Texas and other commenters and after completing a factor analysis, detailed in the TSD for the Dallas-Fort Worth, TX area, we have decided to exclude Hood County from the nonattainment area.

Comment: Several commenters identified concerns regarding the accuracy or reliability of the TCEQ's 2009 Special Inventory of Oil & Gas Sector Pneumatic Emissions, which was included in the EPA's evaluation of emissions data for Hood and Wise Counties. Some of these commenters note that in October 2011, the TCEQ reported revised VOC emissions related to the oil and gas sector to the 2008 NEI that are significantly lower than the emissions initially reported, while others referred to general decreases in oil and gas drilling and production activity and resultant emissions since 2008/2009. One commenter cautioned that the TCEQ's 2009 Special Inventory of Oil & Gas Sector emissions is inaccurate and unreliable, citing that the emissions were self-reported, sometimes included potential emissions instead of actual emissions, and did not undergo thorough quality assurance reviews. One commenter noted that the VOC emissions resulting from oil & gas production activities are relatively nonreactive in the photochemical generation of ground-level ozone and that additionally the DFW area is NOx-limited such that VOC emissions in general do not contribute as much as NOx emissions to the generation of ground-level ozone.

EPA Response: The EPA thanks the commenters for identifying the updated 2009 oil and gas emissions that the TCEQ reported to the NEI in October 2011. The EPA did not consider these data in our preliminary designation recommendations. The revisions to the 2008 NEI submitted by the TCEQ reduce VOC emissions in Hood County by 808 tpy, from 9,547 tpy to 8,739 tpy and reduce the VOC emissions in Wise County by 6,048 tpy, from 23,657 tpy to 17,609 tpy.[25] EPA has since reviewed the updated emissions data reported by the TCEQ and notes that the revised numbers do not affect the ranking of the counties for VOC emissions. EPA's analysis indicates that even with the reduced 2009 VOC emissions data, the emissions from Wise County still contribute to measured

[25] These VOC emission values were reported by TCEQ in October 2011, in the revised emissions inventory.

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violations of the 2008 ozone NAAQS at monitors in neighboring counties. In making our final decision, we considered the reduced emissions and the reduction in drilling activity since 2009. We determined that the smaller emissions in Hood County, when considered with the longer distance from the violating monitor shows that the area should not be included in the nonattainment area. Our full analysis supporting the inclusion of Wise County and exclusion of Hood County as part of the DFW nonattainment area is in the TSD.

Comment: One commenter cautioned against unnecessarily designating Wise County as nonattainment and suggested that observed violations of the ozone standard in neighboring monitors were due more to emissions from Tarrant County than to emissions from Wise County.

EPA Response: While we agree that emissions from Tarrant County are a significant contributor to the generation of ground-level ozone in the area, our analysis of the emissions and meteorological data indicates that emissions from Wise County also contribute to measured violations of the NAAQS at monitors in the area being designated as the DFW nonattainment area.

Comment: Numerous commenters noted that Texas did not recommend the inclusion of Hood and/or Wise Counties in the DFW ozone nonattainment area. Some of these commenters remarked that the EPA ignored, or did not demonstrate the necessity of disregarding Texas' nonattainment area recommendations, while others urged the EPA to reconsider the recommendations submitted by Texas.

EPA Response: The EPA carefully considered information submitted by Texas and other commenters, as well as the CAA requirements, guidance and other relevant information, as described in our TSD. Before making our final nonattainment designation decision for the DFW area, we also reviewed additional information submitted by the TCEQ during the public comment period and attached to the official Texas response letter submitted by Governor Perry on February 29, 2012.

Comment: A resident of Hood County related his experience with a gas well that was installed in 2010 within a short distance of a residential neighborhood. The resident noticed emissions in the evenings, which stopped after TCEQ inspected the site. The commenter expressed his regret that deteriorating air quality and potential nonattainment area status are the inevitable and logical consequences of a lack of adequate air quality regulation in the area.

EPA Response: The EPA recognizes the commenter's concerns.

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Comment: Several commenters stated that the population and VMT data utilized by the EPA in its five-factor weight-of-evidence analysis do not support inclusion of Hood and/or Wise Counties in the DFW ozone nonattainment area. One commenter notes that the population and VMT data referenced in the TSD seem speculative. Several commenters point out that, although the population and VMT numbers for Hood County have increased, Hood County still ranks comparatively lower for these metrics than other counties in the DFW area, including several counties that were not recommended for inclusion in the new DFW ozone nonattainment area. Several commenters identified two typographical errors in the TSD, in which EPA referred to a population range between "60,000 and 15,000 people" that should have been "50,000 and 150,000 people." Finally, one commenter noted that the population and VMT growth experienced by Hood County are not necessarily indicative of an increase in urbanization of the county; the commenter points out that more than half of the population influx is age 55 or greater and consists mostly of retirees who do not contribute significantly to daily VMT totals because they do not commute to work.

EPA Response: Our population and VMT data are not speculative. The population data are from the 2010 Census and the VMT data are from the 2008 NEI. The commenter did not provide references or data to support the assertion regarding the population influx. However, the 2010 Census indicates that 21.3 percent of the population in Hood County is aged 65 or older. Our 120-day recommendation that emissions from Hood County contribute to violations of the NAAQS in nearby counties was based on a weight-of-evidence evaluation of five factors: quality-assured air monitoring data, emissions data, meteorology, geography and topography, and jurisdictional boundaries. As discussed in the final TSD, upon consideration of the information received, we have determined that Hood County need not be included in the nonattainment area.

Comment: Two commenters ask that the EPA halt all permits until Limestone and/or Freestone counties have an ozone monitor installed and three years of air quality data collected. The commenter also requests that when a permit is issued, emissions data from the area and all sources in the area be considered in the air modeling. One commenter requests that permitted facilities using "antiquated" technologies install newer controls or have their permit renewal applications denied.

EPA Response: This final action only addresses the designation of areas for the 2008 ozone NAAQS and not the extent or scope of the monitoring network or the permitting of specific facilities. The TCEQ has the responsibility to determine the appropriate monitoring network to monitor air quality within Texas. The TCEQ determines the State monitoring network in compliance with the minimum ambient air quality monitoring, which is provided at 40 CFR part 58, Appendix D. Appendix D lists the factors considered when determining the minimum number of ozone monitors needed in a MSA. Those factors are the MSA population and the historical ozone concentration monitoring results for the MSA. The TCEQ monitoring network plans are subject to a 30-day public comment period. The EPA reviews the Texas monitoring network plan based upon the criteria listed in 40 CFR part 58, Appendix D. On December 23, 2010, EPA approved the annual air monitoring network plan for the State of Texas. The commenter's concerns

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relating to air quality monitoring and permitting are outside the scope of this action and thus are not addressed here.

Comment: Several commenters stated that the EPA failed to consider the impact of the EPA's new and existing air regulations that are reducing ozone precursor emissions and will result in future reductions, such as: the federal engine standards under New Source Performance Standards (NSPS) requiring stringent reductions in engine emissions from oil and gas activities in both nonattainment and attainment areas; the NSPS for the Oil and Natural Gas Sector; the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters; and the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE).

EPA Response: We agree that we did not consider the impact of new air regulations. The implementation of new and existing regulations should result in lower ozone precursor emissions in the future; however, for purposes of designating areas, we consider whether such areas are "currently contributing" (i.e., current activities) to violations of the 2008 ozone NAAQS and do not assess or predict future source emissions.

Comment: One commenter urged the EPA to work with Hood County to pursue proactive air quality improvements in partnership with local, state and private industry, to secure meaningful emissions reductions in the near term with a goal of meeting or exceeding the NAAQS for Hood County in 2012 and beyond. The commenter stressed that these are emissions reductions that can be achieved now rather than waiting for completion of a SIP. Another commenter states that Hood County submitted a written request to participate in EPA's Ozone Advance program and is taking measurable steps toward emissions reductions.

EPA Response: We are always open to working with state and local areas at their request to help evaluate and/or develop methods to improve air quality. Hood County submitted a letter to the EPA, dated April 4, 2012, expressing their desire to participate in the Ozone Advance program.[26] We support these efforts to ensure healthy air quality for the future. As discussed in the TSD, our analysis has concluded that based on the most current information regarding emissions, Hood County need not be included in the nonattainment area. We look forward to working with Hood County as it develops and implements its Ozone Advance Program.

Comment: One commenter generally stated that the EPA's decision to designate Wise and Hood counties as nonattainment for ozone is arbitrary and capricious. The commenter stated EPA's actions in its designations for Wise and Hood Counties are inconsistent, and therefore arbitrary and capricious, when compared to the standards and

[26] This letter is in the docket for this rulemaking.

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methods of analysis that were applied in other States by other EPA Regional Offices. The commenter also stated that taking into account the totality of the relevant factors set out in the Meyers Memorandum, the EPA fails to provide adequate justification for its designations in the administrative record. The commenter also stated that EPA failed to provide adequate support in the record to support its nonattainment designations.

EPA Response: The EPA made its designation decisions based on the CAA, guidance documents, information pertaining to the particular areas, and information supplied by the TCEQ. Our designation decisions, and rationale and underlying data on which they are based, are fully set forth in the TSD. We disagree with the commenter that our designation criteria have been inconsistently applied and that our decisions are arbitrary and capricious. The commenter fails to point to any specific concerns to support its claim.

Comment: In its assessment of the DFW nonattainment area, the EPA incorrectly and conclusively relied on HYSPLIT modeling, while EPA's assessment of other areas correctly disregarded HYSPLIT modeling and, instead, used general historical wind patterns as the basis for meteorological analyses.

EPA Response: We disagree that our evaluation of HYSPLIT modeling to inform our nonattainment area designation decisions was incorrect. In terms of identifying potential local and regional source/receptor patterns, HYSPLIT wind trajectory or other modeling-based tools are excellent tools for determining the frequencies for which areas potentially contribute to high ozone levels and are preferred over more basic assessments of wind speed and direction at a given point location (e.g., wind roses, or pollution roses). These basic assessments such as wind roses are potentially misleading in cases where wind speeds are light and variable, or vary substantially across the location of the meteorological observation and the monitored high ozone concentrations. While it is true that EPA was unable to use HYSPLIT modeling to inform our decisions for all areas, we believe that it is a valuable tool and should not be disregarded where the information is available, even if the information is not available in all areas. We refer the commenter to section 3.1.3 of this document for additional information regarding the use of HYSPLIT and other meteorological data.

Comment: The EPA acted in an arbitrary and capricious manner by subjecting individual days to a hyper-intensive HYSPLIT analysis rather than using general historical wind data.

EPA Response: The EPA disagrees with the commenter. The EPA's wind trajectory analysis focused on days with observed exceedances of the ozone NAAQS. This methodology is both appropriate and consistent with standard meteorology assessments of frequencies for which areas potentially contribute to elevated ozone concentrations.

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Comment: The EPA's reliance on HYSPLIT modeling was arbitrary and capricious and an abuse of discretion as HYSPLIT modeling is not capable of reliably tracking ozone or its precursors from one area to another.

EPA Response: The commenter's statements on the applicability of back trajectories for determining potential upwind contributors to measured elevated ozone concentrations reflect a fundamentally incorrect view of the HYSPLIT model and its application. In fact, the HYSPLIT model and other back trajectory tools are frequently used in exercises of this sort to assess possible upwind areas. The commenter provides no support for its statement that HYSPLIT is incapable of reliably tracking ozone or its precursors. In fact, HYSPLIT is specifically designed to give an estimate of the probable path a parcel of air travels in reaching a given location at a given time. By applying HYSPLIT to show the tracks that air parcels traveled to monitors during exceedances of the standard, HYSPIT does give a reliable indication of the areas that could be contributing to an exceedance. There is nothing about the meteorology and transport in the DFW area that would preclude the use of HYSPLIT in EPA's nonattainment area designation analysis.

Comment: The EPA incorrectly based nonattainment designations on wind patterns even though Wise and Hood Counties are downwind of violating monitors over 95 percent of the time, while other Regions designated counties as attainment/unclassifiable even though they were upwind of violating monitors over 20 percent of the time.

EPA Response: As an initial matter, we note that there is no bright line test for any of the five factors EPA evaluates in making designation decisions, with the exception of the presence of a violating monitor. Rather, the factors must be weighed based on the unique circumstances of each potential nonattainment area in light of the wide diversity of areas across the country. The commenter's statement comparing the designation determinations in Texas to those in other parts of the country reflects a fundamental lack of understanding of nonattainment area designation evaluations, as it focuses on the metric of wind direction in isolation and fails to take into account that the nonattainment designations are based on a weight-of-evidence analysis of multiple factors that can contribute to violations of the NAAQS.

With regard to meteorology for these counties, we note that we not only looked at wind patterns but also the more sophisticated wind trajectory models based on days on which elevated ozone concentrations were measured in the area; such days are more representative of meteorological and atmospheric conditions that are conducive to the generation of ground-level ozone and exceedances of the ozone NAAQS in the DFW area.

Comment: The EPA incorrectly concluded that an alleged de minimis contribution by Wise and Hood Counties to monitor violations in nearby counties was a sufficient basis to designate those counties nonattainment. Other counties with similar levels of contribution are designated as unclassifiable/attainment.

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EPA Response: As stated above, there is no bright line for any of the factors that EPA considers in making a designation decision; rather the five factors are weighed considering the unique circumstances of each nonattainment area. The commenter fails to point to any specific circumstances that it believes results in an inconsistency and therefore EPA cannot more specifically address the commenter's concerns. The TSD provides the basis for our decision for the counties referred to by the commenter.

Comment: The EPA erred in using the OMB statistical area boundaries in its designations process. These statistical area boundaries were weighed in favor of nonattainment designations because the OMB boundaries have nothing to do with assessment of real-world local environmental conditions.

EPA Response: The commenter misrepresents how EPA considered the statistical area boundaries in its analysis. Consistent with section 107(d)(4)(A)(iv), which applied for areas classified as serious and above for the designations that occurred for the 1-hour standard following enactment of the 1990 Amendments, we relied on the OMB statistical area boundaries as the presumptive starting point for our evaluation. It was not one of the five factors we weighed in determining the ultimate boundaries for a designated nonattainment area. We believe it is appropriate to identify the CSA as the starting point for our evaluation because it is consistent with Congressional intent and because ground-level ozone and ozone precursor emissions are pervasive and readily transported. Moreover, in defining statistical areas, such as CSAs, OMB looks at many criteria that are important and relevant for purposes of making designation decisions. For example, each CSA consists of counties containing at least one urban core plus adjacent counties that have a high degree of social and economic integration with the urban core(s) as measured by commuting ties. Thus, we believe these areas are an appropriate starting point for states and EPA to rely on for evaluating the five factors.

Comment: Numerous commenters expressed concern regarding the potential adverse economic impacts resulting from a designation of nonattainment for Hood and/or Wise counties.

EPA Response: Please see our response to the first comment in section 3.2.6.1 of this Response to Comments document, addressing DFW. In addition, the EPA refers the commenter to section 3.1.5 of this document for additional information regarding questions of "economic harm" associated with the ozone designations process.

Comment: One commenter noted that the EPA selectively chose and evaluated air quality monitors and data. The commenter specifies that it would be logical that, if the EPA wanted to clearly demonstrate that Wise and Hood counties were truly contributing to ozone nonattainment, data from all of the adjacent monitors and not just the three described in the TSD would have been analyzed. The commenter further asserts that data

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from Denton and Pilot Point monitors should have been analyzed due to prevailing winds and that the EPA does not indicate what other monitors were analyzed.

EPA Response: EPA disagrees with the commenter's assertion that the choice of monitor sites used in the evaluation of meteorological data was designed to support a specific conclusion regarding the inclusion of Hood and Wise counties as part of the DFW nonattainment area. The selection of monitor sites used in the analysis of the meteorological data was based on the monitors that were measuring exceedances or violations of the NAAQS. The CAA requires that EPA designate as nonattainment any areas that are in violation of the NAAQS or that contribute to a violation of the NAAQS in nearby areas. Therefore, EPA's evaluation of wind back trajectories to identify sources of emissions impacting ozone concentrations at monitors indicating exceedances or violations of the NAAQS was appropriate and consistent with the CAA. As discussed in our TSD, based on comments received from the State and others, we have determined that Hood County's contribution to violations in nearby counties is not sufficient to warrant inclusion in the nonattainment area.

Comment: We received several comments requesting information on testing sites and testing data to show that Hood County is monitoring a violation of the NAAQS.

EPA Response: The air quality monitor for Hood County indicates that Hood County is currently in compliance with the 2008 ozone NAAQS with a 2008-2010 design value of 0.075 ppm. Our proposed nonattainment designation for Hood County was not based on a violation of the NAAQS at the Hood County monitor, but rather that emissions from Hood County potentially contribute to violations of the NAAQS at monitors in nearby counties. As discussed in our TSD, based on comments received from the state and others, we have determined that Hood County's contribution to violations in nearby counties is not sufficient to warrant inclusion in the nonattainment area.

Comments Concerning Nonattainment Designation of Counties Outside of the DFW CSA:

Comment: Several commenters urged EPA to include the counties of Freestone, Limestone, McClennan, Navarro, and Robertson within the nonattainment boundaries of the DFW nonattainment area. The commenters provided data on air quality, emissions and meteorology, and information on control technologies for coal-fired power plants, and stated that emissions of NOx from power plants in these counties contribute significantly to the ozone levels in the DFW nonattainment area.

EPA Response: The EPA disagrees with the commenters that it is necessary to designate these counties as part of the DFW nonattainment area. The nonattainment designation determinations are based on a weight-of-evidence analysis that takes into consideration the five factors of air quality, emissions, meteorology, geography and topography, and jurisdictional boundaries. These counties are outside the DFW CSA, but we did include them in our analysis. We have not included these five counties in the DFW nonattainment

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area because the counties do not have violating monitors and because they are not nearby a county with a violating monitor. Please see our TSD for our detailed evaluation of these counties.

Comments Supporting the Nonattainment Designations of Hood and Wise Counties:

Comment: A few commenters expressed support for including Hood and Wise counties in the DFW nonattainment area.

EPA Response: The EPA appreciates the commenters' support. However, we have determined that only Wise County should be added to the nonattainment area.

3.2.6.2. Houston-Galveston-Brazoria, TX

Texas Comment: The EPA received a letter from Texas' Governor Perry (the Texas comments), dated February 12, 2012, in which the State provided comments and additional information regarding EPA's including Matagorda County, Texas, in the Houston-Galveston-Brazoria (HGB) nonattainment area. In the letter, the State disagrees with EPA's preliminary designation of nonattainment for Matagorda County, requests that EPA not designate the county as nonattainment and states that there is insufficient scientific justification for the EPA's recommendation as nonattainment for the county. The Texas comments state that Matagorda County does not have a monitor that is measuring a violation of the 2008 standard and contends that such county does not significantly contribute to violations in adjacent counties; that significant reductions in emissions of nitrogen oxides (NOx) in Matagorda County have occurred in the past eight years; and that State permitting and rule requirements, combined with improvements in industrial equipment, are anticipated to cause emissions of NOx to decrease further and thus, additional rules and programs that would be imposed on citizens and businesses are unnecessary.

The Texas comments also provided an analysis performed by the Texas Commission on Environmental Quality (TCEQ), which included emissions and emissions-related data; an evaluation of meteorology; and air quality modeling assessing the impact of county emissions (source apportionment modeling).

EPA Response: The EPA has reviewed all information submitted by the State of Texas and commenters during the review process and, as provided in more detail in the TSD, has determined that Matagorda County should be excluded from the HGB nonattainment area. The EPA has, therefore, designated Matagorda County as unclassifiable/attainment.

Comment: Numerous commenters expressed concern regarding EPA's including Matagorda County, Texas in the Houston-Galveston-Brazoria (HGB) nonattainment area

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and oppose a nonattainment designation for the county. Commenters included the following information to support an unclassifiable/attainment position for Matagorda:

- Matagorda is rural with a population of 36,702
- Matagorda is the only county in the larger 12-county Houston region where population declined from 2000-2010
- Matagorda has the 2nd lowest VMT in the 12 county region and is the only county where VMT declined between 2002-2008
- Emissions in Matagorda have declined
- EPA's TSD fails to show that emissions from the county contribute to ozone formation in HGB area for the 2008-2010 timeframe

EPA Response: The EPA has reviewed all information submitted by the State of Texas and commenters during the review process and, as provided in more detail in the TSD, has determined that Matagorda County should be excluded from the HGB nonattainment area. EPA has, therefore, designated Matagorda County as unclassifiable/attainment.

Comment: A few commenters expressed support for a nonattainment designation for Matagorda County, Texas.

EPA Response: As a result of reviewing data submitted by the State of Texas and commenters during the review process, EPA has designated Matagorda County as unclassifiable/attainment. Please see our TSD for a detailed discussion that supports our decision.

Comment: Commenters identified "flaws" in EPA's meteorological analysis for Texas and stated that we inappropriately used the HYSPLIT to support designation of Hood, Wise and Matagorda counties as nonattainment. Commenters further noted that their review of back trajectories from 2006 to 2010 for days measuring ozone greater than 76 ppb at the Manvel Croix, Texas City and Wallisville monitors showed at most only 1.8% of the trajectory endpoints actually traverse Matagorda County and that on the days when Matagorda County was upwind of a violating monitor the back trajectories routinely crossed counties with far greater emissions.

EPA Response: As provided in response to comments for the DFW area (see section 3.2.6.1 of this document), we disagree that the meteorological analysis was flawed and that HYSPLIT was used inappropriately. The EPA refers the commenter to section 3.1.3 of this document for additional information regarding the use of HYSPLIT and other meteorological data.

In these final designations, EPA has excluded Hood County as part of the DFW nonattainment area and excluded Matagorda County from the HGB nonattainment area. EPA's full analysis is provided in the TSD.

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Comment: Several commenters voiced concern regarding EPA's use of air quality and monitoring data. Some commenters stated that air quality data does not support a nonattainment designation for Matagorda County, Texas. One commenter stated that the closest two ozone monitors, in Lake Jackson and Danciger, show some of the lowest ozone levels in the region. Commenters also encouraged EPA to monitor in the county due to the presence of industrial plants in the area.

EPA Response: We agree that air quality data does not support designating Matagorda County as nonattainment because there is not a violating monitor in the County. The basis for our decision to designate Matagorda County as unclassifiable/attainment is provided in our TSD.

As provided in EPA's response to a comment raised by the Catawba Indian Nation in section 3.2.4.2 of this document, a separate process applies for purposes of determining the monitoring network in the State and that process includes an opportunity for public comment. Issues regarding the scope of the air quality monitoring network are not addressed in this designation action.

Comment: Commenters noted that the emissions inventory for Matagorda County, Texas used by EPA is outdated, inaccurate, or indicates that the emissions are insignificant. Commenters further noted that the 2008 emissions inventory for Matagorda County should be 4,079 tons/year for NOx and 18,973 tons/year for VOC.

EPA Response: Based on information provided by Texas after EPA sent the 120-day letter in December 2011, we revised the 2008 emissions inventory for Matagorda County for the analysis we relied on for our final designation decisions. The revised 2008 NOx emissions inventory is 4,079 tons/year, down from the 7,007 tons per year reported in the National Emissions Inventory (NEI) version1.5. The revised 2008 VOC emissions inventory is 18,973 tons/year, down from the 19,362 reported in the National Emissions Inventory (NEI) version1.5. Texas noted that in May 2010 the state submitted locally obtained non-road emissions data from commercial marine vessels and locomotives to the National Emissions Inventory. These data were not reflected in the NEI version 1.5 that EPA used in developing our proposal for Matagorda County.

Comment: Commenters opposing the nonattainment designation for Matagorda County, Texas, stated that EPA did not consider the impact of new air regulations.

EPA Response: We agree that we did not consider the impact of new air regulations. The implementation of new and existing regulations should result in lower ozone precursor emissions in the future; however, for purposes of designating areas, we consider whether such areas are currently contributing (i.e., current activities) to violations of the 2008 ozone NAAQS and do not assess or predict future source emissions.

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Comment: Commenters reviewing EPA's nonattainment proposal for Matagorda County, Texas, requested that EPA consult with TCEQ and reconsider the intended nonattainment designation for this county. The commenters also requested that EPA designate the county separately from the HGB nonattainment area if we decide to designate it nonattainment, and consider moderate regulatory measures to encourage more extensive implementation of vapor recovery technology on oil and condensate storage tanks.

EPA Response: As a result of reviewing data provided by the State of Texas and commenters during the review process, and after consideration of the most recent data available to us, we have determined that Matagorda County should be designated as unclassifiable/attainment. Please see our TSD for a detailed discussion that supports our decision.

Separate from this rulemaking EPA has proposed regulations to reduce emissions from the oil and natural gas industry. More information on these proposals is available on the EPA Oil and Natural Gas Air Pollution Standards website (www.epa.gov/airquality/oilandgas).

Comment: A commenter stated that NOx is the most effective component in causing ground-level ozone in the HGB area and that other counties lie along the same Southwesterly route as Matagorda County, such as Calhoun County which has an industrial site at Point Comfort, Texas.

EPA Response: Ozone control strategies for the HGB area have focused on reducing NOx and highly reactive VOC emissions in addition to controlling other VOCs. Calhoun County is southwest and adjacent to Matagorda County. EPA's nonattainment designation determinations are based on a weight-of-evidence analysis that takes into consideration the five factors of air quality, emissions, meteorology, geography and topography, and jurisdictional boundaries. Calhoun County is outside the Houston CSA and was not included as part of our initial analysis for the area, which relies on the CSA as the starting point.

Comment: Some commenters asked that EPA delay a designation decision for Matagorda County until EPA addresses uncertainty and errors associated with the data used in the designation process; and collection of additional information, including sensitivity studies or other projections that demonstrate that the proposed measures to be implemented in Matagorda County would have a significant effect on the greater Houston air quality. Another commenter stated that it is unnecessary and unjustified to designate Matagorda County as nonattainment before we review the ozone standard again in 2013.

EPA Response: EPA cannot delay a designation decision for any county or choose not to issue a designation at all. Under the CAA, EPA is required to designate areas within 2 years from the date of promulgation of the revised NAAQS (CAA section 107(d)). A third year is allowed if we have insufficient information to finalize the designations. The

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8-hour ozone NAAQS was promulgated in 2008 and EPA invoked the 1-year extension. Thus, area designations for the NAAQS should have been completed no later than 2011. We were sued for failing to meet that deadline and entered into a consent decree that obligated EPA to finalize designations no later than May 31, 2012. We note, however, the following points in response to the comments. First, as provided in previous responses, Texas provided updated data that we used for purposes of making this final designation decision. Second, we do not use modeling projections, which can be time-consuming and costly, for purposes of determining designations. However, the factors we evaluate help the Agency determine which areas have emissions that are contributing to violations at violating monitors and whether further controls of these emissions would provide reductions in ambient ozone levels. We note, however, that other than a few control programs mandated by the Act, the State has the choice of which sources to regulate.

As discussed in our TSD, based on comments received from the State and others, we have determined that Matagorda County's contribution to violations in nearby counties is not sufficient to warrant inclusion in the nonattainment area.

Comment: A comment was received concerning the designation for Matagorda County, Texas, asking why an economic study is not required.

EPA Response: Please see the response in section 3.1.5 of this document (Other General Issues) concerning the consideration of economic factors in the designation process.

Comment: Commenters supporting the inclusion of Matagorda County in the HGB nonattainment area specifically identified the proposed White Stallion coal-fired power plant in Matagorda County, Texas as a significant future source of emissions in the county. One commenter stated that the case for including Matagorda County in the nonattainment area is even stronger if EPA considers permitted, as well as existing sources of air pollution. The commenter requested that EPA deny issuing the air permit for the proposed White Stallion Energy Center.

EPA Response: Consistent with the CAA requirements for designations, EPA considered existing emissions but not potential future emissions in assessing whether an area is contributing to violations of the NAAQS. While EPA has expressed concerns about the environmental impact and permitting record of the proposed White Stallion facility, those concerns are not a factor in our designation decision for the county.

Comment: We received comments concerning Matagorda County being included in the Houston-Baytown-Huntsville CSA. One commenter stated that "… the use of the CSA for the jurisdictional tie for Matagorda County was used incorrectly, and with disregard of the intended direction from the OMB."

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EPA Response: The decision to include Matagorda County in the Houston-Baytown-Huntsville CSA was made by OMB. The CSA or Core-Based Statistical Area (CBSA) categories are rational starting places for evaluating what areas violate and contribute to violations of the ozone NAAQS, but they are not outcome determinative. We started our evaluation for the HGB area with the counties in the Houston-Baytown-Huntsville CSA. The Houston-Baytown-Huntsville CSA is defined by OMB using Census data and consists of the Houston-Sugar Land-Baytown Metropolitan Statistical Area, the Huntsville Micropolitan Statistical Area (Walker County), and the Bay City Micropolitan Statistical Area (Matagorda County). We evaluated each county in the CSA individually and ultimately determined that 8 out of 12 counties in the CSA should be included, in whole or in part, in the Houston nonattainment area.

Comment: Some commenters noted that the inclusion of Matagorda County, Texas in the HGB nonattainment area would be "arbitrary and capricious" and inconsistent with EPA's treatment of Austin, San Jacinto, and Walker Counties. The commenter further noted that the TSD does not support a distinction between these counties and Matagorda.

EPA Response: EPA disagrees with the commenter and believes that the TSD accompanying the 120-letter distinguished between Matagorda, Austin, San Jacinto, and Walker Counties. However, based on updated information provided during the comment and review period, EPA has designated Matagorda County as unclassifiable/attainment. Please see our TSD for our detailed evaluation.

3.2.7. EPA Region VII

The EPA received no comments from either the public or states and tribes pertaining to the areas in Region VII.

3.2.8. EPA Region VIII

Comment: One comment letter specifies counties in each of the Region 8 states that should be designated as nonattainment.

Colorado: Commenter recommends including all counties in the Denver-Aurora-Boulder, CO Combined Statistical Area in the Denver-Boulder-Greeley-Ft. Collins-Loveland, CO nonattainment area. Commenter further believes that to assess contribution, the EPA should include all the counties within the largest defined metropolitan statistical area, consolidated metropolitan statistical area, or combined statistical area that includes the county with the nonattainment designation.

Utah: Commenter states that the EPA has, so far, determined that Duchesne County and Uintah County are "unclassifiable," because the monitors that are showing ozone at

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levels above the standard are non-regulatory monitors. Commenter supports EPA's decision to apply the narrower classification "unclassifiable" in this case and is pleased that regulatory monitoring has begun in Uintah County. Given the monitored violation of the standard in very similar circumstances in Sublette County, Wyoming, it seems likely that similar unhealthy levels currently exist in these Utah counties. Commenter hopes that steps will be taken to reduce emissions of ozone precursors in these counties, so that the monitored ozone levels will be well under the standard. Commenter further urges EPA to review the data for this site to determine by 2013 whether these counties should be designated as nonattainment in 2013 if the data continue to show that a problem exists.

Wyoming: Commenter supports the designation of the identified counties in Wyoming as nonattainment areas, but recommends that the full county be included in every case, especially because of the potential growth of the oil and natural gas sources that are recognized as contributing to the current violation in the Upper Green River Basis area.

EPA Response to Colorado-related Comment: For purposes of performing our evaluation of the boundaries of a nonattainment area, we analyzed all of the counties within the Denver CSA. However, we disagree with the commenter who appears to suggest that all of the counties within the CSA should be included as part of the designated nonattainment area. Our TSD provides a full analysis as to each county in the CSA was included or excluded as part of the Denver nonattainment area.

EPA Response to Utah-related Comment: We note the support as well as the concerns raised by the commenter. With regard to any future modification of the unclassifiable designation for Duchesne and Uintah Counties, EPA notes we need to consider three full years of monitoring data from the regulatory monitor.

EPA Response to Wyoming-related Comment: EPA is designating all of Sublette County and parts of Lincoln and Sweetwater Counties as nonattainment as provided in the 120-day letter. This is consistent with Wyoming's recommendation for the nonattainment area boundary based on the technical information the state submitted along with its recommendation letter and also consistent with the five-factor analysis EPA provided in the TSD that accompanied its 120-day letter. The final TSD reflects that same analysis.

To the extent the commenter is suggesting that we include additional areas in the designated nonattainment area based on anticipated future emissions, we note that our designation decisions are based on whether an area "is contributing" to a violation of the NAAQS and not whether future actions may contribute.

Comment: Commenter specifically objects to EPA's failure to address ozone monitoring data from 2011 for a number of areas. The EPA must ensure that the most recent air quality monitoring data is reviewed to ensure accurate area designations under the Clean Air Act.

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EPA Response: The EPA refers the commenter to section 3.1.1 of this document for a discussion of EPA's handling of 2011 data for the 2008 ozone designations process.

Comment: The State of Colorado's recommended ozone boundaries for the Denver-Boulder-Greeley-Ft Collins-Loveland, CO (Denver Metropolitan/North Front Range) nonattainment area, including the counties of Douglas, Arapahoe, Jefferson, Denver, Adams, Boulder, Broomfield, Larimer, and Weld, do not include all areas that cause or contribute to violations of the 2008 ozone NAAQS, in particular portions of northern Larimer and Weld Counties and neighboring Morgan County, yet the EPA agreed with Colorado's recommendation. The commenter submitted source apportionment monitoring to support the inclusion of Larimer, Weld and Morgan Counties as part of the nonattainment area. Commenter states that EPA "overlooks the degree to which nearby areas contribute to violations of the NAAQS in the Denver Metro/North Front Range region" and that "the task of the State, as well as the EPA, was not simply to identify areas in violation of the ozone NAAQS, but to also identify nearby areas that are contributing to a violation of the NAAQS." The commenter also contends that the Rawhide Power Plant is the largest EGU source of NOx in Larimer and Weld Counties and contributes to ozone violations at the Fort Collins West monitor.

EPA Response: The commenter believes that the nonattainment area boundary recommended by the state and provided in EPA's 120-day letter does not include all the areas that cause or contribute to violations of the 2008 ozone NAAQS and instead only include the areas violating the 2008 ozone NAAQS. As provided in more detail in the final TSD, EPA included as part of the designated nonattainment area all areas violating the 2008 ozone standard as well as all nearby areas contributing to a violating of the 2008 ozone NAAQS at those monitors. We proposed that nine counties be in the NAA while only two, Jefferson and Douglas, of those nine counties had violating monitors.[27] The other seven counties were nearby areas which were considered contributors to the violations. In particular, the commenter believes that EPA should include all of Larimer, Weld and Morgan Counties in the nonattainment area.

As to source apportionment modeling submitted by the commenter, we note that while the modeling does show limited contributions from emission sources in these counties on certain days, it only informs one factor. EPA's decisions regarding designations are based on a full analysis of the five factors, such as what the State provided in its recommendation or that EPA provided in the TSD.

For Larimer and Weld Counties, the state uses source apportionment (i.e., back trajectory) modeling in their TSD to show that the emission sources contributing to ozone exceedances on high ozone days are located in the southern portions of these counties.

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[27] It is worth noting that the commenter uses 2011 data that is not certified in AQS to show a violation at the Fort Collins West monitor located in Larimer County. Fort Collins West is not a violating monitor in the 2008-2010 data that were used to determine the nonattainment area per EPA guidance of Sept. 22, 2011 (Implementation of the Ozone National Ambient Air Quality Standards).

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This technique does not provide detail of the exact location of the emissions that are contributing to violations, but instead attributes emissions to the southern part of the county. There are limited exceptions to this for Larimer County where the commenter points out that modeling does, on certain days, show the largest contribution from Larimer and Weld counties coming from electric generating units (EGU) sources most of which are located in the southern portion of the counties that EPA is designating nonattainment. The commenter goes on to state that while the modeling grouped all EGUs in Larimer and Weld counties together, the Rawhide Power Plant (which is just outside the nonattainment area boundary) is the largest EGU source of NOx in these counties and therefore must be the main contributor.

We agree with the commenter that the source apportionment modeling indicates contributions from EGUs on certain days where ozone levels are elevated. However, the same modeling also shows that there are several high ozone days on which the majority of contributions from Larimer and Weld counties do not come from EGUs. Rather than using source apportionment modeling alone, which can be inconclusive, to show contribution, EPA examined contributions over a larger time period with a larger sample of high ozone days over multiple summer ozone seasons. The state's analysis evaluated the 12 highest ozone days over a three year period. This method more closely reflects how the ozone design values are calculated for comparison to the health-based NAAQS. The trajectory analysis also demonstrates with greater specificity the areas that contribute to exceedances at the Chatfield, Rocky Flats North and Fort Collins West monitors on high ozone days. (see state of Colorado, "Technical Support Document for Recommended 8-hour Ozone Designations" at 29). The back trajectory analysis shows the greatest concentration of trajectories on high ozone days at the Fort Collins West monitor originating from sources in southwest Weld County and southeast Larimer County. Both of these areas are well within the nonattainment boundary. The contributions to exceedances at both Rocky Flats North and Chatfield are primarily from the Denver Metro area which is also well within the boundary of the nonattainment area. This is indicated by the very low number of trajectories originating in the grid cells over Morgan County and northern portions of Larimer and Weld Counties. These analyses, as well as trajectory modeling, are discussed in greater detail in EPA's TSD for the Denver area.

Further, Colorado's TSD and subsequent Supplemental Analysis for Recommended 8-Hour Ozone Designations explain that the northern portions of Larimer and Weld Counties are rural and sparsely populated with most areas having a population density fewer than five people per square mile (state of Colorado Supplemental Analysis at 11). Similarly, Morgan County is a rural area with a population density 22.2 people per square mile.

We agree with the commenter that oil and gas sources in Weld County contribute to ozone violations. We believe, however, that the majority of those sources are located in the area included as part of the designated nonattainment area. We refer the commenter to the TSD for additional detail.

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Comment: The EPA's proposed "unclassified" designation for the Uinta Basin of northeastern Utah, including the counties of Uintah and Duchesne, ignores valid air quality monitoring data that shows the region is in violation of the 2008 ozone NAAQS. Commenter contends that the term "non-regulatory" does not appear in either the Clean Air Act or in regulations "governing what data can and should be utilized to determine whether an area is in violation of the NAAQS." Commenter states that the term "non-regulatory" "seems to be a creative effort by the EPA to avoid making a nonattainment designation." The commenter summarized the data from two monitors in Uintah County, Utah with data in AQS and suggests that these data must be used because it meets 40 CFR part 50, Appendix P requirements.

EPA Response: There are several reasons that the EPA considers the data from the Uinta Basin to be non-regulatory. Two key reasons are that no Quality Assurance Project Plan (QAPP) meeting all EPA guidance has been approved by the EPA, and that the monitoring operation is not subject to direct quality assurance oversight by any government agency. In addition to the non-regulatory status of the monitors, the data from the monitors for 2010 and 2011 cannot be considered quality assured data, which is a requirement for data used by the EPA for regulatory decisions.

Commenter suggests the data in AQS must be used because it meets 40 CFR part 50, Appendix P requirements; however, 40 CFR Part 58 requirements also must be met before data can be considered regulatory. Appendix A of that Part states that "This appendix specifies the minimum quality system requirements applicable to SLAMS [State and Local Air Monitoring Stations] air monitoring data and PSD [Prevention of Significant Deterioration] data." Meeting both sets of requirements (40 CFR part 50, Appendix P and 40 CFR part 58) ensures that the EPA makes regulatory decisions based on valid and defensible ambient air data.

The commenter suggests that EPA created the term non-regulatory out of convenience to allow the EPA to ignore the data in the Uinta Basin. In truth, many categories of non-regulatory data exist in AQS, including data collected using unapproved methods, monitors which do not meet siting criteria, and monitors lacking quality assurance data. For this reason, "non-regulatory" is an established monitoring type in AQS intended to indicate those monitors which should not be used for comparison to the NAAQS in making attainment decisions. For the Uinta Basin Unclassifiable Area in eastern Utah, the ozone data currently in AQS are non-regulatory because of the nature of the monitoring operation and its independence from direct governmental quality assurance oversight. As a result, the monitors are designated as non-regulatory in AQS.

The two monitors in the Uinta Basin cited by the commenter were operated under contracts from a series of industrial entities, with 26 months of data currently shown in AQS (August 2009 through September 2011). These operations resulted from a series of enforcement cases brought by the EPA, where the industrial entities agreed to conduct monitoring under enforcement settlement consent decrees. The original and subsequent agreements required that the air monitoring stations "meet the siting, methodology and operational requirements of 40 CFR Part 58," and that the monitoring data "be collected in a manner reasonably calculated to meet the EPA's quality assurance/quality control

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("QA/QC") requirements of 40 CFR Part 58, Appendix. A." The use of the term "reasonably calculated" was necessary because 40 CFR Part 58 deals with monitoring conducted as part of governmental regulatory programs, but does not deal with private endeavors such as monitoring by respondents to consent decrees. Inherent in the regulatory structure is a system of oversight by governmental agencies (for example, oversight by the EPA of state monitoring operations conducted under grants from the EPA). The consent decrees requiring these entities to monitor the ambient air in the Uinta Basin have not given EPA authority for oversight comparable to that authorized by the EPA through grant funding of state and local monitoring operations. Therefore, while the ozone data from these monitors meets the requirements of the consent decrees, the data does not meet all EPA requirements to be considered regulatory data.

Among the requirements in 40 CFR Part 58, Appendix A for an air monitoring program to collect regulatory data is a QAPP that meets the EPA Requirements for QAPPs, QA/R-5[28], and that is approved by the EPA (or approved by an EPA grantee having an approved Quality Management Plan). The collection of data in a manner "reasonably calculated" to meet the QA/QC requirements of Part 58, Appendix A does not inherently entail writing a QAPP. A Monitoring and Quality Assurance Plan for the project, including measures "reasonably calculated" to meet the requirements of 40 CFR Part 58, Appendix A, was developed as a deliverable to the original respondent by that respondent's contractor. However, the plan does not meet all the QA/R-5 requirements for a QAPP. One key area not covered by the Monitoring and Quality Assurance Plan is a mechanism for an independent quality assurance function, authorizing regulatory agencies to direct corrective actions should quality assurance issues be identified in the monitoring program. The Monitoring and Quality Assurance Plan was reviewed, but not approved, by the EPA and the state of Utah.

As a result of the high ozone values observed by these non-regulatory monitors, the EPA is responding to the data by making the area an unclassifiable area for the 8-hour ozone standard. The EPA has efforts underway to collect regulatory data in the same area in response to the non-regulatory data collected, allowing future resolution of this unclassifiable status.

In addition to the above discussion on the non-regulatory nature of the data from the Uinta Basin, guidance provided by the EPA on September 12, 2011 (Implementation of the Ozone National Ambient Air Quality Standard, Gina McCarthy, EPA Assistant Administrator for Air and Radiation to EPA Air Division Directors in Regions 1-10), stated that designations would be based on available quality assured ozone data, which in most cases would be 2008-2010 data. In the case of the Uinta Basin data, raw data between August 2009 and September 2011 is currently in AQS, but quality assurance

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[28] EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, EPA/240/B-01/003, March 2001. http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf. Reissued May 31, 2006. http://www.epa.gov/QUALITY/qs-docs/reissue.pdf.

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data are only currently available for August 2009 through January 2010. The data for most of 2010 and all of 2011 cannot be considered quality assured, so insufficient quality assured data are currently available to show a violation under 40 CFR Part 50, Appendix P.

Comment: One commenter stated that it supports the planned designations and urges the EPA to move forward with these designations expeditiously. However, the commenter also suggested and proposed that the nonattainment boundary should encompass the entirety of the Moxa Arch oil and gas field, which is largely or entirely located in Lincoln County. This massive field is proposed for significant expansion, and the Bureau of Land Management will likely release an environmental impact statement (EIS) approving the drilling of an additional 1,861 wells later this year. The EPA at Region 8 is closely involved in the development of this EIS. As was documented in the State's technical support document recommending nonattainment status, the primary cause of the ozone problem in this area is the oil and gas industry. The Moxa Arch field is essentially contiguous with the large gas fields in Sublette County, such as the Pinedale Anticline and Jonah fields. Moreover, the basin topography and wind patterns make it inevitable that emitted pollutants from Moxa Arch will intermix with pollutants generated in Sublette County, to the detriment of air quality. Thus, the Moxa Arch field should be included in the nonattainment boundaries and the failure to fully include it currently is a significant oversight. The likelihood of this field contributing significantly to the nonattainment status of this area is too strong to overlook given the documented impact the oil and gas industry is having on high ozone levels in this area."

EPA Response: As provided previously, for purposes of designations, EPA evaluates what area "is contributing" to a violation and does not consider possible future emissions. However, as stated above, EPA agrees with Wyoming's technical analysis and refers the commenter to both the EPA TSD for this area and to Wyoming's technical analysis provided in its response to 120-day letters for additional information as to why EPA did not include the area of the Moxa Arch field as part of the designated nonattainment area.

Comment: "PAW agrees with the Wyoming recommended boundary and the EPA 120 day notice that the recommended nonattainment area boundary will provide the best opportunity for WY to focus resources and resolve the ozone problem in the Upper Green River Basin. Both agencies have done a sound nine-factor analysis evaluating the most likely ozone precursor sources, recognizing the relevant meteorology during ozone episodes, considering potential transport, and reflecting natural geographic boundaries (high mountains). The analyses consistently showed that emissions from large point sources south of the state recommended nonattainment area boundary were not transported into the area impacted by winter ozone. The boundary was therefore defined to include those point and area emissions sources consistently constrained and transported within the ozone impacted area by local winds, and to exclude more remote sources which were never seen to transport into the ozone impacted area.

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Additionally, weather patterns such as prevailing winds suggest that transport of precursors from outside these boundaries does not contribute to ozone exceedences in Sublette County."

EPA Response: Comment noted.

Wyoming Comment: In response to public comments suggesting that whole counties, rather than partial counties in Wyoming be used to define the nonattainment boundary, Wyoming provided a summary of the technical analysis they had provided for their initial boundary recommendation.

EPA Response: EPA notes Wyoming's summary of prior analyses relevant to this partial county issue and refers readers to both the EPA TSD for this area and to Wyoming's technical analysis provided in its response to 120-day letters for additional information.

Wyoming Comment: In response to a public comment that the Moxa Arch Oil and gas field be included in the UGRB non-attainment area, Wyoming summarized the prior analyses done relevant to the location of the nonattainment area border in Lincoln County. In addition Wyoming provided additional details on the trajectory analysis end points for the Wyoming TSD, new monitoring data from an ozone monitor just east of the Moxa Arch field, and wind roses for ozone exceedance days in the winter of 2011.

EPA Response: EPA notes the comments by Wyoming, and has incorporated the new data provided into the EPA TSD.

Wyoming Comment: The Wyoming DEQ, Air Quality Division (DAQ), identified the longest elevated ozone event to have occurred on February 19-23, 2008. EPA has identified the same event to have occurred on February 19-24, 2008. The DEQ/AQD requests that EPA correct these dates in the TSD, particularly on page 10, paragraph 5, where the DEQ/AQD is meant to be directly quoted.

EPA Response: Data in AQS show the following:

Date	Jonah 8-hr O3	Boulder 8-hr O3	Daniel South	OCI #3
Feb. 19, 2008	**0.080**	**0.079**	0.073	0.051
Feb. 20, 2008	0.075	**0.079**	0.075	0.072
Feb. 21, 2008	**0.084**	**0.122**	0.061	**0.094**
Feb. 22, 2008	**0.102**	**0.101**	0.075	**0.079**
Feb. 23, 2008	**0.076**	**0.104**	0.074	0.066

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Feb. 24, 2008	0.065	**0.078**	0.070	0.053

With ozone exceedances recorded at the Boulder station on all days between February 19-24, EPA considered the ozone episode to extend into February 24. EPA restored the quoted text, and noted EPA's differing conclusion within the TSD.

Wyoming Comment: "The DEQ/AQD requests clarification of the total vehicle miles presented on page 9, Table 7. The EPA presented the miles in millions. However, the DEQ/DAQ calculated a significantly lower number, as can be seen on page 21, Table 5.4-1 of Wyoming's recommendation document. The DEQ/AQD would appreciate a more thorough explanation of how commuting patterns were calculated so the discrepancy in numbers can be better understood.

EPA Response: The data in the Wyoming TSD in Table S.4-1 are labeled as "DVMT" or daily vehicle miles traveled. While not labeled as such in the EPA TSD, the data provided by EPA are from U.S. Census Bureau estimates for 2000 County-to-County Worker Flow (http://www.census.gov/hhes/commuting/data/commuting.html) and are in annual VMT. Multiplying the Wyoming values by 365 yields comparable values in the two tables. The values are not identical, however, reflecting differing inputs and calculation details.

County	WY DEQ DVMT 2007 (miles)	Annualize WY DEQ 2007 VMT (million miles)	EPA 2008 Annual VMT (million miles)
Lincoln	615,113	224.5	321
Sublette	447,953	163.5	198
Sweetwater	2,667,117	973.5	787

Wyoming Comment: On the second paragraph of page 14 in EPA's TSD, there is a portion that is intended to be a direct qote from DEQ/AQD's recommendation document:

> *An extensive series of CalDESK forward trajectory analyses were conducted for high ozone days throughout the winter days of 2008. The analyses consistently showed that emissions from large point sources south of fht state recommended nonattainment area boundayr did not enter the aarea impacted by winter ozone. The boundary was therefore defined to include those point and area emissions sources consistently constrained and transported within the ozone impacted area by local winds, and to exclude more remote sources which were never seen to transport into the ozone impacted area.*

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This language was not included in DEQ/AQD's TSD, and therefore the DEQ/AQD is requesting that EPA remove the italics that indicate State's language.

EPA Response: The italics have been removed in the TSD.

3.2.9. EPA Region IX

California Comment: ARB recommends Amador County be designated as a separate attainment area for ozone, based on the following information:

- Amador County and Calaveras County fall under the jurisdiction of two separate air pollution control agencies. For planning purposes, it is most efficient to have the nonattainment boundary coincide with the jurisdictional boundary.

- Air quality data show a consistent decrease in 8 hour ozone concentrations in Amador County since 2000. The apparent increase during 2008 through 2010 reflects the impact of 2008 wildfire emissions, rather than deteriorating air quality; the 2011 design value for Amador County is 0.071 ppm, which meets the federal standard. Given the historic trend, the design value is expected to continue decreasing, and Amador County will continue to attain the federal standard.

- Ozone precursor emissions in Amador County are projected to continue decreasing over the next decade. The level of ozone precursor emissions generated in Amador County is dwarfed by the level of emissions in the adjacent upwind counties (Sacramento, San Joaquin, and Stanislaus counties).

- High ozone concentrations in both Amador and Calaveras counties are overwhelmed by ozone and ozone precursor emissions transported from the Sacramento, San Joaquin, and San Francisco Bay Area regions. The contribution of local emissions is insignificant on such days.

- The primary attainment strategy for rural areas such as Amador and Calaveras counties relies on statewide controls and control measures implemented by upwind districts. However, the local APCDs will continue to adopt and enforce rules to reduce emissions from sources under their jurisdiction.

In summary, the California Air Resources Board (ARB) commented that based on 2011 design values showing attainment with the 2008 ozone NAAQS, Amador County should be designated a separate attainment area from the existing 1997 ozone Central Mountain Counties nonattainment area.

EPA Response: EPA agrees with the commenter that it is appropriate to designate only Calaveras County, where the violating monitor is located as nonattainment. The State of California's Air Resources Board submitted certified 2011 ozone monitoring data for Amador County prior to the February 29, 2012 deadline that EPA imposed for

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considering air quality data from 2009-2011 for purposes of these designations. Based on these three years, the design value in Amador County is 0.071 ppm, which attains the 2008 ozone NAAQS (0.075 ppm). The relatively low ozone precursor emissions from both counties compared to the counties in the San Joaquin Valley nonattainment area, along with region's meteorology and geography is most suggestive that the violations in Calaveras are attributable primarily to contributions from the broader valley area. Therefore, EPA is concluding that it is appropriate to designate only Calaveras County, where the violating monitor is located, as nonattainment. For further discussion of EPA's review of the state's analysis, please see the technical analysis for Calaveras County in the TSD for California

California Comment: ARB recommends Tuolumne County be designated as a separate attainment area for ozone, based on the following information:

- Tuolumne County and Mariposa County fall under the jurisdiction of two separate air pollution control agencies. For planning purposes, it is most efficient to have the nonattainment boundary coincide with the jurisdictional boundary.

- Air quality data show a consistent decrease in 8 hour ozone concentrations in Tuolumne County since the early 2000s. The apparent increase during 2008 through 2010 reflects the impact of 2008 wildfire emissions, rather than deteriorating air quality.

- The 2011 design value for Tuolumne County is 0.074 ppm, which meets the federal standard. Given the historic trend, the design value is expected to continue decreasing, and Tuolumne County will continue to attain the federal standard.

- Ozone precursor emissions in Tuolumne County are projected to decrease over the next decade and the level of ozone precursor emissions generated in Tuolumne County is dwarfed by the level of emissions in the upwind counties located in the San Joaquin Valley.

- High ozone concentrations in both Tuolumne and Mariposa counties are overwhelmed by ozone and ozone precursors transported from the San Joaquin Valley. The contribution of local emissions is insignificant on such days.

- The primary attainment strategy for rural areas such as Tuolumne and Mariposa counties relies on statewide controls and control measures implemented by upwind districts. However, the local APCDs will continue to adopt and enforce rules to reduce emissions from sources under their jurisdiction.

In summary, ARB commented that based on 2011 design values showing attainment with the 2008 ozone NAAQS, Tuolumne County should be designated a separate attainment area from the existing 1997 ozone Southern Mountain Counties nonattainment area.

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EPA Response: EPA agrees with the commenter that it is appropriate to designate only Mariposa County, where the violating monitor is located, as nonattainment. The State of California's Air Resources Board submitted certified 2011 ozone monitoring data for Tuolumne County prior to the February 29, 2012 deadline that EPA imposed for considering air quality data from 2009-2011 for purposes of these designations. Based on these three years, the design value in Tuolumne County is 0.074 ppm, which attains the 2008 ozone NAAQS (0.075 ppm). Our analysis of the Meteorology and Geography factors suggests that occasional transport of ozone and/or ozone precursors between Mariposa and Tuolumne counties is possible. However, EPA cannot conclusively determine that Tuolumne County contributes to nonattainment in Mariposa County. The relatively low ozone precursor emissions from both counties compared to the counties in the San Joaquin Valley nonattainment area, along with region's meteorology and geography is most suggestive that the violations in Mariposa are attributable primarily to contributions from the broader valley area. Therefore, EPA is concluding that it is appropriate to designate only Mariposa County, where the violating monitor is located, as nonattainment. For further discussion of EPA's review of the state's analysis, please see the technical analysis for Mariposa County in the TSD for California.

Campo Band of Mission Indians Comment: "The Campo Band is committed to protecting air quality on the Campo Reservation and recommends that the area within the external boundaries of the Reservation remain designated 'Attainment' for the 8-hour ozone NAAQS. The Campo Reservation has been designated Attainment for the 8-hour ozone NAAQS since 2004, and no factors have changed affecting ozone formation, or ozone pre-cursor formation on the Reservation or in areas near the Reservation." The Campo Band prepared and submitted a factor analysis that considered air quality data and emissions, traffic and commuting patterns, population density and degree of urbanization, meteorology, geography/topography, and jurisdictional boundaries to support its recommendation that Indian country of the Campo Band be designated attainment for the 2008 ozone NAAQS. Campo cites (1) the lack of an air quality monitor on the Campo Reservation and a nearby monitor showing attainment with the 2008 ozone standard; (2) no emission sources on the Campo Reservation, low population and traffic; (3) meteorology that keeps the Campo Reservation free of ozone precursors; (4) high elevation of the Campo Reservation compared to the air quality monitor showing nonattainment in Alpine; and (5) existing jurisdiction of the Campo Environmental Protection Agency to protect air quality on the Campo Reservation, to support its recommendation attainment designation.

EPA Response: EPA disagrees with the commenter that the five factors support designation of Campo Band of Diegueno Mission Indians of the Campo Indian Reservation's (Campo) Indian country as attainment for the 2008 ozone NAAQS. For further discussion of Campo's factor analysis and EPA's review of Campo's analysis, please see the Technical Analysis for San Diego County in the Technical Support Document for California.

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Pala Band of Mission Indians Comment: The Pala Band of Mission Indians (Pala, or Pala Band) recommends that the lands within the exterior boundaries of the reservation be designated as an unclassifiable/attainment area for the revised 2008 ozone NAAQS. Pala prepared and submitted a factor analysis that considered air quality data and emissions, traffic and commuting patterns, population growth rates and patterns, meteorology, geography, and jurisdictional boundaries to support its recommendation that Indian country of the Pala Band be designated unclassifiable/attainment for the 2008 ozone NAAQS. Pala cites (1) its air quality monitor that shows attainment with the 2008 ozone standard; (2) no significant emission sources on the Pala Reservation, low population, limited traffic, and limited growth; (3) winds from the south-southwest direction; (4) location in a valley surrounded by steep mountains; and (5) jurisdiction as a Reservation with lands held in trust for the tribe by the Bureau of Indian Affairs.

EPA Response: EPA disagrees with the commenter that Indian country of the Pala Band of Luiseno Indians of the Pala Reservation should be designated attainment/unclassifiable for the 2008 ozone NAAQS. Due to available representative data from surrounding monitors, similarities in meteorology and transport patters to the surrounding areas, the high levels of ozone in the area, and the lack of geographical or topographical barriers that would prevent transport from the San Diego County, CA nonattainment area, EPA is designating Pala's Indian country nonattainment as part of the San Diego County nonattainment area for the 2008 ozone NAAQS. For further discussion of Pala's factor analysis and EPA's review of Pala's analysis, please see the Technical Analysis for San Diego County in the Technical Support Document for California.

Pechanga Indian Reservation, Temecula Band of Luiseño Mission Indians Comment: "EPA recently published guidance specifically addressing its policy for designations for Tribal lands. This guidance addresses Pechanga's precise situation, where EPA has received a tribal request for separate designation. The same five factors…are used to determine whether it is appropriate to use tribal boundaries to establish a separate nonattainment area. The principal distinction between the tribal process and the non-tribal process is the increased weight given to the tribal boundaries out of recognition of and respect for tribal sovereignty. If the jurisdictional boundary criterion is given its proper weight, however, and the sovereignty of the tribal government is given due deference, EPA's multi-factor analysis, and EPA's policy for implementing the 8- hour ozone standard in Tribal areas, supports Pechanga's preferred approach: designation of Pechanga's tribal territory as a separate nonattainment or attainment area."

EPA Response: The EPA agrees that the jurisdictional boundaries factor should bear more weight when considering whether to designate Indian country of the Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation (Pechanga) as a separate nonattainment area. Therefore, EPA is designating Pechanga's Indian country as a separate nonattainment area for the 2008 ozone NAAQS. For more information on EPA's analysis, see the Technical Analysis for Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation in the Technical Support Document for California.

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Pechanga's Indian country is located along the border of the South Coast Air Basin and the San Diego Air Basin in California. For air planning purposes, the Pechanga area was designated part of the South Coast Air Basin for the one-hour ozone standard.

The NSR "major source" permit applicability threshold for Pechanga lands is 10 tpy of NO_X or VOCs annually, which applies in the South Coast Air Basin based on its "extreme" classification. For Pechanga, this means that more sources and modifications would be subject to the highest control technology requirement (i.e., LAER) and the offsets requirement. However, this condition was to have been indirectly remedied by EPA in 2004, by classifying the South Coast Air Basin as "severe-17" for the 1997 8-hour ozone standard and by linking the applicable NSR requirement to the new 8-hour ozone classification.

However, in 2006, the D.C. Circuit ruled against portions of EPA's 2004 8-hour Ozone Implementation Rule and, in effect, restored NSR applicability thresholds and emissions offsets pursuant to classifications previously in effect for the 1-hour ozone standard. For Pechanga, the court's decision restored the 10 tpy NSR threshold and offset requirements (in EPA's discussions with the Pechanga, we have referred to this as the 1-hour relic).

More recently, in comments objecting to EPA's August 2009 proposed "bump-up" of the Pechanga lands, along with the rest of the South Coast Air Basin, to "extreme" for the 8-hour ozone standard, the Pechanga expressed the concern that the reclassification will subject them once again to a 10 tpy NSR threshold. However, the effect of the D.C. Circuit's decision means that 10 tpy is already the applicable NSR threshold and that reclassification to "extreme" will not change that fact.

On April 15, 2010, EPA finalized the final "bump-up" notice and we deferred reclassification of the Pechanga tribal lands.

As a practical matter, whether the Pechanga Reservation is designated as a separate nonattainment area, or as part of a larger nonattainment area, for the 2008 ozone standard, certain requirements, such as NSR, that had applied based on the inclusion of the reservation within the South Coast Air Basin for the revoked 1-hour ozone standard, will continue to apply for anti-backsliding purposes until the area is redesignated to "attainment" for the 2008 8-hour ozone standard (or other ozone standard in effect at the time of redesignation). Specifically, this means that the NSR major source threshold of 10 tons per year for VOC or NOx, that applied by virtue of the "extreme" classification of the South Coast Air Basin for the 1-hour ozone standard, would continue to apply to new major sources and major modifications proposed within the reservation until the area is redesignated for the current ozone standard. Once redesignated to attainment, such new major sources and modifications would be subject to PSD requirements (see 40 CFR 52.21) rather than NSR, and the applicable major source thresholds and related requirements would change accordingly.

Pechanga Indian Reservation, Temecula Band of Luiseño Mission Indians Comment:
"EPA's analysis failed to substantively evaluate, much less give proper weight to, the

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fifth factor in the five-factor analysis: Jurisdictional Boundaries. We specifically request that the analysis in the TSD be expanded to compare the case for a separate nonattainment area with the case for including Pechanga in the San Diego Nonattainment Area. We are especially interested in understanding EPA's assessment of the degree that each factor supports one case over the other, and the relative weight that EPA assigns to each factor in this situation."

In summary, Pechanga requests that EPA provide additional information clarifying the relative weight assigned to each factor in assessing whether to designate Pechanga as a separate nonattainment area or to designate Pechanga as part of the San Diego nonattainment area.

EPA Response: EPA provides a more detailed discussion of the relative weight of each factor in the Technical Analysis for Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation in the Technical Support Document for California.

Table Mountain Rancheria Comment: The Table Mountain Rancheria (Table Mountain) recommended that its areas of Indian country be designated a separate unclassifiable area from the adjacent San Joaquin Valley nonattainment area. Table Mountain cited (1) lack of air quality monitors within the boundaries of Table Mountain Rancheria and nearby monitors that are not representative of air quality at Table Mountain, (2) relatively few sources of ozone precursor emissions, (3) lack of meteorological information in Table Mountain to assess fate and transport of emissions on or near the Tribe's trust land, (4) geography that appears to create a natural barrier to ozone transport resulting in foothill ozone concentrations much lower than those at the San Joaquin Valley floor, and (5) separate jurisdiction and the EPA policy that provides for areas of Indian country to be designated as unclassifiable if the area of Indian country lacks a regulatory monitor, is located within a multi-jurisdictional area with a violating regulatory monitor that is not representative of Indian country.

EPA Response: EPA disagrees with the commenter that Table Mountain's Indian country should be designated a separate unclassifiable area from the adjacent San Joaquin Valley nonattainment area. Due to representative data from surrounding monitors, similarities in meteorology and transport patters to the surrounding area, the high levels of ozone in the area, and the lack of geographical or topographical barriers that would prevent transport from the San Joaquin Valley, EPA is designating Table Mountain's Indian country as nonattainment for the 2008 ozone NAAQS, as part of the San Joaquin Valley nonattainment area. For further discussion of Table Mountain's factor analysis and EPA's review of Table Mountain's analysis, please see the Technical Analysis for San Joaquin Valley in the Technical Support Document for California.

Ewiiaapaayp Band of Kumeyaay Indians Comment: "The Ewiiaapaayp Band recommends that the area within the external boundaries of the Reservation remain designated "Attainment" for the 8-hour ozone National Ambient Air Quality Standards (NAAQS). To our knowledge, the Ewiiaapaayp Reservation has always been designated

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Attainment for the 8-hour ozone NAAQS, and no factors have changed affecting ozone formation, or ozone precursor formation on the Reservation or in areas near the Reservation.

The Ewiiaapaayp Indian Reservation was recognized by the EPA as excluded from the San Diego nonattainment during the 2004 designations of the 1997 standard ozone standard through March 30, 2012 according to U.S. EPA's website: "8-Hour Ozone Nonattainment Areas, Detailed Description of Certain Area Boundaries for Partial Counties As of August 30, 2011."

The EPA preliminary conclusion to designate the Indian Country of the Ewiiaapaayp Band as nonattainment for the revised 2008 NAAQS because the [San Diego County] area violates the 2008 ozone NAAQS is in error and should be withdrawn. The Ewiiaapaayp Indian Reservation should either remain excluded from the San Diego nonattainment area or be designated as not a nonattainment area within the exterior boundaries of the Reservation.

The Clean Air Act requires EPA to designate any area as nonattainment if it violates a NAAQS or if it contributes to a violation in a nearby area. No air quality data (Factor 1) for the Reservation show a violation or contribute to a violation in a nearby area. The available conclusion is inescapable that if air quality monitors were on the Reservation the data would support the Tribes conclusion.

Emissions and emission-related data (Factor 2) for stationary sources and population centers and traffic patterns are not available because there are no stationary sources and a population of but 10 residing seasonally on the Reservation, making designation for a nonattainment area unavailable.

Meteorology and weather or transport patterns (Factor 3), influenced by geography and topography (Factor 4), do not show the formation of ozone from local sources or transport. The weather on the Reservation is characterized by high wind speeds defined as a class 7 (average wind speeds in excess of 8 to 15 meters per second varying by season and time of day), which are accelerated by steep ridgelines and narrow valleys. The 10 tribal citizen home sites are seasonally occupied, and average daily trips of vehicle traffic are less than a handful per day.

The jurisdictional boundaries (Factor 5) associated with the County and the State are inappropriate for the Reservation and its tribal government. The EPA has not consulted with the Tribe concerning jurisdiction boundary alternatives appropriate for the Tribe.

Absent new data to the contrary, the Ewiiaapaayp Indian Reservation should remain designated Attainment for the 8-hour Ozone standard as any change from Attainment designation must be accompanied by new data indicating that the area designated is not in compliance with the NAAQS. The Ewiiaapaayp Band is confident any data collected on the Reservation will prove the tribal lands should be designated for attainment.

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The Ewiiaapaayp Band also considered the following factors in making this recommendation for air quality designation for the Ewiiaapaayp Indian Reservation:

Air Quality Data. The Ewiiaapaayp Indian Reservation currently does not have an air quality monitor for ozone. The nearest air quality monitor for ozone is on the nearby La Posta Indian Reservation that shows the area is attaining air quality standards for the new 2008 8-hour ozone standard. This monitor is the nearest air quality monitor in the area with technical information available. That technical information indicates compliance with the 2008 ozone standard. The nearest monitor in the area that meets EPA regulatory monitoring criteria is in Alpine, California, approximately 19 miles away, and approximately 3,000 to 4,000 feet lower elevation at 2,000 feet above sea level. Data from this source is not representative of air quality on the Ewiiaapaayp Indian Reservation and cannot be used to assess regulatory levels on the Reservation and is not representative of air quality on the Ewiiaapaayp Indian Reservation.

Emissions related data. There are little or no emissions data on the Reservation. The nearby Campo Band of Mission Indians performed an Emissions Inventory in 2006 and found no major emissions sources within 65 miles of the Campo Indian Reservation, which is less than 5 miles from the Ewiiaapaayp Indian Reservation, and no minor sources within 25 miles. The Campo Indian Reservation is more than 35 miles from the nearest measurable emissions sources in the area.

Traffic and commuting patterns. There is no major arterial road through the Ewiiaapaayp Indian Reservation. Traffic volume is solely tribal citizen vehicle trips from the 5 tribal citizens and other family (10 total). Vehicle traffic is low and estimated at approximately 2 vehicles per day. There is no commuter traffic, no local traffic to stores and restaurants, of which there are none in the area.

Population Density and degree of urbanization. The area is extremely rural, with no urbanization. Population density is estimated at 1 person per square mile (urban fringe is recognized as a density over 1,000 times this density). No industrial and no commercial development occur on or near the Reservation, with no local Title V emissions sources.

Meteorology. The prevailing winds on the Reservation are 35 to 50 mph from the west, southwest 60 % of the time, which keep the area clear of ozone pre-cursors.

Geography/Topography. The nearest sources of ozone pre-cursors is Alpine, approximately 19 miles away, and approximately 3,000 to 4,000 feet lower elevation at 2,000 feet above sea level, and is not representative of air quality on the Ewiiaapaayp Indian Reservation. Alpine is on a ridge line 30 miles east of San Diego and is presumed to be in a zone where ozone pre-cursors and an ozone mixing zone creates significant ozone levels. Alpine is considered by environmental professionals and agencies in San Diego County to have the highest ozone levels in Eastern San Diego County. Due to the terrain and geography in the area, technical experts presume that ozone levels peak at Alpine

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and then drop off dramatically east of Alpine. Absent monitoring data to indicate otherwise, ozone levels in rural eastern San Diego County are presumed to be meeting the 2008 ozone standards.

The existing jurisdictional boundaries. The external boundaries of the Ewiiaapaayp Indian Reservation separates Indian Reservation land from private, state and federal lands in San Diego County. The Ewiiaapaayp Tribal Government has jurisdiction over air quality on the Ewiiaapaayp Indian Reservation, while the State of California has jurisdiction over state and private lands outside of the Reservation, while federal agencies have jurisdiction over federal public lands outside of the Ewiiaapaayp Indian Reservation. There is no metropolitan planning area that has jurisdiction over the Ewiiaapaayp Indian Reservation."

In summary, the Ewiiaapaayp Band of Kumeyaay Indians (Ewiiaayaap) submitted a factor analysis to support its recommendation that the Ewiiaapaayp Reservation be designated attainment for the 2008 ozone NAAQS. Ewiiaapyaap cites (1) the lack of an air quality monitor on the Ewiiaapaayp Reservation and a nearby monitor showing attainment with the 2008 ozone standard; (2) no emission sources on the Ewiiaapaayp Reservation, extremely low population and traffic; (3) meteorology that keeps the Ewiiaayaap Reservation free of ozone precursors; (4) high elevation of the Ewiiaapaayp Reservation compared to the air quality monitor showing nonattainment in Alpine; and (5) existing jurisdiction of the Ewiiaapaayp to protect air quality on the reservation, to support its recommendation that the Ewiiaapaayp be designated attainment. Ewiiaapaayp also states that no factors have changed affecting ozone formation, or ozone pre-cursor formation on the Reservation or in areas near the Reservation since the 2004 designations.

EPA Response: EPA disagrees with the commenter that the five factors support designating the Ewiiaapaayp Reservation attainment for the 2008 ozone NAAQS, and disagrees with the commenter that the situation has not changed since 2004. This comment was received by EPA Region IX on April 4, 2012, past the deadline for tribal and state comments on the designation process. Consideration of late comments and information from tribes and states is discretionary. EPA has considered the late letter and factor analysis from Ewiiaapaayp in our response to their comment, but in the future may not consider late letters during other designation processes.

The closest ozone monitoring site to Ewiiaapaayp is operated by the La Posta Band of Mission Indians (La Posta). However, the data from this monitoring site does not meet regulatory requirements. EPA has identified issues with the La Posta data, including extended periods of instrument malfunctions, anomalously low ozone values that are significantly lower than expected background concentrations, and very poor completeness levels during ozone season. In 2008, the data completeness for the year was 46%; data completeness in 2009 was 32%; and data completeness in 2010 was 60%. Data are deemed complete if daily maximum 8-hour average concentrations are available for at least 90% of the days within the ozone monitoring season, on average, for a three year period, with a minimum data completeness requirement in any one year of at least 75% (40 CFR part 50, Appendix P, Section 2.3.) EPA is therefore unable to use the La

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Posta data for regulatory decision-making at this time. The San Diego Air Pollution Control District (APCD) operates the next closest monitoring site. It is in Alpine, California, which is located approximately 19 miles to the west-northwest of the Ewiiaapaayp Reservation at 2,000 feet of elevation. Currently, the Alpine monitoring site is the design value site for the San Diego nonattainment area with a 2009-2011 design value of 0.082 parts per million (ppm). EPA believes that the Alpine monitoring site is representative of the eastern portions of San Diego County, including areas surrounding the Ewiiaapaayp Reservation. Several studies have shown ozone transport from the South Coast air basin and the western portions of San Diego County can reach the eastern portions of San Diego County, specifically the locations surrounding the Ewiiaapaayp Reservation. The San Diego APCD also operated an ozone monitor in Descanso during a field study in the late 1980s and early 1990s. The Descanso monitoring site was located approximately nine miles to the west of the Ewiiaapaayp Reservation at 3,600 feet of elevation, and measured high ozone levels that were to comparable to those measured at Alpine. This further supports that there is a potential for high levels of ozone in the elevated portions of eastern San Diego County.

EPA acknowledges that Ewiiaapaayp is located in a rural area with few sources of ozone precursors and that the Ewiiaapaayp Reservation has an extremely low population density compared to other areas of San Diego County. While there are no large sources of emissions near the Ewiiaapaayp Reservation, emissions from western San Diego County and the South Coast air basin can influence high ozone levels in the eastern portions of San Diego County.

EPA's assessment of meteorology is consistent with Ewiiaapaayp's claim that winds are predominantly from the west and southwest, but such patterns are conducive to high levels of ozone transport to the higher-elevation portions of eastern San Diego County and do not typically reduce ozone concentrations.

As previously discussed, the topography of the area has also been considered. The Alpine monitoring site is located at 2,000 feet of elevation and the previously operated Descanso monitoring site located at 3,600 feet measured comparable values. Elevations of the Ewiiaapaayp reservation range from 4,800 feet to 6,300 feet which are similar to the elevation of the Descanso monitoring site, and therefore, it is reasonable to assume that high ozone levels can occur in these elevated portions of eastern San Diego County. EPA also reviewed other sources of information that reaffirm that high levels of ozone can occur in eastern San Diego County as a result of transport from the San Diego metropolitan area and the South Coast air basin. Furthermore, there are no significant topographic barriers that separate Ewiiaapaayp from the surrounding area and no differences in meteorology or transport patterns that would suggest significant differences in air quality on tribal lands.

The jurisdictional boundaries factor is one of five factors that are considered as part of the designations decision-making process for ozone. EPA is carrying out its "Policy for Establishing Separate Air Quality Designations for Areas of Indian Country" to designate areas of Indian country for the 2008 ozone standards. The policy stresses the importance of recognizing tribal sovereignty and the jurisdictional status of Indian country in the

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decision-making process. It also articulates the circumstances under which the jurisdictional boundaries factor could carry more weight when evaluating a tribe's multi-factor analysis. In particular, it indicates that relying heavily on the jurisdiction factor to designate an area of Indian country as a separate attainment area adjacent to a nonattainment area may be justified when a regulatory monitor in Indian country demonstrates the NAAQS is met and no other emissions sources in Indian country contribute to violations in the adjacent nonattainment area based on analysis of the five factors. Ewiiaapaayp does not meet the first criterion of the policy, as it does not have a regulatory monitor or a nearby proximate regulatory monitor demonstrating the NAAQS is met.

Due to quality assurance issues and data anomalies with La Posta's data, EPA cannot rely on that monitor for designation purposes. Quality-assured data from the Alpine monitor and the Descanso monitor, as well as modeling studies of ozone in San Diego County show that the area likely experiences air quality similar to Alpine. An attainment designation is therefore not appropriate for Ewiiaapaayp, and Ewiiaapaayp will be designated as part of the San Diego County nonattainment area.

Since 2004, EPA has lowered the 8-hour ozone NAAQS from 0.080 ppm to 0.075 ppm. This lower standard results in areas that may have been previously attainment for the old standard now being nonattainment under the new more protective standard. EPA also considered additional studies and information specific to San Diego, which provided further information regarding ozone transport and formation in the eastern parts of the County. EPA considered this, together with the information presented above in designating Ewiiaapaayp with the San Diego County nonattainment area for the 2008 ozone NAAQS.

Ewiiaapaayp Band of Kumeyaay Indians Comment: "The EPA letter to the Tribe dated December 9, 2011 that required an expression of interest by the Tribe for tribal consultation by December 23, 2011, a mere 14 days not including the delivery time for the letter, resulted in receipt and consideration of the letter and its notice after the deadline. This is not tribal consultation as defined in the EPA Policy on Consultation and Coordination with Indian Tribes dated May 4, 2011.

The EPA policy states tribal "consultation is a process of meaningful communication and coordination between EPA and tribal officials prior to EPA taking actions or implementing decisions that may affect tribes." [EPA Policy, Article I; 1] This process is required by Executive Order 13175 that requires the EPA "have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." [EPA Policy, Article II; 2] The EPA policy says "consultation should occur early enough to allow tribes the opportunity to provide meaningful input that can be considered prior to EPA deciding whether, how, or when to act on the matter under consideration." [EPA Policy, Article V.C.; 7] The EPA process for the nonattainment designation fails to satisfy any one of the EPA Tribal Consultation Policy criteria."

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In summary, the Ewiiaayaap do not believe that EPA has met its obligations under the "EPA Policy for Consultation and Coordination with Indian Tribes" (Tribal Consultation Policy) or Executive Order (EO) 13175 and requests consultation on the 2008 ozone designation process.

EPA Response: EPA disagrees with the commenter that we did not carry out proper consultation under the Tribal Consultation Policy or EO 13175.

In October 2011, EPA Region IX sent letters offering consultation to Tribes potentially impacted by this designation process (Letter to Robert Pinto, Sr., Tribal Chairman, Ewiiaapaayp Band of Kumeyaay Indians, from Jared Blumenfeld, Regional Administrator, U.S. EPA Region IX, October 28, 2011). EPA also offered consultation to potentially impacted tribes in the 120-day letters sent in December (Letter to Robert Pinto, Sr., Tribal Chairman, Ewiiaapaayp Band of Kumeyaay Indians, from Jared Blumenfeld, Regional Administrator, U.S. EPA Region IX, December 9, 2011). While the deadline in that letter for requesting consultation was only 14 days (December 23, 2011), EPA felt the deadline was the maximum amount of time possible to allow enough time to consult with tribes in a meaningful way during the 120-day period.

In January and February 2012, EPA conducted consultation with nine other California tribes that requested consultation. Some of these requests were received after the December 23, 2011 deadline, but were honored by EPA. On January 12, 2012, EPA held consultation by conference call with representatives from the La Jolla Band of Luiseño Indians, Pala Band of Luiseño Indians of the Pala Reservation, Iiplay Nation Santa Ysabel, and Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation. EPA consulted with representatives of the Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation on January 12, 2012 in San Francisco, California. On January 20, 2012, EPA held consultation by conference call with the Picayune Rancheria of Chuckchansi Indians of California and the Table Mountain Rancheria of California. On February 1, 2012, EPA consulted with the Campo Band of Diegueño Mission Indians of the Campo Reservation at the Campo Reservation. On February 27, 2012, EPA held consultation by conference call with the Soboba Band of Luiseño Indians.

The comment and consultation request from Ewiiaapaayp were received by EPA Region IX on April 4, 2012, past the deadline (communicated in the aforementioned December 9, 2011 letter) for tribal and state comments, and tribal consultation, on the designation process. Consideration of late comments and information from tribes and states, and conducting late consultation with tribes is discretionary.

EPA has considered the late letter from Ewiiaapaayp and conducted consultation with the Tribe on April 5, 2012, but in the future, may not consider late letters or consultation requests for other designation processes.

EPA believes that our consultation process was appropriate and consistent with the Tribal Consultation Policy and EO 13175.

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Morongo Band of Mission Indians Comment: Morongo Band of Mission Indians (Morongo) commented that EPA's preliminary decision to designate the Tribe along with the South Coast Air Basin nonattainment area, but at a lower classification, did not adequately consider the jurisdictional factor or EPA's Tribal Designation Policy.

EPA Response: EPA agrees with the commenter and is designating Indian country of the Morongo Band of Mission Indians (Morongo) as a separate nonattainment area. For further information on EPA's analysis, see the Technical Analysis for Morongo Band of Mission Indians in the Technical Support Document for California.

Morongo's Indian country is located in the South Coast Air Basin in California. For air planning purposes, the Morongo area was designated as part of the South Coast Air Basin for the one-hour ozone standard.

The NSR "major source" permit applicability threshold for Morongo lands is 10 tpy of NOx or VOCs annually, which applies in the South Coast Air Basin based on its "extreme" classification. For Morongo, this means that more sources and modifications would be subject to the highest control technology requirement (i.e., LAER) and the offsets requirement. However, this condition was to have been indirectly remedied by EPA in 2004, by classifying the South Coast Air Basin as "severe-17" for the 1997 8-hour ozone standard and by linking the applicable NSR requirement to the new 8-hour ozone classification.

However, in 2006, the D.C. Circuit ruled against portions of EPA's 2004 8-hour Ozone Implementation Rule and, in effect, restored NSR applicability thresholds and emissions offsets pursuant to classifications previously in effect for the 1-hour ozone standard. For Morongo, the court's decision restored the 10 tpy NSR threshold and offset requirements (in EPA's discussions with the Morongo, we have referred to this as the 1-hour relic).

More recently, in comments objecting to EPA's August 2009 proposed "bump-up" of the Morongo lands, along with the rest of the South Coast Air Basin, to "extreme" for the 8-hour ozone standard, the Morongo expressed the concern that the reclassification will subject them once again to a 10 tpy NSR threshold. However, the effect of the D.C. Circuit's decision means that 10 tpy is already the applicable NSR threshold and that reclassification to "extreme" will not change that fact.

On April 15, 2010, EPA finalized the final "bump-up" notice and we deferred reclassification of the Morongo tribal lands.

As a practical matter, whether Morongo's Indian country is designated as a separate nonattainment area, or as part of a larger nonattainment area, for the 2008 ozone standard, certain requirements, such as NSR, that had applied based on the inclusion of the reservation within the South Coast Air Basin for the revoked 1-hour ozone standard, will continue to apply for anti-backsliding purposes until the area is redesignated to "attainment" for the 2008 8-hour ozone standard (or other ozone standard in effect at the time of redesignation). Specifically, this means that the NSR major source threshold of

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10 tons per year for VOC or NOx, that applied by virtue of the "extreme" classification of the South Coast Air Basin for the 1-hour ozone standard, would continue to apply to new major sources and major modifications proposed within the reservation until the area is redesignated for the current ozone standard. Once redesignated to attainment, such new major sources and modifications would be subject to PSD requirements (see 40 CFR 52.21) rather than NSR, and the applicable major source thresholds and related requirements would change accordingly.

EPA notes that this comment was received by EPA Region IX via email on April 9, 2012, past the deadline for tribal and state comments on the designation process. Consideration of late comments and information from tribes and states is discretionary. EPA has considered the late letter from Morongo, but in the future may not consider late letters during other designation processes.

Comment: Commenter urges EPA to group counties that are recognized parts of contiguous air districts in unified nonattainment areas and identifies Tuscan Buttes as an area that should not be an isolated nonattainment area above 1,800 feet, but part of a broader Sacramento Valley Air Basin nonattainment area (as California already recognizes it). Commenter states that the later approach is fully in keeping with the Clean Air Act and represents the only way those areas are going to reach attainment.

EPA Response: California air basins are established by the state and are used by the state to improve air quality with respect to the California Ambient Air quality Standards (CAAQS). The CAAQS cover a number of pollutants that could be considered long-range as well as short-range pollutants. As such, the air basins are multi-functional and are therefore informative but not determinative with respect to EPA's designations, which EPA undertakes on a pollutant-by-pollutant basis. EPA believes that the boundary of a nonattainment area for a short-range pollutant such as coarse particulates (PM-10) or carbon monoxide (CO) would not necessarily be appropriate for a regional scale pollutant such as ozone or fine particulates (PM2.5).

EPA believes it is appropriate to designate Tuscan Buttes as a nonattainment area. As discussed in the Technical Analysis for Tehama County (Tuscan Buttes) section of the California Technical Support Document, the violating monitor is atop a mountain at 1,877 feet. EPA expects that the mountaintop area is predominantly affected by long-range transport from the Sacramento Metro area, rather than emissions from within Tehama County or adjacent counties. Tehama County and the Sacramento Metro nonattainment area are governed by different air districts. Together, these factors support separate nonattainment areas, as was requested by the state. EPA is designating Sacramento Metro and Tehama County (Tuscan Buttes) as separate nonattainment areas.

How Tuscan Buttes will reach attainment of the 2008 ozone NAAQS is an implementation issue and is outside the scope of our designations process. Separately, EPA is preparing a proposed rulemaking, the "SIP Requirements" rule, that when finalized will govern implementation of the 2008 ozone NAAQS. We note here that urban areas which may be contributing to poor air quality on the Tuscan Buttes (e.g., Butte County, Sacramento Metro nonattainment area, San Francisco Bay Area), will be

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designated nonattainment for the 2008 ozone NAAQS and will be required to attain by mandatory attainment dates. Therefore, we do not agree that Tuscan Buttes, as a separate nonattainment area, would impact the area's ability to attain the 2008 ozone NAAQS, as the commenter suggests.

Comment: One Commenter notes that EPA has recognized some of the broader metropolitan areas in its recommendations, but has omitted many. Clearly, the economic and transportation integration that defines a metropolitan area makes it essential that the entire metropolitan area be included in the nonattainment area if the area is to reduce ozone levels successfully. Only by including all these sources will the states succeed in meeting the standard. To that end, the commenter recommends modifications to the California nonattainment areas, using the geographic boundaries of the air basins as California has defined them already and the Consolidated Statistical Areas as defined by OMB, which represent the broadest economic and transportation network in each area.

EPA Response: The EPA refers the commenter to the response in section 3.1.5 of this document for a discussion of EPA's position on presumptive boundaries. EPA also refers the commenter to the Technical Analysis for the area(s) in question in the Technical Support Document for California.

Comment: Commenter supports EPA's nonattainment recommendation for Amador County, Calaveras County, Mariposa County, San Luis Obispo County (eastern portion), Tuolumne County, but recommends that these areas be consolidated into the San Joaquin Valley Nonattainment Area. As noted in the Technical Support Document, these counties below likely have ozone levels influenced by transported ozone from the San Joaquin Valley Airshed. Commenter states that the explanation in the Technical Support Document does not provide a sufficient justification for splitting them in to separate nonattainment areas and isolating these nonattainment areas from such a major source of their ozone hamstrings the ability of these areas to meet the standard.

EPA Response: EPA acknowledges the commenter's support for our nonattainment designations, but we disagree with their suggestion that mountain counties and eastern San Luis Obispo County should be added to the eight-county San Joaquin Valley nonattainment area. EPA notes that the mountain counties (i.e., Amador, Calaveras, Mariposa, and Tuolumne) are neither part of the state's San Joaquin Valley Air Basin, nor are they part of any of the OMB defined urban areas in the San Joaquin Valley. EPA disagrees that we must justify "splitting them into separate areas" and notes that the Clean Air Act does not require that areas that are both "nearby" and "contributing" to a violating area must be part of the same nonattainment area. The Act requires nearby, contributing areas to be designated nonattainment. Although there may be transport from the San Joaquin Valley into both San Luis Obispo County to the west and into the mountain counties to the east, we believe it is consistent with the Clean Air Act and the five-factor analysis prepared for each nonattainment area to designate these areas with the boundaries proposed. The EPA refers the commenter to the response in section 3.1.5 of this document for a discussion of EPA's position on presumptive boundaries and to

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Technical Analysis for the area(s) in question in the Technical Support Document for California.

Comment: Commenter recommends including all counties in the Sacramento--Arden-Arcade--Yuba City, CA-NV Consolidated Metropolitan Area and full counties in the Sacramento Valley Air Basin (i.e., Butte County, El Dorado County, Nevada County (all), Placer County (all), Sacramento County, Sutter County, Tehama County (all), Yuba County, Yolo County, Douglas County, NV) with violating monitors in a broader Sacramento Valley nonattainment area. Commenter states that absent such a broader approach, it is hard to see how, for example, Tehama County, will reduce emissions enough to meet the standard, since the violating monitor reflects emissions that come from the Valley.

EPA Response: The EPA refers the commenter to the response in section 3.1.5 of this document for a discussion of EPA's position on presumptive boundaries. EPA also refers the commenter to the Technical Analysis for the area(s) in question in the Technical Support Document for California.

Comment: Commenter recommends including all counties in the San Francisco-San Jose-Oakland, CA Consolidated Metropolitan Area (i.e., Alameda County, Contra Costa County, Marin County, Napa County, San Benito County, San Francisco County, San Mateo County, Santa Clara County, Santa Cruz County, Solano County, and Sonoma County) in the San Francisco Bay Area nonattainment area because of the interconnected economic and transportation network that exists there, as recognized in the Consolidated Metropolitan Area boundaries.

EPA Response: EPA disagrees with the commenter's characterization that EPA is including "several counties" that are part of the OMB urban area definition in our designation for the San Francisco Bay Area nonattainment area. OMB includes ten counties in the San Francisco-San Jose-Oakland urban area and EPA includes all or portions of nine of these counties in the nonattainment area. The entireties of seven counties—Marin , Napa, Contra Costa, Alameda, Santa Clara, San Mateo and San Francisco—are included in EPA's nonattainment boundary. Solano County, which is part of the OMB-defined urban area, is split between two nonattainment areas. Therefore, the entirety of the county is nonattainment, but the northeast part, which is under the jurisdiction of the Yolo-Solano air district, is part of the Sacramento Metro nonattainment area. The southwestern portion of Solano County is part of the Bay Area Air Quality Management District and is included in EPA's designation of the San Francisco Bay Area nonattainment area. Although the commenter includes Solano County in the list of counties that should be part of the San Francisco Bay Area nonattainment area, EPA believes after considering "nearby" and "contributing" areas, and applying the five-factor analysis, that Yolo and Solano counties are correctly included in the Sacramento Metro nonattainment area. We also note that the commenter has not provided additional information to support a different conclusion.

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Perhaps more to the commenter's point, EPA has excluded the entirety of one county, San Benito County, and portions of other counties from the nonattainment area. To the north, EPA has split Sonoma County, with the southern, relatively populated area being included and the northern, fairly rural area excluded. EPA believes we have justified this split in our Technical Support Document, applying our five-factor analysis to the county. The commenter has not provided additional information to support a different conclusion.

In contrast, EPA has not included any portion of San Benito County in the nonattainment area. We note that San Benito County appeared on the OMB's list of counties in the urban area is a recent occurrence. EPA has not seen the county listed as part of the urban area in past designations. Although EPA is confident that OMB applied its own criteria properly for its own purposes, we do not believe that at this point in time, San Benito County is a nearby, contributing area to the violations of the 2008 ozone NAAQS that primarily occur in counties to the north and east of the county. For the reasons set forth in our five-factor analysis of the area, EPA does not believe that San Benito County contributes to the violating monitors in the Bay Area. There is an ozone monitor in the county in Pinnacles National Monument, which is currently attaining the 2008 ozone standard.

The boundary we are designating as nonattainment for the San Francisco area is the same boundary that was used for designations for the 1997 and the 1979 ozone NAAQS. The area is marginal nonattainment for the 2008 ozone standard, based on the area's 2008-2010 monitored air quality data. EPA is designating the area based upon that data. The NAAQS is 0.075 ppm and the 2008-2010 three-year average "design value" is 0.080 ppm. However, preliminary data for 2009-2011 shows a design value of 0.076 ppm, at the lower legal limit of what EPA must designate as nonattainment. EPA therefore rejects the commenter's argument that adding the partial counties that EPA has excluded or San Benito County will hinder the area's chances of attaining the 2008 ozone NAAQS. We believe that the full five-factor analysis supports the boundary we have established for the nonattainment area.

***Comment*:** Commenter supports the identification of Phoenix-Mesa-Glendale, AZ (MSA), including Maricopa County and Pinal County as the nonattainment area; welcomes the inclusion of the power plants in the nonattainment boundary recommendations; and strongly recommends including the entire of both identified counties.

EPA Response: EPA thanks the commenter for their support and agrees that the inclusion of power plants in the state's recommended nonattainment area is a reasonable addition to the boundary of the nonattainment area promulgated by EPA in 2004 for the 1997 ozone national ambient air quality standards (NAAQS). However, EPA disagrees with the commenter's recommendation to include the entirety of the two affected counties. These two counties, Maricopa County to the west and Pinal County to the east, are very large when compared to other counties in the United States. EPA does not believe that designating the entirety of these two large counties is warranted for ozone in this case, since we do not believe that the scant emissions from so far away meet the Act's requirement that a contributing nearby area be included in a nonattainment area.

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Neither is the larger area recommended by the commenter consistent with EPA's five-factor analysis presented in the TSD for the Phoenix area.

3.2.10. EPA Region X

The EPA received no comments from either the public or states and tribes pertaining to the areas in Region II.

3.2.11. Multi-Region Areas

3.2.11.1. Memphis, TN-MS-AR

Arkansas Comment: Arkansas Governor Mike Beebe provided comments on February 23, 2012. Enclosed with the comment letter was Arkansas Department of Environmental Quality's analysis of EPA's December 2011, TSD. In the letter and enclosure, Arkansas disagreed with the EPA's intended designation of Crittenden County as nonattainment.

The Arkansas submittal listed numerous concerns: Regarding air quality data, the certified air monitoring data for 2008-2010 has a design value of 0.074 ppm, which does not exceed the 2008 ozone NAAQS. Regarding contribution to the violating monitor: Crittenden County does not significantly contribute to violations recorded at the Frayser monitor in Shelby County, Tennessee; meteorological conditions on episode days for 2008-2010 show that emissions from Crittenden County are unlikely to significantly influence ozone concentrations at the Frayser monitor and the potential for contribution from Crittenden County to the violating air monitor is "very small (with a frequency equivalent to much less than one exceedance day per year)." In addition, the EPA's TSD failed to establish significant pollutant distribution from Crittenden County that could be viewed as contributing to the exceedance of the ozone NAAQS at the Frayser monitor; Crittenden County has a marginal and infrequent influence on ozone concentrations at the Frayser monitor; and a probability analysis of the wind direction frequency and emissions data estimates that emissions from Crittenden County are unlikely to significantly influence ozone concentrations at the Frayser monitor. Regarding jurisdictional boundaries: there is no regulatory justification for recommending the inclusion of a county in a nonattainment area based on its classification under a previous NAAQS; and as a Targeted Economic Development Zone (TEDZ) and because it conducted its own transportation conformity demonstrations, Crittenden County should be treated as a separate jurisdiction.

In addition, the EPA has not provided a scientifically defensible basis to determine that Crittenden County should be designated as nonattainment and thus, Crittenden County should be designated as attainment; the rationale used to exclude from the nonattainment designation five counties in the Memphis area is also true for Crittenden County (this includes relatively low population and urbanization, and precursor emission contribution and transport suggesting negligible contribution to the violating county); pursuant to

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guidance on area designations for the 2008 revised ozone standard, the EPA was to consider nine factors in determining nonattainment area boundaries, but only considered five; Table 5 in the EPA's TSD for Arkansas is titled, "Traffic and Commuting Patterns," but the TSD did not provide information on commuting patterns; and it is likely that the entire Memphis TN-MS-AR area will be attaining the ozone standard in the near future.

EPA Response: We appreciate the comments submitted by Governor Beebe. In September 2011, the EPA invited states and tribes to update the recommendations they submitted to us in 2009 concerning the 2008 ozone standard. Prior to issuing our 120-day letters on December 9, 2011, we did not receive communication from Arkansas indicating that a revised recommendation was desired. Thus we understood at that time that the State agreed with its 2009 recommendations. Governor Beebe submitted technical information with his letter of February 13, 2012, which included, among other things, a revised recommendation that Crittenden County be designated as attainment under the 2008 ozone standard. We disagree with this recommendation for reasons detailed below and in our TSD.

The EPA acknowledges that the air quality monitor in Crittenden County is not violating the 2008 ozone standard during 2008 – 2010 for which air quality data was reviewed. However, section 107(d)(1) of the Clean Air Act (CAA) requires all areas to be designated nonattainment if they do not meet the standard or if they contribute to ambient air quality in a nearby area that does not meet the standard. Consistent with the CAA requirements for designations, it is appropriate to designate Crittenden County as nonattainment within the Memphis TN-MS-AR nonattainment area because emissions from Crittenden County contribute to violations of the NAAQS at the Frayser monitor in Shelby County. The EPA's decisions concerning nonattainment designations for the Memphis TN-MS-AR area are based on criteria set forth in the CAA and in guidance documents, and on technical facts pertaining to Crittenden County. The EPA has examined the information which Governor Beebe submitted and has provided additional information developed by the EPA. Please see our TSD, which includes an evaluation of emissions and meteorological data.

We disagree that Crittenden County should be treated as a separate jurisdiction. Because ground-level ozone and ozone precursor emissions are pervasive and readily transported, it is important to examine ozone-contributing emissions across a relatively broad geographic area. Thus, for the Memphis TN-MS-AR area we considered existing jurisdictional boundaries for the purposes of providing a clearly defined legal boundary and to help identify the areas appropriate for carrying out the air quality planning and enforcement functions for the nonattainment area. We started our evaluation for the Memphis TN-MS-AR area with the counties in the Memphis Metropolitan Statistical Area (MSA). In defining statistical areas, OMB looks at many criteria that are important and relevant for purposes of making designation decisions. For example, each MSA consists of counties containing at least one urban core plus adjacent counties that have a high degree of social and economic integration with the urban core(s) as measured by commuting ties. The Memphis MSA is defined by the OMB using Census data and consists of the following counties: Crittenden County (AR); Desoto, Tunica, Tate and Marshall Counties (MS); and Tipton, Shelby and Fayette Counties (TN). We evaluated each county individually, but did not recommend all the counties in the MSA be

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included. Our use of the Memphis MSA to evaluate the boundary for the Memphis TN-MS-AR nonattainment area is appropriate.

The guidance memo addressing area designations for the 2008 revised ozone standards lists nine factors to consider when determining nonattainment area boundaries: air quality data; emissions data; population density and degree of urbanization; traffic and commuting patterns; growth rates and patterns; meteorology; geography/topography; jurisdictional boundaries; and level of control of emissions sources. The EPA consolidated that list into five factors, including all of the emissions related criteria under one heading. In our TSD that accompanied the 120-day letter for this action we evaluated all nine of the criteria, with the exception of commuting patterns and we failed to notice the incorrect heading in that section (the header has been corrected in our final TSD). The most current data available to evaluate commuting patterns is from the 2000 census, which we felt was not recent enough to provide an accurate assessment for the area.

We disagree with the comment that the Memphis TN-MS-AR area will be attaining the 2008 ozone standard in the near future, because preliminary data for 2009-2011 shows that the monitor in Crittenden County violates the 2008 ozone standard.

Mississippi Comment: Pursuant to section 107(d)(1)(B)(ii), EPA is required to use MSAs as the presumptive boundary only if the area will be classified as a Serious, Severe, or Extreme Area. Based upon EPA's proposed implementation rule, the Memphis, TN-MS-AR nonattainment area will likely be classified as Marginal. Therefore, EPA has discretion on the Memphis, TN-MS-AR nonattainment area boundary determinations.

EPA Response: The provisions in section 107 that addresses the use of statistical areas as the presumptive starting point for nonattainment area boundaries for serious, severe and extreme areas are (d)(4)(A)(iv) and (v). These provisions directly applied only for purposes of the initial designations for the 1-hour standard at the time the CAA was amended in 1990. While these provisions do not directly apply to designations for a new or revised NAAQS under section 107(d)(1), we have adopted the approach of using the OMB statistical area boundaries as a starting point for analyzing nonattainment areas for all areas designated nonattainment for both the 1997 NAAQS and now the 2008 ozone NAAQS. Although we begin our analysis by looking at all counties within the relevant statistical area, in most cases the designated area is smaller because the five factor analysis that we perform (and that we encourage states to use for their recommendations) typically indicates that there is not a strong basis to conclude that some of the counties or parts of counties within the statistical area contribute to violations of the NAAQS within the area. We believe that using the statistical areas as a starting point for our evaluation is a reasonable means to ensure that the "nearby" counties most likely to contribute to a violation of the NAAQS are evaluated and it also provides a consistent and certain starting point for evaluating areas across the country.

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Mississippi Comment: DeSoto County was excluded from the nonattainment boundary for the Memphis, TN-MS-AR nonattainment area in 2004, as EPA determined that DeSoto County did not significantly contribute to ozone levels in the Memphis Area. Since that time, ozone concentrations have dropped significantly for all the monitors in the area, and both Crittenden and Shelby Counties have subsequently attained the 1997 ozone standard. Therefore, this exclusion did not affect the ozone concentrations. Since ozone values have declined and DeSoto County is attaining the standard, there is no reason to reverse the previous determination.

EPA Response: The commenter is correct that Desoto County was not included within the boundary of the for the Memphis, TN-MS-AR nonattainment area for the 1997 ozone NAAQS. However, EPA must analyze the situation anew for purposes of the new, more stringent NAAQS promulgated in 2008, based on the most recent information now available. There has been growth throughout the entire Memphis area since EPA last designated ozone areas and the technical information we are relying on now, in 2012, is different than the information we relied on in 2004 for the 1997 ozone NAAQS. EPA is establishing a new designation for the 2008 ozone NAAQS; a new and separate designation in 2012 for the 2008 NAAQS is not a reversal of the earlier designation in 2004 for the less stringent 1997 ozone NAAQS.

Mississippi Comment: Mississippi evaluated the 9 factors in EPA's guidance using the latest data. The analysis overwhelmingly reveals that DeSoto County does not contribute to violation of the ozone standard in Crittenden and Shelby Counties.

EPA Response: EPA appreciates the updated technical information that Mississippi provided and has updated our technical support document accordingly. However, EPA disagrees with Mississippi's conclusion, and believes the technical evaluation of DeSoto County shows contribution to the air quality in the Memphis area. Please see our TSD for further details on our analyses.

Mississippi Comment: Mississippi is committed to protecting the public health and welfare, and will continue to take an aggressive approach to better the air quality. Mississippi believes they can do this more effectively through extensive outreach, public education, and voluntary measures without the burden of a nonattainment designation. Additionally, Mississippi believes they have demonstrated their commitment in this regard through their proven track record over the last few years. With EPA having another opportunity to review the standard in 2013, Mississippi strongly believes that EPA should not designate DeSoto County as nonattainment.

EPA Response: EPA appreciates and shares Mississippi's commitment to protecting the public health and welfare. The Agency also supports Mississippi's continued efforts regarding outreach, public education, and voluntary measures. However, based on the Act and EPA's evaluation of all of the technical information available at this time, the Agency concludes that the portion of DeSoto County that is being included in the

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nonattainment area boundary is a nearby area that contributes to the poor air quality in the Memphis, TN-MS-AR nonattainment area.

Tennessee Comment: Tennessee believes Shelby County should be designated as attainment. Both monitors in Shelby County are attaining the 2008 ozone standard with 2009-2011 data. Using 2009-2011 data, the only violating monitor in the Memphis, TN-MS-AR nonattainment area is in Crittenden County, Arkansas, which is west of Shelby County. Tennessee further states that winds in this region are primarily from the south, southwest, and south-southwest directions, and that industries in Shelby County only infrequently impact the violating monitor.

EPA Response: EPA acknowledges that Tennessee has provided certified, quality assured air quality data for 2009-2011. Arkansas, however, has not requested early certification of their 2009-2011 data, and, therefore, data are preliminary and cannot be used for designations purposes. Because EPA has not received certified data from all monitors in the area, we are using 2008-2010 air quality data for our analysis of the Memphis, TN-MS-AR area. EPA disagrees with Tennessee's ultimate conclusion regarding the status of Shelby County. The EPA's technical evaluation of Shelby County shows contribution to violations of the NAAQS in the Memphis, TN-MS-AR area. Please see our TSD for further details on our analyses.

Tennessee Comment: Tennessee also notes that the western boundary of Shelby County is also the western boundary of the NOx SIP Call, and that Tennessee has faithfully implemented these requirements and will implement whatever is required by the successor to the currently stayed Cross-State Air Pollution Rule. Tennessee further states that there are large sources in Arkansas to the west of the Memphis area which are not subject to the NOx SIP Call, and have done little to help the area attain. Tennessee also cites EPA modeling that shows contribution from Arkansas on Tennessee ozone.

EPA Response: EPA commends Tennessee in their efforts to implement the NOx SIP Call, and appreciates the commitment to implement future trading programs to address transport of pollutants which affects ozone levels. There are sources outside all areas which may contribute some pollution to air quality within such areas; not all of the contribution to violations of the NAAQS is in nearby areas and not all contributions are significant enough to include a specific area within the designated nonattainment area. Other programs in the Act, such as those required to address longer range transport from one State to another, are aimed at achieving reductions from sources outside the nonattainment area. The commenter did not identify any particular sources of concern. However, we note that our full evaluation, which may be found in the TSD, evaluated contribution from all counties within the CSA; the TSD provides the basis for our decision on which areas to include within the boundaries of the nonattainment area.

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Tennessee Comment: Tennessee requests that if Shelby County is included in the nonattainment area, that only the census tracts containing the City of Memphis be included in the boundary, and not the whole county. Tennessee states that 70 percent of the Shelby County population resides within city limits, and the majority of point source emissions are generated within the city limits. Tennessee also states that they provided more detail on their position in the attached nine factor analysis.

EPA Response: EPA appreciates the updated technical information that Tennessee provided and we have updated our TSD to address the new information. However, EPA disagrees with Tennessee's conclusion, and believes the technical evaluation of Shelby County in its entirety shows contribution to violations of the NAAQS in the Memphis area. Please see our TSD for further details on our analyses.

Comment: One commenter asserts that EPA's action to designate DeSoto County, Mississippi nonattainment will have significant detrimental impact on DeSoto County's future economic development, job creation and transportation activities.

EPA Response: The EPA refers the commenter to section 3.1.5 of this document for a response regarding "economic harm" associated with the ozone designations process.

Comment: One commenter claims that EPA's conclusion is contrary to data submitted to EPA by Mississippi Department of Environmental Quality (MDEQ). The commenter states that data submitted to EPA by MDEQ demonstrates that the DeSoto partial county has a 6-year average of 73 ppb for ozone which is below the 75 ppb 2008 ozone NAAQS. They state that EPA should reconsider its preliminary conclusion that the DeSoto portion should be included as part of the Memphis, TN-MS-AR nonattainment area, and reevaluate the relevant data from the DeSoto portion on a "case-by-case basis" and "area-specific analyses" as indicated in EPA's Principal Deputy Assistant Administrator Robert Meyers' memorandum to Regional Administrators, dated December 4, 2008 ("Meyers Memo"). The commenter states the 9-factor analysis considered by EPA is not evidenced in the portion of the DeSoto County portion and that DeSoto County does not "contribute meaningfully" to the Memphis, TN-MS-AR Area.

EPA Response: EPA has evaluated the information submitted by MDEQ as part of EPA's technical evaluation in the TSD. We agree that there are no monitors in DeSoto County indicating a violation of the 2008 ozone NAAQS. However, in addition to including in the nonattainment area those areas that are violating the NAAQS, EPA must designate as nonattainment any nearby area that is contributing to a violation.

Comment: A commenter supports EPA's proposal to include DeSoto County, MS as a part of the Memphis TN ozone nonattainment area. The commenter stated that it was apparent that DeSoto County was a part of the regional air quality "picture" in the Memphis area. The commenter stated that many people who work in Memphis have moved to DeSoto County. They cite growth and increased number of lanes on I-55 due to

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traffic. They also expressed concern about Memphians and Crittenden County, Arkansas citizens incurring additional medical costs due to ozone.

EPA Response: EPA acknowledges this comment and, consistent with our proposed recommendation, has made the final determination that the Memphis Metropolitan Planning Organization portion of DeSoto County, Mississippi (or urbanized portion) should be included in the nonattainment boundary for the Memphis, TN-MS-AR area for 2008 8-hour Ozone standard designations based on EPA's analysis that the county is contributing to the ozone violation in the area. EPA's Final TSD for the Memphis Area provides our full analysis.

Comment: One commenter suggested that EPA consider a heavy duty diesel truck highway density map and a map of air quality stations for the Memphis Area for the final designation decisions regarding ozone designations for DeSoto County, MS.

EPA Response: EPA appreciates this additional information and considered this information for the determination of the final designations for the Memphis, TN-MS-AR area, as provided in the TSD.

3.2.11.2. St. Louis-St. Charles-Farmington, MO-IL

Comment: A commenter asserts that EPA and the Illinois Environmental Protection Agency (IEPA) have not provided sufficient justification for including Monroe County, Illinois in the proposed nonattainment area. The rationale for this assertion is based on the following points raised by the commenter:

- Neither EPA nor the IEPA have demonstrated, in keeping with section 107(d) of the CAA, that Monroe County is either violating the 2008 8-hour ozone standard or contributing to a violation of this standard in a nearby area.

- EPA, in its technical support document, concludes that Monroe County does not have especially high emissions or Vehicle Miles Travelled (VMT) (high traffic levels), but concludes that Monroe County should be included in the ozone nonattainment area because it is located between St. Clair County, Illinois and Jefferson County, Missouri, both of which have comparatively high emissions and high VMT levels. The commenter believes that this is not an adequate reason for the inclusion of Monroe County in the nonattainment area, and that Monroe County should not be included in the nonattainment area if there is not a clear technical or programmatic basis for doing so.

- The commenter notes that, in its technical analysis, the IEPA concludes that Monroe County should be included in the nonattainment area for the 2008 8-hour ozone standard because Monroe County was included in the nonattainment areas for the 1-hour ozone standard and for the 1997 8-hour ozone standard. The commenter asserts that IEPA does not describe how Monroe County's status in

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regard to the older ozone standards impacts the designation of Monroe County for the 2008 8-hour ozone standard. In addition, the commenter notes that EPA has proposed to redesignate Monroe County to attainment for the 1997 8-hour ozone standard.

The commenter asserts that the designation of Monroe County should be based solely on the significance of its contribution to a violation of the 2008 8-hour ozone standard within Monroe County or within a nearby area. On that basis, the evidence compiled by the IEPA and the EPA seems to clearly indicate that there is no technical, regulatory, or programmatic basis for including Monroe County in the ozone nonattainment area.

EPA Response: We acknowledge that there is no monitored violation of the 2008 8-hour ozone standard in Monroe County, however, we also note that there is no ozone monitor located in Monroe County. We also acknowledge that 2008 VOC and NO_X emissions in this county were relatively low at 2,410 tons per year (tpy) of NO_X and 1,551 tpy of VOC, as compared to those in other counties included in EPA's intended St. Louis-St. Charles-Farmington, MO-IL nonattainment area. However, as indicated in EPA's December 4, 2008 policy entitled "Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards," (designation policy) we weigh all of the factors to establish appropriate nonattainment area boundaries. In addition to the factors noted by the commenter, we also considered emissions-related growth rates and patterns, population and population growth rates, meteorology and transport patterns related to elevated ozone levels and jurisdictional boundaries.

Finally, the state of Illinois has recommended that Monroe County be included in the St. Louis-St. Charles-Farmington, MO-IL ozone nonattainment area for the 2008 8-hour ozone standard. It is EPA's policy to give deference to state area recommendations unless there is compelling justification for revising those recommendations. We see no compelling reason to exclude Monroe County from the nonattainment area. Given all of the above, we intend to include Monroe County in the St. Louis-St. Charles-Farmington, MO-IL ozone nonattainment area for the 2008 8-hour ozone standard.

Comment: A commenter notes that both local sources and transported ozone and ozone precursors contribute to ground-level ozone formation in the St. Louis area and in the States of Missouri and Illinois. Unless all of these sources (local and regional upwind sources) are made subject to planning and cleanup requirements, Missouri and Illinois will struggle to protect public health.

In addition, the commenter notes that technical analyses used to support the Cross-State Air Pollution Rule recognized that states in Regions 5 and 7 contribute to ozone air quality problems in other parts of the United States. The commenter asserts that an updated analysis of transported ozone and ozone precursor contributions to violations of the 2008 8-hour ozone standard would likely show evidence of much greater, widespread contributions to ozone air quality problems in the United States.

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The commenter supports the call of several states for the creation of a super-regional ozone nonattainment area. The commenter urges the EPA to revisit its decision to oppose the establishment of such an ozone nonattainment area for the 2008 8-hour ozone standard.

EPA Response: While we agree with the commenter that EPA's technical analyses used to support other rulemaking efforts shows long-range transport from states in Regions 5 and 7 contribute to ozone air quality in areas distant from the St. Louis area, as provided in our response in section 3.1.2, we believe other provisions of the Act are the appropriate provisions to address this concern.

3.2.11.3. Cincinnati, OH-KY-IN

Kentucky Comment: There are no violating monitors in Boone, Kenton, or Campbell County. Moreover, the emissions contribution of Boone, Campbell, and Kenton Counties to the larger Cincinnati area is negligible in comparison with the emissions for the entire proposed nonattainment area. The combination of all emissions from the Kentucky counties is significantly below those of Ohio emissions. The population of the Kentucky counties is each less than ten percent of the population in the proposed nonattainment area, as is the associated vehicle miles traveled with impacts the mobile emissions contribution.

Furthermore, EPA did not view each county's contribution in relation to the entire proposed nonattainment area. EPA should also give additional consideration to the location of Kings Island Amusement Park and the traffic associated with visitors to the local attraction.

Kentucky does not agree that using previously established nonattainment boundaries is the most effective approach.

Kentucky believes the south-southwest wind direction would exonerate Campbell and Kenton counties since they are south-southwest of two monitors in Ohio that attain the standard.

Kentucky states the Commonwealth does not have the authority to address vehicle emissions as it is reserved for the federal government.

EPA Response: We agree that there are no violating monitors in these three counties. In fact, there are no ozone monitors in the three counties. However, we must designate as nonattainment not only those areas violating the NAAQS, but also those areas contributing to a nearby violation of the NAAQS. We have considered all of the technical information provided by the Commonwealth of Kentucky in our TSD and the TSD provides our full analysis supporting the inclusion of Boone, Campbell and Kenton Counties as part of the designated nonattainment area. We note that while we do consider the nonattainment boundaries of an areas that was designated nonattainment for

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the 1-hour or 1997 8-hour ozone NAAQS, that is one item that we weigh under one of the five factors and is not controlling of our decision. To the extent Kentucky is suggesting that one factor alone supports excluding one or more of these counties from the designated nonattainment area, we disagree. In applying the 5-factor analysis, we use a weight of evidence approach in which we balance the various factors to reach a decision. There are rare circumstances where one factor would weigh so heavily as to be the sole or primary basis for a decision. One example of such a case would be where a geographic feature (e.g., a mountain) prevents the transport of air pollution from an area to the violating monitor. Finally, to the extent that the Commonwealth is suggesting that we should not include the counties as part of the nonattainment area because it does not have authority to regulate "vehicle emissions," we disagree. The issue of who can regulate such emissions is not relevant to determining whether emissions from sources in an area contribute to a nearby violation of the NAAQS. Moreover, the Commonwealth does have authority to regulate vehicle emissions through programs such as inspection and maintenance and the clean fuel fleet program.

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