

# Agricultural Air Quality Task Force

## Additional Information

Office of Air Quality Planning and  
Standards, Office of Air and  
Radiation

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Public Presentation

# Overview

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# NAAQS Reviews: Status Update

(as of November 2014)

	Ozone	Lead	Primary NO <sub>2</sub>	Primary SO <sub>2</sub>	Secondary NO <sub>2</sub> and SO <sub>2</sub>	PM	CO
<b>Last Review Completed</b> (final rule signed)	Mar 2008	Oct 2008	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
<b>Recent or Upcoming Major Milestone(s)<sup>1</sup></b>	<u>August 2014</u> Final REAs Final PA  <b><u>Dec 1, 2014</u></b> <sup>2</sup> Proposed rule  <b><u>Oct 1, 2015</u></b> <sup>2</sup> Final rule	<u>May 2014</u> Final PA  <u>2014</u> Proposed rule	<u>June 2014</u> Final IRP  <u>Fall 2014</u> 2 <sup>nd</sup> Draft ISA REA Planning Document	<u>Summer 2014</u> Final IRP	<u>Fall 2014</u> Draft IRP	Kickoff workshop for next review targeted for early 2015	<u>TBD</u> <sup>3</sup>

Additional information regarding current and previous NAAQS reviews is available at: <http://www.epa.gov/ttn/naaqs/>

<sup>1</sup> IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

<sup>2</sup> Bold and underlined dates indicate court-ordered or settlement agreement deadlines

<sup>3</sup> TBD = to be determined

# Anticipated NAAQS Implementation Milestones

Pollutant	Final NAAQS Date	Infrastructure SIP Due	Designations Effective	Attainment Plans Due	Attainment Date
PM <sub>2.5</sub> (2006)	Oct 2006	Oct 2009	Dec 2009	Dec 2014	Dec 2015 (Mod) Dec 2019 (Ser)
Pb (2008)	Oct 2008	Oct 2011	Dec 2010-2011	June 2012-2013	Dec 2015-2016
NO <sub>2</sub> (2010) (primary)	Jan 2010	Jan 2013	Feb 2012	N/A	N/A
SO <sub>2</sub> (2010) (primary)	June 2010	June 2013	Oct 2013 (+2 rounds)	April 2015	Oct 2018
Ozone (2008)	Mar 2008	Mar 2011	July 2012	Mid 2015-2016	2015-2032
PM <sub>2.5</sub> (2012)	Dec 2012	Dec 2015	Early 2015	Mid 2016	Dec 2021 (Mod) Dec 2025 (Ser)
Ozone (2015)	Oct 2015	Oct 2018	Dec 2017	Dec 2020-21	2020-2037

# Ozone NAAQS

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- ▶ 2008 Revised primary 8-hour Ozone NAAQS (75 ppb)
  - ▶ Area designations (46 nonattainment and 1 unclassifiable) were effective on July 20, 2012
    - On going litigation concerning designations for several areas
- ▶ 2008 Ozone NAAQS SIP Requirements Rule and Revocation of 1997 NAAQS
  - ▶ Proposed May 29, 2013 (78 FR 34178), anticipate final rule in early 2015
  - ▶ Emission inventory and RACT SIPs were due in July 2014
  - ▶ Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)
- ▶ 2015 Ozone NAAQS Review
  - ▶ April 29, 2014 court issued ruling on schedule:
    - Signed November 25, 2014
    - Final October 1, 2015

# Particulate Matter<sub>2.5</sub> (PM<sub>2.5</sub>) NAAQS

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- ▶ On December 14, 2012, EPA revised the primary (health-based) annual PM<sub>2.5</sub> standard by lowering the level from 15.0 to 12.0  $\mu\text{g}/\text{m}^3$
- ▶ EPA also made updates and improvements to the PM<sub>2.5</sub> monitoring network that include relocating a small number of monitors to measure PM<sub>2.5</sub> near heavily traveled roads in areas with populations  $\geq 1$  million
  - ▶ These relocations will be phased in over two years (2015-2017) and will not require additional monitors
- ▶ U.S. Court of Appeals, D.C. Circuit issued its decision on May 9, 2014 regarding a lawsuit challenging the final PM NAAQS
  - ▶ Court denied petitions for review on all accounts

# PM<sub>2.5</sub> NAAQS Implementation: Status of Designations

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## ▶ Status of Designations

- ▶ On August 19, 2014, 120-day letters were signed and released indicating EPA's intent to designate:
  - Nonattainment – 14 areas in 6 states
  - Unclassifiable – 2 territory, 1 area in Indian country, 3 areas in Georgia, the entire state of Tennessee (except for 3 counties in the Chattanooga area), the entire state of Illinois, 2 counties in Indiana and 4 counties and 1 city in Missouri
  - Deferring designations for 1 year for five areas – primarily in Georgia but also affecting single counties in South Carolina and Alabama
- ▶ Final designations expected in December 2014

# PM<sub>2.5</sub> NAAQS Implementation: Under Subpart 4

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- ▶ January 2013 D.C. Circuit decision held that EPA should be implementing the PM<sub>2.5</sub> NAAQS according to subpart 4 (particulate matter-specific provisions), not solely subpart 1 (general nonattainment area provisions)
  - ▶ Court remanded the 2007 PM<sub>2.5</sub> Implementation Rule and the 2008 NSR Rule for 1997 PM<sub>2.5</sub> NAAQS back to EPA
- ▶ On June 2, 2014, EPA issued a final rule on “Identification of Nonattainment Classification and Deadlines for Submission of SIP Provisions for 1997 PM<sub>2.5</sub> NAAQS and 2006 PM<sub>2.5</sub> NAAQS” (79 FR 31566)
  - ▶ Clarified that areas designated nonattainment for the 1997 and/or 2006 PM<sub>2.5</sub> standards are classified as “Moderate”
  - ▶ Set deadline of December 31, 2014, for states to submit attainment-related and nonattainment NSR SIP submissions to meet requirements of subpart 4, as needed
  - ▶ Litigation on final rule is pending

# PM<sub>2.5</sub> NAAQS Implementation: SIP Requirements Rule

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- ▶ PM<sub>2.5</sub> NAAQS SIP Requirements Rule
  - ▶ Proposal currently undergoing interagency review; due for signature late 2014/early 2015
  - ▶ EPA plans to finalize rule as close as possible to effective date of designations for the 2012 PM<sub>2.5</sub> NAAQS
- ▶ The proposal will:
  - ▶ Take 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 decision
  - ▶ Apply to all PM<sub>2.5</sub> NAAQS nonattainment areas, including areas designated for the 1997 and 2006 PM<sub>2.5</sub> NAAQS and areas designated later this year for the 2012 PM<sub>2.5</sub> NAAQS
  - ▶ Address how subpart 4 court decision affects nonattainment NSR permitting requirements (e.g., with respect to major source threshold, precursors, etc.)

# PM<sub>2.5</sub> NAAQS and SIP Actions

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- ▶ Effect of the January 2013 court decision on implementation of the 1997 and 2006 PM<sub>2.5</sub> nonattainment areas
  - ▶ States are updating SIPs to address all precursors (including ammonia and VOC), as appropriate
  - ▶ For some current nonattainment areas, EPA action on attainment plans and/or nonattainment NSR SIPs will be required prior to issuance of the final PM<sub>2.5</sub> implementation rule
- ▶ For areas designated nonattainment for the 2012 PM<sub>2.5</sub> NAAQS, Moderate area plans will be due 18 months after the effective date of designation (Fall 2016)
  - ▶ Final PM<sub>2.5</sub> NAAQS implementation rule is expected to be finalized before these plans come due

# Secondary NO<sub>x</sub>/SO<sub>x</sub> NAAQS Review

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## Background

- ▶ The last review of the NO<sub>x</sub>/SO<sub>x</sub> Secondary NAAQS concluded in March 2012 and the secondary standards for NO<sub>2</sub> and SO<sub>2</sub> were not changed
  - This review was done independently from the reviews for the primary NO<sub>2</sub> NAAQS and primary SO<sub>2</sub> NAAQS
  - On May 27, 2014, the D.C. Circuit Court upheld EPA's decision to not establish a new secondary standard
- ▶ In the last review, NO<sub>x</sub> and SO<sub>x</sub> were considered jointly for their effects on public welfare (secondary NAAQS)
- ▶ Because the last review focused on the effects of acidification on aquatic ecosystems, it was important to consider both of these pollutants jointly as they both contribute to acidification

## Status

- ▶ In July 2013, the Office of Research and Development's National Center for Environmental Assessment put out a call for information relating to the public welfare effects of NO<sub>x</sub> and SO<sub>x</sub>
- ▶ On March 4-6, 2014, EPA held a NO<sub>x</sub>/SO<sub>x</sub> workshop to bring in experts to discuss the state of the science on oxides of nitrogen and sulfur
- ▶ Planning for the scope of the review and the development of the Integrated Science Assessment (ISA) is ongoing
- ▶ A draft planning document is anticipated in early 2015, and a first draft ISA is anticipated in Summer 2015

# Exceptional Events

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- ▶ Revisions to the 2007 Exceptional Events Rule (EER)
  - ▶ Target proposal mid-2015 and promulgating in mid-2016
  - ▶ Revisions will focus on statutory language to clarify level of supporting documentation to satisfy approved EE demonstrations with the focus on improved national consistency
  - ▶ Schedule provides EER changes in advance of implementation activities for any potential new or revised ozone NAAQS
- ▶ Guidance to Support Data Exclusion Requests for Wildfire-Related Events that May Affect Ozone Concentrations
  - ▶ Schedule anticipated to parallel EER revisions
  - ▶ Focus on demonstration components and the technical tools available to support EER criteria

# Nitrogen Strategy

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- ▶ In response to the 2011 SAB Reactive Nitrogen Report, the agency developed a cross-cutting multimedia strategy for researching ecological effects, source controls, and environmental changes of reactive nitrogen and co-pollutants (sulfur, phosphorus, sediments)
- ▶ Future plans to include other federal agencies
- ▶ Goal is to prioritize nitrogen research and improve collaboration
- ▶ Action Items
  - ▶ June 24-26, USDA, USGS and EPA participated in a meeting, entitled: Management Strategies for Reactive Nitrogen and Co-pollutants
  - ▶ Purpose of meeting – develop a partnership between EPA, USDA and USGS to promote sustainable management of N and co-pollutants
- ▶ Expected products
  - ▶ Draft Workshop Report with notes and slides from the workshop, December 2014
  - ▶ Joint Science and Management Action Plan (Fall 2015)
- ▶ The Draft Nitrogen Cross Cutting Research Roadmap Report is available at: [http://yosemite.epa.gov/sab/sabproduct.nsf/0/337ECE7064DEE1F185257CF3005F5367/\\$File/NCoPollutant+DRAFT+Cross-cutting+Roadmap+080814.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/0/337ECE7064DEE1F185257CF3005F5367/$File/NCoPollutant+DRAFT+Cross-cutting+Roadmap+080814.pdf)

# Biomass

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- ▶ On November 19, 2014 EPA released a 2<sup>nd</sup> draft of the *Framework for Assessing Biogenic Carbon Dioxide (CO<sub>2</sub>) from Stationary Sources*, for further review.
  - ▶ Revised report takes into account the latest information from the scientific community and other stakeholders.
  - ▶ EPA will continue to refine its accounting work by initiating a second round of targeted peer review with the Science Advisory Board
- ▶ EPA also released a memorandum that describes our current thinking pertaining to biogenic CO<sub>2</sub> emissions in the context of the Clean Power Plan (CPP) and the Prevention of Significant Deterioration (PSD) program.
  - ▶ EPA expects that state reliance on waste-derived feedstocks and agricultural- and forest-derived feedstocks from sustainable practices may also be approvable elements of state compliance plans under the CPP
  - ▶ EPA will evaluate the biogenic feedstock components of proposed state plans as part of the compliance plan and review process, and will provide clarification as needed on the basis on which it will make such biomass-related evaluations.
  - ▶ EPA plans to propose revising the PSD regulations to include an exemption from application of the Best Available Control Technology (BACT) requirements for GHGs from waste-derived feedstocks and from non-waste biogenic feedstocks derived from sustainable forest or agricultural practices.
  - ▶ EPA anticipates providing additional guidance to sources undergoing BACT analysis involving biogenic feedstocks.
- ▶ The memo and revised Framework can be found at:  
<http://epa.gov/climatechange/ghgemissions/biogenic-emissions.html>

# Farm, Ranch & Rural Communities Committee

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- ▶ The Farm, Ranch, and Rural Communities Committee (FRRCC) was established in 2008 to “provide independent policy advice, information and recommendations to the Administrator on a range of environmental issues and policies that are of importance to agriculture and rural communities”
- ▶ Committee members include representatives from academia, industry (e.g., agriculture and allied industries), non-governmental organizations, and state, local and tribal governments
- ▶ The 2014-16 Committee will focus on:
  - ▶ The importance of soil health
  - ▶ The advantages soil health can have for air and water quality
  - ▶ The increased occurrences of extreme weather events across the U.S.
  - ▶ How soil health can mitigate impacts to farms during extreme weather events
- ▶ The FRRCC is scheduled to meet on January 21 - 22, 2015 at EPA’s Conference Center located at One Potomac Yard; the street address is 2777 South Crystal Drive, Arlington, Virginia 22202

# The Farm Bill SAB Agriculture Committee

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- ▶ Farm Bill Charge: “Provide scientific and technical advice to the Board relating to matters referred to the Board that the Administrator and the Board determines, in consultation with the Secretary of Agriculture, to have a significant direct impact on enterprises that are engaged in the business of the production of food and fiber, ranching and raising livestock, aquaculture and all other farming and agriculture related industries”
- ▶ Members appointed by the Administrator and the Board, in consultation with the Secretary of Agriculture
- ▶ Status: EPA’s Office of the SAB, OGC and the Acting Agriculture Counselor are working together to address issues associated with establishing this committee

# Additional Agency Activities

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- ▶ Grain Elevators New Source Performance Standard (NSPS)
  - ▶ Proposed amendments on July 9, 2014
  - ▶ Comment period extended and now closes on December 22, 2014
  - ▶ Docket - <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2010-0706>
- ▶ Phosphoric Acid and Phosphate Fertilizer RTR
  - ▶ Proposal published in FR on November 7, 2014
  - ▶ Comment period will end on December 22, 2014
  - ▶ Docket- <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2012-0522>
- ▶ Clean Power Plan for Existing Power Plants
  - ▶ On June 2, 2014, the EPA issued the proposed Clean Power Plan; the proposal was published in the *Federal Register* on June 18, 2014
  - ▶ The EPA published a notice of data availability (NODA) in the *Federal Register* on October 30, 2014
  - ▶ On November 6, 2014, the EPA issued a technical support document (TSD) that provides two examples of how states, U.S. territories, and Indian country can translate rate-based goals into total metric tonnes of CO<sub>2</sub> (or “mass-based equivalent”)
  - ▶ The EPA published the Clean Power Plan supplemental proposal in the *Federal Register* on November 4, 2014.
  - ▶ For more information please visit: <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule>
- ▶ Renewable Standard Fuel
  - ▶ On November 17, EPA issued a notice announcing that it will not be finalizing 2014 volume standards under the Renewable Fuel Standard program before the end of 2014
  - ▶ The proposed rule, issued in November 2013, generated a significant number of comments, particularly on the proposal’s ability to ensure continued progress toward achieving the law’s renewable fuel targets
  - ▶ Due to the delay in finalizing the standards for 2014, and given ongoing consideration of the issues presented by the commenters, the agency intends to take action on the 2014 standards rule in 2015
  - ▶ Looking forward, one of EPA’s objectives is to get back on the annual statutory timeline by addressing 2014, 2015, and 2016 standards in the next calendar year
  - ▶ More information is available at: <http://www.epa.gov/otaq/fuels/renewablefuels/documents/fr-notice-2014-rf-standards.pdf>

# Regional Activities

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- ▶ The Arizona Ag BMP Committee
  - ▶ Has adopted on the RACM rule for control of PM<sub>10</sub> from ag sources for Pinal County, AZ and will be submitting it to EPA soon
- ▶ Pinal County and Cowtown monitor
  - ▶ The County co-located monitors at two different locations and is working with Region 9 to evaluate these locations
- ▶ California Air Resources Board and the San Joaquin Valley Air District plan to submit a 188(e) extension request to EPA
  - ▶ Request will provide SJV with additional time to meet the 1997 PM 2.5 standard
  - ▶ 188(e) requires the District to demonstrate that its rules are the most stringent measures (MSM)
  - ▶ Anticipate the District providing an MSM analysis for both ag and no-ag rules

# USDA/EPA Ammonia & Agriculture Workgroup Update

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- ▶ Informal interagency workgroup that may focus on:
  - ▶ Assessing and summarizing the state of the science with regard to agricultural ammonia emissions and their fate
  - ▶ Identifying research gaps in this science realm
  - ▶ Clarifying the EPA regulatory approach to ammonia and its relevance to agriculture
  - ▶ Assessing and prioritizing agricultural ammonia mitigation strategies
- ▶ Meetings held monthly since June 2014
- ▶ Topics discussed to date include:
  - ▶ Overview of EPA regulatory programs
  - ▶ Overview of current USDA and EPA research activities
  - ▶ Detailed discussions of EPA modeling approaches

# For more information

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- ▶ Please contact Robin Dunkins, Group Leader, Sector Policies and Programs Division within the Office of Air Quality Planning and Standards at: 919-541-5335 or at [dunkins.rob@epa.gov](mailto:dunkins.rob@epa.gov)