



# EPA: Taking Action to Improve Air Quality



**Carol L. Kemker, Deputy Director**  
**Air, Pesticides and Toxics Management Division**  
**U.S. EPA – Region 4**



# The Future of EPA: Administrator Jackson's Priorities



- ❖ Taking Action on Climate Change
- ❖ Improving Air Quality
- ❖ Assuring the Safety of Chemicals
- ❖ Cleaning Up Our Communities
- ❖ Protecting America's Waters
- ❖ Expanding the Conversation on Environmentalism and Working for Environmental Justice
- ❖ Building Strong State and Tribal Partnerships



# APTMD Priorities

- ❖ Grants Management
- ❖ Implementing and Managing ARRA of 2009
- ❖ Energy Permitting
- ❖ Reducing greenhouse gas emissions
- ❖ NAAQS Implementation
- ❖ Children's Health
- ❖ Environmental Justice
- ❖ School Air Toxics Monitoring Initiative

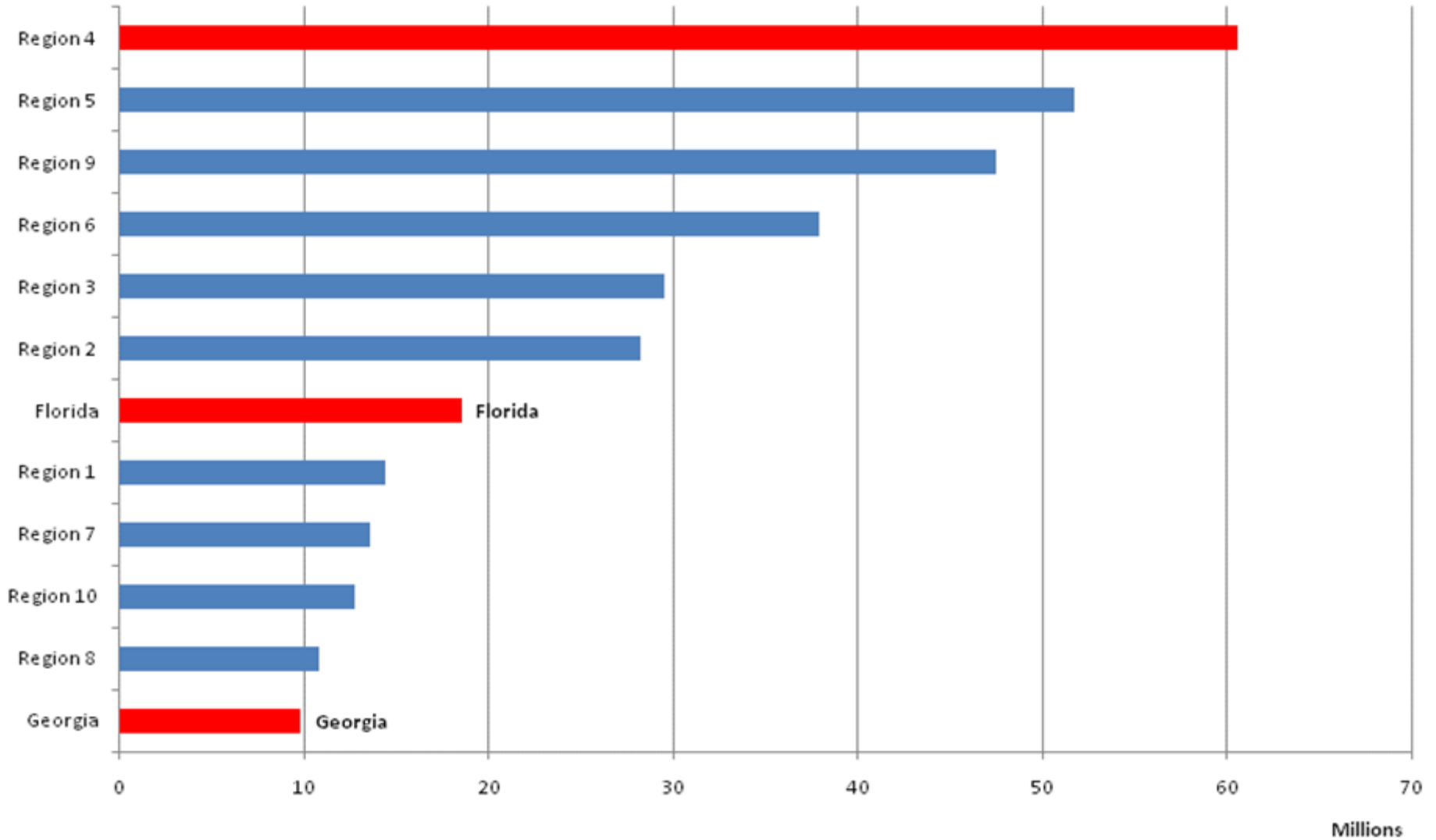




# Grants Management

- ❖ APTMD currently manages approximately 181 grants, including:
  - Continuing Environmental Programs
  - Special Project Grants
  - Diesel Emission Recovery Act Grants
  - American Reinvestment & Recovery Act of 2009 Grants
- ❖ APTMD has awarded and manages approximately \$95M in grant funds.

# How Does Region 4 Impact Air Quality?



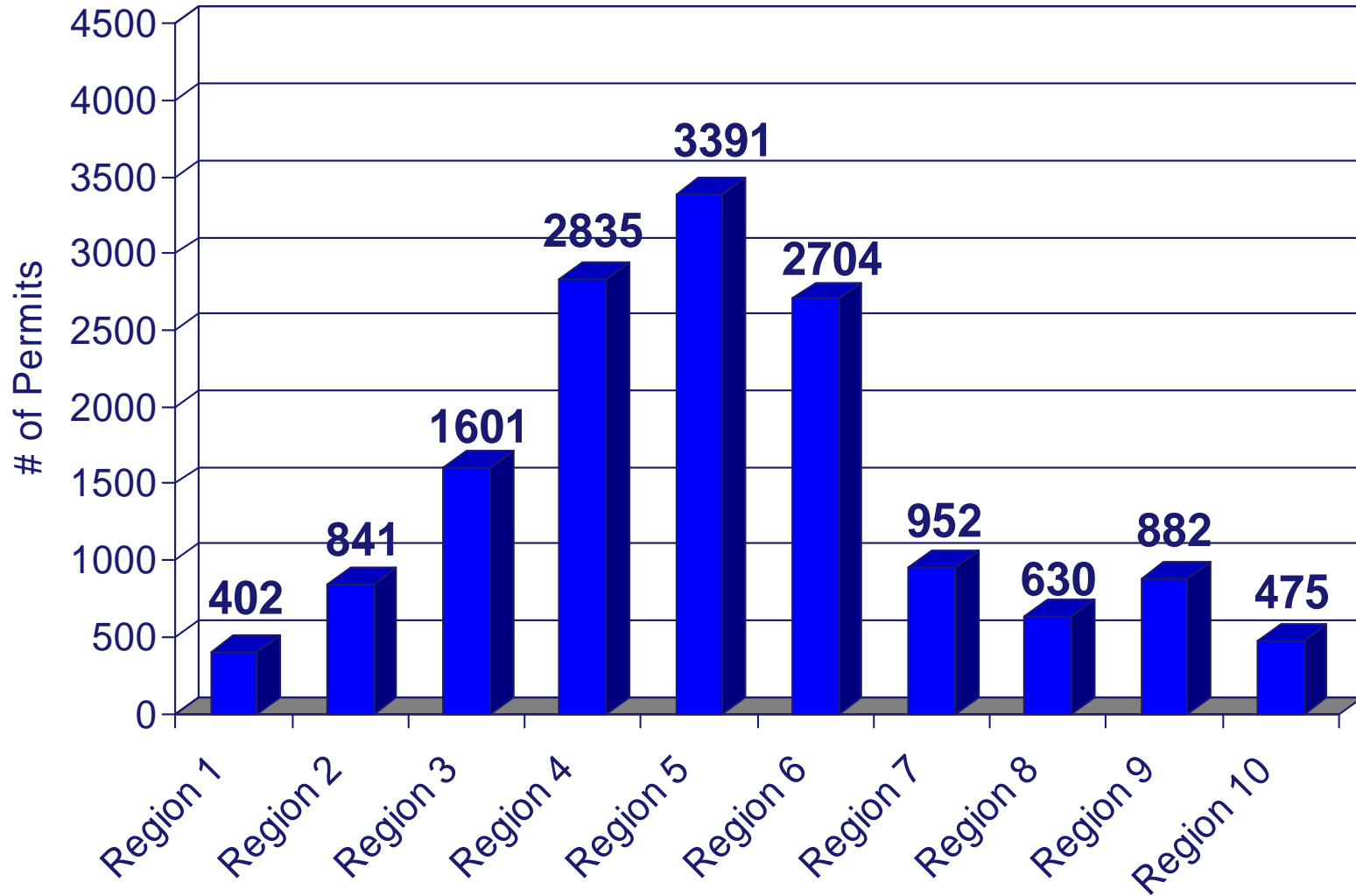
2009 Annual Population Estimates

SOURCE: U.S. Census Bureau

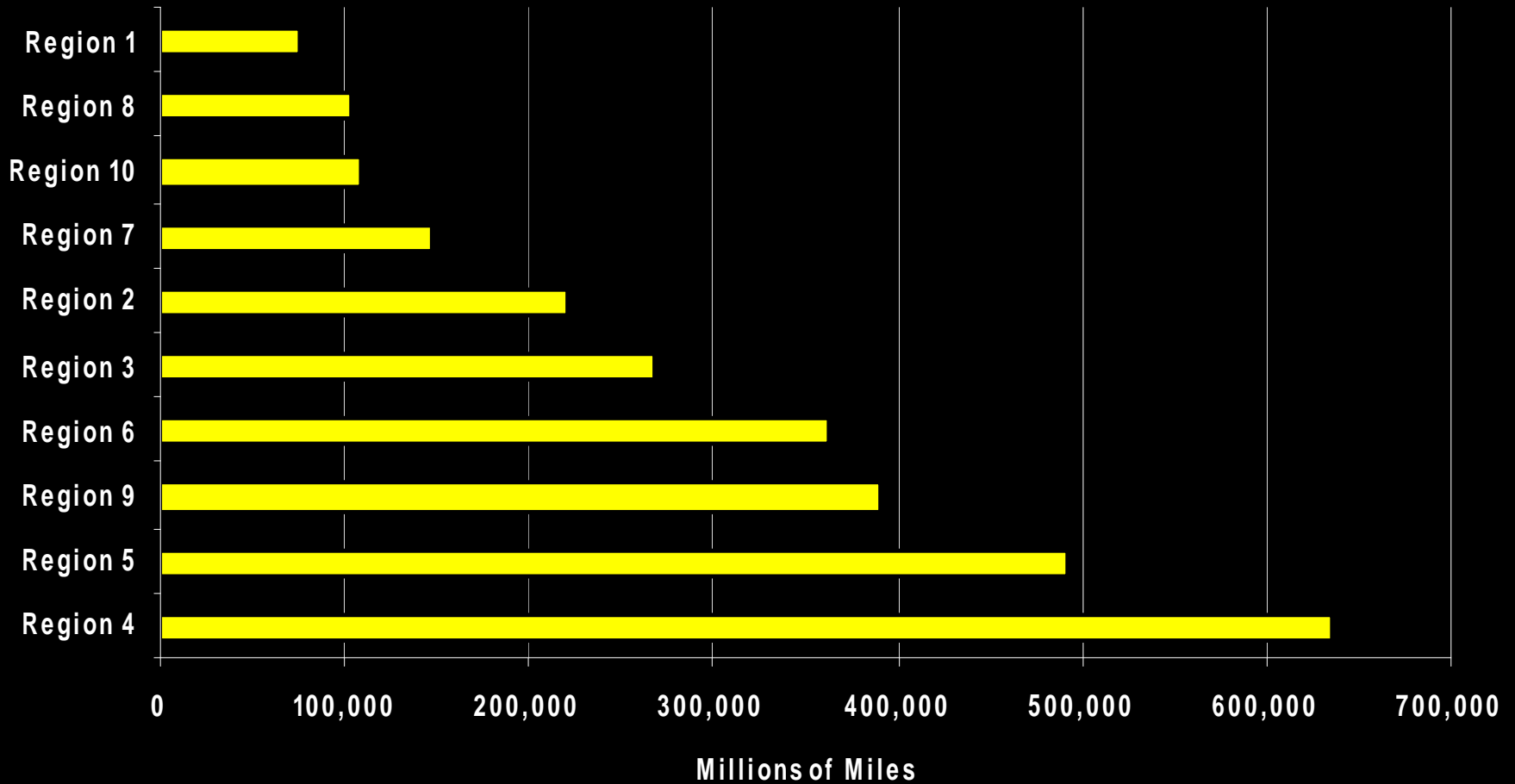


# Title V Sources

(as of 1/2010)



# Annual Vehicle Miles Traveled





# How will the Agency Implement Priorities?

- ❖ Regulatory Actions
- ❖ Special Initiatives
- ❖ Collaborating with our Partners
- ❖ Voluntary Programs
- ❖ Engaging the Community



# Regulatory Actions





# Current Regulatory Activity

- ❖ EPA is seeing an unprecedented amount of rulemaking activity to address air quality concerns.
- ❖ The Agency is making strides to communicate the science of our regulatory decisions and its impact.
- ❖ Current activity includes the following:
  - NAAQS
  - Permitting: Title V and New Source Review
  - Air Toxics
  - Clean Air Act Enforcement



# Current NAAQS Activity

- ❖ Lead Designation Process
- ❖ NO<sub>2</sub> Rulemaking Process
- ❖ SO<sub>2</sub> Rulemaking Process
- ❖ Ozone Reconsideration Rulemaking
- ❖ All NAAQS revisions will require revisions to the monitoring networks.
- ❖ Other Activities:
  - Regional Haze
  - Federal Transport Rule



# NAAQS Review Schedule Proposed and Final Rules as of May 2010

MILESTONE	POLLUTANT						
	NO <sub>2</sub> Primary	SO <sub>2</sub> Primary	Ozone Reconsideration <sup>1</sup>	CO	PM	NO <sub>2</sub> /SO <sub>2</sub> Secondary	Lead
NPR	<u>Jun 26, 2009</u>	<u>Nov 16, 2009</u>	Jan 6, 2010	<u>Oct 28, 2010</u>	Nov 2010	<u>July 12, 2011</u>	Nov 2013
NFR	<u>Jan 22, 2010</u>	<u>Jun 2, 2010</u>	Aug 31, 2010	<u>May 13, 2011</u>	July 2011	<u>Mar 20, 2012</u>	Sept 2014

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

- 1 On September 16, 2009, EPA announced reconsideration of the 2008 8-hour Ozone standard. The reconsideration calls for an accelerated designation schedule for a new standard. On January 6, 2010, EPA signed and on January 19, 2010, EPA proposed a reconsidered primary and secondary standard.

Next Ozone Review: Proposal in May 2013 and Final in Feb 2014



# Region 4 Air Quality Monitoring

State	Ozone	NO <sub>2</sub>	SO <sub>2</sub>	Pb		Total
				NCore	Source-oriented <sup>1</sup>	
Alabama	5	2	11	1	TBD	19
Florida	6	14	23	2	TBD	45
Georgia	9	4	13	1	TBD	27
Kentucky	3	2	12	1	TBD	18
Mississippi	4	1	4	1	TBD	10
<b>North Carolina</b>	<b>6</b>	<b>5</b>	<b>17</b>	<b>2</b>	<b>TBD</b>	<b>30</b>
South Carolina	5	4	7	1	TBD	17
Tennessee	6	6	12	1	TBD	25
<b>Total</b>	<b>44</b>	<b>38</b>	<b>99</b>	<b>10</b>	<b>TBD</b>	<b>191</b>

1. Source-oriented Pb monitoring network designs will be developed by State and Local agencies in consultation with EPA. 2005 and 2008 National Emissions Inventories (NEI) and 2005 Toxics Release Inventory (TRI) indicate 62 sources and 16 airports over 0.50 tpy in Region 4.



# Permitting...Title V

- ❖ Recent rulemaking has put the spotlight on title V permitting.
- ❖ Recent National Activity
  - Title V petition responses (more on that later)
- ❖ Region 4 Activity
  - Program evaluations for North Carolina and Mecklenburg County scheduled for 2010
    - Focus on fee adequacy and compliance assurance monitoring (CAM)



# Permitting...Title V Petitions

- ❖ In FY10, Region 4 continues to process petitions that have precedent setting positions on national issues.
- ❖ Issues such as appropriately addressing public comments received on the consideration of clean fuels in a Best Available Control Technology (BACT) analysis.



# Permitting...New Source Review

## ❖ National Activities

- Implementation of NSR Program for PM<sub>2.5</sub>
  - March 23, 2010 - Memo issued on modeling procedures for demonstrating compliance with the PM<sub>2.5</sub> NAAQS
- Rulemakings expected to be finalized
  - Tribal NSR Rule
  - PM<sub>2.5</sub> Increments, Significant Impact Levels, Significant Monitoring Concentration Rule (tentatively scheduled for late May 2010)
- May 13, 2010 - Final PSD and Title V Greenhouse Gas (GHG) Tailoring Rule
- March 24, 2010 – Stay of Fugitive Emissions Rule for 18 months
- March 29, 2010 - Reconsideration of Johnson Interpretative Memo signed
- March 29, 2010 – Proposed Action of Aggregation Rule
- Upcoming Guidance on NO<sub>2</sub> and SO<sub>2</sub> modeling
- Region 4 Activities
  - Issuing Agency for Outer Continental Shelf (OCS) permits and LNG Deepwater Port permits



# MACT Rules Updates

Section 112 Major Source Rules	New Rule or Re-work	Promulgation Deadline	Status	Comments
PVC	Re-work due to Vacatur	29-Jul-11	Must propose by Oct. 2010	
Boilers & Heaters	Re-work due to Vacatur	C.O. Dec. 2010	Signed April 30, 2010	Major and area rules on same track
Brick & Struct. Clay	Re-work due to Vacatur	None	Reviewing testing data from ICR	112(j) will apply
Clay Ceramics	Re-work due to Vacatur	None	Reviewing testing data from ICR	
Utilities MACT	Re-work due to Vacatur	Propose by 3/16/11. Promulgate by 11/16/11	ICR finalized and 114 letters mailed	Test data requested from facilities
Gold Mining Production Process	New rule to cover mercury emissions	C.O. Dec. 2010	Proposed on April 28, 2010	Will also cover area sources
SSM provisions of Part 63 Gen. Provisions	Re-work due to vacatur	Mandate issued on 10/16/09	Industry's petition denied	Vacatur now effective
Haz. Waste Combustion MACT (EEE)	Re-work due to Remand	None	EPA must re-propose new regulations	Original rule remains effective
112(j) rule	Amendment	Projected for 3 <sup>rd</sup> QTR 2010	Proposed on 3/30/10	Addresses MACT vacaturs



# Area Source Rules Update

- ❖ Implementation needs based on identified focus areas:
  - Reorganize Air Toxics Website for Area Source Rules;
  - Develop new campaign;
  - Viability of electronic submittals/certifications;
  - Better access to informal determinations; and
  - Finalize area source implementation guidance.



# Air Enforcement Priorities

## ❖ Air Toxics

- Leak Detection and Repair, Industrial Flares, and Surface Coating

## ❖ NSR/PSD Priorities:

- Glass Manufacturing, Cement Manufacturing, Acid Manufacturing, and Coal-Fired Utilities

## ❖ Port of Huntington Initiative

## ❖ Chesapeake Bay Initiative

## ❖ School Air Toxics Initiative



# Special Initiatives and Collaborating with our Partners





# Southeast Diesel Collaborative (SEDC)

- ❖ May 26, 2010 – Mobilizing North Carolina Conference
  - SEDC Community Leadership Award in Raleigh, NC
- ❖ June 21-24, 2010 - Annual Partners Meeting in Atlanta, GA
  - Registration open @ [www.southeastdiesel.org](http://www.southeastdiesel.org)
- ❖ 2010 DERA Competition
  - Five projects selected for a total of \$8.1M
  - Announcement in early May 2010





# American Recovery & Reinvestment Act (ARRA) of 2009

- ❖ In FY09, Region 4 awarded 17 competitive grants and 8 state grants totaling \$51M.
- ❖ Mecklenburg County, NC Project Highlight:
  - GRADE + - “Grants to Replace Aging Diesel Engines”
    - Project provides for 28 or more repowers and 6 or more replacement of nonroad construction equipment, stationary diesel engines or highway diesel.
    - Emission Reductions: 166 tpy NO<sub>x</sub>, 10 tpy PM, 60 tpy CO, 13 tpy HC





# State Implementation Plan (SIP) Lean Process

- ❖ Purpose: To improve the SIP process to benefit Regions, State and Local Agencies, and Tribes.
- ❖ Process: Lean Kaizen Event lead by Region 7.
- ❖ Results: Recommendations on the ozone nonattainment SIP process and development.



# State Implementation Plan (SIP) Lean Process

## ❖ Recommendations:

- Elimination of non-value added steps;
- Parallel processing;
- Direct final approvals;
- Approaches that combine or eliminate steps;
- Elimination of unnecessary paperwork.

❖ Region 4 will continue to support the Southeastern states efforts to make recommendations to the SIP process.

❖ Region 4 will continue to support OAR's Air Quality Management Plan pilot program with North Carolina.



# Voluntary Programs and Engaging Communities





# Voluntary Programs

## ❖ ENERGY Star

- Americans with the help of ENERGY STAR prevented 45 million tons of greenhouse gas emissions in 2009 alone.
- Equivalent energy bill savings were nearly \$17 billion dollars.

## ❖ Radon

- Enhance the outreach, visibility, and effectiveness to increase awareness on the exposure to radon.



# Engaging Communities

## ❖ School Air Toxics Initiative

- Worked with the Chicora Community to relay information regarding the air quality monitoring activities.

## ❖ Environmental Justice

- Work with communities to help address public health concerns associated with activities such as freight travel and other environmental concerns.

## ❖ Children's Health

- Work with communities and schools to help address health concerns that impact children at a disproportionate rate.



# School Air Toxics Initiative

- ❖ Region 4 monitored 14 schools
- ❖ EPA resampled at schools in Kentucky, South Carolina and Alabama for VOC and Acrolein in October 2009
- ❖ Resampling at Chicora Elementary completed in March 2010





# Environmental Justice

- ❖ SC Port Authority's "Pledge for Growth" program focuses on SC Port's pledge to grow in an environmentally and economically sustainable manner
- ❖ Funding from EPA to the Port is providing repowers of many pieces of port equipment and installation of Auxiliary power units or pollution control devices on trucks to reduce pollution in the surrounding community
- ❖ The Port of Charleston is one of the very few U.S. ports with terminal construction permits in hand. At full build-out, the new terminal will increase port capacity by 1.4 million TEU, or approximately 50%.
- ❖ SC Port received, along with other organizations, the 2009 EJ Achievement Award for efforts to reduce the impacts of this new port.





# Children's Health

- ❖ Children's Health Programs include, among other things:
  - Outreach on Asthma Prevention
  - Tools for Schools
  - Lead - addressing lead from air sources and lead-based paint
  - Integrated Pest Management
  - Outreach on Radon Detection
  
- Appalachian Initiative
  - Partnership with the KY Environmental Education Council and East KY Pride to deliver environmental information in Appalachia with a focus on children's health
  - Among other things, this will include outreach using such things as Tools for Schools training in the Appalachian area





# Energy and Climate Change

❖ Region 4 has developed a Strategy to address climate change and promote clean energy alternatives:

- Reduce Energy Use
- Mitigation
- Adaptation
- Education





# Questions?

**Carol L. Kemker**  
**Deputy Division Director**  
**404-562-9700**  
**kemker.carol@epa.gov**

---

<http://www.epa.gov/region4/>