

NAAQS Implementation and Permits Update

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Outline of Presentation

- Overview of NAAQS Schedules and Milestones
- Ozone NAAQS Update
- 2010 SO₂ NAAQS Area Designations and Implementation Strategy
- 2012 PM_{2.5} NAAQS Implementation and Implications of Recent Court Decision
- Interstate Transport Update
- GHG Permitting Update

Anticipated NAAQS Implementation Milestones

(updated February 2013)

Pollutant	Final NAAQS Date (or Projection)	Infrastructure SIP Due	Designations Effective	Attainment Demonstration Due	Attainment Date
PM 2.5 (2006)	Oct 2006	Oct 2009	Dec 2009	Dec 2012	Dec 2014/2019
Pb (2008)	Oct 2008	Oct 2011	Dec 2010/2011	June 2012/2013	Dec 2015/2016
NO ₂ (2010) (primary)	Jan 2010	Jan 2013	Feb 2012	none	none
SO ₂ (2010) (primary)	June 2010	June 2013	June/July 2013 (+2 rounds)	Feb. 2015	Aug 2018
Ozone (2008)	Mar 2008	Mar 2011	July 2012	July 2015	2015/2032
PM 2.5 (2012)	Dec 2012	Dec 2015	Early 2015	mid 2016	2021 (Mod)* 2025 (Ser)*
Ozone (2014)	2014	2017	2016	2019	2019/2036

Current Schedule for Ongoing NAAQS Reviews

(Updated January 31, 2013)

MILESTONE	POLLUTANT						
	Ozone	Lead	NO ₂ Primary	SO ₂ Primary	NO ₂ /SO ₂ Secondary	CO	PM
NPR	2013	Jan 2014	Feb 2016	Feb 2017	May 2017	Summer 2017	TBD
NFR	2014	Oct 2014	Nov 2016	Nov 2017	Feb 2018	Spring 2018	TBD

Ozone NAAQS Update

- 2008 Ozone NAAQS Implementation Rule
 - Rule and guidance addressing SIP Requirements Rule
- 2014 Ozone NAAQS Review:
 - Integrated Science Assessment – Released February 15, 2013
 - Risk and Exposure Assessment and Policy Assessment – second draft due May/June 2013
 - Propose - December 2013
 - Final - September 2014

2010 SO₂ NAAQS: Background

- June 2010: SO₂ NAAQS finalized
 - Proposal emphasized expanded monitoring network
 - Commenters expressed concerns related to costs and other issues
 - Final rule: Fewer monitors required. Preamble: Recommended that states should demonstrate attainment statewide in section 110 infrastructure SIPs due in June 2013, through a hybrid modeling and monitoring approach
- March 2011: EPA issued draft designations guidance
 - Included guidance re: modeling based on allowable emissions to characterize air quality
- Sept. 2011: EPA issued draft implementation and modeling guidance.
 - Guidance indicated that modeling should be based on allowable emissions (because areas would need to show attainment)
 - Concerns expressed by commenters included:
 - In effect requiring nonattainment SIPs without any nonattainment designation
 - Section 110 plans would be due before nonattainment SIPs

2010 SO₂ NAAQS: Background

- April 2012: McCarthy letter to Environmental Commissioners
 - EPA announced plan to reconsider implementation approach - not expecting section 110 plans to demonstrate attainment
 - Announced plans to hold stakeholder meetings
- May-June 2012: EPA issued white paper and held 3 stakeholder meetings
 - Also received many written comments
- July 2012: EPA extended designation deadline by 1 year to June 2013
- February 2013: Issued 120-day letters to states for 30 areas with violating monitors
 - Also issued strategy paper on next steps for designations in other parts of the country
- Strategy paper and additional information is located at <http://www.epa.gov/airquality/sulfurdioxide/implement.html>

SO₂ Strategy: Source Thresholds and Coverage

- Focus on characterizing air quality in areas with largest sources and then use these data for future designations
- State would have flexibility to characterize air quality for sources below thresholds as well

SO₂ Strategy: Characterizing Air Quality

- State flexibility to provide monitoring or modeling data on an area-by-area basis to characterize current air quality
- Technical assistance documents coming soon
- Key issues:
 - Monitoring: Technical Assistance Document (TAD) on issues such as identifying location of maximum concentration for monitoring sites
 - Modeling: use actual emissions, since modeling in this situation serves as surrogate for monitoring air quality. Availability of 1-hour emissions data will vary source by source
 - Draft TADs in April 2013 to be issued for 45-day review; final TADs planned for July 2013

SO₂ Strategy: Expected Implementation Timeline

- **End of 2013 and 2014:** EPA issues proposed and final rules respectively
- **Jan. 2016:** Air agency identifies sources to use monitoring data requirements; provides modeling protocol for others
- **June 2016:** Air agency provides updated monitoring plan
- **Jan. 2017:**
 - New monitoring sites operational by 1/1/17
 - For modeled areas, air agency submits analysis and boundary recommendation
- **Dec. 2017:** EPA designates new areas based on modeling
- **Early 2020:** New monitoring sites have 3 years of data. Air agency submits boundary recommendations
- **Dec. 2020:** EPA designates rest of country

SO₂ Strategy: Incentive for Early Reductions

- Air agencies can avoid nonattainment designation by working with sources to establish enforceable emission limitations showing modeled attainment with the SO₂ NAAQS prior to second round of designations in 2017
 - Permanent source-specific emission limits in SIP or permit; consent decree; etc.
- Can take into consideration emission reduction measures that will be implemented for Mercury and Air Toxics Standard (MATS) and other rules

2012 PM_{2.5} NAAQS Implementation

- EPA strengthened the annual primary PM_{2.5} NAAQS to 12 µg/m³ from the previous level of 15 µg/m³ on December 14, 2012
 - Published in Federal Register on January 15, 2013
- EPA aims to complete initial designations of nonattainment areas by the end of 2014
 - Designations will likely become effective in early 2015
- EPA is developing an implementation rule through notice-and-comment rulemaking
 - Current schedule aims to issue final rule around the time of initial designations (e.g., December 2014)

D.C. Circuit Ruling on Implementing PM_{2.5} NAAQS

- On January 4, 2013, the D.C. Circuit Court ruled that EPA erred in implementing the 1997 PM_{2.5} NAAQS under the general Clean Air Act (CAA) requirements for nonattainment areas (“Subpart 1”) rather than the Act’s PM-specific requirements (“Subpart 4”)
 - NRDC et al. v. EPA, D.C. Cir., No. 08-1250, 1/4/13
- The Court remanded both the 2007 PM_{2.5} NAAQS Implementation Rule and the 2008 New Source Review (NSR)/Prevention of Significant Deterioration (PSD) Rule back to the Agency, but did not set a deadline for further action

Implications of Subpart 4 Decision

- We are working to determine the proper course for responding to the Court's remand
 - EPA is developing the proposal for the 2012 PM_{2.5} NAAQS implementation rule according to Subpart 4
 - EPA is also assessing the implications of the Court's decision on a variety of issues and actions currently pending or anticipated in the short-term such as
 - 1997 and 2006 PM_{2.5} NAAQS redesignations and Clean Data Determinations
 - 2006 PM_{2.5} NAAQS SIP submittals
 - Petitions for reconsideration and pending litigation associated with SIP actions for the 1997 and 2006 NAAQS
 - We are also assessing the impact of the decision in Nonattainment NSR areas for the 1997 and 2006 NAAQS

Plan to Move Forward

- We are moving as quickly as possible to fully consider the effects of the Court's decision so that we can continue to process actions appropriately
- We are currently reaching out to the states through existing workgroups and EPA regional offices, and encouraging states to submit questions and raise issues through their EPA regional offices

PSD: Recent Ruling on PM_{2.5} SILs and SMC

- On January 22, 2013, the D.C. Circuit Court ruled that EPA was not authorized by the CAA to use the PM_{2.5} Significant Monitoring Concentration (SMC) to exempt PSD sources from monitoring data requirements
 - Sierra Club v. EPA, D.C. Cir., No. 10-1413, 1/22/13
- The Court vacated the PM_{2.5} SMC from EPA's two PSD regulations
- The Court challenged EPA's "safe harbor" approach for implementing PM_{2.5} Significant Impact Levels (SILs)
- The Court, at EPA's request, vacated the PM_{2.5} SILs provisions and remanded them to EPA for further consideration

Interstate Transport Requirements

- The “good neighbor provision” (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

CSAPR Decision:

Homer City Generation v. EPA

- The Cross-State Air Pollution Rule (CSAPR) is the most recent example of EPA's efforts to implement the "good neighbor provision"
- CSAPR aimed to reduce the harmful power plant emissions reaching Americans in downwind states, thereby protecting public health
- CSAPR vacated by the D.C. Circuit Court of Appeals on August 2012
- The prior transport rule addressing this issue, the 2005 Clean Air Interstate Rule (CAIR) remains in place
- EPA remains committed to working with states and with industry and environmental stakeholders to address pollution transport issues required by the CAA

Interstate Transport Update

- Status of litigation:
 - In January 2013, the D.C. Circuit denied all requests for rehearing
 - No decision from U.S. government about whether to petition the Supreme Court to review
- EPA and states are still responsible for addressing transport
- Even as we consider legal options it is prudent to begin moving ahead to meet these obligations expeditiously
- EPA is planning to work with states in the coming months on a path forward to address interstate transport

GHG Permitting Activity to Date

- As of Feb. 20, 2013, approximately 206 PSD and 29 Title V permit applications have been submitted
 - Of 206 PSD permit applications, 73 permits with GHG limits have been issued
 - Most issued permits are for EGUs and Oil & Gas facilities
 - Of 29 Title V permit applications, no final permits have been issued to date

GHG Tailoring Rule Implementation

- To date, we have completed the first 3 steps of our phased-in approach to GHG permitting
 - January 2, 2011, EPA and states began PSD permitting for GHGs under the Tailoring Rule Step 1 for “anyway” sources and modifications
 - Tailoring Rule Step 2 began July 1, 2011, including sources that would be major for GHG-only
 - Tailoring Rule Step 3 issued on June 29, 2012
 - Maintains the Step 1 and 2 thresholds and established changes to the PAL rules that help streamline the GHG permitting process
- Additional work/commitments include:
 - 5-year study due for completion in April 2015
 - Step 4 Rule due in April 2016
 - Actions to ensure full implementation of the Tailoring Rule
 - Program Updates (SIP and Title V)
 - Streamlining Techniques Development
 - GHG’s and Title V Fees
 - Treatment of Biogenic CO₂ emissions for permitting purposes

GHG Five-Year Study

- As part of Tailoring Rule, EPA made an enforceable commitment to conduct and complete a study by April 30, 2015
- The study will help inform the Step 4 Rule due in April 2016
- GHG permitting activity data for both PSD and Title V programs is needed to as part of the study
- In addition to the permitting data we have collected to date, EPA plans to collect data from regional, state, local and tribal permitting programs on permit processing and burden
 - The exact mechanisms and timeframes for data collection are still under discussion

GHG Five-Year Study: Data Needs

- The following are some of the data elements we have identified for the 5-year study
 - Total number of permits being issued with and without GHG permit requirements, including major, synthetic minor and Title V permits
 - Source categories for which permits are being issued
 - Emissions information to estimate the number of currently minor sources that would be added to the program if the thresholds were changed/lowered
 - Development and use of streamlining techniques
 - Permitting authority burden data
 - Average time spent issuing each permit
 - Permitting staff and budget
 - Number of hours spent training staff on all aspects related to GHG permitting
 - Resources spent on program updates

Streamlining Techniques Development

- EPA is reviewing CAAAC GHG Permit Streamlining Workgroup Report (released September 14, 2012) which:
 - Provides summary of GHG permit streamlining information received either through Tailoring Rule process or workgroup's efforts to collect additional information
 - Does not offer recommendations due to resource and time constraints
 - Asks EPA to solicit stakeholder feedback through public notice and comment rulemaking
- In addition, EPA continues to review possible streamlining approaches identified in Tailoring Rule and analyzing comments received
- EPA is also exploring other potential streamlining alternatives such as the use of energy efficiency programs/approaches for GHG permitting of some sources

GHG Permitting: Additional Work Areas

- Updating SIP and Title V programs
 - Continue to work with permitting authorities to ensure permitting program changes are processed in an efficient manner
- Treatment of Biomass CO₂ Emissions for Permitting Purposes
 - 3-year deferral and guidance document were completed in 2011
 - Deferral expires July 2014
 - SAB has now completed its scientific analysis and provided EPA with a report
 - EPA is analyzing the information in the SAB report in order to determine next steps