

US EPA ARCHIVE DOCUMENT

2014 Region IV Modelers Conference

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NSRG/AQPD

Atlanta, GA

November 3-5, 2014



Overview

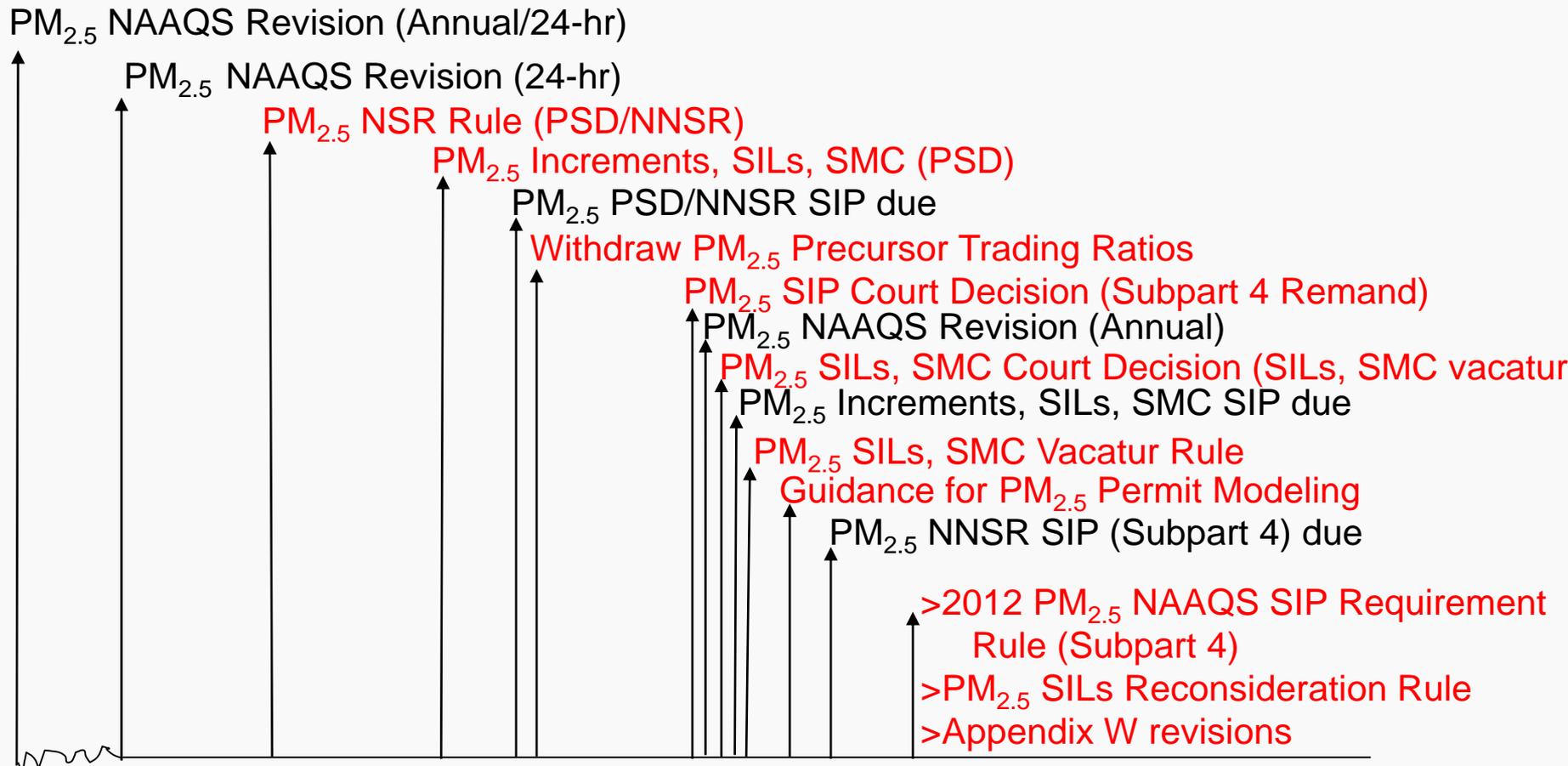
- PM_{2.5} Policy updates
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 - PM_{2.5} NAAQS Implementation
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PM_{2.5} Policy Updates



PM_{2.5} NAAQS Implementation Chronology



1997 2006..2007..2008..2009..2010..2011..2012..2013..2014..2015



PM_{2.5} NAAQS Implementation

- PM_{2.5} NSR Implementation
 - Pursuant to the 1997-2006 NAAQS revisions, EPA promulgated two sets of NSR rules:
 - 2008 PM_{2.5} PSD/NNSR Rule
 - 2010 PM_{2.5} Increments, SILs, SMC Rule
 - 2008 PM_{2.5} PSD/NNSR Rule:
 - Major source thresholds, significant emissions rates for direct PM_{2.5} and PM_{2.5} precursors (SO₂ and NO_x)
 - State discretion to include VOC and/or ammonia as precursors
 - Direct PM_{2.5} includes CPM (waived until 1/1/2011)
 - PSD grandfathering provision
 - NNSR Inter-pollutant trading policy for PM_{2.5} precursors



PM_{2.5} NAAQS Implementation (Cont'd)

- 2010 PM_{2.5} Increments, SILs, SMC Rule
 - PM_{2.5} increment system includes:
 - Baseline area
 - Major & Minor source baseline date
 - Trigger date
 - Followed CAA section 166(a), which requires 1-year delay in implementation of new increments
 - SILs and SMC defined for PM_{2.5}
 - Class I, II and III SILs added to PSD rules; Class II SILs added to 40 CFR 51.165(b)



PM_{2.5} NAAQS Implementation (Cont'd)

- Two court cases directly affect PM_{2.5} NSR
 - NNSR: January 4, 2013 SIP implementation decision
 - PSD: January 22, 2013 PSD SILs and SMC decision
- January 4 decision
 - Court remanded to EPA 2007 and 2008 PM_{2.5} rules to require implementation via part D subpart 4
 - NNSR: new definition of “major source” for Serious Areas
 - All precursors must be regulated (SO₂, NO_x, VOC and NH₃); states can show that any precursor does not significantly contribute to nonattainment in area
 - EPA does not interpret this decision to affect PSD



PM_{2.5} NAAQS Implementation (Cont'd)

- January 22 D.C. Circuit Court Case on PSD SILs and SMCs
 - Court vacated PSD SILs and SMCs
 - Court stated that EPA lacks authority to allow for exemptions (SMCs) for air quality monitoring data requirement
 - Court remanded to EPA the SILs provision at 51.166(k) and 52.21(k) to correct inconsistency with preamble
 - Class II PM_{2.5} SILs at 40 CFR 51.165(b) continue to apply
 - Proper use of the PM_{2.5} SILs
 - EPA released PM_{2.5} Q&A's March 4, 2013
 - Permits should not rely on the SILs alone to demonstrate “cause or contribute”
 - Additional “care” should be taken so permitting record supports conclusion of no “cause or contribute” to a violation
- EPA issued Guidance for PM_{2.5} Permit Modeling in May 2014



Proposed Rulemaking to Reconsider the Significant Impact Levels (SILs) for PM_{2.5}

- Rule will focus on legal and technical basis for the SILs
- Rule will address “air quality modeling requirements” for SO₂, NO_x and VOCs as PM_{2.5} precursors (MERPs)
- Rule will consider creating an ammonia SER for non-attainment areas
- Proposal anticipated in early 2015



Significant Monitoring Concentration (SMC) Rule

- Direct final “Good Cause” rule published at 78 FR 73698, December 9, 2013
 - Rule vacated $PM_{2.5}$ SILs and provision for implementing them at 51.166(k)(2) and 52.21(k)(2)
 - Rule removed the $PM_{2.5}$ SMC from 40 CFR 51.166 and 52.21
- Effectively stated that the CAA does not allow exemptions from preconstruction monitoring
 - Monitors that are quality assured and maintained by state and local agencies can be used in lieu of preconstruction monitors as before



Additional NSR Rules & Guidance updates



Ozone NAAQS Rules

- Two ozone NAAQS Rules underway
 - 2008 ozone SIP Requirements Rule (Final)
 - 2015 Revised ozone NAAQS Rule (Proposal)
- 2008 Ozone NAAQS SIP Requirements Rule
 - Proposed revocation of 1997 Ozone NAAQS (Anti-backsliding implications)
 - PSD/NNSR applicability
 - Allow inter-precursor trading
 - Proposed June 6, 2013 (78 FR 34178)
 - Anticipate final rule in early 2015



Ozone NAAQS Rules (Cont'd)

- 2015 Ozone NAAQS Rule
 - Includes discussion of PSD/NNSR applicability
 - Effect of revoked NAAQS on PSD/NNSR applicability
 - Consideration of grandfather provision (PSD only)
 - Compliance with NAAQS prior to NNSR designations
 - Anticipated Proposal – December 1, 2014
 - Anticipated Final Rule (est): October 1, 2015



NO₂/SO₂ NAAQS Implementation Issues

- Both 1-hour NAAQS involve stringency that challenges the PSD process:
 - Low SILs claimed to be of little value
 - “Worst case” nature of modeling demonstrations slows or stops permitting
- EPA guidance has addressed some of the issues
 - June 2010 and Mar 2011 1-hr NO₂ PSD Guidance
 - Aug 2010 1-hr SO₂ PSD NAAQS Guidance
- Remember: Annual/24-hour SO₂ increments must still be assessed
- SO₂ SIP Modeling Guidance –
 - Up to 30-day rolling average for compliance
 - Conferring with ROs, OGC and some states for path forward
 - Potentially case-by-case approach for PSD permitting
 - Need to better understand what states are currently doing



Tribal Minor NSR Rule – Final Amendments

- The final Amendments, signed on May 9, 2014, addressed six exemption categories and clarified construction related terms
 - Exemption categories included:
 - Certain emergency generators,
 - Internal combustion engines with a horsepower rating below 50,
 - Certain small furnaces or boilers used for space heating,
 - Single family residences and residential buildings with four or fewer dwelling units
 - Air conditioning units not associated with industrial processes
 - Cooking of food other than wholesale businesses that both cook and sell cooked food
 - Clarified construction related terms:
 - Beginning and commencing construction



NSR: PSD Permit Extension Guidance

- Guidance Purpose:
 - clarify adequate permit extension justification
- EPA issued national guidance on January 31, 2014
 - Generally should be available for an additional 18-month period following the initial timeframe
 - Shorter or longer time periods may be granted depending on justification provided
 - Public notice/comment not necessary for simply extending deadline if:
- Reconsideration or amendment of the substantive conditions do not change



Future actions under Consideration



Ambient Air

- Industry asserts that current definition is too restrictive
- EPA's longstanding interpretation (1980 Costle Memo)
 - "That portion of the atmosphere, external to buildings, to which the general public has access"
- Can we better define "general public" and "access"
 - Several discussions with OGC on Ambient Air definition
 - EPA has discretion to interpret ambient air but need to ensure basic principles are adhered to
- AF&PA has provided scenario's for consideration



PSD Offset provisions: Can we do it?

- PSD Offsets
 - Strengthened NAAQS typically result in new nonattainment areas; prior to designation, PSD applies
 - 40 CFR 51.165(b) provides option for compensating for adverse air quality impacts (PSD offsets)
 - Involves a modeling approach which is difficult to accomplish
 - Reviewing options for “compensation” requirement
 - Current thinking is that it can not be accomplished like nonattainment
 - Next Steps:
 - Work with AQMG to assess viability and path forward