

# **Clean Air Updates: NAAQS and Other Implementation- Related Topics**

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# Remember!

- The presenter is just the messenger!



- You don't shoot the messenger!

# Anticipated NAAQS Implementation Milestones

(updated September 2012)

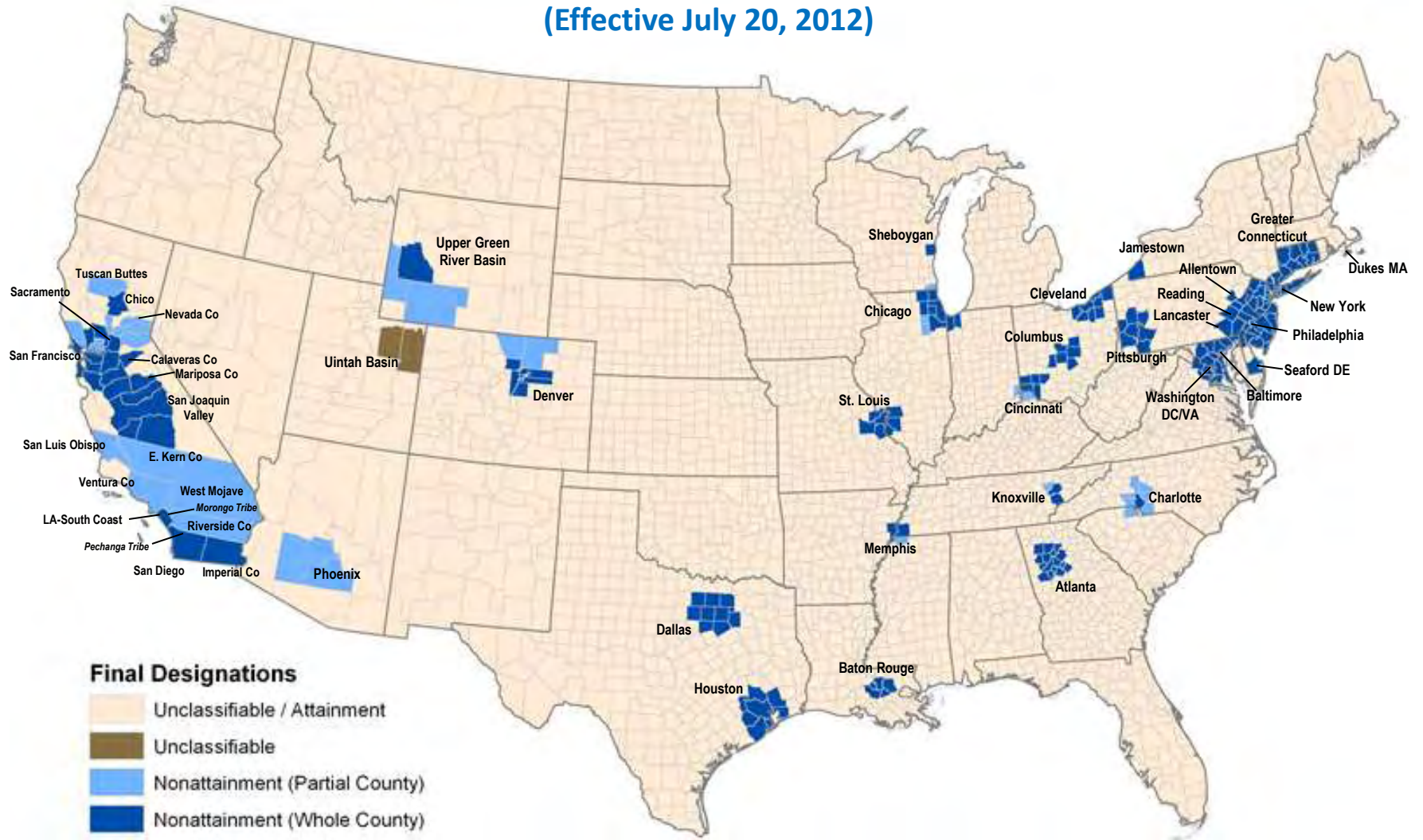
| Pollutant                 | Final NAAQS Date (or Projection) | Infrastructure SIP Due | Designations Effective | Attainment Demonstration Due | Attainment Date |
|---------------------------|----------------------------------|------------------------|------------------------|------------------------------|-----------------|
| PM <sub>2.5</sub> (2006)  | Oct 2006                         | Oct 2009               | Dec 2009               | Dec 2012                     | Dec 2014/2019   |
| Pb                        | Oct 2008                         | Oct 2011               | Dec 2010/2011          | June 2012/2013               | Dec 2015/2016   |
| NO <sub>2</sub> (primary) | Jan 2010                         | Jan 2013               | Feb 2012               | none                         | none            |
| SO <sub>2</sub> (primary) | June 2010                        | June 2013              | TBD                    | TBD                          | TBD             |
| Ozone (2008)              | Mar 2008                         | Mar 2011               | July 2012              | 2015                         | 2015/2032       |
| PM (current review)       | Dec 2012                         | Dec 2015               | Early 2015             | 2018                         | 2020/2025       |
| Ozone (current review)    | 2014                             | 2017                   | 2016                   | 2019                         | 2019/2036       |

# 2008 Ozone NAAQS Designations and Implementation

- Final Area Designations
  - 46 areas designated nonattainment including 2 separate tribal areas (This includes the 5-parish Baton Rouge Area)
    - Only 3 had never before been designated nonattainment for ozone
  - Designations effective July 20, 2012 (77 FR 30088)
- Ozone Designations Petitions
  - Received 30 petitions for reconsideration
    - 6 Nonattainment Areas: Atlanta, GA; Charlotte, NC-SC; Chicago-Naperville, IL-IN-WI, Dallas-Fort Worth, TX; Knoxville, TN; Memphis, TN-AR-MS
    - 1 Unclassifiable Area: Uinta Basin, UT
    - 15 Attainment Areas (in 8 states) - Petitioner requesting EPA designate these areas nonattainment based on 2011 rather than 2010 air quality data
  - 16 petitions for review filed with the court

# Nonattainment Areas for 208 Ozone NAAQS

(Effective July 20, 2012)



## Notes:

EPA has not designated as nonattainment any areas outside the Continental US.

# 2008 Ozone NAAQS Designations and Implementation (cont.)

- 2008 Ozone NAAQS Classifications Rule
  - Signed April 30, 2012, effective July 20, 2012 (77FR30160)
  - Established classification thresholds and end-of-year attainment dates
  - Reclassified 6 areas in California that had previously requested bump-up for 1997 NAAQS
  - Revoked the 1997 standard, effective July 20, 2013, only for purposes of transportation conformity
- 2008 Ozone NAAQS SIP Requirements Rule
  - Rule and guidance addressing SIP requirements under Subpart 2
  - Current schedule under development

# Widespread Use of Onboard Refueling Vapor Recovery and Stage II Waiver

- Final rule effective May 16, 2012 (77 FR 28772)
  - Potpourri Notice for Louisiana will be published Nov. 20, 2012.
- August 7, 2012, issued guidance for states on:
  - Methodologies to demonstrate compliance with specific CAA provisions in sections 110(l) and 193 governing EPA approval of SIP revisions
  - New technical and policy guidance for areas of the Ozone Transport Region (OTR) on implementing measures under CAA section 184(b)(2) capable of achieving emissions reductions comparable to those achievable by Stage II controls

# PM<sub>2.5</sub> NAAQS Proposal: An Overview

- Proposal signed June 14, 2012; final due December 14, 2012
- Highlights of proposal include:
  - Primary PM<sub>2.5</sub> standards: lower annual primary standard within the range of 12.0 to 13.0 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) (seeking comment down to 11.0  $\mu\text{g}/\text{m}^3$ ); retain existing 24-hour standard level of 35  $\mu\text{g}/\text{m}^3$
  - Secondary PM<sub>2.5</sub> standard: set a separate standard to address visibility effects, primarily in urban areas
  - PM<sub>10</sub> standard: retain existing 24-hour standard of 150  $\mu\text{g}/\text{m}^3$
  - Monitoring: add 52 near-road PM<sub>2.5</sub> monitors
  - Implementation: proposed action on two permitting issues, solicited input on other issues



## PM<sub>2.5</sub> NAAQS Proposal: Proposed Changes to Permitting Provisions

- Changes would *ensure that changes to the PM standards will not delay pending permits or reduce potential burdens to permit applicants*
- Changes would:
  - Grandfather permit applications if a draft permit or preliminary determination has been issued for public comment by the date the revised PM standards become effective
  - Provide a “surrogacy approach” that would allow, for purposes of the proposed secondary visibility index, permit applicants to rely on their analysis demonstrating that PM<sub>2.5</sub> emissions increases would not cause or contribute to a violation of the 24-hour mass-based standards

# Progress on Ozone and PM<sub>2.5</sub> Attainment

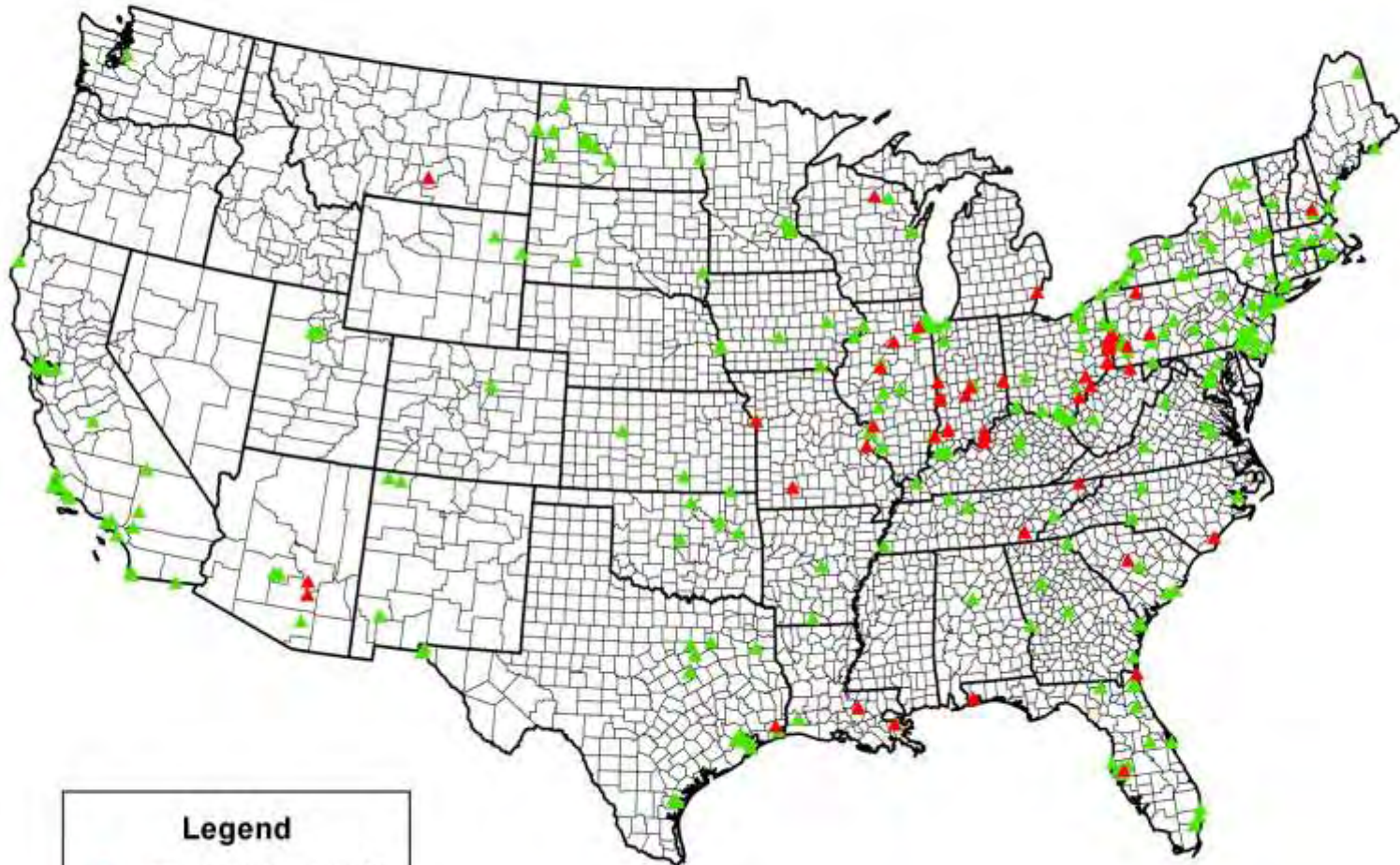
(as of September 2012)

|   | 1997 8-hr<br>Ozone<br>2004<br>designations | 1997 PM <sub>2.5</sub><br>2005<br>designations | 2006 PM <sub>2.5</sub><br>2009<br>designations |
|---|--|--|--|
| Initial Nonattainment Areas             | 113  | 39   | 32   |
| Redesignations Approved Areas           | 72   | 4  | 0  |
| Current Nonattainment Areas             | 41   | 35   | 32   |
| Clean Data Determinations               | 23   | 42   | 9  |
| Pending Proposed Redesignation Requests | 0  | 5  | 1  |

# SO<sub>2</sub> NAAQS Implementation

- New primary SO<sub>2</sub> 1-hr standard (75 ppb) promulgated in June 2010
- Designations
  - July 27, 2012 FR notice extends to June 2013 the date for completing designations for all areas
  - SIPs due 18 months after effective date of designations. EPA provided draft guidance for comment in Fall 2011. Intend to issue final guidance for State plans to show attainment in nonattainment areas by the time that nonattainment area designations are effective
- Implementation for areas without violating monitors
  - Recognition that some areas without monitors likely have violations
  - Announcement on April 12, 2012 stated that EPA is no longer expecting the June 2013 section 110 infrastructure SIPs to include modeling demonstrations showing attainment in “remaining” areas
  - EPA issued May 2012 White Paper describing monitoring and modeling options for implementing the standard in areas not initially designated nonattainment
    - Stakeholder meetings to discuss White Paper held in May-June 2012
  - Expect to issue rulemaking or guidance to clarify the designations approach for the remaining areas of the country

# SO<sub>2</sub> Monitoring Data



59 violating monitors in 18 states and 1 territory, (48 counties)

*2008-2010 design values*

# SO<sub>2</sub> NAAQS Implementation: Stakeholder Meetings

- **State Comments**
  - Use threshold concept to address focus on addressing largest sources (e.g., 2000 tons/yr)
  - Allow flexibility to use monitoring and/or modeling in SO<sub>2</sub> implementation process
  - Redeploying monitors will be possible in limited cases only
  - If EPA establishes new modeling or monitoring requirements, do it through rulemaking

# SO<sub>2</sub> NAAQS Implementation: Stakeholder Meetings (cont.)

## Enviro. Group Comments

- Use 3<sup>rd</sup> party modeling in designations process prior to June 2013
- Address largest sources first
- Issue guidance ASAP regarding modeling of actual emissions (as surrogate for monitoring air quality for 3 recent years) for use in designations
- Concurrently involved in Title V permit renewal actions to ensure sources show compliance

## Industry Comments

- Need rulemaking and additional time for any new implementation requirements
- Most support basing designations on monitoring data only
- If modeling for designation is used, it should be based on actual emissions

# NO<sub>2</sub> NAAQS Implementation

- 1-hr 100 ppb standard promulgated January 2010
- Guidance on NO<sub>2</sub> PSD permit modeling issued June 2010 and March 2011 (<http://www.epa.gov/NSR/guidance.html>)
- Designations of “unclassifiable/attainment” for all areas became effective in February 2012
- New monitoring network: Of the 126 near-road sites required, EPA has funded 52 sites (one site in each CBSA with population > 1 million)
  - Current deadline for all monitoring sites to be operational is January 1, 2013
  - EPA has committed to do a rulemaking to extend this deadline and to phase-in required sites (Published last week)
- Infrastructure SIPs due January 2013; guidance planned



# Interstate Transport Litigation

- CSAPR:
  - Court decision in *EME Homer City Generation v. EPA* on August 21, 2012 to vacate and remand the rule
  - CAIR remains in place pending promulgation of a replacement rule
- EPA assessing implications of court decision in following areas:
  - Interstate Transport SIP actions for 2006 PM<sub>2.5</sub> and 2008 ozone NAAQS
  - Redesignation requests for PM<sub>2.5</sub> and Ozone NAAQS
  - SIP Attainment Demonstration approvals
  - Action on Regional Haze SIPs that relied on CSAPR Better-than-Bart rule



# GREENHOUSE GAS AND TITLE V PERMITTING

# Greenhouse Gas Permits

- Approximately 160 PSD permit applications have been submitted to states and EPA that either address GHGs or may have to address:
  - 50 permits with GHG limits have been issued
  - 43 permit applications are pending at EPA
  - 12 pending permits are draft permits issued by states
  - 55 permit applications do not address GHG at this time since application is on-hold, there is on-going litigation, etc.
- The 50 PSD permits with GHG limits were issued in 7 source categories:
  - EGU
  - Oil and gas
  - Minerals and metals
  - Chemicals
  - Cement
  - Pulp , paper and wood products
  - Ethanol

# Title V Permit Petitions

- Existing backlog of petitions and large volume of new petitions
  - We respond to about 12 – 15 petitions per year
- Petitioners continue to be very aggressive seeking deadlines for responses
  - We have recently started working on response schedules outside of court deadlines (letter of intent)
- Many of the issues presented continue to be related to New Source Review

# NEW SOURCE REVIEW

# Timely PSD Permit Processing Guidance

- Guidance issued on October 15, 2012:
  - Applies only to PSD permits issued by EPA and delegated states
    - SIP approved states can use but are not required
  - Provides tools, templates and checklists to ensure timely processing of PSD permits
    - Encourages permitting authorities to exercise due diligence in declaring an application complete

## PM<sub>2.5</sub> Modeling Guidance

- Issued guidance on March 23, 2010 for NAAQS compliance demonstration based on PM<sub>2.5</sub>
- 2<sup>nd</sup> round guidance expected to be released by early 2013:
  - Draft version will be available for review and comment in Fall 2012 on EPA's Support Center for Regulatory Atmospheric Modeling (SCRAM) website
  - PSD modeling of PM<sub>2.5</sub>, screening nature, consultation & protocol
  - Compliance demonstration for direct and secondary (precursor) emissions
  - Modeling of PM<sub>2.5</sub> direct emissions
  - Options for the assessment of secondary formed PM<sub>2.5</sub>
  - Representative background concentrations
  - Comparison of modeled and monitored results to NAAQS

# PM and Condensable Emissions

- 2008 PM<sub>2.5</sub> NSR Implementation Rule amended definition of “regulated NSR pollutant” to require CPM for PM<sub>10</sub> and PM<sub>2.5</sub>
  - Definition inadvertently required that “PM emissions” include CPM
- On March 16, 2012, proposal revised definition to remove CPM requirement for “PM emissions”
  - Include CPM only if required by specific NSPS or a SIP
  - Final rule signed October 12, 2012

# Questions or Comments

