

# Air Quality Regulatory Update

April 7, 2016

U.S. EPA  
Office of Air and Radiation  
Office of Air Quality Planning and Standards

# Overview

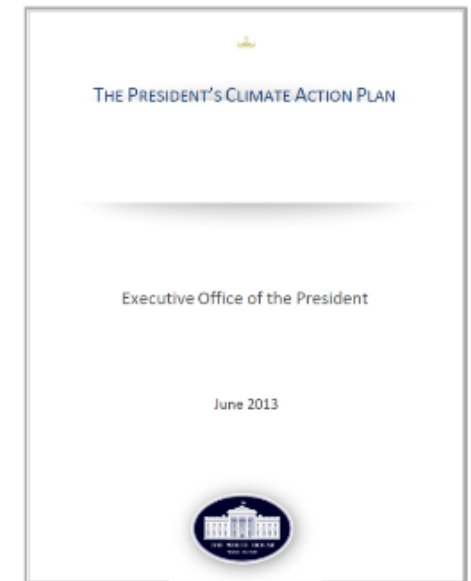
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- ▶ Presidential Climate Directives
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# Climate Action Plan

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- ▶ The President's Climate Action Plan was released in June 2013
- ▶ The plan's 3 key pillars contain actions to:
  - ▶ Cut domestic GHG emissions
  - ▶ Prepare the U.S. for the impacts of climate change
  - ▶ Continue U.S. leadership in international efforts to combat global climate change
- ▶ Supports Administration's climate goal:
  - ▶ Reduce U.S. GHG emissions in the range of 17% below 2005 levels by 2020

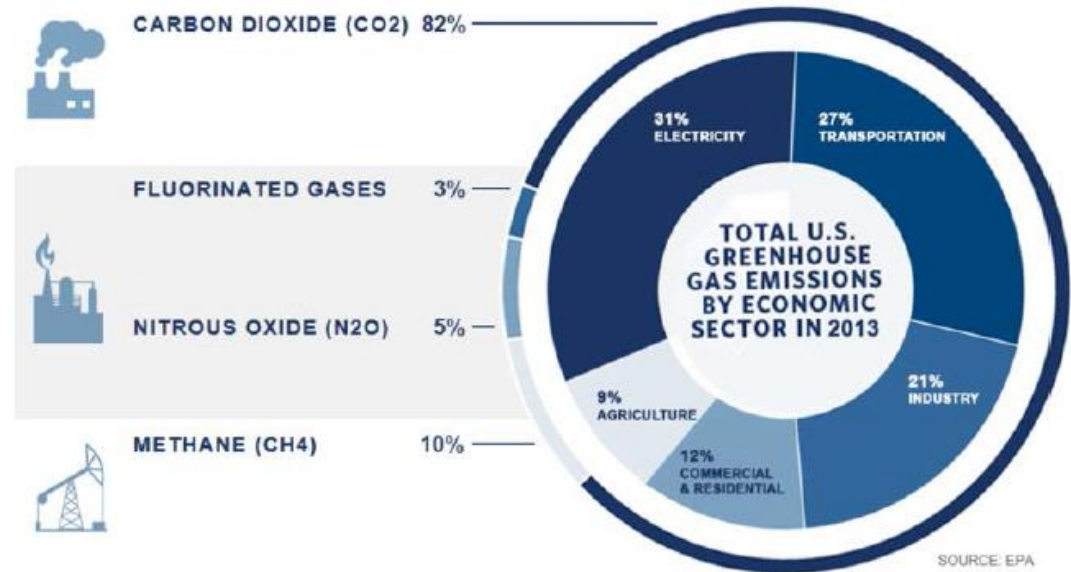


# Clean Power Plan: Background

- ▶ On August 3, 2015, EPA issued the first-ever national standards that address carbon pollution from existing power plants – the Clean Power Plan
  - ▶ By 2030, expected to reduce carbon pollution from power sector to 32% below 2005 levels
- ▶ At the same time, EPA issued:
  - ▶ Proposed federal plan and model rule to assist states in implementing CPP
  - ▶ Final carbon pollution standards for new, modified, and reconstructed power plants

- ▶ Establishes CO<sub>2</sub> emission performance rates for affected EGUs based on 'best system of emission reduction' (BSER)
- ▶ Rates also translated into state rate- and mass-based CO<sub>2</sub> goals, based on each state's unique 2012 power plant mix
- ▶ Each state can choose how to meet its goals
- ▶ States can work together, using tools such as emissions trading

## POWER PLANTS ARE THE SINGLE LARGEST SOURCE OF CARBON POLLUTION



# Clean Power Plan: Status

- ▶ The D.C. Circuit Court consolidated all of the petitions related to the Clean Power Plan into one case (*State of West Virginia et al., v. EPA*)
- ▶ January 21, 2016 – D.C. Circuit Court denied motion for stay of regulation pending litigation and ordered consideration of appeals on an expedited schedule
- ▶ February 9, 2016 – U.S. Supreme Court stayed implementation and enforcement of the Clean Power Plan pending judicial review
- ▶ For states that choose to continue to work to cut carbon pollution from power plants and seek the agency's guidance and assistance, EPA will continue to provide tools and support

## Key Points

- Implementation and enforcement are on hold
- State submittals not required on September 6, 2016
- EPA will continue to work with states that want to work with us on a voluntary basis

# Strategy to Reduce Methane Emissions: Background

- ▶ Climate Action Plan called for the development of an interagency methane strategy, which was published in March 2014
- ▶ *Why focus on methane reductions?*
  - ▶ Methane is a potent GHG
  - ▶ The recovery and use of methane provides many important co-benefits (economic, public health, & safety)
  - ▶ Low-cost technologies and best practices are already widely available and used in key sectors
- ▶ Steps in this strategy could potentially reduce GHG emissions up to the equivalent of 90 million metric tons of carbon dioxide in 2020, which is equivalent to:



# Strategy to Reduce Methane Emissions: Overview

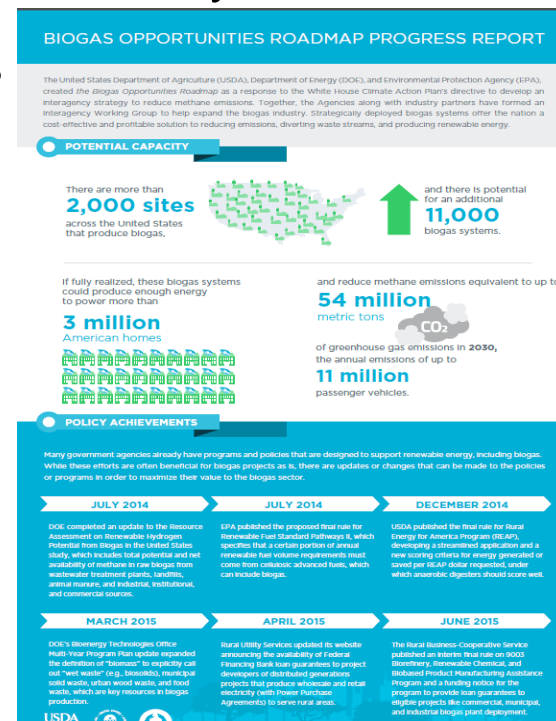
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- ▶ Plan focuses on four sectors:
  - ▶ Landfills (EPA)
  - ▶ Agriculture (EPA, USDA, DOE)
  - ▶ Coal Mines (DOI, EPA)
  - ▶ Oil & Gas (EPA, DOE, DOI)
- ▶ Reducing Methane Emissions: Builds on best practices and activities to reduce methane emissions
  - ▶ Combination of regulatory and voluntary domestic activities, depending on sector
- ▶ Improving Methane Data: Calls for assessment of current methane emissions data
  - ▶ Identifies ways in which EPA can improve the GHG inventory and GHG reporting program
  - ▶ Focuses on improving global estimates
- ▶ Providing International Leadership: Highlights U.S. role in global organizations
  - ▶ Participation in the Arctic Council Task Force on Black Carbon and Methane, Global Methane Initiative, and Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants

# Biogas Opportunities Roadmap

## *Biogas Opportunities Roadmap: Voluntary Actions to Reduce Methane Emissions and Increase Energy Independence*

- ▶ Action item from Interagency Methane Strategy; published in August 2014
- ▶ Jointly developed by USDA, DOE and EPA in conjunction with the American Biogas Council & Innovation Center for US Dairy.
- ▶ *Goal:* Stimulate expanded use of biogas systems by leveraging resources of multiple government agencies
- ▶ Issued *Progress Report* in December 2015 highlighting achievements to date, continued challenges and opportunities, and future strategies
- ▶ EPA has several ongoing initiatives related to the biogas sector





# AgSTAR

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- ▶ Established in 1994 to provide technical support to livestock operations for voluntary methane reduction projects
- ▶ National Digester Database
  - ▶ EPA maintains primary database dedicated to tracking farm-scale digester projects in the U.S.
  - ▶ EPA works collaboratively with USDA to maintain and expand this database as projects are developed. <https://www.epa.gov/agstar/livestock-anaerobic-digester-database>
- ▶ Interagency Agreement with USDA
  - ▶ EPA AgSTAR program executed a five year Interagency Agreement (IA) with USDA Rural Development in September 2015 - the continuation of a 20+ year relationship between AgSTAR and Rural Development
  - ▶ IA will help support USDA's [Building Blocks for Climate Smart Agriculture and Forestry](#), specifically on Livestock Partnerships and Energy Generation and Efficiency - “plans to support 500 new digesters over the next 10 years” and “promote renewable energy technologies”

# Biomass: Revised Framework

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- ▶ Technical report that presents important considerations (e.g., scope, baseline type, temporal and spatial scales, leakage) and an equation that can be used when assessing biogenic CO<sub>2</sub> emissions from stationary sources
  - ▶ Report is not specific to any policy or program
- ▶ First draft released in 2011; associated EPA Science Advisory Board (SAB) review completed in 2012
- ▶ Revised report released November 2014, along with SAB review request
- ▶ Key takeaways
  - ▶ Biomass should not be assumed to be carbon neutral
  - ▶ Net biogenic CO<sub>2</sub> atmospheric contribution depends on various factors (type, production and combustion practices), and, in some cases, what would happen to the feedstock if not used for energy production
  - ▶ Illustrative studies exemplify how some feedstocks, such as those from waste-derived feedstocks, may have minimal or zero net emissions when used for energy production
- ▶ In February 2016, the SAB biomass panel submitted a draft peer review report to the full chartered SAB for a quality review
- ▶ SAB review took place March 31 - April 1, 2016
  - ▶ SAB recommended that the draft peer review report recommendations should undergo further revisions by the SAB Biomass Panel

# Biomass Engagement

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- ▶ States and stakeholders have shown strong interest in the role biomass can play in state strategies to address carbon pollution
- ▶ States are very important:
  - ▶ Have extensive expertise with carbon- and GHG-beneficial forestry and land management practices
  - ▶ Apply unique approaches to biomass and bioenergy based on the state's economic, environmental and renewable energy goals
- ▶ EPA-hosted public workshop (April 7, 2016)
  - ▶ Goal: Support efforts to further evaluate the role of biomass in stationary source carbon strategies
  - ▶ States & other stakeholders will share their successes, experiences and approaches to deploying biomass in ways that have been, and can be, carbon beneficial

For more information on the framework and workshop, visit:

<https://www3.epa.gov/climatechange/ghgemissions/biogenic-emissions.html>

# Biomass: Treatment in CPP

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- ▶ CPP includes bioenergy as an option for meeting state goals and compliance with power plant emission standards
- ▶ Where biomass is incorporated in a state plan, states must propose biomass types for use
  - ▶ How they are considered as “qualified biomass” (i.e., a biomass feedstock that is demonstrated as a method to control increases of CO<sub>2</sub> levels in the atmosphere)
- ▶ Not all forms of biomass may be approvable as qualified biomass
  - ▶ Like other technologies, proposed qualified biomass feedstock use requires adequate monitoring, reporting and verification requirements
  - ▶ Waste-derived and certain industrial byproduct feedstocks would likely be approvable
  - ▶ Forestry and agriculture feedstocks may also be acceptable, if state plans adequately demonstrate they control increases of CO<sub>2</sub> levels in the atmosphere
- ▶ Information in the revised Framework, second SAB process, and state/third party programs can assist states considering the role of biomass in state energy solutions
- ▶ In the proposed CPP federal plan/model rule, EPA requested comment on topics related to biomass, including whether biomass should be included and, if so, how it should be included and verified

# NAAQS Reviews: Status Update

(as of February 2016)

	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> <small>(final rule signed)</small>	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  <u>Nov 25, 2014</u> Proposed rule  <u>Oct 1, 2015</u> Final rule	<u>May 2014</u> Final PA  <u>Dec 2014</u> Proposed decision  <u>2016</u> Final decision	<u>May 2015</u> REA Planning Document  <u>Jan 2016</u> Final ISA  <u>Summer 2016</u> 1 <sup>st</sup> Draft PA/REA	<u>Jan 2015</u> CASAC review of 1 <sup>st</sup> Draft ISA  <u>Fall/Winter 2016</u> 2 <sup>nd</sup> Draft ISA REA Planning Document	<u>Oct 2015</u> Draft IRP  <u>Spring/ Summer 2016</u> Final RIP  <u>Fall 2016</u> 1 <sup>st</sup> Draft ISA REA Planning Document	<u>Spring 2016</u> Draft IRP	TBD <sup>2</sup>

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

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

<sup>2</sup> TBD = to be determined

# Anticipated NAAQS Implementation Milestones

(updated March 2016)

Pollutant	Final NAAQS Date	Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
PM <sub>2.5</sub> (2006)	Oct 2006	Dec 2009	Oct 2009	Dec 2014	Dec 2015 (Mod) Dec 2019 (Ser)
Pb (2008)	Oct 2008	Dec 2010-2011	Oct 2011	June 2012-2013	Dec 2015-2016
NO <sub>2</sub> (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
SO <sub>2</sub> (2010) (primary)	June 2010	Oct 2013 (+3 rounds)	June 2013	April 2015 (2018, 2019, 2022)	Oct 2018 (2021, 2023, 2026)
Ozone (2008)	Mar 2008	July 2012	Mar 2011	Mid 2015-2016	Mid 2015-2032
PM <sub>2.5</sub> (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Mod)	Dec 2021 (Mod) Dec 2025 (Ser)
Ozone (2015)	Oct 2015	Dec 2017	Oct 2018	Dec 2020-2021	2020-2037

# 2008 Ozone NAAQS Implementation

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- ▶ Final 2008 Ozone NAAQS SIP Requirements Rule: “Implementation of the 2008 NAAQS for Ozone: State Implementation Plan Requirements” published March 6, 2015 (80 FR 12264)
  - ▶ Provides guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas
  - ▶ Revoked the 1997 NAAQS (effective April 6, 2015) and establishes anti-backsliding requirements
- ▶ Key implementation dates for nonattainment areas:
  - ▶ Emissions inventories, emissions statement rules and RACT SIPs due July 2014
  - ▶ Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)
  - ▶ Marginal area attainment date July 20, 2015 (attainment determined by 2012-2014 air quality data)
  - ▶ Moderate area attainment date July 20, 2018 (2015-2017 air quality data)
- ▶ Litigation: South Coast Air Quality Management District and environmental petitioners (Sierra Club et al.) challenged various aspects of the 2008 SIP Requirements Rule, including creditability of RFP control measures, baseline years of RFP, and anti-backsliding requirements
  - ▶ Petitioners’ opening briefs filed March 17, 2016; EPA response brief due June 15, 2016

# 2008 Ozone NAAQS Implementation:

## Proposed Actions for Marginal Nonattainment Areas

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- ▶ Marginal area attainment date was July 20, 2015
- ▶ On August 27, 2015 (80 FR 51992), EPA proposed several actions for 36 Marginal areas under the 2008 ozone NAAQS:
  - ▶ Determinations of attainment by the attainment date proposed for 17 areas
  - ▶ One-year extensions of the attainment date proposed for 8 areas
  - ▶ Reclassifications to Moderate due to failure to attain by the attainment date proposed for 11 areas
  - ▶ Proposal also took comment on 2 options for the Moderate area attainment plan due date:
    - Beginning of each area's 2017 ozone season, or
    - January 1, 2017 (for all areas)
- ▶ Comment period closed September 28, 2015
- ▶ Final rule expected April 2016



# 2015 Ozone NAAQS

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- ▶ Final rule October 1, 2015 (80 FR 65291 & 79 FR 75233)
  - ▶ Revised the primary health standard and secondary welfare standard to 70 ppb.
  - ▶ Updated the Air Quality Index breakpoints based on the level of the revised primary standard.
- ▶ Implementation aspects
  - ▶ Extended the monitoring season in 33 states
  - ▶ New Federal Reference Method (FRM) for measuring ambient ozone
  - ▶ Revised minimum Photochemical Assessment Monitoring Stations (PAMS) network requirements to decrease overall burden and increase flexibility
  - ▶ Grandfathered in-the-pipeline PSD permit applications
  - ▶ Addressed the “exceptional event” demonstration deadline to ensure air agency claims for 2013-2016 are adequately considered in area designations decisions

For more information related to the ozone standards and implementation, please visit:

<https://www.epa.gov/ozone-pollution>

# 2015 Ozone NAAQS: Current and Upcoming Implementation-Related Rules/Guidance/Activities

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- ▶ Area designations guidance (including assessing rural transport areas) issued to states in February 2016  
<https://www.epa.gov/ozone-designations/ozone-designations-guidance-and-data>
  
- ▶ Proposed rule to update, where necessary, the existing ozone NAAQS implementation regulations targeted for October 2016
  - ▶ Nonattainment area classification thresholds
  - ▶ State implementation plan (SIP) due dates
  - ▶ Anti-backsliding provisions associated with potential revocation of the 2008 NAAQS
  
- ▶ White paper on background ozone issued December 2015; workshop held in February 2016  
<https://www.epa.gov/ozone-pollution/epa-workshop-background-ozone-february-24-and-25-2016>
  
- ▶ PSD permitting:
  - ▶ Final update to Guideline on Air Quality Models (Appendix W to 40 CFR Part 51) (July 2016)
  - ▶ Guidance on compliance demonstration tools: ozone significant impact level (SIL) (August 2016)
  
- ▶ Update to transportation conformity guidance specific to areas that are nonattainment for 2015 NAAQS (Fall 2017)

# 2015 Ozone NAAQS

## Anticipated Timeline for Designations Process

Milestone	Date
The EPA promulgates 2015 Ozone NAAQS rule	October 1, 2015
The EPA issues designations guidance	February 25, 2016
States and tribes submit recommendations for ozone designations to EPA	No later than October 1, 2016
The EPA notifies states and tribes concerning any intended modifications to their recommendations (120-day letters)	No later than June 2, 2017 (120 days prior to final ozone area designations)
The EPA publishes public notice of state and tribal recommendations and the EPA's intended modifications, if any, and initiates 30-day public comment period	On or about June 9, 2017
End of 30-day public comment period	On or about July 10, 2017
States and tribes submit additional information, if any, to respond to the EPA's modification of a recommended designation	No later than August 7, 2017
The EPA promulgates final ozone area designations	No later than October 1, 2017

# Exceptional Events

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- ▶ Exceptional Events Rule Revisions and Wildfire Guidance Development
  - ▶ November 10, 2015: Notice of Proposed Rulemaking for rule revisions and Notice of Availability for draft guidance signed
  - ▶ November 20, 2015: Publication in Federal Register (80 FR 72840)
  - ▶ December 8, 2015: Public hearing in Phoenix, Arizona
  - ▶ February 3, 2016: Close of comment period
  - ▶ Summer 2016: Sign final rule and issue final guidance document
  
- ▶ Communication and Outreach
  - ▶ Summer/Fall 2016:
    - Additional draft guidance document(s) available for stakeholder review
    - Revisions to 2013 Interim Exceptional Events Implementation Guidance
  - ▶ Continued development of exceptional events tools (e.g., website, templates)
  - ▶ Implementation workshop(s)/webinars for states, tribes, and other affected stakeholders following promulgation

# PM<sub>2.5</sub> NAAQS Implementation

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- ▶ EPA issued final Deadline and Classifications Rule on June 2, 2014 (79 FR 31566)
  - ▶ Clarified that areas designated nonattainment for the 1997 and/or 2006 PM<sub>2.5</sub> standards were classified as “Moderate”
  - ▶ Set new deadline of December 31, 2014, for states to submit attainment–related and nonattainment NSR SIP submissions required under subpart 4
  - ▶ Directed states to existing EPA guidance (1992 General Preamble and 1994 Addendum) for interpretation of subpart 4 requirements
- ▶ Petition for review filed July 31, 2014, by WildEarth Guardians with the U.S. Court of Appeals for the DC Circuit on Deadline and Classifications Rule
  - ▶ Oral arguments were November 6, 2015
  - ▶ Awaiting response from the Court
- ▶ The Center for Biological Diversity, Center for Environmental Health, and Neighbors for Clean Air filed a complaint on October 8, 2015 to take final action on 2006 PM<sub>2.5</sub> NAAQS attainment plans or issue findings of failure to submit
  - ▶ Proposed consent decree lodged with the Court on March 23, 2016

# PM<sub>2.5</sub> NAAQS Implementation

## SIP Requirements NPRM

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- ▶ March 10, 2015: EPA proposed rule for SIP requirements that would apply to current and future PM<sub>2.5</sub> nonattainment areas
  - ▶ “Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements; Proposed Rule” was published on March 23, 2015 (80 FR 15340)
- ▶ Proposal sought comment on approaches to clarify nonattainment implementation requirements (including nonattainment NSR) according to subpart 4 of part D of Title I of the CAA, consistent with January 2013 U.S. Court of Appeals for the DC Circuit Court decision
  - ▶ Final rule will apply to all areas designated nonattainment for the 1997, 2006 and 2012 PM<sub>2.5</sub> NAAQS, and any additional areas designated nonattainment for these or future revised PM<sub>2.5</sub> NAAQS
- ▶ Final rule projected for summer 2016

# GHG Regulatory Updates

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- ▶ In April 2015, EPA issued a final action revising EPA's PSD regulations to enable the EPA to rescind EPA-issued PSD permits
  - ▶ Direct Final – 80 FR 26183; Parallel Proposal – 80 FR 26210
- ▶ In August 2015, EPA issued a final rulemaking to remove certain provisions from PSD and title V that were vacated as part of the D.C. Circuit's April 2015 Amended Judgment (80 FR 50199)
- ▶ EPA is working on a proposed rule to establish a significant emissions rate for GHGs under the PSD program
  - ▶ This proposed rulemaking will also propose the remaining changes to PSD and title V that are necessary to fully implement the DC Circuit's April 2015 Amended Judgment
  - ▶ Proposal is projected for summer 2016

# Animal Production: Update on Petitions/Litigation

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- ▶ *Zook v. McCarthy* (D.C. Cir.): Dismissed
  - ▶ Sought to compel EPA to list ammonia and hydrogen sulfide as criteria pollutants (CAA 108) and list CAFOs as a source category (CAA 111)
  - ▶ D.C. Circuit upheld court decision to dismiss (April 2015) & denied petition for panel rehearing (June 2015); Supreme Court denied petition for rehearing (Nov. 2015)
- ▶ *EIP v. EPA* (D.C. Cir): New NOI
  - ▶ Petitioners: EIP, Iowa Citizens for Community Improvement, Clean Wisconsin, CFS, HSUS, Association of Irrigated Residents, Food & Water Watch
  - ▶ Filed original petition to regulate ammonia as a criteria pollutant (CAA 108 & 109) in April 2011
  - ▶ Filed unreasonable complaint delay under APA in Jan. 2015, which was dismissed in Dec. 2015 because Plaintiffs had not filed proper notice or used appropriate statute
  - ▶ Provided new NOI under CAA 304 in Feb. 2016



# Animal Production: Update on Petitions/Litigation (cont'd)

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- ▶ *HSUS v. EPA* (D.C. Cir): Awaiting Decision
  - ▶ Petitioners: HSUS, Association of Irrigated Residents, EIP, Friends of the Earth, Sierra Club
  - ▶ Filed original petition to list CAFOs as a category of sources under CAA (CAA 111(B)) in Sept. 2009
  - ▶ Filed unreasonable complaint delay under APA in Jan. 2015

# Animal Production: NAEMS Update

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## ▶ Background

- ▶ 2005: Voluntary air compliance agreement reached with AFO industry
- ▶ 2007 – 2010: Conducted emissions measurements at AFOs
- ▶ 2011: Submitted draft emissions estimating methodologies for broiler confinement houses and swine and dairy lagoons/basins to the EPA Science Advisory Board (SAB) for review
- ▶ 2013: Received final report from SAB with several recommendations

## ▶ SAB Recommendations

- ▶ Need for additional data to fill specific gaps in knowledge
  - EPA worked with the NAEMS Science Advisor to reanalyze the raw data at different completeness criteria levels
  - EPA has received analysis, but has not investigated the impacts of the different completeness criteria on the EEMs
  - EPA acquired several new datasets and incorporated those data into the larger NAEMS dataset
- ▶ Encouraged EPA to develop a more complex modeling tool to estimate emissions that would reflect greater variability in animal production systems
- ▶ Suggested applying improved versions of the draft methodologies in the interim

# Animal Production: NAEMS Update (cont'd)

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## ▶ **Current Status**

- ▶ Although addressing the SAB comments has delayed finalization of the emissions-estimating methodologies, EPA plans to continue this work and will use the findings, in conjunction with related recommendations from the 2003 National Research Council, to account for air emissions from AFOs
- ▶ EPA's Office of the Inspector General notified the Office of Air and Radiation on March 8, 2016 that they would begin an evaluation of EPA's effort to evaluate air emissions from animal feeding operations

# Animal Production: Best Management Practices

*Agricultural Air Quality Conservation Measures:  
Reference Guide for Poultry & Livestock Production Systems*

- ▶ Collaboration between USDA-NRCS and EPA
- ▶ Expected publication: Winter 2016
- ▶ Follow-up to 2012 guide for cropping systems and general land management
- ▶ Purpose of the guide:
  - ▶ Provide a broad set of conservation practices for poultry/livestock operations that may address air resource concerns
    - Strong focus on NRCS conservation standards
    - Also includes other demonstrated practices
  - ▶ Allow stakeholders to choose measures relevant to their operations
- ▶ The guide does not:
  - ▶ Provide regulatory measures
  - ▶ Quantify current agricultural air quality impacts
  - ▶ Present a comprehensive list of all emission reduction measures or their co-benefits

# NESHAP/NSPS Updates

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## ▶ RICE NESHAP/NSPS

- ▶ NESHAP finalized in 2013; applies to agricultural stationary engines
- ▶ May 2015 vacature of some NESHAP and NSPS provisions related to emergency engines
- ▶ Minor NSPS amendments to be finalized in spring 2016:
  - Allow owner/operator to temporarily override engine performance inducements related to the emission control system during emergency situations
- ▶ Videos for farmers available: <http://www.apti-learn.net/LMS/EPAHomePage.aspx>  
(Click on LEARN, Stationary Sources, then Launch Course)

## ▶ Grain Elevators NSPS

- ▶ Expect signature on final rule in late 2016

## ▶ Phosphoric Acid and Phosphate Fertilizer RTR & Phosphate Processing NSPS review

- ▶ Final rule issued in August 2015

## ▶ Nutritional Yeast RTR

- ▶ Originally promulgated in 2001; applies to yeast used in baking and nutritional food supplements (not yeast used for animal feed or beer/wine)
- ▶ March 2016: *Sierra Club v. EPA* (DC Cir.) requires RTR to be finalized by October 1, 2017

# Renewable Fuel Standard Program Updates

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- ▶ April 2015:
  - ▶ Established cellulosic waiver credit price
    - CWC price for 2016: \$1.33
- ▶ October 2015:
  - ▶ Published analysis of the GHG emissions attributable to production and transport of jatropha oil for use in biofuel production
  - ▶ Comment period ended on November 12, 2015
- ▶ November 2015:
  - ▶ Finalized 2014-2016 volume requirements for cellulosic biofuel, biomass-based diesel, advanced biofuel & total renewable fuel
  - ▶ Finalized 2017 volume requirement for biomass-based diesel
- ▶ March 2016: MOU with U.S. Commodity Futures Trading Commission
  - ▶ Agencies agree to cooperate and coordinate on topics related to implementation of RFS program and the market for RINs

# EPA's National Enforcement Initiatives

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- ▶ Focus on national environmental problems where:
  - ▶ Significant non-compliance with laws exists and
  - ▶ Federal enforcement efforts can make a difference
- ▶ Three-year cycles
  - ▶ Current cycle: October 1, 2016 – September 30, 2019
  - ▶ Retained 4 initiatives, added 2 initiatives, and expanded 1 initiative (to include new area of focus)

# EPA's National Enforcement Initiatives (cont'd)

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- ▶ Air
  - ▶ Reducing Air Pollution from the Largest Sources
  - ▶ **Cutting Hazardous Air Pollutants** (*expanded for FY 17-19*)
- ▶ Energy Extraction
  - ▶ Ensuring Energy Extraction Activities Comply with Environmental Laws
- ▶ Hazardous Chemicals
  - ▶ Reducing Pollution from Mineral Processing Operations (returning to base program level in FY17)
  - ▶ **Reducing Risks of Accidental Releases at Industrial and Chemical Facilities** (*new for FY17-19*)
- ▶ Water
  - ▶ Keeping Raw Sewage and Contaminated Stormwater Out of Our Nation's Waters
  - ▶ Preventing Animal Waste from Contaminating Surface and Ground Water
  - ▶ **Keeping Industrial Pollutants Out of the Nation's Waters** (*new for FY17-19*)



# Farm, Ranch & Rural Communities Committee

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## The Farm, Ranch, and Rural Communities Committee (FRRCC)

- Established in 2008
- Provides policy advice, information and recommendations on a range of environmental issues and policies related to agriculture and rural communities

## Committee Structure

- Committee Co-Chairs: Dr. Steve Balling, Del Monte Foods (retired), and Mr. David Petty, Iowa River Ranch

## Working Groups

- Soil Health
  - Identifying EPA's role, programmatic goals and policies relevant to soil health
- Communication and Engagement
  - Evaluating EPA's adoption of past recommendations

# 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 SAB Office and Agricultural Counselor have reviewed 88 candidates and 300 public comments, consulted with USDA, and are preparing recommendations for committee membership

# Additional Agency Activities

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## ***USDA-EPA Ammonia Workgroup***

- ▶ Facilitates information exchange and collaboration on activities related to ammonia measurements, modeling, and mitigation strategies
- ▶ For more details, refer to the “USDA-EPA Collaborative Ammonia Research” presentation

## ***Clean Diesel (Clean Agriculture) Program***

- ▶ Diesel Emission Reduction Act (DERA) Grant Programs
  - ▶ Clean Diesel Funding Assistance Program (national)
    - Has been used for tractor upgrades & electrification or repowering of irrigation pumps and systems
    - RFP open through April 26, 2016
  - ▶ Clean Diesel State Allocations (PM & NOx reduction projects)
    - Some states provide funding for ag sector projects

## ***Nutrient Recycling Challenge***

- ▶ EPA is partnering with USDA, pork and dairy producers, and environmental and scientific experts to launch the [Nutrient Recycling Challenge](#), a competition to develop affordable technologies that recycle nutrients from livestock waste
- ▶ Challenge participants will develop technologies that extract nutrients from livestock manure to generate products with environmental and economic benefits that farmers can use or sell
- ▶ Phase I (concept paper) winners were announced March 30, 2016

# Additional Agency Activities (cont'd)

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## *EPA/USDA Food Waste Challenge*

- ▶ In September 2015, USDA and EPA announced the United States' first-ever national food waste reduction goal, calling for a 50-percent reduction by 2030.
- ▶ As part of the effort, the federal government will lead a new partnership with charitable organizations, faith-based organizations, the private sector and local, state and tribal governments to reduce food loss and waste in order to improve overall food security and conserve our nation's natural resources.

[http://www.usda.gov/wps/portal/usda/usdahome?contentid=2015/09/0258.xml&navid=NEWS\\_RELEASE&navtype=RT&parentnav=LATEST\\_RELEASES&deployment\\_action=retrievecontent](http://www.usda.gov/wps/portal/usda/usdahome?contentid=2015/09/0258.xml&navid=NEWS_RELEASE&navtype=RT&parentnav=LATEST_RELEASES&deployment_action=retrievecontent)

# Regional Activities

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## *Nitrogen Deposition Research at Rocky Mountain National Park*

- ▶ Established interagency agreement with National Park Service
- ▶ Awarded funds to continue research through 2017 monitoring season

## *San Joaquin Valley (SJV) of California Appears to Have Attained the 1-hour Ozone Standard*

- ▶ State submitted clean data finding request to EPA
- ▶ EPA intends to propose action this month
- ▶ Science indicates the SJV atmosphere has become NO<sub>x</sub> limited for ozone and NO<sub>x</sub> reductions are being very effective for reducing ozone
- ▶ Mobile source efforts, including those funded by NRCS EQIP are working

# Regional Activities (cont'd)

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## *PM Standards Remain a Challenge for SJV*

- ▶ Air district and state working on a plan for the 2012 PM2.5 annual standard which should be submitted to EPA in October
- ▶ Additional analysis for controls will be needed for sources of both secondary and direct PM2.5
- ▶ Second 10-year maintenance plan for PM-10 due to EPA in December

## *Hawaii Commercial and Sugar Announced They Will No Longer Grow Sugar Cane Beginning in 2017*

- ▶ Sugar cane production has not been profitable for HC&S for several years
- ▶ Cane burning has been an issue discussed by the AAQTF in the past

# Regional Activities (cont'd)

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## *Arizona Update*

- ▶ Governor's BMP Committee has adopted BMPs for Pinal County for PM-10
- ▶ EPA has approved relocation of Cowtown monitor in Pinal County (previously visited by the AAQTF)

For more information

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# Appendix

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# Biogas Opportunities Roadmap

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## *Purpose:*

- ▶ Encourage interagency collaboration
- ▶ Bring attention and legitimacy to emerging technologies to help attract greater private sector investment
- ▶ Identify government program modifications & research needs that could enhance the rate of growth of these systems

## *Areas of Focus:*

- ▶ Promoting biogas utilization through existing agency programs
- ▶ Fostering investment in biogas systems
- ▶ Strengthening markets for biogas systems and system products
- ▶ Improving communication and coordination

# Ongoing SAB Review Process for Biomass

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- ▶ In 2014, EPA requested a second targeted peer review of the revised framework with the Science Advisory Board (SAB)
  - ▶ Charge questions focused on specific areas that were not addressed by the 2012 SAB review and where EPA would like further guidance (including temporal scales)
  - ▶ SAB reconvened the 2011 Panel (14 of 17 members)
- ▶ Five public meetings were held since March 2015
  - ▶ 20+ different stakeholders submitted comments during the process
- ▶ In February 2016, the SAB biomass panel submitted a draft peer review report to the full chartered SAB for a quality review
- ▶ Full chartered SAB peer review took place March 31-April 1 and included public comment opportunities
  - ▶ Full chartered SAB recommended that the draft peer review report recommendations should undergo further revisions by the SAB biomass Panel

# Ongoing Litigation

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- ▶ December 8, 2014 Notice of Intent to Sue from Environmental Integrity Project (EIP) under CAA section 130
  - ▶ Unreasonable delay of a non-discretionary duty to establish emission factors under section 130 of the CAA for VOC emissions from AFOs
- ▶ In February 2015, EPA's Office of Civil Rights accepted for investigation a complaint filed by Earthjustice on behalf of local community groups that alleges racial and national origin discrimination related to the impacts of swine feeding operations in North Carolina in violation of Title VI of the Civil Rights Act of 1964

# RICE NESHAP/NSPS Detail

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- ▶ On May 1, 2016, the D.C. Circuit Court vacature of the provisions allowing emergency engines to operate up to 100 hours/year for emergency demand response (EDR) and voltage/frequency deviations takes effect
  - ▶ After the vacature, engines operating for EDR and voltage/frequency deviations must comply with the standards for non-emergency engines
- ▶ EPA requested and received a voluntary remand of the provision allowing emergency engines to operate for up to 50 hours/year to mitigate local transmission and distribution limitations
- ▶ EPA expects to finalize minor amendments to the NSPS for Stationary Compression Ignition Engines this spring; amendments will:
  - ▶ Allow owner/operator to temporarily override engine performance inducements related to the emission control system during emergency situations
  - ▶ Modify definition for remote areas of Alaska to include additional areas

# Phosphoric Acid Manufacturing & Phosphate Fertilizer Production NESHAP RTR

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- ▶ Established emission limits for mercury & total fluoride emissions from phosphate rock calciners at phosphoric acid plants.
- ▶ Established work practice standards to control HF emissions from gypsum dewatering stacks and cooling ponds at phosphoric acid plants.
- ▶ Removed SSM provisions & added work practice standards to address periods of startup and shutdown.
- ▶ Modified and corrected testing & monitoring provisions.
- ▶ Clarified the applicability for emission points covered by the source categories.
- ▶ Review of New Source Performance Standards for Phosphate Processing
  - ▶ No changes to emission limits

# Grain Elevators NSPS

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- ▶ Originally promulgated in 1978
- ▶ Proposed amendments on July 2014
  - ▶ Clarify definition of grain loading and unloading stations, as well as requirements of certain unloading operations
- ▶ Comment period ended on December 22, 2014
- ▶ Docket Number: EPA-HQ-OAR-2010-0706

# Links of Interest

▶ Agriculture Air Quality:

<https://www3.epa.gov/airquality/agriculture/>

▶ AgSTAR Program:

<https://www.epa.gov/agstar>

▶ RFS2 Program:

<https://www.epa.gov/renewable-fuel-standard-program>

▶ EPA's National Agriculture Center:

<https://www.epa.gov/agriculture>

**EPA** United States Environmental Protection Agency

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## Agriculture and Air Quality

**Animals** **Croplands** **Land Management**

**Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and General Land Management (PDF)** (2pp, 89 Kb)  
The EPA and United States Department of Agriculture (USDA) have developed a reference guide that provides options for improving air quality on agricultural lands.

**USDA's National Conservation Practice Standards**  
This site provides USDA's National Conservation Practice Standards, which may be considered as options for reducing air pollutant emissions.

**USDA's Technical Resources for Air Quality**  
This site provides air quality technical resources from USDA's National Resources Conservation Service.

**USDA Agricultural Air Quality Task Force**  
The USDA's repository of information about the Task Force provides public access to Federal Register notices, meeting minutes, reports and documents, and official communications.

**EPA/USDA Memorandum of Understanding (PDF)** (5pp, 21 Kb)  
The EPA and USDA signed a memorandum of understanding in 1998 to formalize the agencies' working relationship relative to air quality.

**EPA/USDA Agricultural Equipment Statement of Principles (PDF)** (2pp, 122 Kb)  
The Agricultural Equipment Statement of Principles was developed jointly between EPA and USDA at the request of agriculture industry stakeholders seeking support for programs to assist farmers looking to invest in cleaner agricultural equipment-including engines.

**National Air Emissions Monitoring Study**  
The EPA provides information for animal feeding operations with a focus on National Air Emissions Monitoring Study (NAEMS) topics.

**EPA Science Advisory Board Site for Animal Feeding Operations Air Emission Estimation Methodologies**  
The EPA Science Advisory Board provides links to the agency charge, review documents, panel information, and meeting information.

**EPA National Agriculture Center**  
The EPA National Agriculture Center provides information on various agriculture related topics.

**EPA National Ambient Air Quality Standards**  
The EPA has provided information on the standards for particulate matter and ozone, in addition to information about the National Ambient Air Quality Standards review process.

- Particulate Matter
- Ozone