

U.S. EPA Region 4 Air Quality Update

2018 Southern Section AWMA *Huntsville, AL* September 25-28, 2018

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Administrative Update

Air Program Update

- Air Quality Improvements
- Progress on NAAQS Implementation
- Clean Air Act Regulatory and Policy Activity
- Voluntary Programs and Successes

Questions



Plans for FY18 and Beyond

The new 2018-2022 Strategic Plan charts the course for advancing EPA's priorities and mission to protect human health and the environment



https://www.epa.gov/planandbudget



EPA is Implementing a Lean Management System (ELMS)

EPA Desires:

Continuous improvement through problem solving at the level closest to the work

Continuous improvement based on respect for the people doing the work

Accountability to the process without blaming people

Sustainment of gains from its improvement efforts

Development and adherence to standard processes

LEAN MANAGEMENT SYSTEM





Comparison of Growth vs Emissions

Comparison of Growth Areas and Emissions, 1980-2017





Emissions Have Reduced In Region 4

TRI (Air Emissions)



Year

NEI Criteria Pollutant Emissions*



*NOX, SO2, CO, VOC, NH3, PM2.5 and PM10, Mobile Sources excluded

www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei And www.epa.gov/tri



Progress on NAAQS Implementation

- NAAQS Setting Process
- Proposal for SO2 NAAQS
- 2015 Ozone Designations Process
- 2010 SO₂ Designations Process
- Current Region 4 Nonattainment Areas (all NAAQS Pollutants)





Updating the NAAQS Review Process

- May 9, 2018: EPA Administrator outlines five principles for EPA to follow in <u>future</u> NAAQS reviews
 - Meet statutory deadlines;
 - Address all CAA provisions for NAAQS reviews;
 - Streamline and standardize the process for development and review of key policy-relevant information;
 - Differentiate science and policy judgments in the NAAQS review process; and
 - Issue timely implementation regulations and guidance

NAAQS Reviews: Status Update

	Ozone	Lead	Primary NO ₂	Primary SO ₂	Secondary (Ecological) NO ₂ , SO ₂ , PM ¹	PM ²	CO
Last Review Completed (final rule signed)	Oct. 2015	Sept 2016	April 2018	Jun 2010	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s)	<u>Late 2018</u> IRP <u>Oct 2020</u> Final	TBD ⁴	TBD ⁴	<u>May 25, 2018</u> Proposal <u>Aug 9, 2018</u> Comment period closed <u>Jan 28, 2019</u> Final	<u>June 2018</u> 2 nd Draft ISA <u>August 2018</u> REA Planning Document	Late 2018 1 st draft ISA <u>Dec 2020</u> Final	TBD ⁴

(August 2018)

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

¹ Combined secondary (ecological effects only) review of NO₂, SO₂, and PM
² Combined primary and secondary (non-ecological effects) review of PM
³ IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

⁴ TBD = to be determined



Proposal for SO₂ NAAQS

- May 25, 2018: EPA proposed to retain the existing primary health-based NAAQS for SO₂
- Proposal based on judgment that the current NAAQS protects the public health, with an adequate margin of safety, including the health of at-risk populations



- The comment period closed 8/9/18; the public hearing was on 7/10/18
- EPA is under a consent decree to finalize review by January 28, 2019.

www.epa.gov/so2-pollution/primary-nationalambient-air-quality-standard-naaqs-sulfur-dioxide



- October 1, 2015: EPA revised primary 8hour Ozone NAAQS (70 ppb)
- Final designations required within 2 years after NAAQS promulgation (Administrator has discretion to extend the deadline by one year to collect sufficient information)
 - State and Tribal Recommendations were submitted to EPA by October 1, 2016
- April 30, 2018: EPA completed additional area designations
 - Nonattainment: Atlanta, GA; Louisville, KY-IN; Cincinnati, OH-KY
 - Unclassifiable: Jacksonville, FL (Duval County)



Round 1: Completed August 2013 – EPA Region 4 designated 5 areas nonattainment based on existing monitors violating the standard*

Round 2: Completed June 30 and November 29, 2016 – EPA designated 65 areas in 24 states based on air dispersion modeling and 2013-2015 violating monitors (6 areas designated in Region 4)

Rounds 1-3

EPA currently has five areas designated as nonattainment in three States in Region 4

Round 3: Completed December 21, 2017 and March 28, 2018 – EPA completed an additional round of designations for all remaining undesignated areas <u>except</u> where states have deployed new monitoring networks by January 1, 2017<u>if</u> executed under the SO₂ Data Requirements Rule (DRR); one new area was designated nonattainment

Round 4: By December 31, 2020 – EPA must complete designations for all remaining areas (based on 2017-2019 monitoring data)

www.epa.gov/so2-pollution/applying-or-implementing-sulfur-dioxide-standards

*one of the five has been redesignated to attainment (Campbell County, KY)



National Focus on NAAQS Implementation

Nonattainment Areas for Non-revoked NAAQS as of 10/1/17





Progress on Ozone and PM2.5 Attainment in Region 4

OZONE	1997 NAAQS (2004 Designations)	2008 NAAQS (2012 Designations)	2015 NAAQS (2018 Designations)
Initial Nonattainment Areas	14	5	3*
Areas Redesignated to Attainment	14	5	0
Current Nonattainment Areas	0	0	3

PM2.5	1997 PM _{2.5} NAAQS (2005 Designations)	2006 PM _{2.5} NAAQS (2009 Designations)	2012 PM _{2.5} NAAQS (2015 Designations)
Initial Nonattainment Areas	11	2	0
Areas Redesignated to Attainment	11	2	0
Current Nonattainment Areas	0	0	0

*Atlanta GA, Cincinnati OH-IN-KY (KY portion), Louisville KY-IN – Nonattainment Jacksonville FL-GA - Unclassifiable

https://www.epa.gov/green-book

Current R4 Nonattainment Areas (all NAAQS Pollutants)







Other Clean Air Act Regulatory and Policy Activity

- Interstate Air Pollution Transport
- Regional Haze
- Exceptional Events
- NSR Improvements and other recent actions
- Affordable Clean Energy Proposal
- Recent Risk and Technology Review Proposed Rules
- Proposed Oil and Gas Rule
- Proposed CISWI Technical Amendments





Interstate Air Pollution Transport

- Clean Air Act's "good neighbor" provision (section 110(a)(2)(D)(i)(I)) requires EPA and states to address interstate transport of air pollution that affects downwind states' ability to attain and maintain the NAAQS
 - Currently EPA is working with states to develop and/or approve good neighbor SIPs
- Most recently
 - 2015 Ozone NAAQS March and August 2018 Memos and Supplemental Information Regarding Good Neighbor SIPs for the 2015 Ozone NAAQS
 - August 31, 2018 -- EPA released a follow-up Memo that contained an analysis of contribution thresholds for use in transport iSIPs the 2015 ozone NAAQS. This memorandum compared EPA's traditional 1 percent threshold, which equates to .70 parts per billion for the 2015 ozone NAAQS, with a 1 parts per billion threshold. The memo further stated that "EPA believes that a threshold of 1 [parts per billion] may be appropriate for states to use to develop SIP revisions addressing the good neighbor provision for the 2015 ozone NAAQS"
 - 2008 Ozone NAAQS October 2017 Memo and Supplemental Information to address the remaining interstate transport for the 2008 Ozone NAAQS
 - 2010 SO₂ NAAQS EPA is currently coordinating with states on an appropriate analytical approach for developing their good neighbor SIPs

www.epa.gov/airmarkets/interstate-air-pollution-transport



Regional Haze Updates

- 3/21/18: DC Circuit upheld EPA's final "CSAPR Better Than BART Rule"
- **9/10/18:** EPA Announces <u>Regional Haze Reform Roadmap</u> to Continue Improving Visibility and Reduce Regulatory Burdens
 - Enables efficient, timely, and effective implementation of the Regional Haze program today and in the future

Over the next year, EPA's Office of Air and Radiation will release a series of implementation tools and guidance documents that will help focus states' efforts and reduce and streamline the time and resources needed to meet the statutory and regulatory requirements for reducing regional haze in National Parks, wildlife refuges, and wilderness areas.

https://www.epa.gov/visibility



Exceptional Events: Rule Implementation Update

- July 20, 2018: we received a favorable decision in NRDC v. EPA, 16-1413 (D.C. Circuit), regarding the definition of a "natural event"
 - This was the only legal challenge to the 2016 Exceptional Events Rule
- EPA has concurred on 18 demonstrations that were submitted after revising the Exceptional Events Rule in September 2016, including:
 - Six demonstrations from northeast states for ozone influences from the 2016 Fort McMurray fires in Canada
- Our implementation efforts remain focused on addressing key stakeholder concerns:
 - Increasing communication and transparency
 - Ensuring a timely review process
 - Right-sizing demonstrations
 - Fostering national consistency
 - Providing helpful resources





NSR Improvements and Other Recent Actions

- Actual-to-Projected-Actual Applicability Test Guidance Memorandum
- Project Emissions Accounting Memo
- Project Emissions Accounting Rulemaking
- Source Aggregation Guidance
- Project Aggregation Reconsideration

- Ambient Air Guidance
- Rulemaking on Treatment of Biomass for Permitting
- PM_{2.5} and Ozone SILs Guidance
- Routine Maintenance, Repair and Replacement (RMRR)
- Once-In-Always-In



Affordable Clean Energy Proposal

- 8/21/18, EPA proposed the Affordable Clean Energy (ACE) rule, which empowers states to reduce carbon dioxide (CO₂) emissions and provides reliable power at an affordable cost (comment period closes 10/1/18; public hearing 10/1/18 in Chicago)
- ACE would replace the Clean Power Plan (CPP), which EPA has proposed to repeal
- CPP was stayed by the Supreme Court and has never been implemented



Affordable Clean Energy Proposal

- The ACE rule has several components:
 - Establish emission guidelines for state plans to address greenhouse gas emissions from existing coal-fired power plants
 - Determine on-site efficiency improvements to be the best system of emission reduction at existing coal plants
 - Revise New Source Review permitting to streamline these improvements
 - Revise implementing regulations to give states adequate time and flexibility to develop state plans



Recent Risk and Technology Review Rules

The Risk and Technology Review (RTR) is a combined effort to evaluate both risk and technology as required by the Clean Air Act (CAA) after the application of maximum achievable control technology (MACT) standards.

Recent Proposed RTRs:

- Surface Coating of Large Appliances, Metal Furniture, and Fabrics signed on 8/8/18.
- Portland Cement Manufacturing published 7/25/18
- Surface Coating of Wood Building Products published 5/16/18
- Friction Materials Manufacturing published 5/3/18
- Wet-Formed Fiberglass Mat Production published 4/6/18
- Leather Finishing published 3/14/18



Oil and Gas Proposed Rule

- **9/11/18:** EPA proposed targeted improvements to the 2016 New Source Performance Standards for the oil and gas industry
 - Streamline implementation
 - Reduces duplicative EPA and state requirements
 - Decreases unnecessary burdens on domestic energy producers
- This oil and gas targeted improvements package is expected to save up to approximately \$484 million in regulatory costs from 2019 – 2025 or \$75 million annually
- Comments will be due 60 days after publication in the *Federal Register*



https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry



Proposed CISWI Technical Amendments

- May 9, 2018: EPA proposed to amend the 2016 NSPS and emission guidelines for new and existing sources (respectively) for Commercial and Industrial Solid Waste Incineration Units (CISWI)
 - \circ Codify the emission limit for mercury (Hg) for waste-burning kilns in a production-based limit
 - \circ Extend performance evaluation tests timeline from 60 days to 180 days
 - $\circ\,$ Extend timeline for electronic data reporting
 - Add provisions for particulate matter, dioxins, hydrogen chloride (HCl), sulfur dioxide, nitrogen oxide and Hg for demonstrating initial compliance by using a continuous emission monitoring system
 - Providing clarifications on reduced testing requirements, deviation reporting, continuous opacity monitoring systems and air curtain incinerators
- The comment period closed July 30, 2018.



Voluntary Programs and Successes

- Advance Program
- Southeast Diesel Collaborative (SEDC)





Advance Program

A collaborative effort by EPA, states, tribes, and local governments to encourage emission reductions in attainment areas, to help them continue to meet the air quality standards for ozone and $PM_{2.5}$

Program Goals:

- Help attainment areas to ensure continued health protection
- Better position areas to remain in attainment
- Efficiently direct available resources toward actions to address ozone and PM2.5 problems quickly

Region 4 Participants

SC – entire state Catawba Tribe, SC Middle GA (including Robins Air Force Base) Louisville, KY Cumberland County, NC (including Fort Bragg) Charlotte, NC NC – Remainder of the State

EPA Region 4 contact: Kelly Sheckler 404-562-9222; sheckler.Kelly@epa.gov www.epa.gov/advance



Air Quality and Health Benefits Quantification

EPA is uniquely positioned to provide public health related tools and resources:

• Updated AVERT and COBRA – now you can more easily estimate AQ and Health benefits of energy efficiency and renewable energy programs using both tools together.





Southeast Diesel Collaborative (SEDC)

- Voluntary public/private partnership formed in 2006 (part of the National Clean Diesel Campaign), focused on clean diesel opportunities that incorporate Energy, the Environment and Economics
- Diverse Partners from government, industry, state/local groups with the goal of improving air quality and public health by reducing emissions from existing diesel engines
- Annual funding under the Diesel Emissions Reduction Act (DERA)





 13th Annual Partners Meeting will be held the week of September 24, 2018, in Charleston, SC

www.southeastdiesel.org



Questions?

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