United States Environmental Protection Agency

U.S. EPA Region 4 Air Quality Update

Southern Section Air & Waste Management Association

September 23, 2016

Kenneth L. Mitchell, Ph.D.
U.S. Environmental Protection Agency
Atlanta, GA

Today's Topics

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

Air, Pesticides and Toxics Management Division

Air, Pesticides & Toxics Management Division
Beverly H. Banister, Director
Carol L. Kemker, Deputy Director
Jeaneanne M. Gettle, Deputy Director
Immediate Office Staff
Grants and Strategic Planning Office

Air Enforcement & Toxics Branch	Air Planning & Implementation Branch	Air Analysis and Support Branch	Chemical Safety & Enforcement Branch
Beverly Spagg	*Scott Davis*	*Gregg Worley*	*Anthony Toney*
North Air Enforcement and Toxics Section *Richard Dubose*	Air Permitting Section *Heather Ceron*	Air Data and Analysis Section *Todd Rinck*	Chemical Management and Emergency Planning Section *Robert Bookman*
South Air Enforcement and Toxics Section *Todd Russo*	Air Regulatory Management Section *Lynorae Benjamin*	Communities Support Section *Amber Davis*	Lead & Asbestos Section *Donnette Sturdivant*
			Pesticides Section *Kimberly Bingham*

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_2	Primary SO_2	Secondary NO_2 and SO_2	PM	CO
Last Review Completed (final rule signed)	Oct. 2015	Oct 2008	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s)[1]	TBD	Dec 2014 Proposed decision Sept 2016 Final decision	Jan 2016 Final ISA Summer 2016 1st Draft PA/REA	Jan 2016 CASAC review of 1st Draft ISA Winter/Spring 2017 2nd Draft ISA REA Planning Document	Fall 2016 Final IRP Winter 2016/2017 1st Draft ISA REA Planning Document	Fall 2016 Final IRP Summer 2017 1st draft ISA REA Planning Document	TBD[2]

Additional information regarding current and previous NAAQS reviews: https://www3.epa.gov/ttn/naaqs/

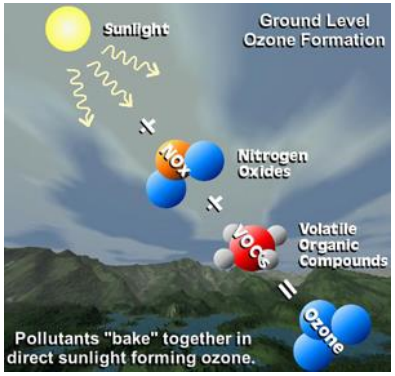
[1] IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

2015 Ozone NAAQS: Area Designations

Designation Schedule		
	Schedule	**Date**
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)
Implementation Schedule		
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

Attainment Schedule by Classification	
Classification	**Schedule***
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_2) NAAQS

EPA revised the primary SO2 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

Consent Decree

- Entered on March 2, 2015 by U.S. District Court for Northern California
- "Triggered" the following deadlines:
  - **July 2, 2016** - EPA to complete designations for areas associated with 68 EGUs in 24 states and any undesignated areas with violating monitors **(Round 2)**
  - **December 31, 2017** - EPA to 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 **(Round 3)**
  - **December 31, 2020** - EPA to complete all remaining designations (primarily expected to be areas where states have elected to monitor per the provisions of the DRR; **Round 4**)

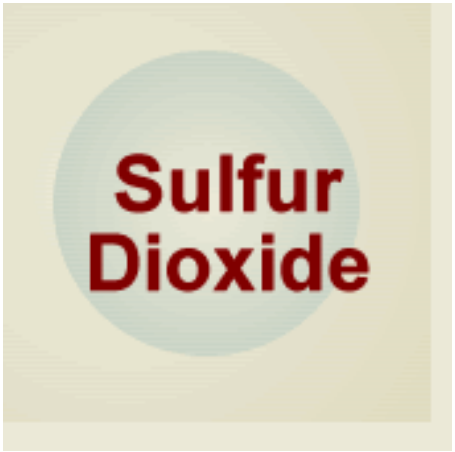
https://www.epa.gov/so2-pollution

2010 1-hour Sulfur Dioxide (SO_2) NAAQS

Designations – Round 2 (completed 7/1/16)

- Areas violating the standard based on 2013-2015 monitoring data

- Areas with sources which, as of 3/2/15, have not been "announced for retirement," and met one of the following emissions thresholds:
  - 16,000 tons SO_2 emitted in 2012, or
  - 2,600 tons of SO_2 emitted in 2012 with an average emission rate of at least 0.45 pounds of SO_2 per mmBtu



Yielded 68 sources in 24 states

2010 1-hour Sulfur Dioxide (SO2) NAAQS

Round 2 Completed 7/1/16

R4 State	County	Facility Name/Area	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

2010 1-hr SO_2 NAAQS – Looking Ahead

Data Requirements Rule

- **January 15, 2016** – state air agencies identified a list of sources exceeding a 2K ton per year 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 agencies specified (for each identified source) whether they will monitor air quality, model air quality, or establish an enforceable limit
  - Air agencies also submited a revised monitoring plan, modeling protocols, or descriptions of planned limits on emissions to less than 2K tpy
- **January 1, 2017** – Air monitors (for Round 4) deployed and operational
- **January 13, 2017** – States submit information for Round 3
  - Modeling analyses
  - Documentation of federally enforceable emission limits and compliance

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

2010 1-hr SO_2 NAAQS – Looking Ahead

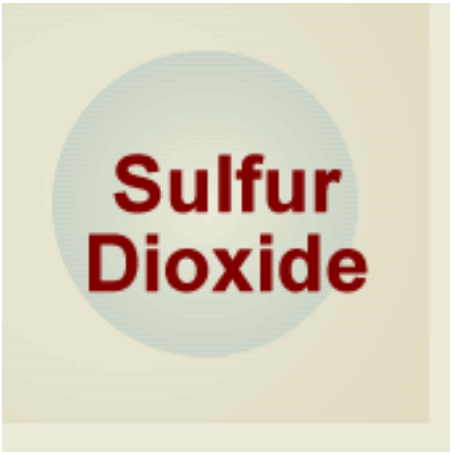
Designations

Round 3

- August 2017 (tentative) – EPA issues intended designations
- December 31, 2017 – EPA finalizes designations

Round 4

- December 31, 2020 -- EPA finalizes designations based on monitoring



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

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 PM2.5 and 2006 PM2.5 NAAQS
- On November 16, 2015, EPA proposed an update to address the 2008 ozone NAAQS
- Final Rule signed on September 5, 2016
- Rule will reduce summertime emissions from power plants in 22 eastern states
- Rule will provide up to $880,000 million per year in health benefits to millions of Americans

http://www.epa.gov/airtransport

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

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

http://www.epa.gov/MATS

Industrial/Commercial/Institutional Boilers and Process Heaters

- Final rule promulgated on January 31, 2013
- Rule amendments promulgated on November 5, 2015
- Compliance date - January 31, 2016
- US Sugar Corp. petitions court to vacate rule – December 3, 2015
- DC Court vacates portion of rule - July 29, 2016
  - Mandate has not been issued
  - Court did not specify which subcategories to vacate
  - EPA petitions to remand without vacatur – Sept. 12, 2016
  - Mandate to be issued after petitions resolved
  - Rule remains in effect

https://www3.epa.gov/airtoxics/boiler/boilerpg.html

Air Toxics Major and Area Source Rulemaking Updates

Section 112 Major Source Rules	New Rule or Re-work	Promulgation	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	**4 / 6 / 16**	Proposed on 2/17/15	Subpart 5U
PVC (7H & 6D)	Reconsideration	**2018(?)**	**Will propose in 2017(?)**	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

E-Reporting and Recordkeeping for NSPS Sources

- Proposed 3/20/15
- Promulgation projected for December 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

http://www.epa.gov/ttn/atw/ereporting/20150302aerrproposal.pdf

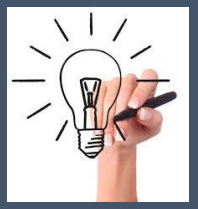
E-Reporting and Recordkeeping for NSPS Sources

- 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



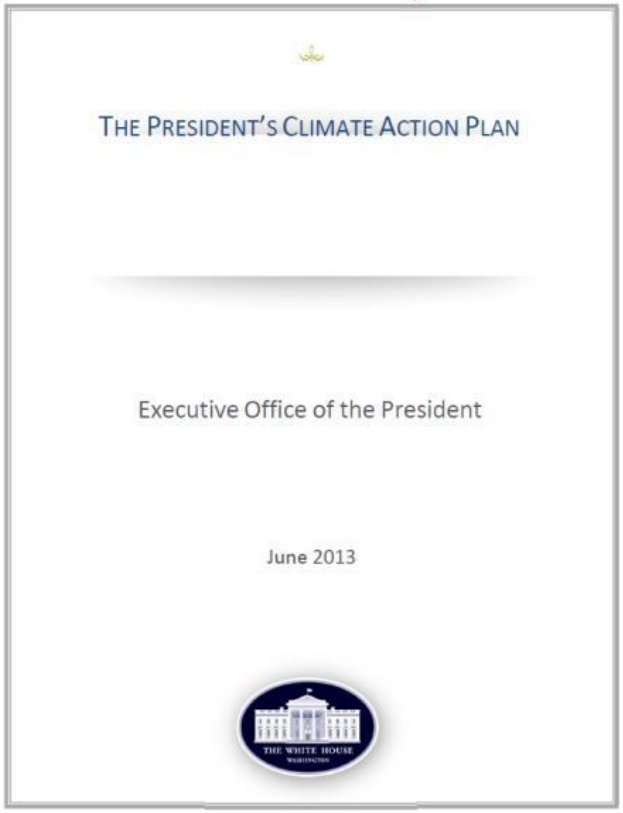
Federal repository/back-up system

Decrease in required storage space for hardcopy reports

http://www.epa.gov/ttn/atw/ereporting/20150302aerrproposal.pdf

The President's Climate Action Plan

- **President Obama's Climate Action Plan takes a series of ambitious steps to combat climate change**
  - Cuts carbon pollution in America through domestic policies that involve both voluntary and regulatory action
  - Prepares our country for the impacts of climate change
  - Leads international efforts to address global climate change
  - Advances the Science



https://www.whitehouse.gov/climate-change

Supreme Court Stays the Clean Power Plan

- **February 9, 2016** – The 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 provide additional information as it is available

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**

Presented for informational purposes only; the CPP for existing sources is stayed pending judicial review

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 has been extended to November 1, 2016

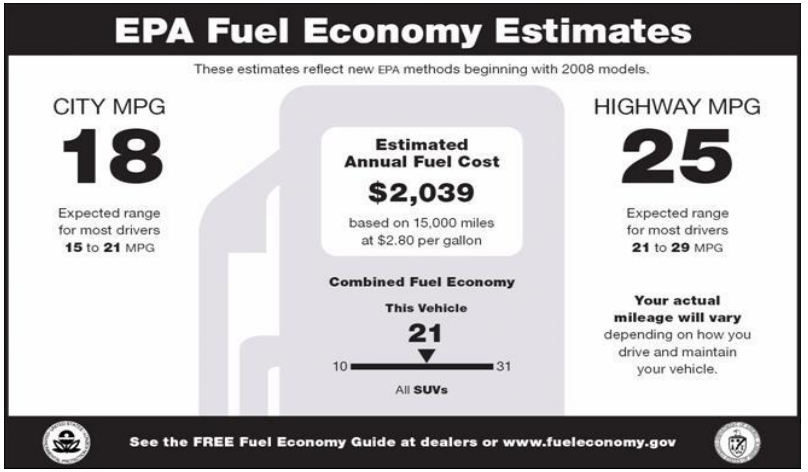
Presented for informational purposes only; the CPP for existing sources is stayed pending judicial review

Mobile Sources

Increasing fuel efficiency, reducing GHG emissions….

- **Fuel Economy.** EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles, through reduced greenhouse gas (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



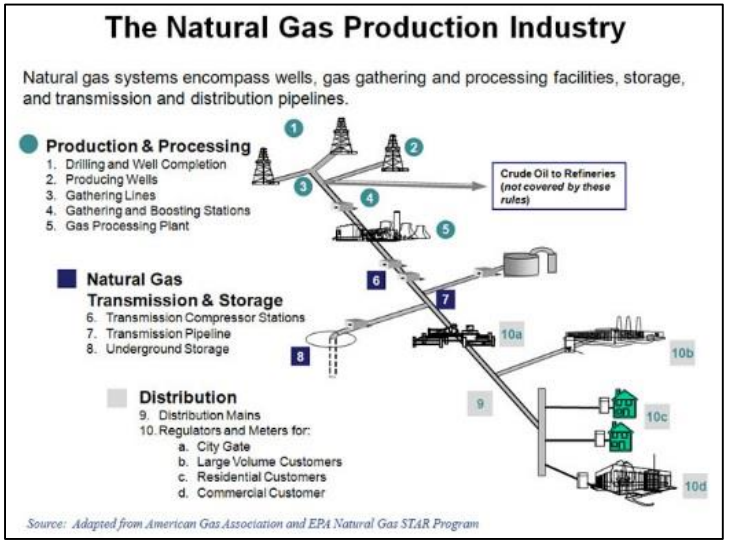
http://www.epa.gov/otaq

Addressing Methane

- The oil and natural gas industry includes a wide range of operations and equipment, from wells to natural gas gathering lines and processing facilities, to storage tanks, and transmission and distribution pipelines

- The oil and natural gas industry also is a significant source of emissions of methane, a greenhouse gas that is more than 20 times as potent as carbon dioxide

- Reducing methane emissions is an essential part of an overall strategy to address climate change and EPA is getting reductions through both regulatory and voluntary approaches



http://www.epa.gov/airquality/oilandgas/

Voluntary Partnership Programs

Some Examples….

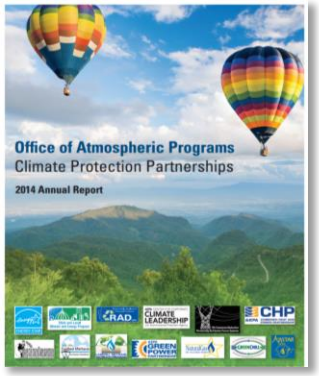
- **Energy Star** is a widely recognized symbol for energy efficiency, helping Americans save $430 billion on utility bills, and reducing 2.7 billion MMTCO2e since 1992

- Since the **Green Power Partnership** was introduced in 2001, nearly 1,300 organizations have committed to using about 34 billion kWh's of clean, renewable green power each year

- More than 480 partners have installed nearly 6,900 MWs of new CHP since the **Combined Heat and Power Partnership** launched in 2001

- **EPA's Landfill Methane Outreach program** (LMOP) 1,100 partners have 632 projects and have avoided more than 345 MMTCO2e since the program began

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



National Enforcement Initiatives

- New and continuing NEI cycle in 2017 – 2019
- Air Toxics (Expanded)
  - Expanded in FY17 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)

https://www.epa.gov/enforcement/national-enforcement-initiatives

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
- **PM2.5 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 PM2.5 Significant Impact Levels (SILs) for PSD Guidance:** The guidance establishes a SIL for ozone and re-establishes SILs for PM2.5. Document is currently at OMB for review. Guidance is expected by early fall 2016

https://www.epa.gov/nsr and https://www.epa.gov/title-v-operating-permits

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.

https://www.epa.gov/nsr and https://www.epa.gov/title-v-operating-permits

TSCA Reform

The Frank R. Lautenberg Chemical Safety for the 21st Century Act

- On June 22, 2016, President Obama signed into law the Frank R. Lautenberg Chemical Safety for the 21st Century Act which amends the Toxic Substances Control Act (TSCA), the Nation's primary chemicals management law

- The new law, which received bipartisan support in both the U.S. House of Representatives and the Senate, includes much needed improvements such as:
  - Mandatory requirement for EPA to evaluate existing chemicals with clear and enforceable deadlines
  - New risk-based safety standard
  - Increased public transparency for chemical information, and
  - Consistent source of funding for EPA to carry out the responsibilities under the new law

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

R4 MVD Communities

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

https://www.epa.gov/smartgrowth/making-visible-difference-communities

Questions?