



Office of Air Quality Planning and Standards

Meeting the NAAQS: Federal Stationary Source Control Measures On the Books & Underway

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NACAA Spring Meeting 2010



Overview

- ▶ On the horizon:
 - ▶ NAAQS reviews
 - ▶ NAAQS implementation schedule
 - ▶ Toxics regulations
 - ▶ The multi-pollutant challenge
 - ▶ Proposed increases in grant funding
- ▶ Highlight:
 - ▶ National rules
 - ▶ Assessment activities
 - ▶ Technical guidance
 - ▶ Training



The Bottom Line

- ▶ Significant workload
 - ▶ Across the board increase in work to be done across all aspects of the air program
 - ▶ Some new resources are coming our way
- ▶ Significant health benefits
 - ▶ There is a pay-off for public health and the environment
- ▶ As the complexity of problems grows, the need for creative solutions grows
 - ▶ Need to look holistically across pollutants, across sectors, across communities
 - ▶ We are doing this thinking at EPA, with the States, with Industry, with stakeholders

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THIS YEAR ALONE: Finalize or Propose Five NAAQS

- ▶ **Nitrogen dioxide (NO₂)** Final - January 2010
- ▶ **Sulfur dioxide (SO₂)** Final - June 2010
- ▶ **Ozone (O₃) Reconsideration** Final - August 2010
- ▶ **Carbon monoxide (CO)** Proposal - October 2010
- ▶ **Particulate matter (PM)** Proposal – Winter 2010-11

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Setting the NAAQS Is Just the Beginning...

Pollutant	NAAQS Promulgation Date	Designations Effective (approximate date)	Transport SIPs Due (3 yrs after NAAQS promulgation)	Attainment Demonstration Due	Attainment Date
PM _{2.5} (2006)	Sept 2006	Nov 2009	Sept 2009	Nov 2012	Nov 2014/2019
Pb	Oct 2008	Nov 2010/2011 (extra time for new monitors)	Oct 2011	June 2012/2013	Nov 2015/2016
NO ₂ (primary)	Jan 2010	Feb 2012	Jan 2013	Aug 2013	Feb 2017
SO ₂ (primary)	June 2010	July 2012	June 2013	Jan 2014	July 2017
Ozone	Aug 2010	Aug 2011 (based on 2008-10 data)	Aug 2013	Dec 2013 (to be proposed)	Dec 2017 (Moderate)
CO	May 2011	June 2013	May 2014	Dec 2014	May 2018
PM _{2.5} (2011)	Oct 2011	Dec 2013	Oct 2014	Dec 2016	Aug 2018/2023
NO ₂ /SO ₂ Secondary	March 2012	April 2014	March 2015	Oct 2015	N/A

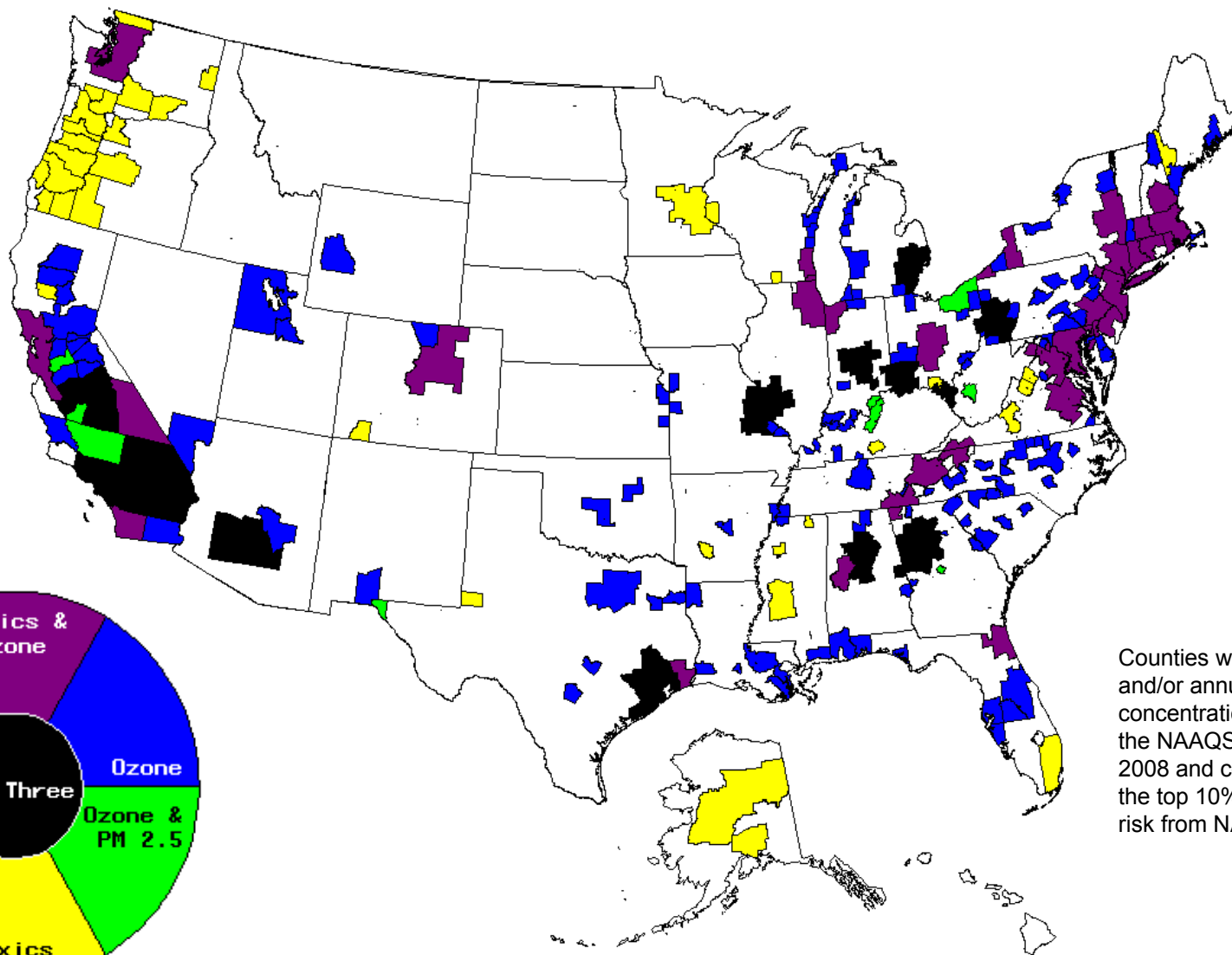


But Wait, There's More: Additional Clean Air Act Requirements for Industry Groups

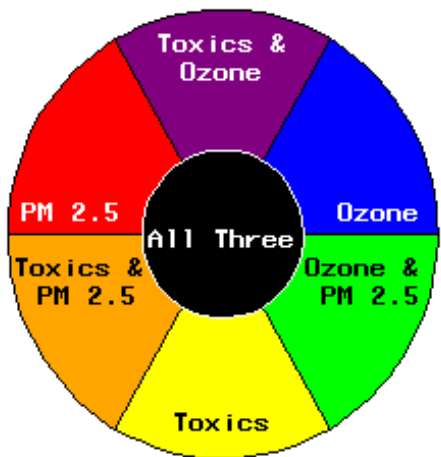
Industry Group	Total	Area Source	CTG/183(e)	MACT/129	Pre-1990 NESHAP	NSPS
Chemical Production	75	14	18	31	1	11
Durable Goods Manufacturing	58	4	23	20		11
Metal Processes	48	16	1	15	3	12
Minerals	36	5	2	12	2	15
Agriculture and Forest Products	15	2	3	7		3
Oil and Gas Production and Distribution	15	2	5	5		3
Petroleum Refining	13		4	2	4	3
Energy and Combustion	12	1		5	1	5
Service Industries	11	2	6	2		1
Transportation Equipment	10		5	4		1
Waste Management	8			8		1
Chemical Usage	5	1	3	1		
Utilities	3			1		2
Institutions	1			1		
Transportation Infrastructure	0					
Total	310	47	70	114	11	68

Nature of Multi-pollutant Air Quality Problems in US

Many urban areas have O3, PM, and air toxics problems.



Counties with ozone and/or annual PM2.5 concentrations above the NAAQS for 2006-2008 and counties in the top 10% of modeled risk from NATA 2002



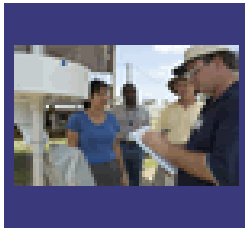
What We Are Doing:



- ▶ **National and Regional Measures**
 - ▶ Coordinate reductions from key sectors
 - ▶ Issue major and area source regulations



- ▶ **Improve Assessment Capabilities**



- ▶ **Technical Support**
- ▶ **Training**

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Coordinating Reductions: Utility Sector

EPA Air Regulations Affecting the Power Sector

	March 2010	Response to Johnson Memo	Final
2010	May 2010	Tailoring Rule	Final
	May 2010	CAIR Remand Response	Proposal
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	March 2011	NSPS for EGUs (anticipated)	Proposal
	March 2011	Utility Toxic Controls	Proposal
2011	Spring 2011	CAIR Remand Response	Final
	November 2011	NSPS for EGUS (anticipated)	Final
	November 2011	Utility Toxics Controls	Final
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2011 - 2013		BART Determinations	

Integrating Power Sector Regulations

► Key Components

- Energy efficiency
 - Reduced energy demand driven by energy efficiency can help lower all emissions
- Timing matters
 - How the regulations are timed can affect investments in new equipment, technologies and jobs and provide more certainty to industry
- Significant health benefits
 - Well-designed regulations can save America billions of dollars in lost work days and avoided adverse health effects





National Stationary Source Rules

- ▶ Transport Rule (CAIR Replacement)
- ▶ Industrial, Commercial and Institutional Boilers
- ▶ Commercial, Institutional & Solid Waste Incinerators
- ▶ Portland Cement
- ▶ Reciprocating Internal Combustion Engines
- ▶ Stationary Combustion Turbines
- ▶ Refineries
- ▶ Utilities



Improving Assessment Capabilities

- ▶ NATA 2005
 - ▶ Helps states understand where the HAP risks are
- ▶ Emission Inventory System
 - ▶ Allows faster and better access to key information
- ▶ Environmental Justice Rulemaking Analysis
 - ▶ Helps stakeholders understand who is being affected by our rules
- ▶ Detroit Project
 - ▶ Helped demonstrate cost effective multipollutant planning approach
- ▶ Integrating Climate and Air Quality
 - ▶ This is the next generation of the multipollutant challenge

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Technical Support – Some Examples

- ▶ Monitoring to support implementation
- ▶ Modeling guidance
- ▶ Implementation Rules for PM and Ozone
- ▶ Facilitating the incorporation of reductions from clean energy measures in SIPs
- ▶ Methods for Measuring PM_{10/2.5} & Condensable PM

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STAG Funding is Increasing

- ▶ FY 2011 President's Budget - \$ 309 million
 - ▶ \$45 million increase for core State workload
 - ▶ \$25 million increase for GHG permitting capacity
 - ▶ \$15 million increase for State air monitoring

\$ 85 million Increase*

- ▶ FY 2010 \$226.5 million
- ▶ FY 2009 \$224.0 million
- ▶ FY 2008 \$216.8 million

* From '09 enacted levels





Air Pollution Training Institute 2010

- ▶ Classroom course updates
 - ▶ APTI 415 Control of Gaseous Emissions
 - ▶ APTI 450 Source Sampling for Pollutants
 - ▶ APTI 474 Continuous Emission Monitoring
- ▶ Webinar presentations
 - ▶ Transport rule proposal
 - ▶ Boilers and Incinerator proposals
 - ▶ Trends report
- ▶ Video training modules
 - ▶ Final reciprocating internal combustion engines (RICE) rule
 - ▶ Final NO₂ NAAQS
 - ▶ Final tailoring rule
 - ▶ SIPs for new nonattainment areas (e.g., ozone)
- ▶ National training strategy



Summary – Meeting the NAAQS Challenge

- ▶ National rules are coming
- ▶ Integrated approaches for key sectors are in the works
- ▶ We are working with you to improve assessment capabilities
 - ▶ Understand how to effectively address NAAQS and toxics
- ▶ We need to continue to innovate
 - ▶ What more can be done nationally
 - ▶ Enable local initiatives
- ▶ We will continue to assist with technical support and training

