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CIBO - NAAQS/Dispersion Modeling Update

◆ December 8, 2015

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Outline

- > SO2 Designations and Data Requirements Rule (DRR) - Updates
- > SO2 DRR Modeling and Monitoring Options - Technical Considerations
- > PM2.5 Implementation Update
- > Ozone Implementation Update
 - ❖ Exceptional Events Rule
 - ❖ 2008 NAAQS
 - ❖ 2015 NAAQS

SO2 DRR Update

- > Per the final Rule from August, States now have to provide to EPA the list of facilities that will be evaluated under the SO2 DRR by 1/15/16.
- > The decision on what those sites will do (model or monitor) is not due until 7/1/16 to the EPA, at which time for those sites that will model a modeling protocol is due to EPA, and for those sites that will monitor a monitoring plan is due to EPA.
- > New monitors must be operational by 1/1/17, and modeling sites must have modeling analyses submitted by 1/13/17.
- > What is important is that these are the deadlines on the States for submitting information to EPA.
 - ❖ Some states we are working with on SO2 DRR are requesting issues be resolved between site/state several months in advance of the deadlines for submittal to the EPA.
 - ❖ For example, for a site in Alabama, ADEM wants the monitoring plan finalized in 4/16.

SO2 DRR Update

- > A few interesting tidbits with SO2 DRR:
 - ❖ An owner (not a CIBO member) has been very concerned about how different Virginia DEQ (Region 3 State) has been approaching the SO2 DRR as opposed to ADEM (Region 4 State).
 - ❖ This is a monster that EPA themselves created, as their guidance documents for the SO2 DRR are somewhat ambiguous, leaving much to the States interpretation.
 - ❖ Budgeting and staff availability at the agencies is also playing a role (some States are doing modeling internally under SO2 DRR, whereas others cannot from lack of manpower).
 - ❖ Too much divergence between states in implementation of a Federal Rule?
 - ❖ This is a higher level problem in lack of consistency. EPA's trend lately has seemed to be trying to allow flexibility (modeling/monitoring, etc.) - Creating inconsistencies?

SO2 DDR Update

- > Head of planning of Georgia EPD (Jim Boylan)
 - ❖ He feels pretty confident that EPA is not going to argue with many, if any, of the submittals by the states regarding modeling or monitoring.
 - ❖ In discussions with EPA, EPA themselves have indicated they don't have the resources to review in detail all of the submittals. This could lead to greater inconsistency then in how different sites are treated/handled.
- > Interesting time period is going to be between January and July 2016. With the new schedule under SO2 DRR, there is now a 6 month window where EPA might haggle with the States on which sites should be included in the SO2 DRR (after States turn in this information in January 2016).

SO2 DDR Update

- > A few rumors/tidbits related to modeling/Appendix W
 - ❖ Have heard from a few State modelers that EPA has told them, as part of regional calls, that the Modeling Emission Rates for Precursors (MERPs) for SO₂/NO_x (for PM_{2.5}) and VOC/NO_x (for ozone) will not be part of rulemaking, as EPA has previously stated, but likely issued as part of new guidance documents.
 - ❖ The same goes for the PM_{2.5} SILs and ozone SIL that EPA has also mentioned in various facets as “forthcoming”, that everything will be through guidance documents instead of rulemaking.
 - ❖ The reason given was that EPA feels they don’t have the time required to go through a rulemaking process on those items.
- > Treat all of this as rumor, but it makes sense since if EPA wants to have those pieces of information out there before finalization of Appendix W and the associated guidance, they don’t have enough time between now and spring 2016 (when Appendix W should be finalized) to go through any other rulemaking process.

SO₂ Designations and Data Requirements Rule (DRR)

**Elements based on EPA Summary
Presentation - 8/19/2015**

2010 SO2 NAAQS - Implementation - Now What?

- > Nonattainment Area designations, modeling, SIPs, etc.
- > All other areas unclassified or not designated
- > 2013 modeling and monitoring guidance
- > 5 August 2013 - 29 areas designated NAA
- > 13 May 2014 - Data Requirements Rule proposed
- > 2 March 2015 - Consent Decree (area designation schedule - certain geographies)
- > 20 March 2015 - Updated guidance in memo from EPA (Stephen Page)
- > 21 August 2015 - Data Requirements Rule finalized

2010 SO₂ NAAQS Designation Schedule

- > Nonattainment area studies are underway
- > Consent Decree requirements - by 2 July 2016 two groups of areas must be designated
 - ❖ Areas with new violations
 - ❖ Areas with sources >16,000 ton/y SO₂ emissions in 2012 or emitted >2,600 ton/y and rate of =>0.45 lbs SO₂/MMBtu

Summary of Court Order - Area Designations

First, by July 2, 2016 (16 months from the date of the court's order), the EPA must sign a notice for publication in the Federal Register that promulgates designations for remaining undesignated areas that:

(a) Based on air quality **monitoring** in the three full calendar years preceding that date have monitored violations of the NAAQS; or

(b) contain any stationary source that has not by March 2, 2015, been ``announced for retirement'' and that, according to data in the EPA's Air Markets Database, either (1) **emitted more than 16,000 tons of SO₂ in 2012**, or (2) **emitted more than 2,600 tons of SO₂ and had an annual average emission rate of 0.45 lbs. SO₂/Mmbtu or higher in 2012**.

(The March 2015 consent decree defines ``announced for retirement'' as meaning ``any stationary source in the United States with a coal-fired unit that as of January 1, 2010, had a capacity of over five (5) megawatts (MW) and that has announced it will cease burning coal at that unit through a company public announcement, public utilities commission filing, consent decree, public legal settlement, final state or federal permit filing, or other similar means of communication.'')

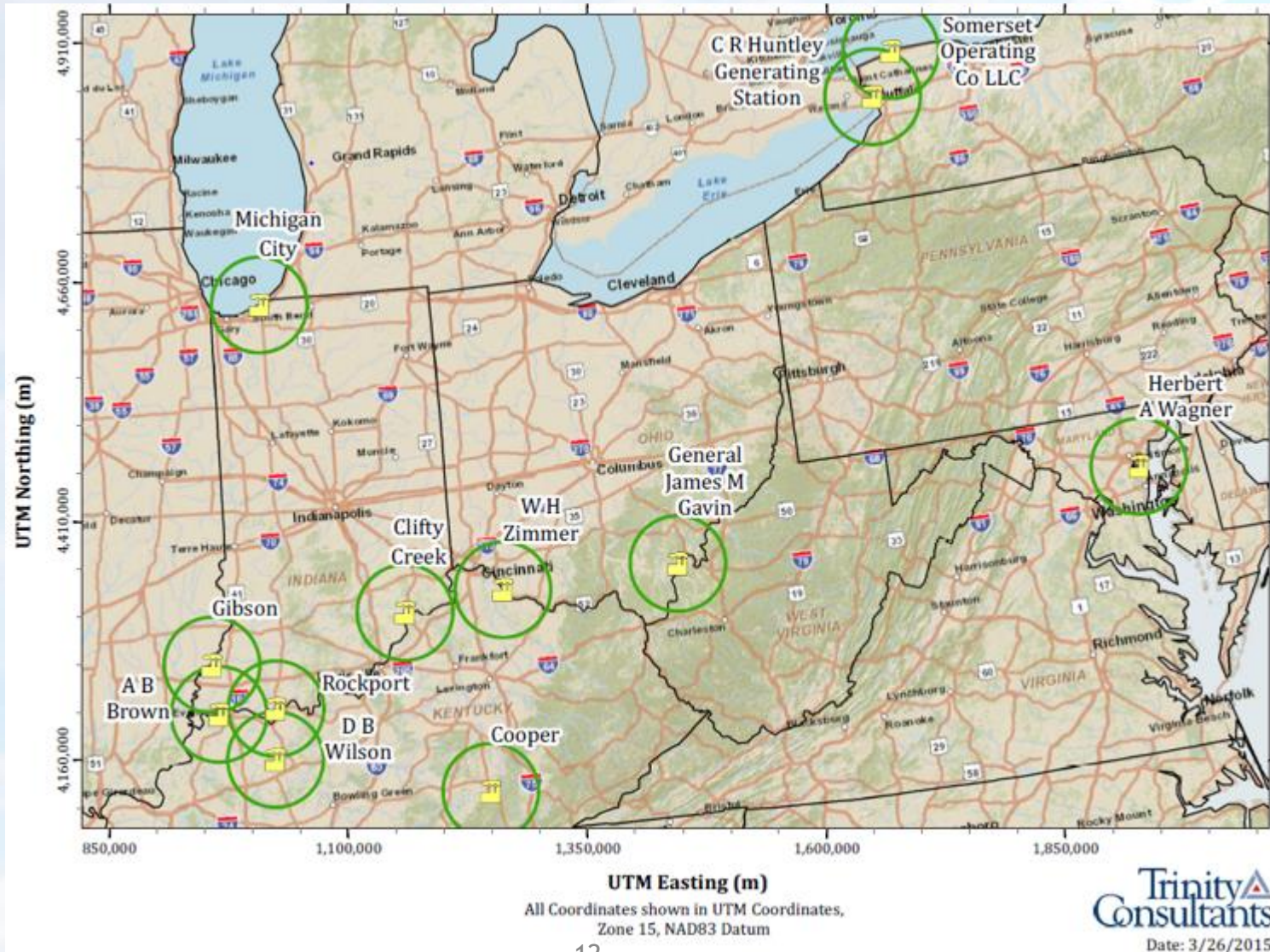
Summary of Court Order - Area Designations (cont.)

Second, by December 31, 2017, the EPA must sign such a notice promulgating designations for remaining undesignated areas in which, by January 1, 2017, states have not installed and begun operating a new SO₂ monitoring network meeting EPA's specifications referenced in this rulemaking.

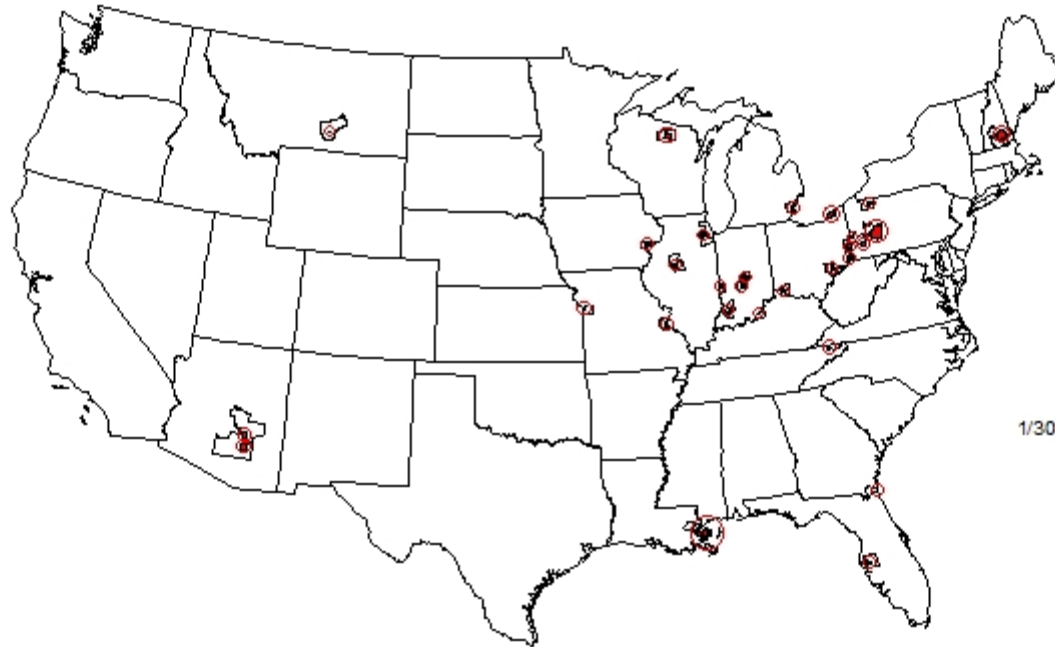
Finally, by December 31, 2020, the EPA must sign a notice promulgating designations for all remaining undesignated areas.

The EPA notes that the schedule imposed by the court will allow at least the latter two stages of designations to be informed and benefited by the additional information that is timely obtained pursuant to this final[DRR]rule, as appropriate.

Who is Affected by Consent Decree? Example from MidWest U.S.




SO2 Nonattainment Areas (2010 Standard)



1/30/2015

Nonattainment areas are indicated by color.
When only a portion of a county is shown in color,
it indicates that only that part of the county is within
a nonattainment area boundary.

 SO2 Nonattainment Areas

Source Applicability Threshold (Final DRR)

- > Source applicability threshold is 2,000 tons per year (tpy) of actual SO₂ emissions in most recent year for which data are available.
 - ❖ Identifies priority sources.
 - ❖ No separate threshold based on metro area population.
 - ❖ Data submitted annually pursuant to requirements of acid rain program and/or Air Emissions Reporting Rule may be used for evaluating applicability.
- > Based on 2011 emissions data, a threshold of 2,000 tpy accounts for *approximately* 400 sources and covers ~90% of U.S. SO₂ emissions.
 - ❖ Based on more recent data, it is estimated that about 10% fewer sources now exceed this threshold.

40 CFR 51.1202 - Applicability

This subpart applies to any air agency in whose jurisdiction is located one or more applicable sources of SO₂ emissions that have annual actual SO₂ emissions of 2,000 tons or more; **or in whose jurisdiction is located one or more sources of SO₂ emissions that have been identified by the air agency or by the EPA Regional Administrator as requiring further air quality characterization.** For the purposes of this subpart, the subject air agency shall identify applicable sources of SO₂ based on the most recently available annual SO₂ emissions data for such sources.

Federally Enforceable Emission Limits

- > Air agencies can avoid the requirement for source characterization by working with sources to establish permanent and enforceable emission limitations with compliance by January 13, 2017 that provide for annual emissions to remain below 2,000 tpy. [See 40 CFR 51.1202(b)]
- > SO₂ emission limits can be made federally enforceable through various mechanisms (e.g. through a source-specific SIP revision, a minor NSR permit, consent decree, etc.). Not all approaches would require a SIP revision.
- > The air agency can also avoid air quality characterization for a source if the air agency can provide documentation that the affected source has permanently shut down operations prior to January 13, 2017. [See 40 CFR 51.1202(b)]

Who is Potentially Affected by DRR?



Sources > 2000 tons SO₂/year (~400 plants)

Detailed NAAQS Update PM_{2.5}

2012 PM_{2.5} NAAQS

- > Final PM_{2.5} NAAQS rule signed December 14, 2012. Revised the primary annual PM_{2.5} standard to 12 µg/m³
- > Retained secondary annual PM_{2.5} standard of 15 µg/m³ and 24-hr PM_{2.5} standards of 35 µg/m³ (and 24-hr PM₁₀ standard of 150 µg/m³)
- > January 2013 DC Circuit decision regarding litigation on 2007 PM_{2.5} implementation rule and 2008 NSR rule for PM_{2.5}. Court held that EPA must implement PM_{2.5} NAAQS under subpart 4
- > December 18, 2014 -Administrator signed final area designations for most areas of the country (based on 2011-2013 data). Final designations include 9 nonattainment, plus several unclassifiable area
- > Effective date for designations was April 15, 2015 (90 days)
 - ❖ Supplemental final signed March 31, 2015 changed designation of several areas to attainment based on early-certified 2014 data showing attainment

PM-2.5 Nonattainment Areas (2012 Standard)



10/01/2015

Nonattainment areas are indicated by color.
When only a portion of a county is shown in color,
it indicates that only that part of the county is within
a nonattainment area boundary.

2012 PM_{2.5} Implementation Schedule

- > Implementation schedule for initial round of designations for 2012 PM_{2.5} NAAQS:
 - ❖ December 2014: Initial area designations (all nonattainment areas classified as Moderate initially)
 - ❖ April 2015: Initial area designations become effective
 - ❖ October 2016: Moderate area SIPs due (18 months from date of designations)
 - ❖ December 2021: Moderate area attainment date (end of 6th calendar year after designations)
 - ❖ December 2025: Serious area attainment date (end of 10th calendar year after designations)

Proposed 2012 PM_{2.5} NAAQS Implementation Rule

- > The proposal (80FR 15340):
 - ❖ Takes comment on approaches to clarify nonattainment implementation requirements according to subpart 4 of part D of Title I of the CAA, consistent with January 2013 D.C. Circuit Court decision
 - ❖ Would apply to all 2012 PM_{2.5} NAAQS nonattainment areas, areas designated nonattainment for the 1997 and 2006 PM_{2.5} NAAQS, and any additional areas designated nonattainment for these or future revised PM_{2.5} NAAQS
 - ❖ Addresses how subpart 4 court decision affects nonattainment NSR permitting requirements (e.g., with respect to major source threshold, precursors, etc.)

Proposed 2012 PM_{2.5} NAAQS Implementation Rule

- > Key topics addressed in the proposed rule:
 - ❖ Classifications, attainment plan due dates, attainment dates, reclassifications
 - ❖ **Changes to PM_{2.5} precursor policy**
 - ❖ Moderate area attainment plan requirements
 - ❖ Serious area attainment plan requirements
 - ❖ Attainment demonstrations and unmonitored areas
 - ❖ RFP and quantitative milestones
 - ❖ Nonattainment NSR program requirements
 - ❖ Revocation of the 1997 primary annual PM_{2.5} NAAQS

New PM_{2.5} Precursor Policy

- > January 2013 DC Circuit decision: all precursors (SO₂, NO_x, VOC, and ammonia) are “in” for purposes of control requirements
 - ❖ Cannot have initial presumptions that control measures are not required to be evaluated for certain precursors, as was included in 2007 implementation rules and 2008 NSR rule
- > Proposal interprets the statute to mean that states must consider control measures for all four PM_{2.5} precursors from all stationary, mobile and area sources
 - ❖ This is the statutory interpretation that has been applied for PM₁₀
 - ❖ Subpart 4 section 189(e) provides a specific exception for major stationary sources of precursors where EPA determines that such sources do not “contribute significantly” to PM_{2.5} levels which exceed the standard in the area; those major sources would be exempt from “control requirements” (which EPA interprets to include requirements such as RACM, BACM, and nonattainment NSR requirements such as LAER and offsets)
- > Proposal includes options that would allow a state plan to control emissions only of certain precursors where they demonstrated that the remaining precursors do not significantly contribute to nonattainment
 - ❖ Proposal also includes technical criteria for states to apply for evaluating precursors and demonstrating that a given precursor does not “contribute significantly” to ambient PM_{2.5} concentrations in an area
 - ❖ Separately addresses the lack of Significant Emissions Rates (SERs) for certain PM_{2.5} precursors for purposes of nonattainment NSR

New PM_{2.5} Precursor Policy (cont.)

- > Proposed approaches for optional air agency demonstration to show that a particular precursor should be exempt from evaluation for potential control requirements in a given PM_{2.5} nonattainment area plan:
 - ❖ Two independent analyses: A) RACM/RACT analysis will determine which precursors must be controlled for expeditious attainment (i.e., for attainment planning); and B) a separate analysis would be required to determine if major stationary sources of a particular precursor can be exempted from nonattainment NSR requirements per section 189(e)
 - ❖ A single technical analysis could be conducted to demonstrate that emissions from all sources of a precursor do not significantly contribute to PM_{2.5} levels that exceed the standard. Control requirements for the precursor therefore would not be required for attainment planning or for nonattainment NSR
 - ❖ The RACM/RACT analysis will determine which precursors would not need to be controlled for expeditious attainment of the area (similar to option 1). This analysis then would be deemed to meet the section 189(e) requirement, and would define the “initial” set of precursors covered under the nonattainment NSR program. (An additional 189(e) analysis focused on contributions of another precursor emitted from major stationary sources could also be conducted by the state.)
- > Proposed options for technical analysis:
 - ❖ Total contribution of precursor emissions to PM_{2.5} concentration
 - ❖ Sensitivity of PM_{2.5} concentration to increases or decreases of precursor

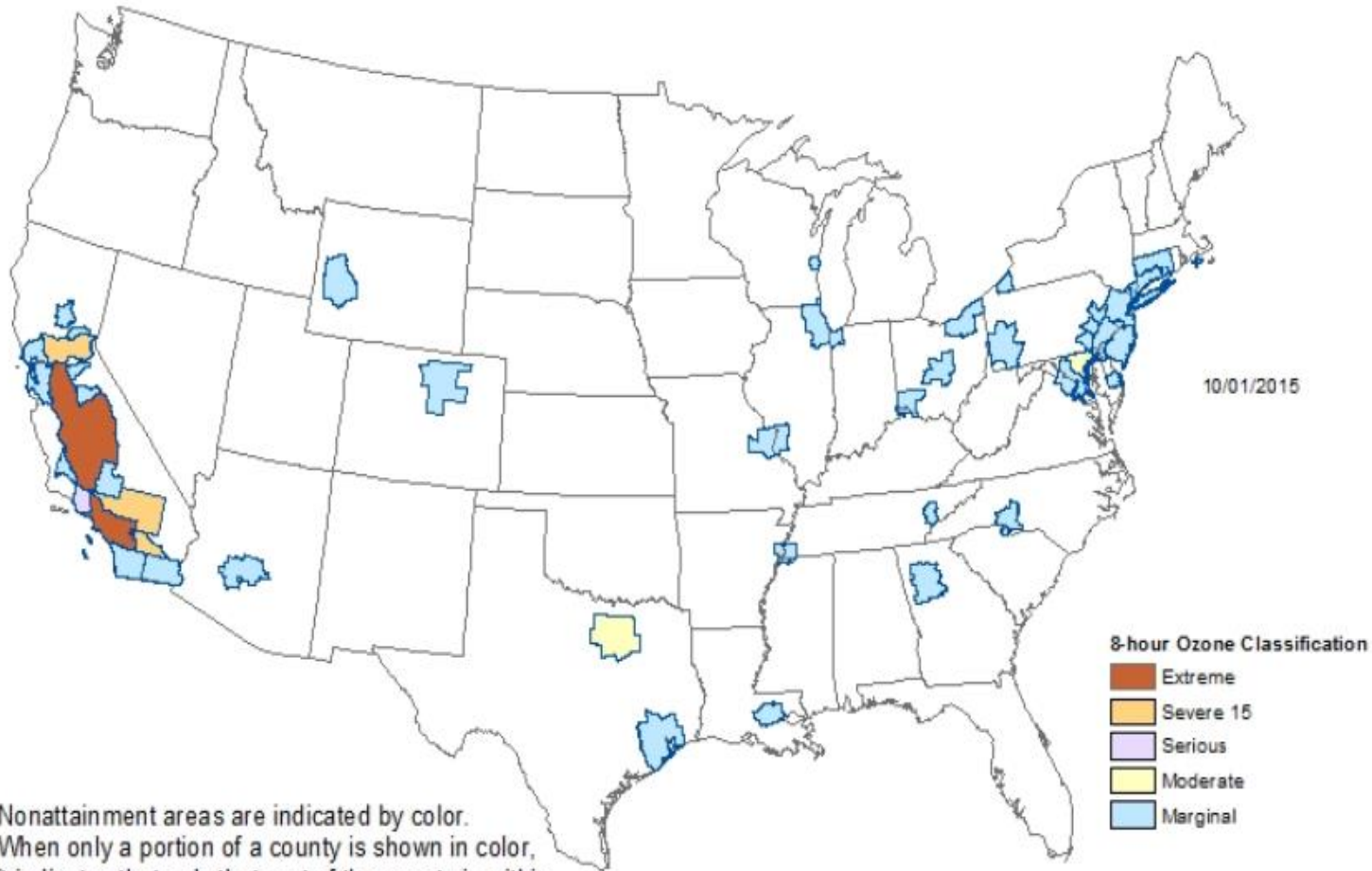
Recent Ozone Actions/Issues

- > Ozone (2008) NAAQS implementation plan
- > Ozone (2015) NAAQS implementation plans

2008 Ozone NAAQS

- > Revised primary 8-hour Ozone NAAQS in 2008 (75 ppb)
- > Final 2008 Ozone NAAQS Classifications Rule published May 21, 2012 (77 FR 30160)
- > Established air quality thresholds for each ozone nonattainment area classification, attainment deadlines and revocation of the 1997 Ozone standards for transportation conformity
 - ❖ Area designations for 2008 Ozone NAAQS effective July 20, 2012. 46 nonattainment areas, 1 unclassifiable area as follows: 36 Marginal; 3 Moderate; 2 Serious; 3 Severe; 2 Extreme

8-Hour Ozone Nonattainment Areas (2008 Standard)



Nonattainment areas are indicated by color. When only a portion of a county is shown in color, it indicates that only that part of the county is within a nonattainment area boundary.

2008 Ozone NAAQS (NAAQS - 75 ppb)

- > 2008 Ozone NAAQS Implementation Rule
 - ❖ Proposal published 6/6/13 (78FR 34178) - See NSR section beginning on Page 34216
 - ◆ Proposal addresses ozone SIP requirements for ozone attainment areas as well as those not meeting any one or more of the following: pre-1997 1-hour NAAQS, 1997 NAAQS, and the current 2008 NAAQS
 - ◆ EPA's general plan is to encourage states to adopt the most stringent SIP limitations based on the highest level of ozone classification (moderate, serious, etc.)
 - ❖ March 6, 2015 (80FR 12264) - Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements - See NSR section beginning on Page 12286
 - ❖ State NA Ozone SIPs were due in mid-2015

Final 2008 Ozone NAAQS Implementation Rule

- > Provides a template for implementation of the 2015 rule
- > Establishes due dates for attainment plans and clarifies attainment dates for each nonattainment area according to its classification (established based on air quality thresholds)
- > Provides guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas .
For example:
 - ❖ A non-attainment area must conduct a new RACT analysis even for sources that already have RACT limits
 - ❖ NO_x reductions cannot be substituted for VOC reductions in new non-attainment areas, but can for existing non-attainment areas
 - ❖ VOC reductions will be required even if they won't help an area attain the standard (EPA says statutory language is clear)

2008 Ozone NAAQS (NAAQS - 75 ppb)

- > 40 CFR 51.165 Permit requirements.
- > (a)(11) The plan shall require that in meeting the emissions offset requirements of paragraph (a)(3) of this section, the emissions offsets obtained shall be for the same regulated NSR pollutant **unless interprecursor offsetting** is permitted for a particular pollutant as specified in this paragraph.
 - ❖ (i) The plan may allow the offset requirement in paragraph (a)(3) of this section for emissions of the ozone precursors NO_x and VOC to be satisfied by offsetting reductions in emissions of either of those precursors, if all other requirements for such offsets are also satisfied.
 - ❖ (ii) The plan may allow the offset requirements in paragraph (a)(3) of this section for direct PM_{2.5} emissions or emissions of precursors of PM_{2.5} to be satisfied by offsetting reductions in direct PM_{2.5} emissions or emissions of any PM_{2.5} precursor identified under paragraph (a)(1)(xxxvii)(C) - [SO₂, NO_x, etc.] of this section if such offsets comply with the **interprecursor trading** hierarchy and ratio established in the approved plan for a particular nonattainment area.

2008 Ozone NAAQS - Proposed Transitional NSR Permitting Requirements

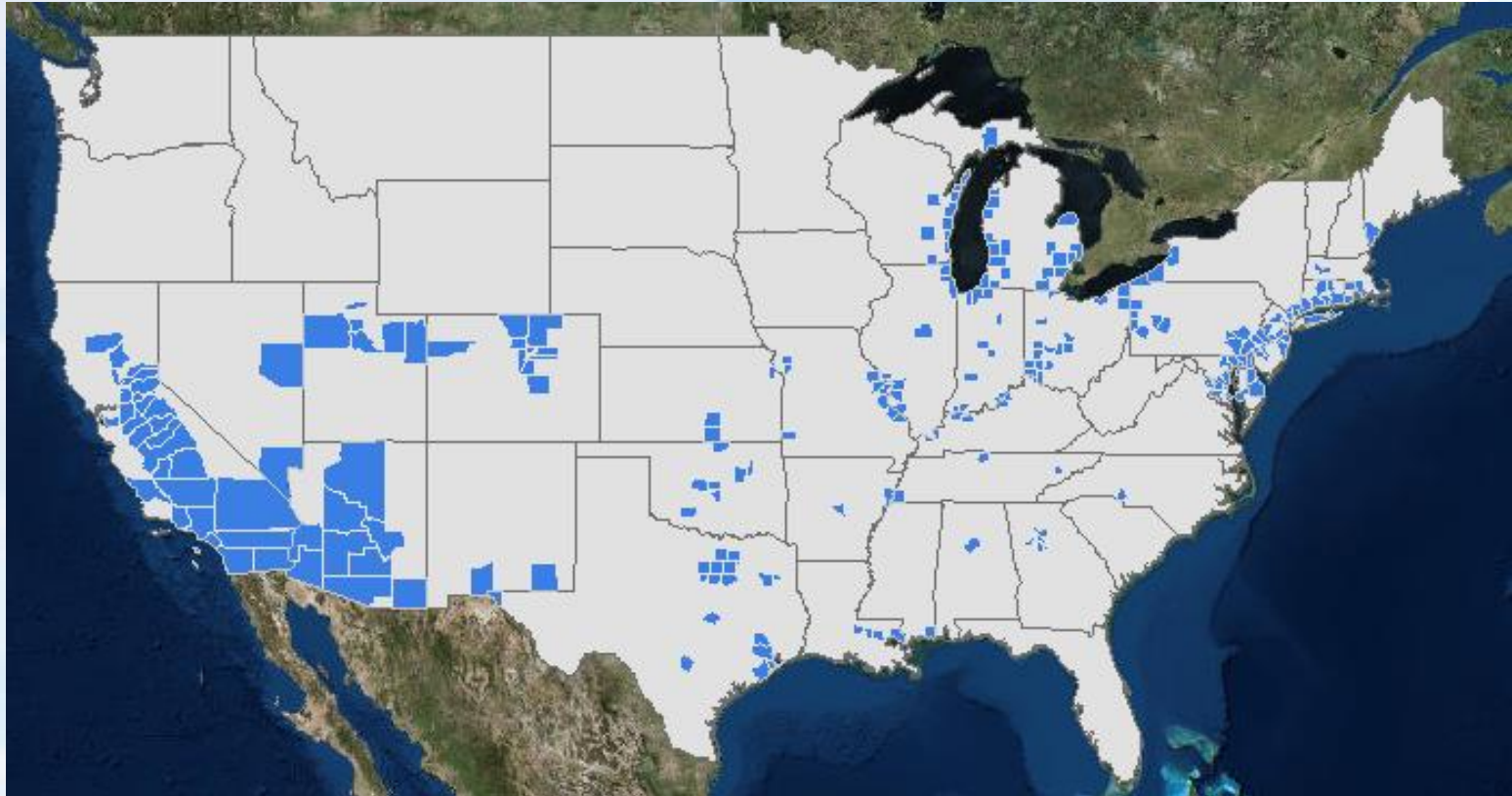
TABLE 2—2008 OZONE NAAQS TRANSITION OBLIGATIONS

Designation for 2008 NAAQS	Designation for previous NAAQS (at time of revocation)	Proposed NSR/PSD obligations	Other proposed transition obligations
1. Attainment	Attainment/Maintenance	PSD remains in effect	<ul style="list-style-type: none"> —Area remains subject to existing section 175A maintenance plan for the previous ozone NAAQS and requirements already in the SIP, subject to revision consistent with sections 110(l) and 193. —Section 175A maintenance plan satisfies maintenance requirement under section 110(a)(1).
2. Attainment	Nonattainment for 1997 ozone NAAQS only; or nonattainment for 1997 and 1-hour NAAQS.	Nonattainment NSR in effect until revocation of the 1997 ozone NAAQS; then PSD applies.	<ul style="list-style-type: none"> —Area remains subject to measures to meet nonattainment requirements already in its adopted SIP. Removable only with a section 110(l) demonstration and a section 193 demonstration if applicable. —Two alternatives to address section 110(a)(1) maintenance provision: (a) Area's approved PSD SIP satisfies section 110(a)(1) maintenance provision, or (b) additional maintenance showing under section 110(a)(1).
3. Nonattainment	Attainment/Maintenance	Nonattainment NSR applies based on 2008 ozone NAAQS classification.	<ul style="list-style-type: none"> —Area remains subject to existing section 175A maintenance plan for the previous NAAQS and requirements already in the SIP, subject to revision consistent with sections 110(l) and 193.
4. Nonattainment	Nonattainment for 1997 ozone NAAQS only; or nonattainment for 1997 and 1-hour ozone NAAQS.	Nonattainment NSR applies based on highest applicable classification.	<ul style="list-style-type: none"> —Area subject to all applicable anti-backsliding requirements for 1-hr and/or 1997 NAAQS. —Anti-backsliding obligations lifted when the area either is redesignated to attainment for the 2008 ozone NAAQS, or the EPA approves a redesignation substitute for the revoked 1-hour or 1997 NAAQS —EPA solicits comment on additional options for lifting anti-backsliding obligations.

Final 2015 Ozone NAAQS

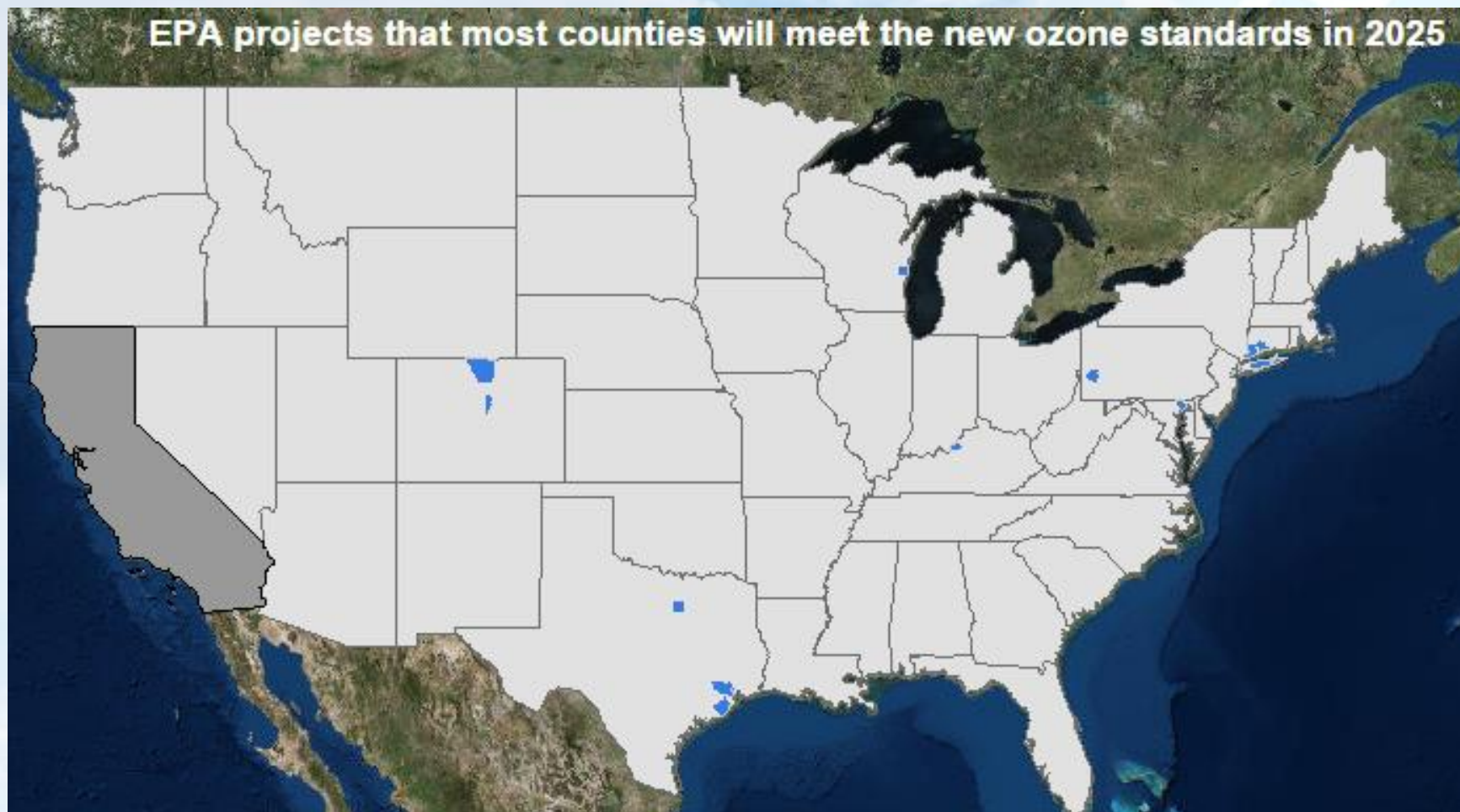
- > 70 ppb based on fourth-highest maximum daily 8-hour concentration per year, averaged over three years
- > EPA Implementation memo
 - ❖ Guidance available to agencies;
 - ❖ Ensuring major source permitting is effective and efficient;
 - ❖ Designating areas and background ozone;
 - ❖ Interstate ozone transport;
 - ❖ CA's challenges
 - ❖ Managing monitoring networks;
 - ❖ Ozone Advance Program
- > Grandfathering provision for certain preconstruction permits
- > EPA's plans with respect to the Exceptional Events rule
- > Modernization of monitoring requirements
- > Public engagement items - updates to ozone monitoring season and AQI

Current Compliance with Revised Ozone NAAQS



2012-2014 data shows 241 counties in violation of the 2015 revised ozone standard

EPA Projected Compliance with Ozone NAAQS



2015 Ozone NAAQS (1 of 8)

Implementation items

- > Guidance/rules that remain applicable to revised NAAQS
 - ❖ Guidance on Infrastructure SIP Elements under CAA 110(a)(1) and 110(a)(2) - September 13, 2013
 - ❖ Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5} and Regional Haze - December 2014
 - ❖ Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze - April 2007
 - ❖ Draft Emissions Inventory Guidance for Implementation of Ozone [Particulate Matter] NAAQS and Regional Haze Regulations - April 2014
 - ❖ Revisions to the General Conformity Regulations and guidance
 - ❖ Transportation Conformity Rule
 - ❖ Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas - February 2012

2015 Ozone NAAQS (2 of 8)

Implementation items

- > Expected updates to implementation guidance/rules
 - ❖ Rulemaking to establish NA classification thresholds, incorporate SIP due dates into EPA regulations
 - ❖ Rulemaking to revoke 2008 ozone NAAQS effective 1 year after initial area designations and plan for transitioning from 2008 to 2015 standards
 - ❖ Appendix W (GAQM) changes
 - ◆ Last updated in 2005 - finalization expected in 2016
 - ❖ New designations guidance anticipated early 2016

2015 Ozone NAAQS (3 of 8)

Implementation items

- > Background Ozone - Exceptional Events Rule (EER)
 - ❖ Concern over violations in ozone standard due to background ozone
 - ❖ Likely issue only at higher elevation sites in western U.S. or locations along the U.S.-Mexican border
 - ❖ EPA to work closely with states to ensure regulatory relief is provided in recognition of background ozone
 - ❖ CAA provides for exclusion of emission data showing exceedances of standards when this is caused by natural events (EER)
 - ❖ “Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone Concentrations” (Draft - 11/2015)
 - ◆ www.epa.gov/sites/production/files/2015-11/documents/o3_draft_wildfire_guidance.pdf

Exceptional Event

- > The CAA includes four requirements that, collectively, define an exceptional event:
 - ❖ The event affected air quality.
 - ❖ The event was not reasonably controllable or preventable.
 - ❖ The event was caused by human activity that is unlikely to recur at a particular location or was a natural event.
 - ❖ There exists a clear causal relationship between the specific event and the monitored exceedance.

Exceptional Events Rule (EER) Amendments (40 CFR 50.14)

- > The revised EER (40 CFR 50.14(c)(3)(iv)) requires that demonstrations submitted to the EPA include the following elements:
 - ❖ A narrative conceptual model;
 - ❖ A demonstration that the event was both not reasonably controllable and not reasonably preventable;
 - ❖ A demonstration that the event was a human activity that is unlikely to recur at a particular location or was a natural event; and
 - ❖ A demonstration that the event affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation.
- > Demonstrations prepared by air agencies and submitted to the EPA must address each of these rule elements.

Proposed Exceptional Events Rule Amendments (80FR 72840)

- > The proposed revisions to the Exceptional Events Rule addresses issues raised by stakeholders since promulgation of the 2007 rule and are intended to provide clarity and increase the administrative efficiency of the Exceptional Events Rule criteria and process.
- > Exceptional events include natural events such as wildfires, stratospheric ozone intrusions and volcanic and seismic activities.
- > Highlights of the proposal include:
 - ❖ More clearly defining the scope of the Exceptional Events Rule to apply only to certain types of regulatory actions,
 - ❖ Revising the rule language to more closely align with the language in the CAA,
 - ❖ Relying on SIP controls to satisfy the “not reasonably controllable or preventable” criterion provided the EPA has approved the SIP within the last 5 years,
 - ❖ Clarifying the analyses, content and organization for exceptional events demonstrations,
 - ❖ Requiring an initial notification by the state to the EPA of a potential exceptional event request,
 - ❖ Removing the specific deadlines that apply in situations other than initial area designations following promulgation of a new or revised NAAQS, and
 - ❖ Clarifying fire-related definitions and demonstration components.
- > The EPA intends to finalize these rule revisions before October 1, 2016, which is the date by which states, and any tribes that wish to do so, are required to submit their initial designation recommendations for the 2015 National Ambient Air Quality Standards (NAAQS) for ozone.

2015 Ozone NAAQS (4 of 8)

Implementation items

> Interstate Ozone Transport

- ❖ “Good Neighbor Provision” of the CAA
- ❖ Good Neighbor/Transport SIPs due within 3 years of new NAAQS (10/2018)
- ❖ Cross-State Air Pollution Rule (CSAPR) to address Good Neighbor Provision through 4-step process
 - ◆ Identify “problem” downwind receptors
 - ◆ Determine “contributing” upwind states
 - ◆ Identify upwind emissions that “significantly” contribute to NAAQS issues
 - ◆ Adopt SIPs or FIPs that eliminate identified significant upwind emissions
- ❖ EPA to provide timely information regarding Steps 1 and 2 in fall 2016 through a Notice of Data Availability (NODA) process

2015 Ozone NAAQS (5 of 8)

Implementation items

- > Special situations - California
 - ❖ Unique challenges due to terrain and climate
 - ❖ South Coast and San Joaquin Valley “Extreme” for 1979, 1997 and 2008 standards
 - ❖ CA challenged by high levels on NO_x from freight movement and transportation (mobile sources)
 - ❖ Several aggressive regulatory and non-regulatory programs to control mobile-source emissions already in place
 - ❖ Both CA and EPA recognize that transformational change likely needed
 - ❖ Possible transition to largely zero/near-zero vehicle technologies along with significant turnover of legacy fleet vehicles

2015 Ozone NAAQS (6 of 8)

Implementation items

- > Ozone monitoring network changes
 - ❖ Monitoring season period extended in 32 states and District of Columbia starting in 2017
 - ❖ Modernization and streamlining of network requirements for Photochemical Assessment Monitoring Stations (PAMS)
 - ◆ Better geographic distribution of PAMS sites
 - ◆ Moderate (and above) NA areas and states in Ozone Transport Region required to establish Enhanced Monitoring Plans (EMPs)
 - within 2 years of designations or by 10/1/19.
 - ❖ New procedure for determining daily maximum 8-hr concentrations to avoid “double counting” of overlapping daily max 8-hr averages

2015 Ozone NAAQS (7 of 8)

Implementation items

- > Grandfathering permitting provision
 - ❖ Allows certain pending PSD permit applications to use ozone standards in effect during time of submittal if
 - ◆ Reviewing authority has formally determined that the application is complete on or before signature date of final rule
 - ◆ First public notice of the draft permit or preliminary determination has been published before effective date of the revised NAAQS

2015 Ozone NAAQS (8 of 8)

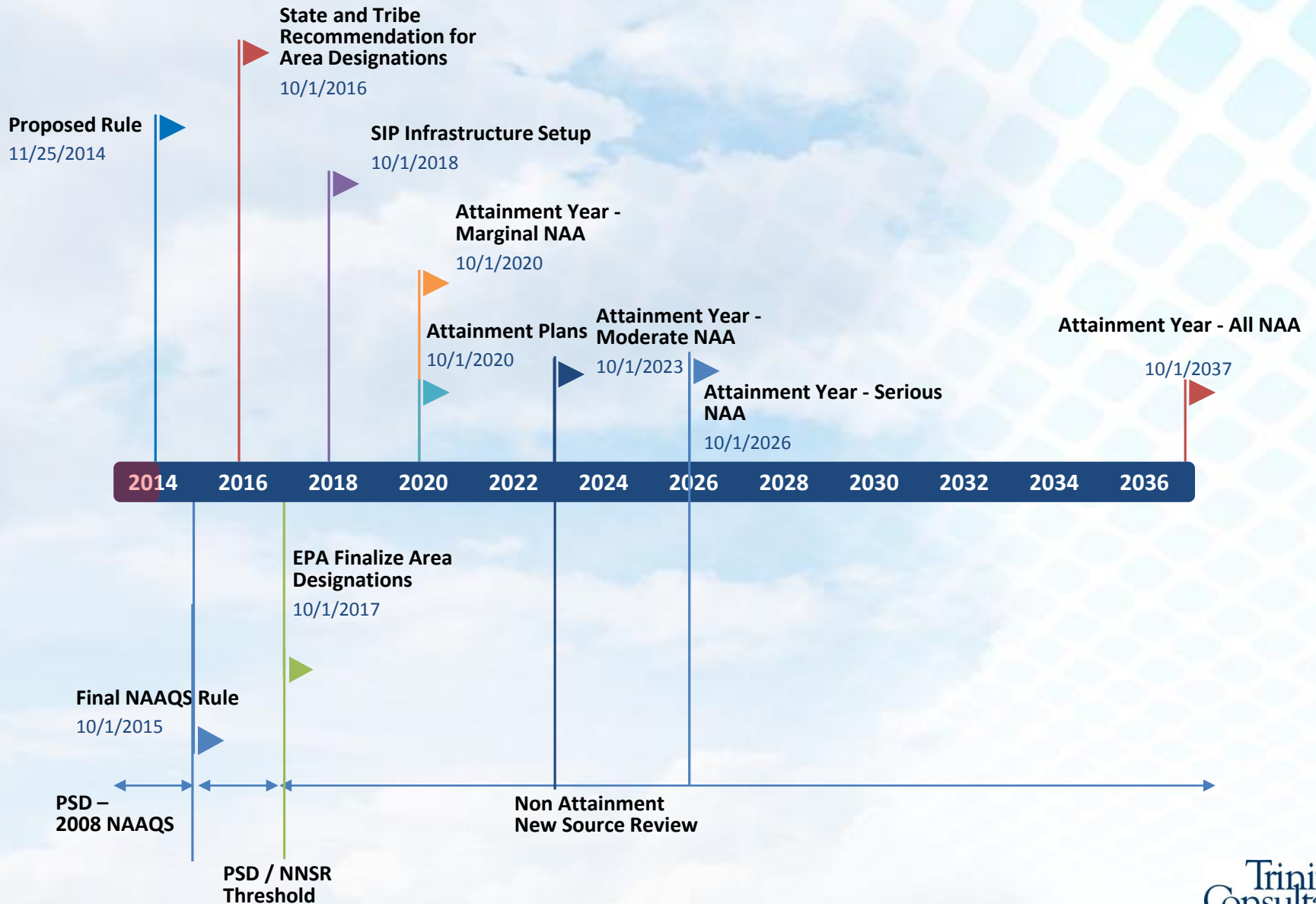
Implementation items

- > Opportunity for Multi-Pollutant Planning
- > Ozone Advance Program
 - ❖ Encourages expeditious emissions reductions in attainment areas to help continue to meet NAAQS
 - ❖ Areas currently not meeting 2015 NAAQS can participate until final area designations (2017)
- > Change the Air Quality Index so that the primary NAAQS equals 100 on the index

AQI Category	Index values	Current Breakpoints (2008 AQI) (ppb, 8-hour avg)	Proposed Breakpoints (ppb, 8-hour avg)
Good	0 - 50	0 - 59	0 - (49 to 54)
Moderate	51 - 100	60 - 75	(50 - 55) - (65 to 70)
Unhealthy for Sensitive Groups	101 - 150	76 - 95	(66 to 71) - 85
Unhealthy	151 - 200	96 - 115	86 - 105

Timeline of the New Ozone NAAQS and Implications

Final Rule Timeline



The Timeline (1 of 2)

- > Anticipated schedule key dates - Designations
 - ❖ **October 1, 2016** - States/Tribal Areas provide designation recommendations to EPA
 - ❖ **June 1, 2017** - EPA responses to designation recommendations
 - ❖ **October 1, 2017** - EPA issues final area designations (likely based on 2014-2016 monitoring data)

The Timeline (2 of 2)

- > Anticipated schedule key dates -
Permitting
 - ❖ **October 1, 2015** - Grandfathering provision for PSD permitting projects in progress
 - ❖ **December 28, 2015** - Effective date of the 2015 Ozone NAAQS
 - ❖ **October 1, 2017** - PSD vs. Nonattainment New Source Review permitting

PSD vs Nonattainment NSR Permitting?

- > A PSD permit issued **before** an area's designation date of October 1, 2017, should remain effective
 - ❖ www2.epa.gov/sites/production/files/2015-07/documents/extend14.pdf
 - ◆ No 18 month PSD permit construction commencement extensions granted for pollutants that are newly designated to nonattainment
 - ◆ Careful consultation with permitting authority important
 - ❖ **It may be time to dust off those project plans**

Grandfathering Provisions for the New Ozone NAAQS Proposal

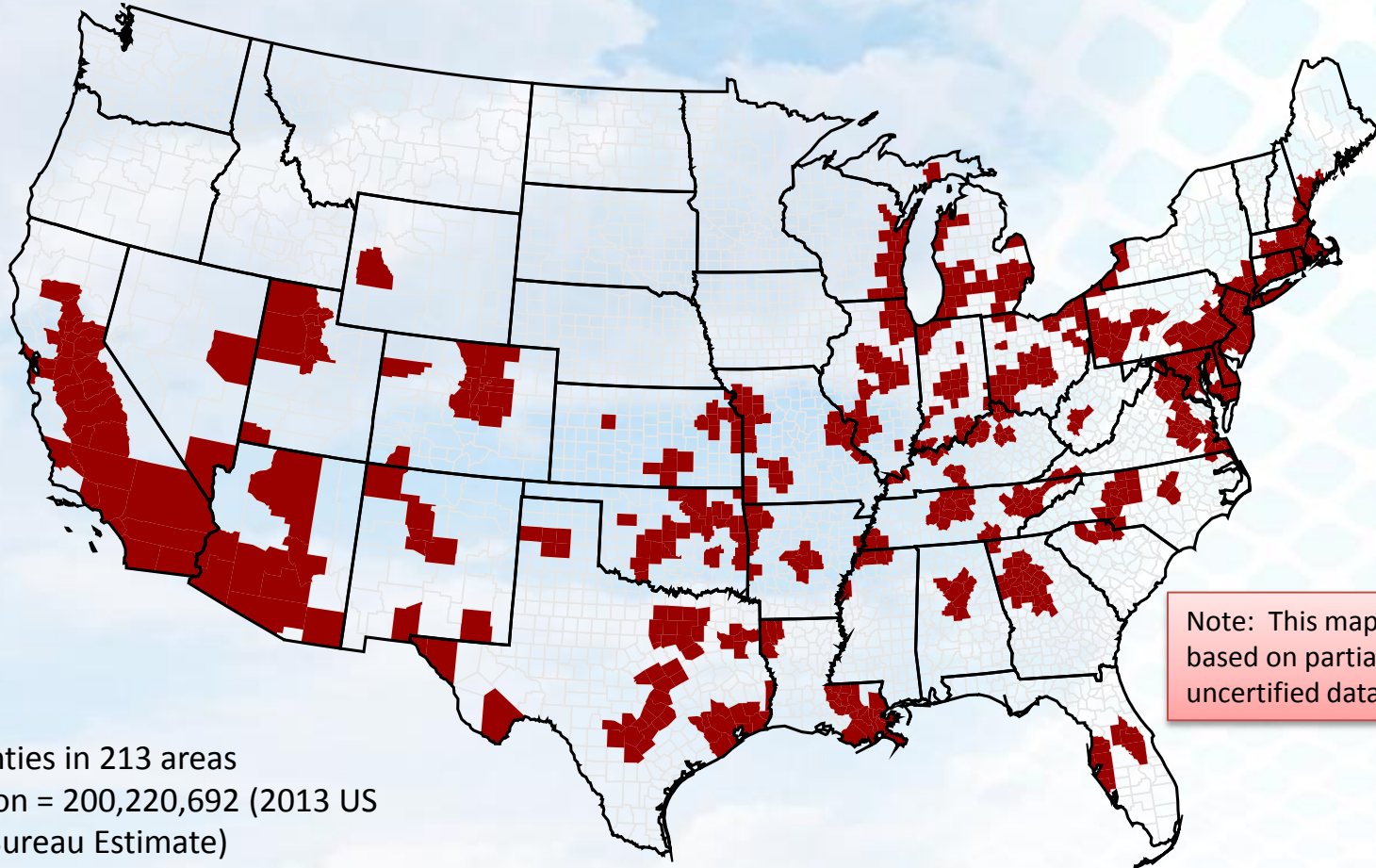
- > EPA has finalized a grandfathering provision for pending PSD permits
 - ❖ Similar to grandfathering provisions for PM_{2.5} NAAQS effective in 2013
- > Grandfathering applicable to:
 - ❖ Facilities that have received a completeness letter from the state agency for their PSD permit application as of October 1, 2015
 - ❖ A public notice for a draft permit or preliminary determination has been published prior to the effective date of the new ozone standard (December 28, 2015)
 - ❖ Timing is critical!

EPA Policy Regarding NAAQS Implementation for PSD Permitting

- > 1-hr NO₂ NAAQS in 2010 caused quite a stir
- > *April 1, 2010 Memo - Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised NAAQS*
 - ❖ From OAQPS to the EPA Regions
 - ❖ Formalized that applicants were required to address new promulgated NAAQS as part of the application process - if a new or revised NAAQS became effective prior to the issuance date of a final PSD permit, applicant required to address those new or revised NAAQS
 - ❖ Only exception - if grandfathering provisions included in the NAAQS rulemaking

Monitored Areas Not Meeting 70 ppb

As of 5/17/2014; Based on preliminary 2011-2013 data accessed from <http://www.epa.gov/airtrends/> and <http://www.epa.gov/airdata/> on 6/2/2014



Note: This map is based on partially uncertified data

718 counties in 213 areas
Population = 200,220,692 (2013 US
Census Bureau Estimate)

23 percent of US counties
63 percent of US population