

SASS – A & WMA Conference Williamsburg, Va. November 21, 2008

*North Carolina Division of Air Quality
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Director*



Topics to be Covered

- **Current Rule Making Activities**
- **Mobile Source Grants**
- **Renewable Energy Resource Applications/ Projects**
- **PM2.5 Attainment Status**
- **Ozone Standards, Old and New**
- **Inspection & Maintenance Program & Outreach**
- **Miscellaneous**

Current Rule Making Activities

- **Changes to Air Toxics Rules**
- **Annual Emissions Reporting Rule**
- **Heavy Duty Vehicle Idling Restrictions**
- **NOx SIP Call Temporary Rules**
- **NOx SIP Call Permanent Rules**

Changes to Air Toxics Rules

- **Triggered by Boiler MACT**
- **Situation Exacerbated by MACT Vacatur**
- **AQC Guidance to Continue to Study the Situation**
- **Two-Pronged Plan Developed by DAQ & Approved by AQC**

Changes to Air Toxics Rules (Cont'd)

- **Modeling Conducted using EPA Human Exposure Model (HEM)**
- **All Sources with >1 in a Million Risk Based upon HEM to do additional Modeling**
- **Director's Call Planned for Sources that can't "Model Out"**

Changes to Air Toxics Rules (Cont'd)

- **Rule Changes Minimized**
 - **Combustion Source Exemption Maintained for Existing Sources**
 - **All New and Modified Combustion Sources After Effective Date of Rule Changes will Trigger a Toxics Review**
 - **Review of Existing Sources again in 5 years**

Changes to Air Toxics Rules (Cont'd)

● Schedule:

1. Rule Making Prong:

Rule Concept to AQC	March 12, 2008
Draft Rule to AQC	May 7, 2008
Draft Rule to EMC	July 10, 2008
Comment Period Begins	October 1, 2008
Public Hearing	October 28, 2008
Comment Period Ends	December 31, 2008
Hearing Record to EMC	March 2009
State Effective Rule	May 2009

Changes to Air Toxics Rules (Cont'd)

● Schedule:

2. Non Rule Making Prong general time line:

Facilities on short list notified	April/May 2008
Facilities modeling (< or > AAL)	June-Sept 2008
Director's call letters	Oct-Nov 2008
Facilities will have 180 days after receiving a Director's call to submit a permit application showing compliance with 15A NCAC 02D .1100.	

Annual Emissions Reporting Rule

- Update to Existing Reporting Rule
- Will add GHG Reporting Requirement for TV Facilities
- DAQ will ask for GHG Emissions for 2008 inventory (due June 2009)

Annual Emissions Reporting Rule (Cont'd)

● Amendments to Annual Emission Reporting Rule Schedule:

Rule Concept to AQC	March 12, 2008
Draft Rule to AQC	May 7, 2008
Draft Rule to EMC	July 10, 2008
Comment Period Begins	October 1, 2008
Public Hearing	October 28, 2008
Comment Period Ends	December 1, 2008
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Heavy Duty Vehicle Idling Restrictions

- **Applicable to On-Road Heavy-Duty (10,001 pounds and greater) Vehicles**
- **Exemption for Vehicles such as Emergency, Military, Vehicles with power take offs performing designed function (e.g., refrigeration, dumping, lifting, etc.)**
- **Requirements: No more than 5 consecutive minutes of Idling in any 60 minute period**
- **Stakeholder process to develop the Rule**

Schedule for Idling Rule

● Idle Rule Schedule:

Rule Concept to AQC	March 12, 2008
Stakeholder Meeting	May 28, 2008
Pre-draft Comments	July 20, 2008
2 nd Stakeholder Mtg	August 13, 2008
Draft Rule to AQC	September 10, 2008
Draft Rule to EMC	November 13, 2008
Public Hearing	January 2009
State Effective Rule	May 2009

NOx SIP Call Temporary Rules

- Temporary Rules needed due to CAIR Vacatur and Repeal of Old Rules
- Temporary Rules to reinstate unit-level ozone season NOx allocation for the 2009 season
- Temporary Rule only in place for 270 days

NOx SIP Call Temporary Rules (Cont'd)

● Timeline for NOx SIP Temporary rule-making:

Concept and Draft Rule	September 10, 2008
Draft Rule to EMC	September 11, 2008
Comment Period Begins	September 18, 2008
Public Hearing	October 28, 2008
Comment Period Ends	October 28, 2008
Hearing Record to EMC	November 13, 2008
State Effective Rule	December 31, 2008

NOx SIP Call Permanent Rules

- Needed to replace Temporary (See above)
- Permanent Rules to establish allocations for future years
- Allocations for 2010-2014 and 2015 and beyond

NOx SIP Call Permanent Rules

● Timeline for NOx SIP Permanent rule-making:

Concept and Draft Rule	November 12, 2008
Draft Rule to EMC	January 8, 2009
Public Hearing	Feb. - March 2009
Hearing Record to EMC	May 14, 2009
State Effective Rule	July 1, 2009

Mobile Source Grants

- **“Regular” MSGs from Fuel Tax**
- **School Bus Retrofit Grants**
- **DERA Grant for States**
- **DERA Competitive Grant**

HB 1912 School Bus Retrofits for Nonattainment Areas Pilot Project

- **Ozone and PM**
nonattainment/maintenance area school district bus fleets targeted for retrofits
- **Diesel Particulate Filters (DPF) in combination with Closed Crankcase Ventilation Systems (CCVS) given highest priority**

HB 1912 Pilot - Status

- Notified that will receive \$2M from CMAQ
- \$500,000 required match has been transferred from NC Department of Public Instruction (NCDPI)
- NCDPI-NCDAQ Agreement is awaiting signature

HB 1912 Pilot – Next Steps

- All eligible school districts will be contacted
- A letter of interest from all eligible school districts desiring to be considered for funding will be required
- NCDAQ will work with NCDPI to select buses to retrofit from the pool of buses in interested school districts

DERA State Clean Diesel Grant Program

- Non-competitive funding given to each state that sent a letter of intent to EPA
- Funding used for additional diesel funding through the Mobile Source Emission Reduction Grant Program
- Partial funding of ~\$295K awarded this FFY
- Total EPA approved funding over 2 FFYs ~\$620K

DERA Clean Diesel Grant Program...(Cont'd)

- With DAQ match total ~\$1M over 2 FFYs dedicated to diesel projects
- Request for Proposals for MSERG Projects with additional State Clean Diesel Grant funding issued Oct 1 and closes Dec 31

DERA Competitive Grant

- NCDAQ Notified of Successful Proposal
- Proposal is called: NC Clean Construction LEADER Grant
- LEADER = Leading in Early Adoption of Diesel Emission Reduction
- Applied for \$750,000 to establish a grant to replace, repower, or retrofit construction equipment

Renewable Energy Resource Applications/Projects

- **Senate Bill 3, 2007 Legislative Session**
- **Establishes Requirements for Renewable Energy Resource usage as part of Baseload Generation**
- **Defines Renewable Energy Resource**

Renewable Energy Resource Applications/Projects

What is a Renewable Resource in SB 3?

- Solar
- Wind
- Hydropower
- Geothermal
- Ocean Current or Wave Energy Resource
- Biomass – Ag, Animal, Wood, Residues, Liquids, Gasses, Energy Crops, Landfill Methane
- Waste Heat from Industrial Manufacturing
- Hydrogen Derived from a Renewable Energy Source
- “Renewable Energy Source” Does NOT Include Fossil or Nuclear Energy

SB 3

Promote Renewable Energy Baseload Generation

- Requires a percentage of energy sales in NC to come from new renewable sources and efficiency measures on the following schedule:

3% by 2012 (up to 0.75% from efficiency)

6% by 2015 (up to 1.5% from efficiency)

10% by 2018 (up to 2.5% from efficiency)

12.5% by 2021 (up to 5% from efficiency)

SB 3

Promote Renewable Energy – Baseload Generation

- Requires small amounts of electric sales from:



Solar (0.02% in 2010... up to 0.2% in 2018)



Swine Waste (0.07% in 2012...up to 0.2% in 2018)



Poultry Waste (170,000 megawatt hrs in 2012... up to 900,000 megawatt hrs in 2014)

SB 3



Promote Renewable Energy - Baseload Generation



- Provisions requiring any new biomass energy facility to meet Best Available Control Technology (BACT)
- Other language was included to ensure that renewable energy technologies don't have secondary, undesirable consequences
- Impact to consumers:
 - Residential – not to exceed,
 - \$12/yr 2012-2014
 - \$10/yr 2008-2011
 - \$34/yr 2015 and beyond

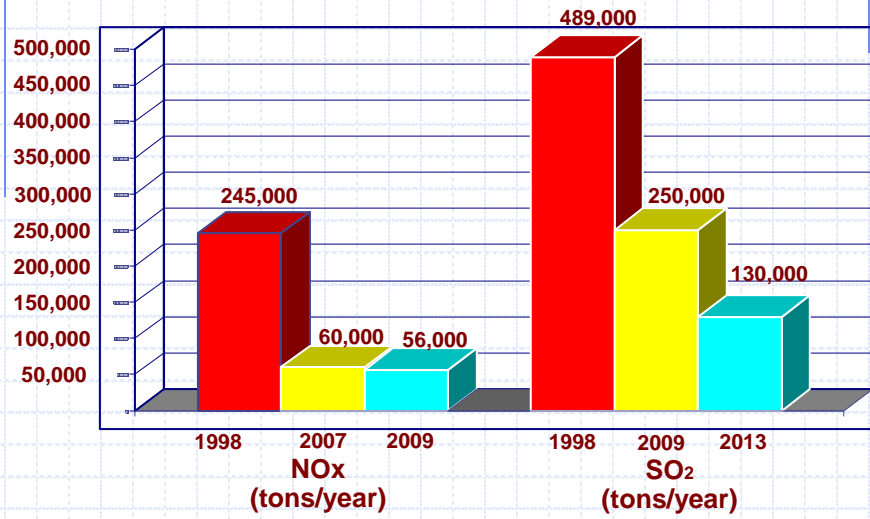
Renewable Energy Resource Applications/Projects

- Applications received for new biomass (wood burning) facility in NE North Carolina
- Several discussions at Regional level about landfill methane projects
- Three announced poultry litter facilities
- Several announced solar projects

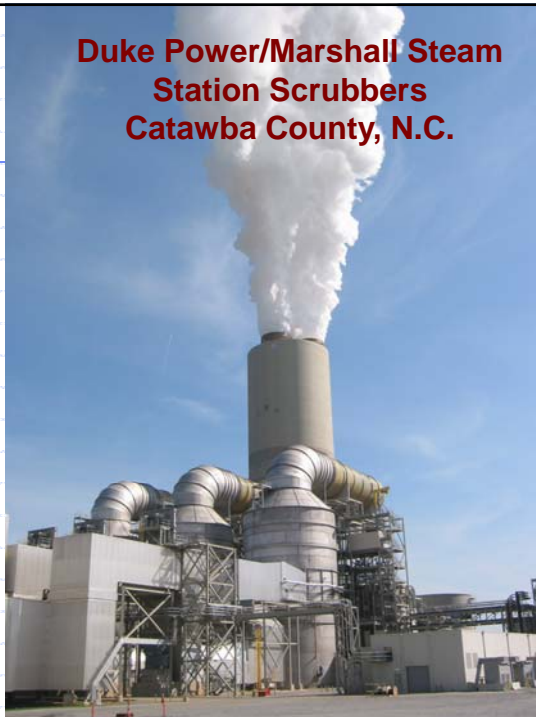
PM 2.5 Attainment Status

- Two Monitors (Catawba and Davidson) now meet the annual standard of 15ug/m³
- Request to redesignate to attainment anticipated
- All monitors in state show compliance with the new 24 hour standard of 35ug/m³ based upon 2005-2007 data

Emissions Reductions Under Clean Smokestacks Bill

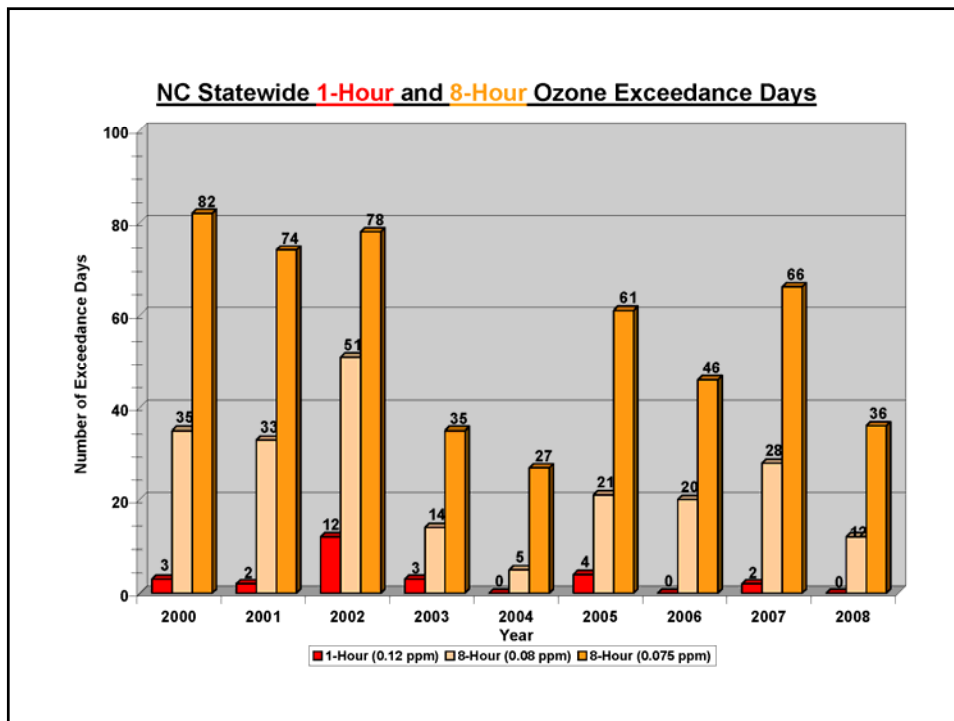


Duke Power/Marshall Steam Station Scrubbers
Catawba County, N.C.

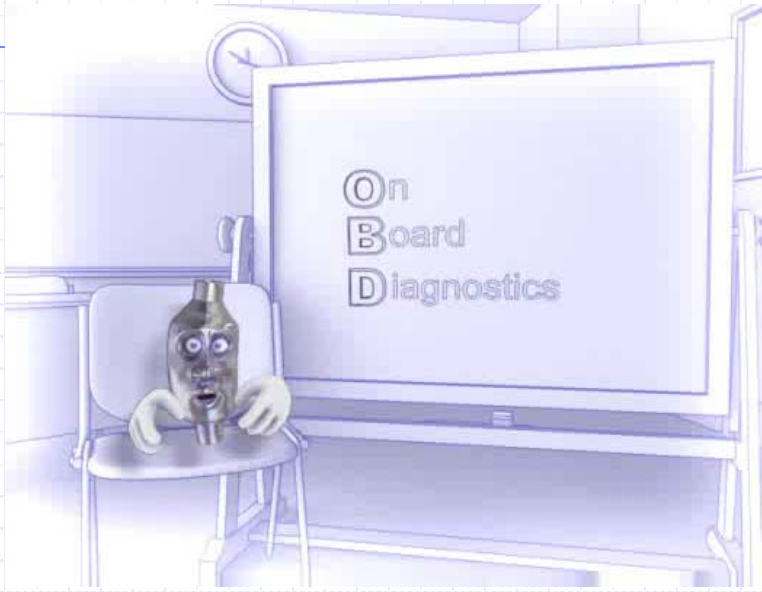


Ozone Standards, Old and New

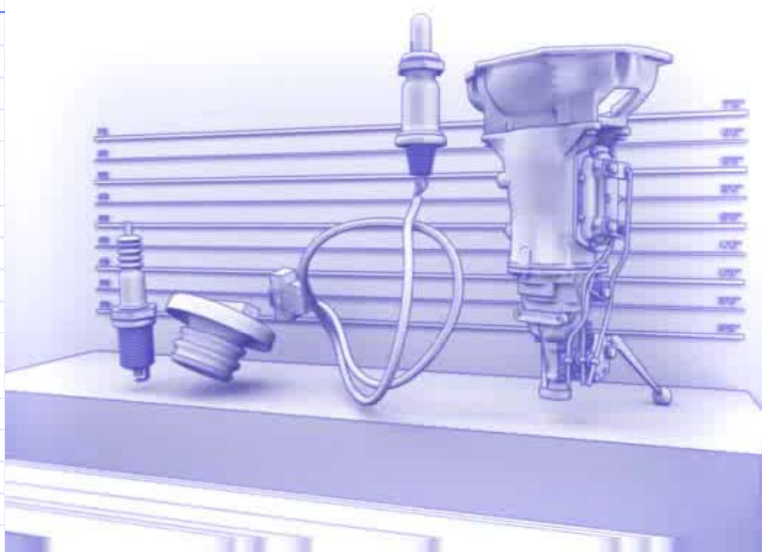
- Old Standard → 0.08 ppm (effectively 0.084)
- New Standard effective March 12, 2008 → 0.075 ppm



Classroom



Lineup



List



Mechanic



Miscellaneous

- **Climate Action Plan Advisory Group (CAPAG) and ASU Jobs Analysis**
- **Planning for DAQ's Future**
- **Change A Light NC**

CAPAG & ASU Jobs Analysis

- **Both final reports on DAQ website**
- **Jobs Analysis – 15,000 additional jobs and \$1.3 billion added to State Gross Product by 2020**

Planning for DAQ's Future

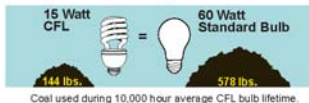
- New Deputy Director
- New Planning Chief
- New Compliance and Enforcement Manager (Soon)

NC Change A Light.org



Conserve Energy

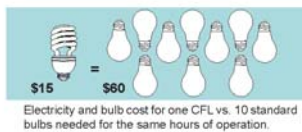
CFLs use about 1/4 of the energy of standard light bulbs. Each CFL can save more than 400 pounds of coal during its lifetime.



For more information, go to:
ChangeALightNC.org

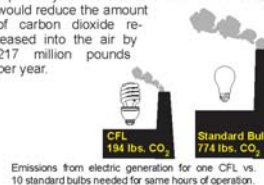
Save Money

CFLs last up to 10 times longer than standard bulbs, and each CFL saves about \$40 in electricity during its lifetime.



Cut Air Pollution

Most electricity in N.C. comes from burning coal, oil and other fossil fuels. This creates pollution that contributes to ozone, haze, climate change and other air quality problems. If every N.C. home replaced just one standard bulb with a CFL, we would reduce the amount of carbon dioxide released into the air by 217 million pounds per year.



2008 NC State Fair



Progress Energy donated the bulbs for the State Fair.

Volunteers at the “Change A Light Exhibit” handed out 9,000 free bulbs at the fair to visitors who pledged to use CFLs in their homes.



North Carolina Department of Environment and Natural Resources

Division of Air Quality



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