

NAAQS Implementation Update

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Outline of Presentation

- Overview of NAAQS Schedules and Milestones
- NAAQS Implementation Updates
 - Ozone
 - PM 2.5
 - SO₂
 - NO₂
 - Lead
- Infrastructure SIPs
- Transport SIPs
- Other Related Topics

Current Schedule for Ongoing NAAQS Reviews

(Updated July 2012)

MILESTONE	POLLUTANT						
	NO ₂ /SO ₂ Secondary	PM	Ozone	Lead	NO ₂ Primary	SO ₂ Primary	CO
NPR	<u>Jul 12, 2011</u>	<u>Jun 14, 2012</u>	2013	Feb 2014	Aug 2015	Feb 2016	Jul 2016
NFR	<u>Mar 20, 2012</u>	<u>Dec 14, 2012</u>	2014	Nov 2014	May 2016	Nov 2016	Apr 2017

NOTE:

Underlined dates indicate court-ordered or settlement agreement deadlines

Anticipated NAAQS Implementation Milestones

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

2008 Ozone NAAQS Designations and Implementation

- Final Area Designations
 - 45 areas designated nonattainment on April 30, 2012, including 2 separate tribal areas
 - Only 3 had never before been designated nonattainment for ozone
 - Chicago area (IL, IN, WI) designated May 31, 2012.
 - For first time, separately designated areas of Indian Country (2 CA Tribal nonattainment areas)
 - Designations effective July 20, 2012.
 - This action met a consent decree schedule resulting from a deadline suit filed by Wild Earth Guardians
- 2008 Ozone NAAQS Classifications Rule
 - Effective July 20, 2012 (with designations).
 - Established classification thresholds and end-of-year attainment dates
 - Also reclassified 6 areas in California that had previously requested bump-up for 1997 NAAQS.
- Marginal areas generally do not have attainment planning requirements. Moderate and above areas will require attainment demos.
 - Moderate and above areas include 6 CA areas plus 2 CA Tribes, Dallas and Baltimore
 - Dec 31, 2018 is attainment date for Moderate Areas (later for higher classifications)

Overview of 2008 Ozone SIP Requirements Rule

- Rule and guidance addressing SIP requirements (Subpart 2)
- Current schedule: proposal in fall 2012; final in spring 2013
- What the proposed rule will cover:
 - Attainment Demonstration SIPs
 - Reasonable Further Progress (RFP)
 - Reasonably Available Control Technology (RACT)
 - Contingency measures
 - New Source Review (NSR)
 - Emissions Inventory
 - Rural Nonattainment Areas
 - Flexible Programs (e.g., Ozone Advance)
 - Anti-backsliding provisions

Other Ozone-Related Actions

- Widespread Use of Onboard Refueling Vapor Recovery and Stage II Waiver
 - Final rule signed May 9, 2012 (77 FR 28772).
 - Guidance to states on August 7, 2012 on removing Stage II vapor recovery programs from SIPs.
- Revision to Monitoring Rules
 - Proposed July 2009; Status on final rule is TBD.
- Emission Reduction Measures Information
 - Intended to help states in developing emission reduction strategies, plans and programs. Found at: <http://www.epa.gov/air/criteria.html>

Other Ozone-Related Actions (cont.)

- Revisions to implementation rules for '97 8-hr ozone NAAQS
 - **RFP credit final rule for emissions reductions outside ozone nonattainment areas**
 - Proposed December 2010 to limit RFP credit only to reductions “in the area,” in response to court decision. Evaluating when we will take final action on the rule.
 - **Classification of former subpart 1 areas under subpart 2**
 - Final on April 27, 2012. Reclassified 16 areas in response to court decision. A handful of these areas will need to submit additional SIP elements within 12 months.
 - **RACT/RACM policies proposal**
 - Upcoming proposal to revise presumption that NO_x SIP Call and CAIR satisfy nonattainment area RACT/RACM requirements for covered sources, per July 2009 court decision.

Notable Ozone Litigation

- Environmental groups sued EPA over several ozone issues including:
 - to compel EPA to make determinations regarding whether Serious/Severe/Extreme 1-hour ozone nonattainment areas attained by attainment dates;
 - Settled in most cases, CD schedules agreed to and met.
 - Failure to attain also triggers requirement to implement Section 185 fee program (4 areas).
 - to compel EPA to take action on various ozone SIP submittals (deadline: 18 mos.);
 - challenging redesignation of St. Louis (Illinois portion) to attainment for the 1997 standard;
 - to compel EPA to designate model(s) to use to determine if PSD sources will violate the ozone NAAQS and increments.
 - EPA granted the petition to engage in rulemaking to evaluate whether updates to Appendix W are warranted for ozone and secondary PM_{2.5}, and to incorporate new analytical techniques or models as appropriate (Jan. 4, 2012).
- 2008 Ozone NAAQS is still under litigation
 - Oral argument November 16

PM NAAQS Proposal: An Overview

- Proposal signed on June 14, 2012 (under Court order)
- Strengthens the annual primary (health) standard for fine particles by setting the standard at a level within the range of 12.0 to 13.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The current annual standard level of 15.0 $\mu\text{g}/\text{m}^3$ has been in place since 1997.
 - EPA also is seeking comment on alternative levels of the annual standard, down to 11.0 $\mu\text{g}/\text{m}^3$.
- Retains the existing (2006) 24-hour fine particle health standard level of 35 $\mu\text{g}/\text{m}^3$.
- Sets a separate fine particle secondary (welfare) standard to address visibility effects associated with particles, primarily in urban areas.
 - EPA is proposing two options for the level of this secondary 24-hour standard: 30 deciviews or 28 deciviews.
 - EPA is also proposing to retain the current secondary welfare standards to address non-visibility welfare effects.
- Proposes addition of 52 near-road PM_{2.5} monitors by Jan. 2015.
- Proposes no change to existing PM₁₀ standards.
- Comment period closed last week. Must Finalize by December 2012.

PM_{2.5} NAAQS Proposal: Proposed Changes to Permitting Provisions

- EPA proposed changes to its requirements for PSD permits to:
 - Ensure that changes to the PM standards will not delay pending permits
 - Reduce potential burdens to permit applicants.
- EPA proposed to 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
- EPA proposed to implement a “surrogacy approach” that would allow, for purposes of the proposed secondary visibility index, permit applicants to rely on their analysis demonstrating that PM_{2.5} emissions increases would not cause or contribute to a violation of the 24-hour mass-based standards
 - EPA believes requiring separate PSD air quality analyses for the proposed secondary PM_{2.5} visibility index could present practical difficulties for industry that would impose unreasonable costs, uncertainty and permitting delays.
 - EPA believes that this approach will ensure that new or modified pollution sources will not cause or contribute to a violation of the proposed visibility index.

2006 PM_{2.5} NAAQS Implementation

- SIP timeline for 2006 standards
 - Designations effective in December 2009
 - Attainment demonstration SIPs due December 2012
 - 20 of 32 areas attaining based on 2009-11 data
 - Attainment date is no later than 2014; EPA can extend to 2019.
- Guidance for 2006 standards (issued 3/2/12)
 - Clarified several issues, including RFP milestone years, seasonal emission inventory issues, policy for contingency measures
 - Also clarified that framework of existing implementation rule is appropriate for attainment planning for 2006 PM_{2.5} standards
 - Note that this existing rule is still under challenge; oral argument next month on two issues
 - Earthjustice filed litigation on this guidance, and EPA filed a Motion to Dismiss in July 2012.

2012 PM_{2.5} NAAQS Implementation

- SIP timeline for 2012 standards (projected)
 - Designations effective in early 2015.
 - Attainment demonstration SIPs due in 2018.
 - Planning to issue implementation rule by time designations are effective.
- Consulting with states on potential implementation issues with new standards (PSD, designations, SIP guidance).
 - EPA asked for comment on implementation issues in the NAAQS proposal as well
 - We will consider comments as we develop proposed implementation rule and possible guidance.

Progress on Ozone and PM_{2.5} Attainment

(as of August 2012)

	1997 8-hr Ozone 2004 designations	1997 PM _{2.5} 2005 designations	2006 PM _{2.5} 2009 designations
Initial Nonattainment Areas	113	39	32
Area Redesignations Approved	71	4	0
Current Nonattainment Areas	42	35	32
Clean Data Determinations	23	42	7
Pending Proposed Redesignation Approvals	1	3	1

SO₂ NAAQS Implementation

- New primary SO₂ 1-hr standard promulgated in June 2010.
- Designations
 - July 27, 2012 FR notice extends to June 2013 the date for completing designations for all areas.
 - Prior to extension, we had received a NOI to sue for failure to meet June 2012 deadline.
 - Per July 2012 notice EPA expects to promulgate final designations for areas with monitored violations before next June.
 - SIPs due 18 months after effective date of designations. Intend to issue 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 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 that will not be designated nonattainment, and held a series of stakeholder meetings in May-June 2012.
 - High-level summaries of comments received are available at: <http://www.epa.gov/airquality/sulfurdioxide/implement.html>.
 - Holding senior management briefings to determine path forward.
 - Expect to issue rulemaking or guidance to clarify the implementation approach for the remaining areas of the country.

NO₂ NAAQS Implementation

- 1-hr 100 ppb standard promulgated January 2010
- Guidance on NO₂ PSD permit modeling issued June 2010 and March 2011. See <http://www.epa.gov/NSR/guidance.html>
- Designations of “unclassifiable/attainment” for all areas became effective in February 2012
- New monitoring network: 52 near-road sites in cities with population > 1 million
 - EPA has committed to do a rulemaking to extend the implementation deadlines for the NO₂ near-road monitoring network
 - Current deadline is January 1, 2013

NO₂/SO₂ Secondary NAAQS

- On March 20, 2012, EPA announced it would retain the current NO₂ and SO₂ secondary standards to address the direct effects on vegetation of exposure to gaseous oxides of nitrogen and sulfur.
 - We did not add new standards to address effects associated with the deposition of oxides of nitrogen and sulfur on sensitive aquatic and terrestrial ecosystems.
- Thus, there are no upcoming implementation milestones associated with the retained standard.
- Center for Biological Diversity sued EPA over this decision
 - Briefing begins Sept 21

Pb NAAQS Implementation

- Standard last revised in October 2008
- Initial designations occurred in two rounds.
 - Round 1 completed in November 2010
 - Round 2 completed in November 2011.
- Attainment SIPs are due in June 2012 for Round 1, June 2013 for Round 2.
 - Attainment deadline is three years later.
- EPA has provided tools for states (Q&As, etc.)
 - Implementation website:
<http://epa.gov/air/lead/implement.html>.
 - RACT/RACM guidance issued March 2012

CO NAAQS Implementation

- Final decision to retain existing standards (9 ppm 8-hr, 35 ppm 1-hr) issued on August 12, 2011
- Current implementation approach will continue
- Final ambient air monitoring requirements include co-locating one CO monitor with a “near-road” NO₂ monitor in urban areas having populations of 1 million or more
 - Approximately 52 CO monitors within 52 urban areas, as part of the overall CO monitoring network

Infrastructure SIPs

- The term “infrastructure SIPs” generally refers to the SIP requirements under Section 110(a)(2) of the act, as distinct from the nonattainment plan requirements. Example elements include:
 - Emission limits and other control measures
 - Ambient air quality monitoring/data system
 - Adequate personnel, funding, and authority
 - Consultation/participation by affected local entities
 - And several others
- These requirements are generally related to regulatory, technical, and legal “infrastructure.” However, this section of the Act also includes the substantive control requirements of section 110(a)(2)(D)(i) regarding interstate transport.
- Importantly, States are required to submit these SIPs within three years after promulgation of a NAAQS

Infrastructure SIPs (cont.)

- In recent years, there has been a significant increase in litigation over infrastructure SIP requirements
 - Deadline suits generally are being filed for each recent NAAQS for which the 3-year deadline has passed.
 - Increasing number of adverse comments on EPA actions to approve infrastructure SIP submittals on certain issues.
- This has resulted in states asking for more specific guidance on infrastructure SIP submittals. We issued guidance for Pb NAAQS last October; aiming to issue guidance addressing multiple pollutants (NO₂, SO₂, Ozone) by end of 2012.
- Commenters sometimes allege problems with existing SIPs that are not being addressed by a particular SIP revision. We have stated that EPA approval of the revision is not the same as re-approving the existing SIP as it relates to four issues:
 - Excess emissions of a facility at times of startup, shutdown, or malfunction (“SSM”)
 - Director’s discretion
 - Minor source NSR program
 - NSR Reform amendments
- We can address alleged problems with existing SIPs in these areas through other means (e.g., rulemaking to address Sierra Club petition concerning SIP provisions for Startup, Shutdown, and Malfunction)

Interstate Transport Requirements

- Section 110(a)(2)(D)(i) of the CAA requires submittal of interstate transport SIPs in the same 3-year timeframe as infrastructure SIP submittals
 - SIPs must contain provisions prohibiting emissions that contribute significantly to downwind nonattainment with (or interfere with maintenance of) a NAAQS by any other state
 - Section 110(a)(2)(D)(i)(II) also contains provisions prohibiting downwind interference with PSD or visibility requirements
 - Interstate transport requirements apply for all NAAQS in all states.
 - As with infrastructure SIPs, we often get deadline suits
 - We have been sued over 2008 ozone NAAQS deadline;
 - Several consent decrees are in effect governing transport SIP actions for various NAAQS.
- The Cross-State Air Pollution Rule (CSAPR) quantified certain states' obligations pursuant to section 110(a)(2)(D)(i)(I) with respect to 1997 ozone and PM_{2.5} and 2006 PM_{2.5} NAAQS in Eastern U.S.
 - For other NAAQS and in Western U.S., EPA works to help States develop SIPs that meet interstate transport obligations.
- D.C. Circuit Court decided on August 21, 2012 to vacate and remand CSAPR
 - CAIR remains in place pending promulgation of a replacement rule.
 - EPA remains committed to working with states and the power sector to address transport issues.
 - We are reviewing decision to determine appropriate course of action.

Other Implementation-Related Issues

- Regional Haze
 - EPA has entered into consent decrees which have established schedules for taking action on all regional haze SIPs.
 - By November 15, 2012, the EPA will have taken more than 100 proposed and final actions on SIPs/FIPs for regional haze. A few will still need to be wrapped up in 2013.
 - Some of these actions established new emissions limits
 - Periodic report describing progress toward reasonable progress goal
 - OAQPS is working with the Regions to clarify expectations and will provide guidance, as appropriate.
 - 2018 SIP revision must fully satisfy RH rule requirements
 - Comprehensive SIP revision due July 31, 2018, with revised reasonable progress goals, if necessary.

Other Implementation-Related Issues

- EPA recently took comment on revised Exceptional Events Rule guidance
 - Draft guidance documents are available for download from:
 - Exceptional Events website
(<http://www.epa.gov/ttn/analysis/exeevents.htm>)
 - In late 2012, EPA intends to release guidance documents as final product or as interim step prior to rule revisions
- SIP Reform (with NACAA/ECOS group)
 - Efforts to promote faster SIP processing/elimination of backlog
 - Full Cycle Analysis Project (FCAP)
 - Comprehensive effort to promote timelier implementation guidance, air quality planning, and SIP processing whenever a NAAQS is issued/revised;
 - Uses 2012 PM2.5 NAAQS revision as model