

# **U.S. EPA Region 4 Air Quality Update**

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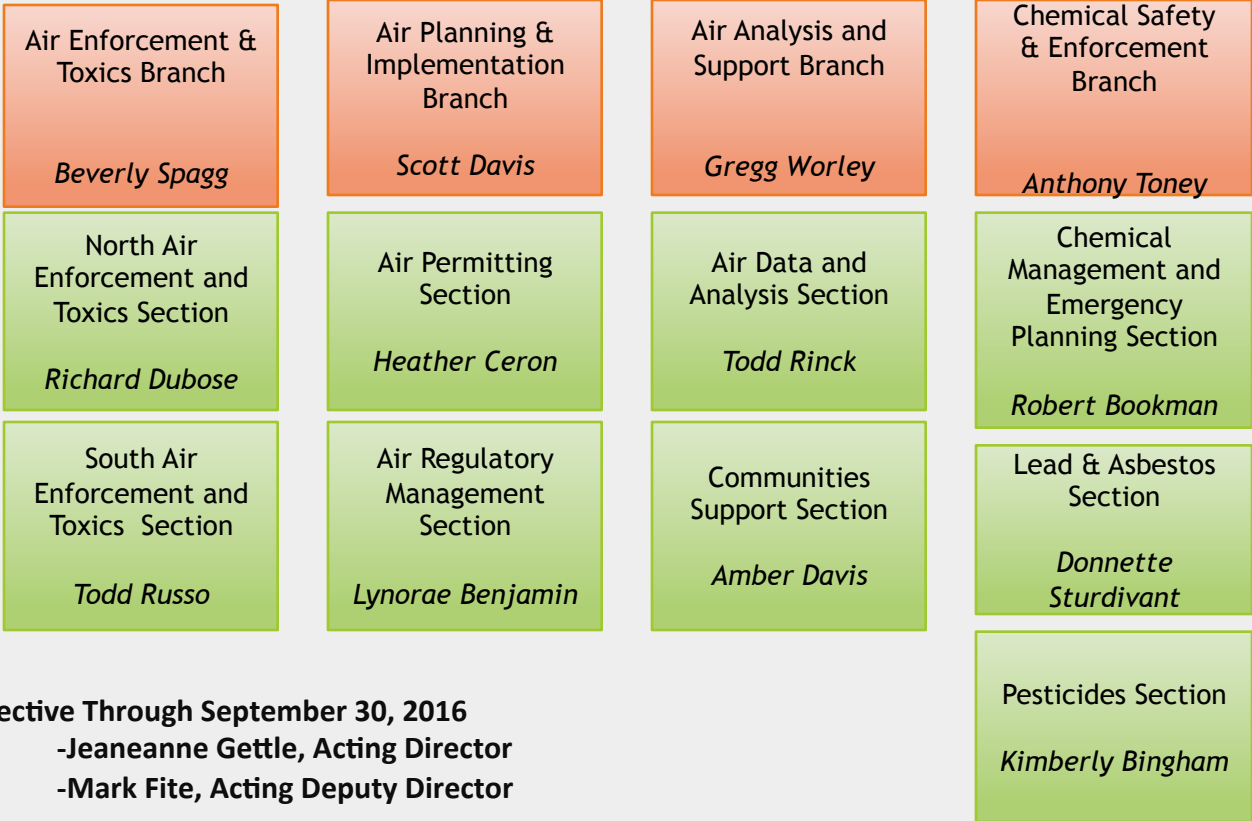
**Georgia Environmental Conference  
August 24, 2016**

# Today's Topics

- ▶ Administrative Update
- ▶ NAAQS Reviews and Implementation
- ▶ MATS Implementation
- ▶ Update on Transport
- ▶ SSM SIP Call
- ▶ Other CAA Rulemaking and Planning
- ▶ EPA Actions to Support the President's Climate Action Plan
- ▶ Permitting and Enforcement Priorities
- ▶ Making a Visible Difference

# Air, Pesticides and Toxics Management Division

Air, Pesticides & Toxics Management Division  
Beverly H. Banister, Director  
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**Effective Through September 30, 2016**  
-Jeaneanne Gettle, Acting Director  
-Mark Fite, Acting Deputy Director

# EPA's Themes - Meeting the Challenge Ahead

- Making a Visible Difference in Communities
- Addressing Climate Change and Improving Air Quality
- Taking Action on Toxics and Chemical Safety
- Protecting Water: A Precious, Limited Resource
- Launching a New Era of State, Tribal and Local Partnerships
- Embracing EPA as a High Performing Organization
- Working Toward a Sustainable Future



Gina McCarthy

# NAAQS Reviews: Status Update

(as of July 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> (final rule signed)	Oct. 2015	Oct 2008	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
<b>Recent or Upcoming Major Milestone(s)<sup>1</sup></b>	TBD <sup>2</sup>	<u>Dec 2014</u> Proposed decision  <u>2016</u> Final decision	<u>Jan 2016</u> Final ISA  <u>Summer 2016</u> 1 <sup>st</sup> Draft PA/ REA	<u>Jan 2016</u> CASAC review of 1 <sup>st</sup> Draft ISA  <u>Winter/Spring 2017</u> 2 <sup>nd</sup> Draft ISA REA Planning Document	<u>Fall 2016</u> Final IRP  <u>Winter 2016/2017</u> 1 <sup>st</sup> Draft ISA REA Planning Document	<u>Fall 2016</u> Final IRP  <u>Summer 2017</u> 1 <sup>st</sup> draft ISA REA Planning Document	TBD <sup>2</sup>

Additional information regarding current and previous NAAQS reviews is available at: <https://www3.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> TBD = to be determined

# 2015 Ozone NAAQS: Area Designations

<b>Designation Schedule</b>		
	<b>Schedule</b>	<b>Tentative Date</b>
State and Tribe Recommendations	Within 1 year after NAAQS promulgation	October 1, 2016
EPA responds to state and tribal recommendations		June 1, 2017
Final Designation	Within 2 years after NAAQS promulgation (Administrator has discretion to extend the deadline by one year to collect sufficient-information.)	October 1, 2017 Effective date may vary. (Air quality data years: 2014 – 2016)
<b>Implementation Schedule</b>		
Infrastructure SIP	Within 3 years after NAAQS promulgation	October 2018
Attainment Plans Due	Within 36 - 48 months after designations depending on classification	October 2020-2021

<b>Attainment Schedule by Classification</b>	
<b>Classification</b>	<b>Schedule*</b>
Marginal	3 years to attain
Moderate	6 years to attain
Serious	9 years to attain
Severe	15 to 17 years to attain
Extreme	20 years to attain

\*Areas must attain as expeditiously as practical, but not later than the schedule in the table. Two one-year extensions are available in certain circumstances based on air quality.

# 2010 1-hour Sulfur Dioxide (SO<sub>2</sub>) NAAQS

## Implementation

- EPA revised the primary SO<sub>2</sub> standard on June 3, 2010 (75 ppb/1-hour).
- **Designations Round 1:** 5 areas in Region 4 designated nonattainment based on violating monitors
- Attainment plans for 29 areas currently designated nonattainment were due April 4, 2015
- On March 10, 2016, EPA issued findings of failure to submit SIPs for 16 of the 29 nonattainment designated areas

## Designations

- Consent decree entered on March 2, 2015 by U.S. District Court for Northern California “triggered” the following deadlines:
  - July 2, 2016 - The EPA must complete a round of designations for areas associated with 68 EGUs in 24 states and any undesignated areas with violating monitors
  - December 31, 2017 - The EPA must complete an additional round of designations for any area a state has not elected to monitor per the provisions of the DRR starting January 1, 2017
  - December 31, 2020 - The EPA must complete all remaining designations (primarily expected to be areas where states have elected to monitor per the provisions of the DRR)
- Plaintiff states have appealed the March 2, 2015 court order, and in a separate action, North Carolina has filed its own designations deadline suit

# 2010 1-hour Sulfur Dioxide (SO<sub>2</sub>) NAAQS

## Designations - Round 2

- ❑ Court order issued on March 2, 2015 deadline:
  - ❑ July 2, 2016 -
    - Areas violating the 2010 SO<sub>2</sub> NAAQS (based on 2013-2015 data)
    - Areas where there are sources (electric power plants) that as of March 2, 2015, have not been “announced for retirement,” and meet one of the following emissions thresholds:
      - ▶ 16,000 tons emitted in 2012 or
      - ▶ 2,600 tons of SO<sub>2</sub> emitted in 2012 with an average emission rate of at least 0.45 pounds of SO<sub>2</sub> per mmBtu
- Yielded 68 sources in 24 states



# July 2, 2016

## SO2 Designation 2<sup>nd</sup> Round Completed

R4 State	County	Facility Name/Area	120-day Intended Designations
GA	Monroe	Robert W Scherer Power Plant (Juliette Georgia Area)	Unclassifiable/Attainment (Monroe, Jones, Jasper, Butts, Lamar, Upson and Crawford Counties)
KY	Ohio	D B Wilson Generating Station Ohio County, KY Area	Unclassifiable (Ohio County)
	Pulaski	John S. Cooper Power Station Pulaski County, KY Area	Unclassifiable (Pulaski County)
MS	Lamar	R D Morrow Senior Generating Plant Lamar County, MS Area	Unclassifiable/Attainment (Lamar County)
NC	Brunswick	CPI USA North Carolina Southport Brunswick County, NC Area	Unclassifiable (partial Brunswick County)
TN	Sumner	TVA: Gallatin Fossil Plant Sumner County, TN Area	Unclassifiable (Sumner County)

<http://www.epa.gov/so2designations>

# SO<sub>2</sub> NAAQS Data Requirements Rule: Implementation Timeline

- January 15, 2016: Air agency identifies sources exceeding threshold and other sources for which air quality will be characterized
- March 2016 – EPA responded to state's January 15, 2016 DRR list.
- July 1, 2016: Air agency specifies (for each identified source) whether it will be monitor air quality, model air quality, or establish an enforceable limit
  - Air agency also accordingly submits a revised monitoring plan, modeling protocols, or descriptions of planned limits on emissions to less than 2,000 tpy

January 2017

## **Designations Round 3**

- Modeling analyses must be submitted to EPA by Jan. 13, 2017
- Documentation of federally enforceable emission limits and compliance must be submitted to EPA by Jan. 13, 2017

## **Designations Round 4**

- New monitoring sites must be operational by Jan. 1, 2017
- Designations based on monitoring December 31, 2020

<https://www3.epa.gov/airquality/sulfurdioxide/drr.html>

# Mercury Air Toxics Standard (MATS)

- December 21, 2011: EPA final standards issued
- June 29, 2015: Supreme Court remands MATS back to Appeals Court finding that EPA interpreted the Act unreasonably when it deemed cost irrelevant to the decision to regulate power plants.
- March 3, 2016: SCOTUS denied a request to stay the MATS
- April 14, 2016 - EPA issued a final finding that it is appropriate and necessary to set standards for emissions of air toxics from coal- and oil-fired power plants. This finding responds to a decision by the U.S. Supreme Court that EPA must consider cost in the appropriate and necessary finding supporting the Mercury and Air Toxics Standards (MATS).
- August 8, 2016 -- EPA denied two petitions for reconsideration of the startup and shutdown provisions in MATS.

[www.epa.gov/mats](http://www.epa.gov/mats)

# Cross-State Air Pollution Rule Update

- EPA began implementation of this rule on January 1, 2015 to address interstate transport for the 1997 ozone, 1997 PM<sub>2.5</sub> and 2006 PM<sub>2.5</sub> NAAQS
- On November 16, 2015, EPA proposed an update to address the 2008 ozone NAAQS
- Proposed Rule published on December 3, 2015
- Proposed Rule will reduce summertime emissions from power plants in 23 eastern states
- Proposed Rule will provide up to \$1.2 billion in health benefits to millions of Americans.

## Startup, Shutdown, and Malfunction (SSM) SIP Call

- Final action was signed May 22, 2015, in response to a Sierra Club petition for rulemaking concerning startup, shutdown and malfunction (SSM)
- SIP Call applies to 36 states (45 jurisdictions), the majority of which were named in the original petition
- Deadline for state action to remove provisions from their rules and make corrective SIP submissions is November 22, 2016
- Litigation from multiple parties filed with DC Circuit

# Industrial/Commercial/Institutional Boilers and Process Heaters

- Final rule promulgated on January 31, 2013
- Petitions for reconsideration granted on 3 issues
- Proposed rule - January 21, 2015
- Rule finalized on November 5, 2015
- Current compliance date - January 31, 2016
- One year compliance extension is available only if extra time is needed to add on controls

## Air Toxics Major and Area Source Rulemaking Updates

Section 112 Major Source Rules	New Rule or Re-work	Promulgation Deadline	Status	Comments
Brick & Struct. Clay	Re-work due to Vacatur	10 / 26 / 15	Proposed on 11 / 20 / 14	Subpart 5J
Clay Ceramics	Re-work due to Vacatur	10 / 26 / 15	Proposed on 11 / 20 / 14	Subpart 5K
Utilities MACT	Reconsideration	4 / 30 / 15	Final	Denial of remaining petitions
Utilities MACT	Technical Corrections	Remanded back to EPA 4/6/16	Proposed on 2/17/15	Rule remains in effect
PVC (7H & 6D)	Reconsideration	<b>2018(?)</b>	<b>Will propose in 2017(?)</b>	7H = Major 6D = Area

**Red** indicates projected date of action

## Air Toxics Risk and Technology Review Rules

Residual Risk Rules	New Rule or Re-work	Promulgation	Status	Comments
Ferroalloys Production		6 / 30 / 15	Supp. Proposal 10 / 6 / 14	Proposed on 11 / 23 / 11
Mineral Wool		7 / 29 / 15	Supp. Proposal 10 / 15 / 14	Proposed on 11 / 25 / 11
Wool Fiberglass		7 / 29 / 15	Supp. Proposal 10 / 15 / 14	Proposed on 11 / 25 / 11
Secondary Aluminum		9 / 18 / 15	Supp. Proposal 11 / 13 / 14	Proposed on 2 / 14 / 12
Primary Aluminum		10 / 15 / 15	Supp. Proposal 11 / 13 / 14	Proposed on 12 / 6 / 11
Petroleum Refinery		12 / 1 / 15	Proposed on 6 / 30 / 14	Part 63; CC & UUU + NSPS
Phospho. Acid Phosphate Fert.		8 / 19 / 15	Proposed on 10 / 21 / 14	
Aerospace		12 / 7 / 15	Proposed on 2 / 17 / 15	
Pulp & Paper (Combustion)		10 / 1 / 17	Propose 2016	Subpart MM
Portland Cement		6 / 15 / 18	Propose by 6 / 15 / 17	
13 MACT Categories	Litigation	??	2016	Schedule being negotiated

**Red** indicates projected date of action



# Electronic Reporting and Recordkeeping for NSPS Sources

- Proposed 3/20/15
- Promulgation projected for September 2016 (EPA Regulatory Agenda)
- Affects more than 70 different subparts promulgated in 40 CFR Part 60
- Also lists 20 subparts that are not covered by the proposal
- Estimated annual cost savings of \$300K for the regulated community
- No attempt to quantify cost savings for the EPA or state air agencies



# Electronic Reporting and Recordkeeping for NSPS Sources (continued)

- Types of Covered Submittals
  - ❖ Summary reports - 40 CFR 60.7(c)
  - ❖ Excess emission reports - 40 CFR 60.7(c)
  - ❖ Performance test reports - 40 CFR 60.8(a)
  - ❖ CEM performance reports - 40 CFR 60.13(c)
  - ❖ Subpart-specific reporting
- The authority to approve alternatives to electronic reporting is retained by EPA

## Electronic Reporting - A Good Thing!

Streamlined, automated report reviews

Readily accessible data



Federal repository/back-up system

Decrease in required storage space for hardcopy reports

## Combustion - §129 Sewage Sludge Incineration

- ▶ On February 22, 2016, EPA finalized the Federal Plan for existing sewage sludge incinerators (SSI) that began construction on or before October 14, 2010
- ▶ The Federal Plan will implement the emission guidelines (EG) adopted on March 21, 2011, for states that do not have an approved state plan implementing the emission guidelines in place



<https://www3.epa.gov/ttn/atw/129/ssi/ssipg.html>

# EPA Actions to Support the President's Climate Action Plan

- ▶ Collecting various types of GHG emissions data to track trends and identify opportunities for reducing emissions and increasing efficiency
- ▶ Reducing GHG emissions and promoting a clean energy economy through highly successful partnerships and common-sense regulatory initiatives
- ▶ Contributing to world-class climate research
- ▶ EPA's State and Local Climate and Energy Program provides technical assistance, analytical tools, and outreach support to state, local, and tribal governments
- ▶ Engaged in a variety of international activities to advance climate change science, monitor our environment, and promote activities that reduce greenhouse gas emissions
- ▶ Helping communities adapt

<http://epa.gov/climatechange/EPAactivities/>

# Supreme Court Stays the Clean Power Plan

- **February 9, 2016** -- Supreme Court stayed implementation and enforcement of the Clean Power Plan pending judicial review
  - The Court's decision was not on the merits of the rule
- EPA firmly believes the Clean Power Plan will be upheld when the merits are considered because the rule rests on strong scientific and legal foundations
- For the 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
- EPA will make additional information available as necessary

## Key Points

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

[www.epa.gov/cleanpowerplan](http://www.epa.gov/cleanpowerplan)

# Clean Energy Incentive Program (CEIP)

- The CEIP is an optional early-action program, designed to provide multiple benefits, including:
  - Helping states, tribes, and affected sources meet their emission goals under the Clean Power Plan;
  - Providing incentives for investment in demand-side energy efficiency measures and solar power generation in low-income communities; and
  - Encouraging early investment in renewable energy generation from wind, solar, geothermal, and hydropower.
- Key parts of the program were finalized on October 23, 2015 in the Clean Power Plan, in which the Environmental Protection Agency (EPA) also committed to providing design details of the CEIP in a later action
- On June 16, 2016, the EPA provided these CEIP design details in a proposed rule (comment period closes September 2, 2016)

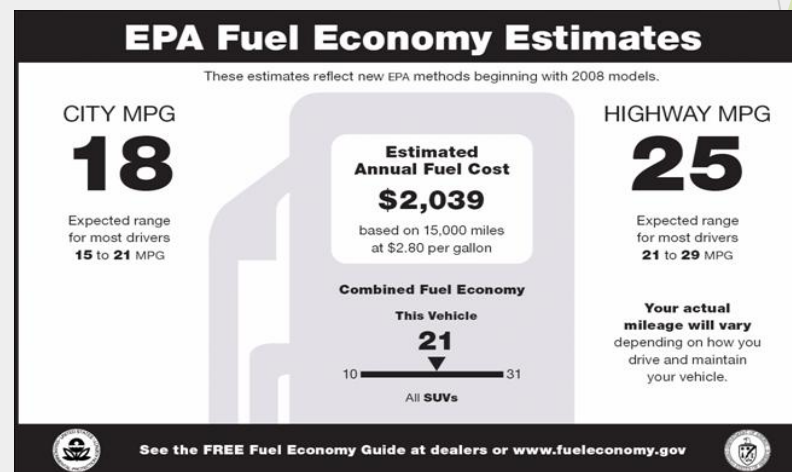
# Addressing Methane

- ▶ May 12, 2016 - EPA has issued three final rules that together will curb emissions of methane, smog-forming volatile organic compounds (VOCs) and toxic air pollutants such as benzene from new, reconstructed and modified oil and gas sources, while providing greater certainty about Clean Air Act permitting requirements for the industry.
- ▶ May 12, 2016 - EPA issued a draft Information Collection Request (ICR) to require oil and natural gas companies to provide extensive information needed to develop regulations to reduce methane emissions from existing oil and gas sources (comment period closed 8/2/16)
- ▶ July 8, 2016 - EPA issued a voluntary Request for Information inviting all parties to provide information on innovative technologies to detect, measure and mitigate emissions from the oil and natural gas industry (Responses must be received on or before November 15, 2016)

# For Example

*Increasing fuel efficiency, reducing GHG emissions from mobile sources....*

- ▶ **Fuel Economy.** EPA and DOT are taking coordinated steps to enable the production of a new generation of clean vehicles, through reduced GHG emissions and improved fuel use from on-road vehicles and engines, from the smallest cars to the largest trucks
- ▶ **Cleaner Fuels.** Energy Independence and Security Act requires a significant increase in renewable fuels to displace petroleum consumption
  - ▶ 36 billion gallons by 2022
  - ▶ Requires GHG lifecycle analysis





# For Example

## *Voluntary Partnership Programs....*

With the help of **ENERGY STAR**, more than **293 MMTCe** of **greenhouse gas emissions** were prevented in 2013 alone, providing more than \$11 billion in benefits to society due to reducing damages from climate change

Since the **Green Power Partnership** was introduced in 2001, more than 1,500 organizations have committed to using about **35 billion kWh's** of clean, renewable green power each year

More than 480 partners have installed nearly **6,200 MWs** of new CHP since the **Combined Heat and Power Partnership** launched in 2001



<http://epa.gov/climatechange/EPAactivities/voluntaryprograms.html>

# National Enforcement Initiatives

- ▶ **New and continuing NEI cycle from 2017 - 2019**
- ▶ **Air Toxics (Expanded)**
  - ▶ Expanded in FY 2017 to include Organic Liquid Storage Tanks
  - ▶ Refineries/Chemical Plants/Terminals can be significant sources of excess emissions
  - ▶ EPA will continue using optical gas imaging cameras to detect emissions of VOCs and HAPs
- ▶ **Energy Extraction (Continuing)**
- ▶ **Current Status of NSR/PSD Enforcement**
  - ▶ Coal-fired utilities
  - ▶ Cement/Glass/Acid Manufacturing
- ▶ **Chemical Accident Risk Reduction (New)**

# Status of NSR/Title V Rule-related Actions

- ▶ **Regional Consistency Rule Amendments:** Final rule revision to 40 CFR Part 56 allowing an exception to the regional consistency regulation for certain judicial decisions was signed July 21, 2016.
- ▶ **Source Determination for Oil and Gas Extraction:** Final rule defining “adjacent” as it applies to Oil and Gas extraction facilities located within ¼ mile of each other that share equipment was signed May 12, 2016.
- ▶ **PM<sub>2.5</sub> NSR Implementation rule remand by D.C. Circuit:** The final rule was signed on July 29, 2016. Guidance for completing optional precursor demonstrations will be issued later.
- ▶ **Revisions to Public Notice Requirements for Clean Air Act Permits (Electronic notices):** Rule allowing for noticing of permits electronically on agency websites rather than through newspaper notices was proposed December 21, 2015, comment period closed February 29, 2016. The final rule is expected to be signed by September 2016.
- ▶ **Permit Rescission Revision:** Rule allowing for PSD permit rescissions (under post July 1987 rules) and clarify types of scenarios suitable for rescissions was proposed June 14, 2016, comment period closed July 14, 2016. Currently reviewing comments for response.
- ▶ **Ozone and PM<sub>2.5</sub> Significant Impact Levels (SILs) for PSD Guidance:** The guidance establishes a SIL for ozone and re-establishes SILs for PM<sub>2.5</sub>. Document is currently at OMB for review. Guidance is expected by early fall 2016.

# Status of NSR/Title V Rule-related Actions

- ▶ **Title V Petition Provisions:** Proposed rule to revise Title V petition provisions at Part 70 was signed on Aug 15, 2016. 60-day comment period opens on publication. Five key provisions to the proposed revisions:
  1. Providing directions on how Title V petitions should be submitted to EPA;
  2. Provisions for expected format and minimum required content of Title V petitions;
  3. Requirement for permitting authorities to respond to significant comments during the public comment period and to provide that response when proposing the permit to EPA;
  4. Recommended practices to help ensure the Title V administrative record is complete;
  5. Clarifying information on EPA's interpretation of petition-related provisions of the CAA.
  
- ▶ **Removal of Title V Emergency Affirmative Defense Provisions:** rule to remove emergency provisions from 40 CFR Parts 70 and 71 to align the state and federal operating permit program rules with the Startup, Shutdown and Malfunction SIP Call. Rule proposed on June 14, 2016, comment period closed on August 15, 2016.

## Making a Visible Difference in Communities

- Enhance coordination across Federal agencies and with state partners
- Improve effectiveness of existing efforts
- Improve overall coordination within EPA across media
- Strengthen decisions impacting communities through science

# MVD COMMUNITIES

- ▶ Turkey Creek Watershed, Gulfport, MS
- ▶ North Birmingham, AL
- ▶ Selma & Montgomery, AL
- ▶ Eastern Band of Cherokee, NC
- ▶ Proctor Creek Watershed, Atlanta, GA
- ▶ Catawba

**THANK YOU!**