

## Environmental Overview for 2009



Georgia Metropolitan Planning Organizations' Meeting  
December 9, 2008

Dick Schutt, Chief  
Air Planning Branch  
U.S. Environmental Protection Agency

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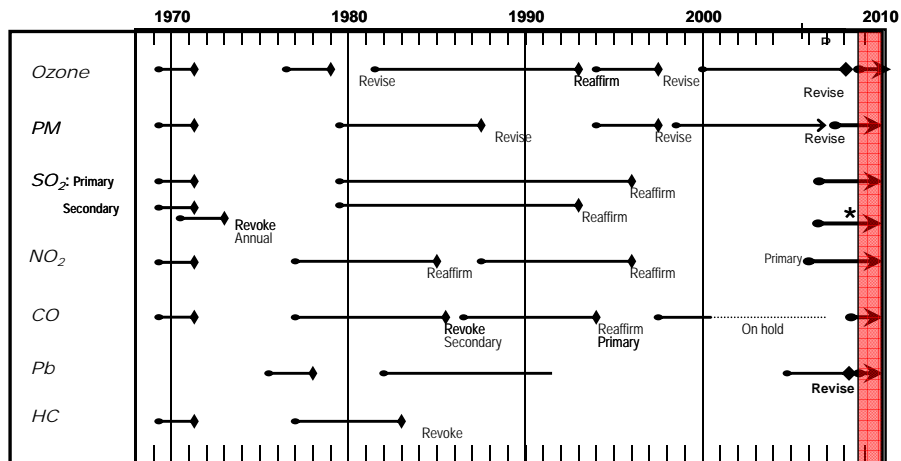
### Directs Administrator to:

- Identify and list “air pollutants” that “in his judgment,
  - may reasonably be anticipated to endanger public health and welfare” and
  - whose “presence... in the ambient air results from numerous or diverse mobile or stationary sources”
  
- Issue air quality criteria to “accurately reflect the latest scientific knowledge useful in indicating the kind and extent of identifiable effects on public health or welfare which may be expected from the presence of [a] pollutant in ambient air...”

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Directs the Administrator to:

- Propose and promulgate standards for pollutants listed under Section 108
  - Primary (health-based)
  - Secondary (welfare-based)
- Periodically review (5 year intervals) and, if appropriate, revise NAAQS
- Establish independent scientific advisory committee, the Clean Air Scientific Advisory Committee (CASAC), to:
  - Review air quality criteria
  - Recommend to the Administrator any new standards and revision of existing criteria and standards as may be appropriate



\* Joint NOx/SOx secondary NAAQS review – 2006-2010

Proposed and Final Rules as of 11/19/08

MILESTONE	POLLUTANT						
	Ozone <sup>1</sup>	Lead	NO <sub>2</sub> Primary	SO <sub>2</sub> Primary	NO <sub>2</sub> /SO <sub>2</sub> Secondary	CO	PM
NPR			Jun 26, 2009	Nov 16, 2009	<u>Feb 12, 2010</u>	<u>Oct 28, 2010</u>	Jan 2011
NFR	<u>Mar 12, 2008</u>	<u>Oct 15, 2008</u>	<u>Jan 22, 2010</u>	<u>Jun 2, 2010</u>	<u>Oct 19, 2010</u>	<u>May 13, 2011</u>	Oct 2011

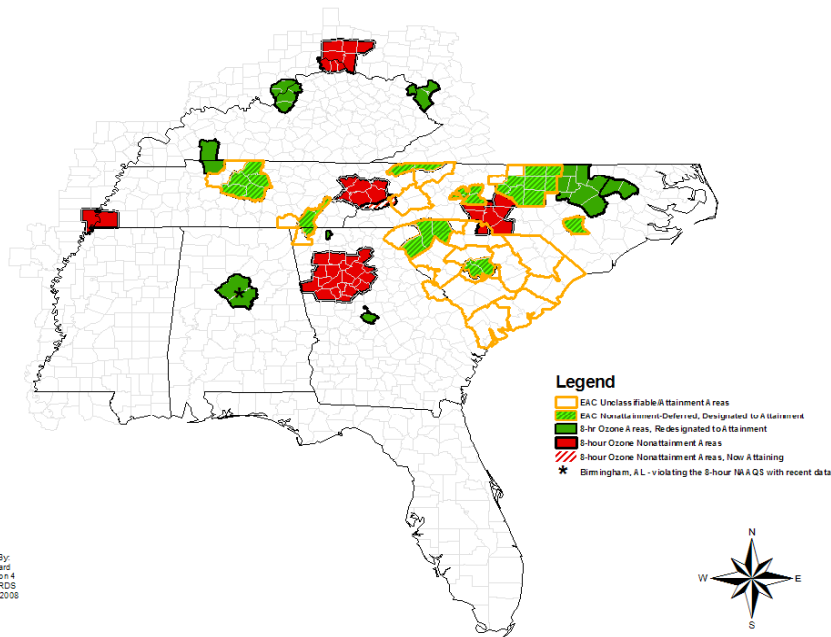
Note: Underlined dates indicate court-ordered or settlement agreement deadlines – for NO<sub>2</sub> and SO<sub>2</sub> Primary NAAQS reviews, the final dates listed above have been agreed to by the plaintiffs but have not yet been officially entered by the court.

<sup>1</sup> A new Ozone review was initiated in Oct 2008 with a kick-off workshop: proposed rule targeted for June 2012 and final rule targeted for March 2013.

2008 Ozone



## 1997 8-hour Ozone NAAQS Nonattainment & EAC Area Status



## 2008 8-Hour Ozone Standard

- March 12, 2008 (published March 27, 2008)
- Primary & secondary standard
  - 0.075 ppm
- Next Steps
  - Designations
    - State/Tribal recommendations due to EPA by March 12, 2009
    - EPA response to States – November 12, 2009
    - Designations by EPA – March 12, 2010\*
    - Transportation Conformity applicable one year after effective date
  - Development of Attainment Plans
    - Attainment Plans due 2013
    - Will contain “emissions cap” for transportation planning activities

\* If the EPA Administrator determines that there is insufficient information to make final designations, then the date of final designations may be extended by up to one year but no later than March 12, 2011.

- Results of >1,700 studies – adverse health effects @ 1997 stnd level of 0.08 ppm
- Study estimates – premature deaths avoided annually in 2020
  - 260 to 2,000 (\$3 to \$17 billion benefit/yr)
  - 420 to 2,300 (\$4 to \$19 billion benefit/yr)

Reduced cases of...	O <sub>3</sub> <sup>^</sup>
Premature death	~260 to 2,300
Chronic bronchitis	380
Nonfatal heart attacks	890
Hospital admissions & emergency department visits	1,900
Acute bronchitis	1,000
Upper and lower respiratory symptoms	11,600
Aggravated asthma	6,100
Missed work or school days	243,000
Restricted activity days	750,000

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- **Rulemaking**
  - 2008 8-hour ozone Implementation Rule
- **Guidance**
  - 2008 8-Hour Ozone Boundary Guidance
  - Other guidance documents-TCM, Conformity SIP, & Latest Planning Assumptions
- **Release of MOVES**
  - “Draft MOVES” released January 2009
  - Final MOVES released end of 2009/early 2010

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## PM2.5



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## PM2.5 Standard

- Annual standard –  $15 \mu\text{g}/\text{m}^3$ 
  - Attainment SIPS were due for Atlanta, Rome, Macon, and Chattanooga in April 2008
  - Pre-hearing package for Macon submitted to EPA on December 3, 2008
  - Others anticipated early to mid-2009
- New daily standard –  $35 \mu\text{g}/\text{m}^3$ 
  - EPA to complete designations this month
  - No areas in Georgia are violating

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## 2008 Lead Standard



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## Overview

- On October 15, 2008, EPA strengthened the national ambient air quality standards (NAAQS) for lead (Pb) to increase protection of public health and the environment.
  - Since 1978, ambient air lead standards have been set at  $1.5 \mu\text{g}/\text{m}^3$  (micrograms per cubic meter of air).
  - **Now, EPA is strengthening the lead standards by 90 percent to a level of  $0.15 \mu\text{g}/\text{m}^3$ .**

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## Timeline For Implementing Revised Lead NAAQS

Milestone	Date
Signature—Final Rule	Oct. 15, 2008
State Designation Recommendations to EPA	No later than October 2009 (based on existing network data)
Monitoring Network	At least half of required sites operational by Jan. 1, 2010 (additional required sites operational by Jan. 1, 2011)
Final Designations	No later than effective date Jan. 1, 2012* *Based on one-year deadline extension due to insufficient information; some areas are expected to be designated earlier based on existing data.
Transitional Strategy (Antibacksliding)	Revoke 1978 Pb NAAQS in pre-2009 attainment areas no later than October 2012
Attainment Demonstration SIPs Due	No later than June 2013 (18 month maximum)
Attainment Date	No later than January 2017 (5 year maximum)

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## Sources Contributing to Lead Pollution

- More than 1,300 tons of lead are still emitted each year from about 16,000 sources, many of which emit a fraction of a ton
- The highest levels of lead in air are generally found near lead smelters
- Other sources of current lead emissions include:
  - Iron and steel foundries
  - Copper Smelting
  - Metal mining
  - Industrial/commercial/utility boilers
  - Gasoline for small planes  
(not used in commercial passenger aircraft)
  - Waste incinerators
  - Cement manufacturing
  - Glass manufacturing



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## Ambient Air Monitoring Implications For EPA Region 4

- **Lead monitoring required:**
  - At sources emitting 1.0 tons/year or more of lead based on NEI or other justifiable data.
  - In core-based statistical areas (CBSAs) with population over 500,000.
- EPA OAQPS estimates 236 new or relocated monitoring sites will be required nationwide based on the 2002 NEI and 2007 population estimates.
- 40 of these new or relocated monitoring sites are in Region 4
- If additional sources over 1.0 ton/year from the 2006 Toxics Release Inventory (TRI) are included, the number of required new or relocated sites increases to 72.
- Currently, a total of 25 lead monitoring sites are operating in five states in Region 4.

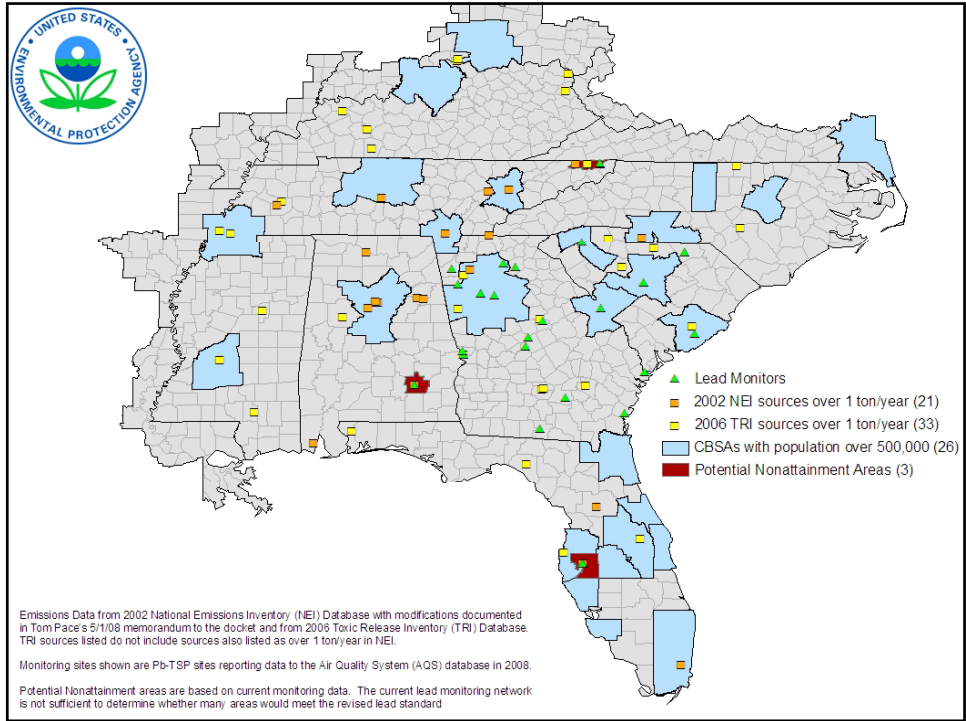
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## EPA Region 4 Lead Monitors

Location of Monitor	Required Lead Monitors	Current Lead Monitors	New or Relocated Monitors Needed
2002 NEI sources over 1 ton/year	21	2	19
2006 TRI sources over 1 ton/year	33 <sup>1</sup>	1	32
CBSAs over 500,000	26	5	21
Other	0	17	0
<b>Total</b>	<b>80</b>	<b>25</b>	<b>72</b>

<sup>1</sup> TRI sources do not include sources listed as over 1 ton/year in the NEI

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 United States Environmental Protection Agency

**The value of partnership in achieving air quality goals can be tremendous!**



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## Benefits:

- Cleaner Air Sooner
- Possible attainment vs. nonattainment
- Ozone – possible lower classification

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- Become engaged in air quality planning issues! - check in with GA EPD
- Help educate your stakeholders on ways to reduce emissions.
  - Retrofits
  - Smart commuting & commute options...
- Participate in SEDC & learn more ways!
  - [www.southeastdiesel.org](http://www.southeastdiesel.org)

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- EPA, states & locals looking ahead to new & upcoming standards
- Partner activities include:
  - Monthly calls to share information
  - Develop clearinghouse of presentations and outreach materials

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