

***Fall 2007 CAPCA Update  
Myrtle Beach, S.C.  
October 25, 2007***

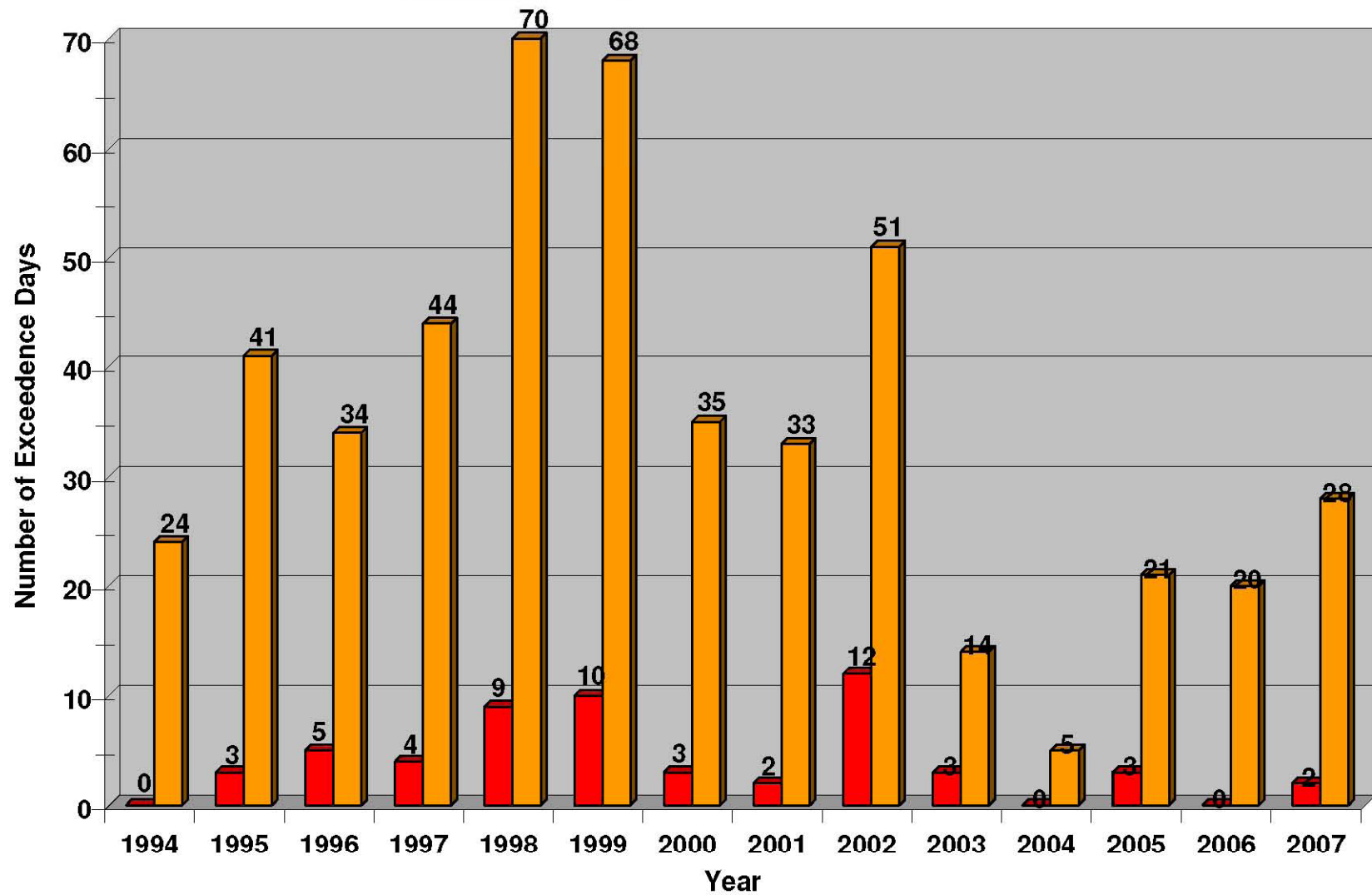
*North Carolina Division of Air Quality  
Keith Overcash, P.E.  
Director*



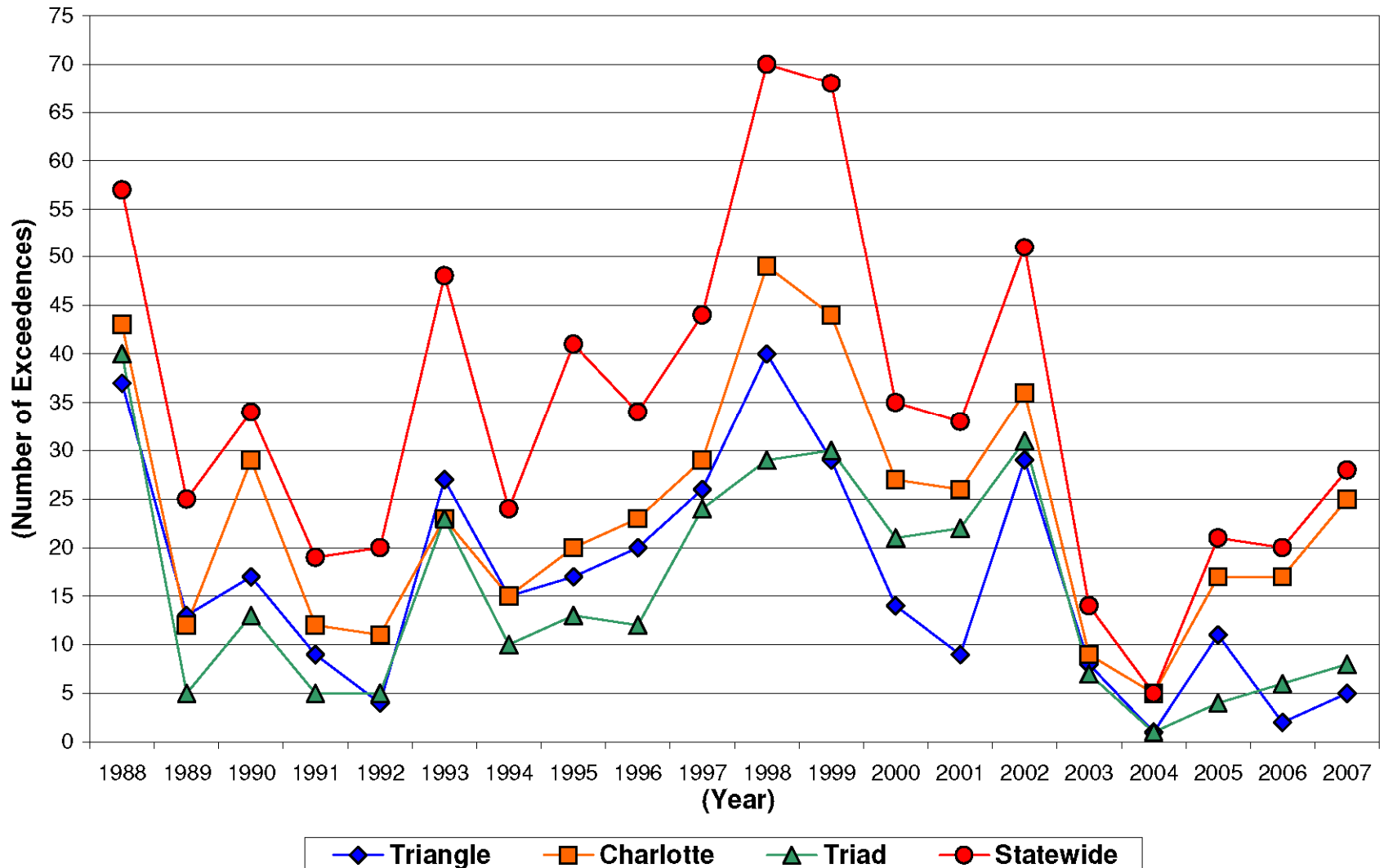
# Topics to be Covered

- **Improving Air Quality**
- **Ozone/Particulate Updates**
- **Implications of New Standards**
- **Legislative Activities**
- **Current/Possible Rulemaking Activities**
- **Miscellaneous**

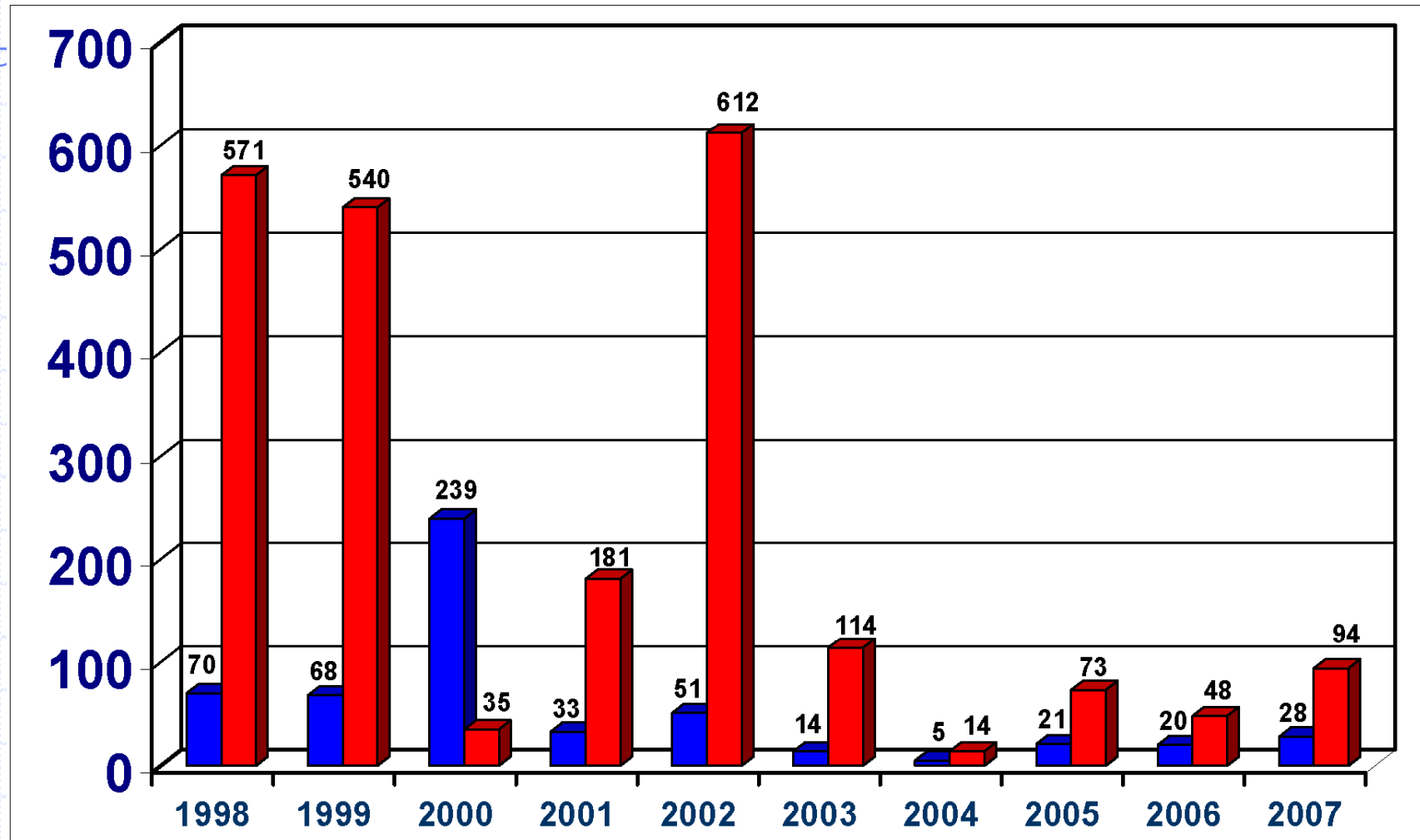
## NC Statewide **1-Hour** and **8-Hour** Ozone Exceedence Days



# Yearly 8 Hour Ozone Exceedences



# NC Statewide 8-Hour Exceedance Days & Total Measured Exceedances



■ Exceedance Days ■ Monitors w/Exceedances

# **(Current) Ozone Standard**

- **Rocky Mount and Triangle are in attainment – RM redesignated, Triangle proposed by EPA for redesignation**
- **EAC areas (Hickory, Triad, Fayetteville) all have “Clean” data and should be designated in attainment in Spring of 2008**
- **Demonstration State Implementation Plan (SIP) has been submitted for Charlotte**

# PM 2.5 Standard

- **Two Monitors (Catawba and Davidson) Still exceed the annual standard of  $15\mu\text{g}/\text{m}^3$**
- **All monitors in state show compliance with the new 24 hour standard of  $35\mu\text{g}/\text{m}^3$  based upon 2004-2006 data**

# PM 2.5 Standard (Cont'd)

- **SIPs due April 8, 2008, for the non attainment areas – project attainment for both areas by 2009**
- **Governor's letter due in December on the “new” 24 hour standard. NC plans to state that all areas attain for this standard.**

# Regional Haze

- **Draft SIP has been circulated to Federal Land Managers for comments**
- **Draft currently available to public for review and comment**
- **Hearings in Asheville and Washington, NC on November 13 and 15**
- **Plan to submit SIP in December to EPA**

# Control Programs

## Federal

- NOx SIP Call, Clean Air Interstate Rule (CAIR), Tier II Engine and Fuel Standards, Heavy Duty Engine and Fuel Standards, Cleaner Off-road Engines

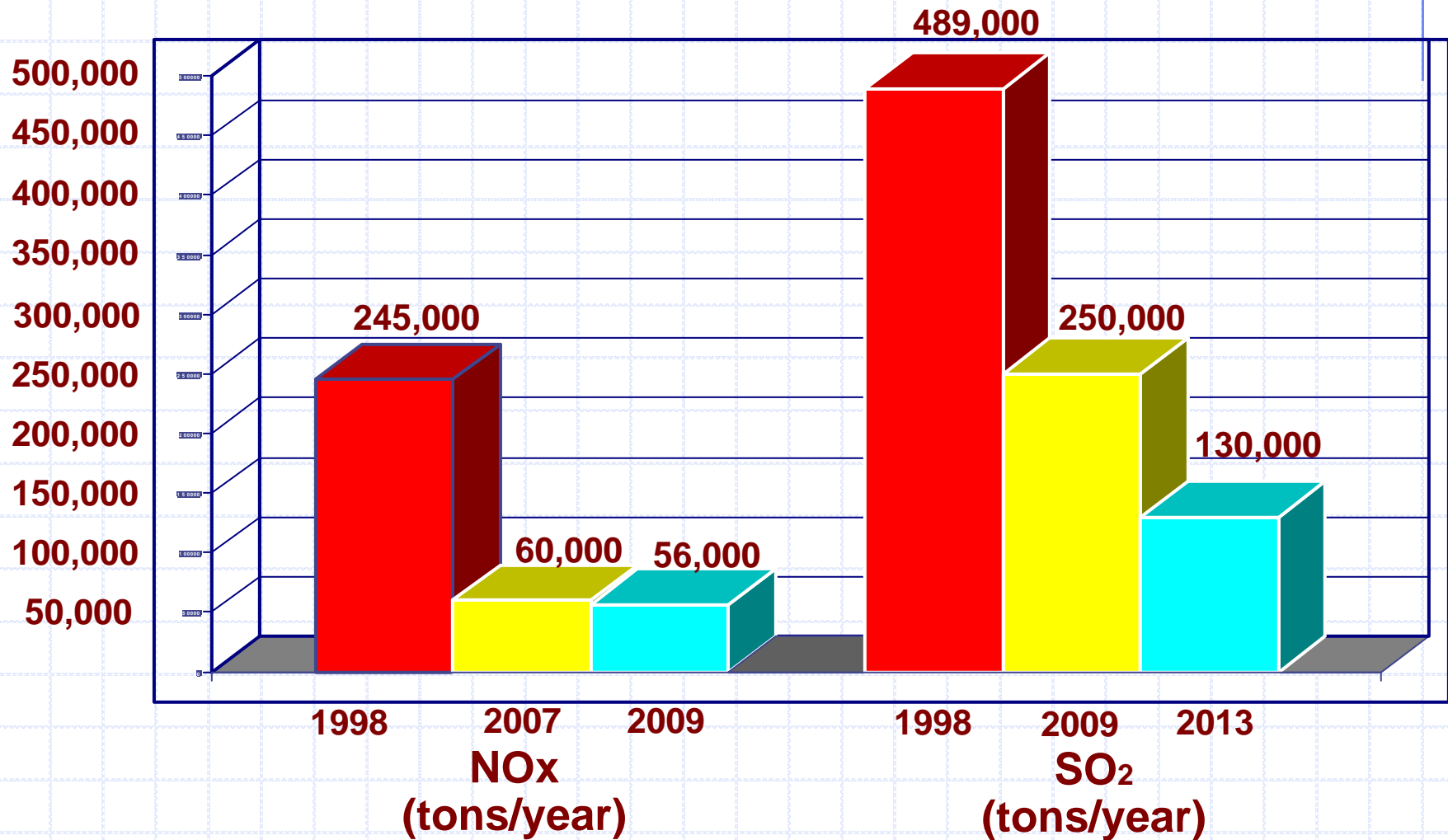
## State

- NC Clean Smokestacks Act
- Vehicle Inspect. & Maintenance Program (48 counties)
- Grants Funding Cleaner Vehicles
- Open Burning Rule/Outreach

## Local

- Early Action Compacts
  - all areas attained in NC by 2005 (2 yrs early)
- Technical Support for Local/Voluntary Measures

# Emissions Reductions Under Clean Smokestacks Bill



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

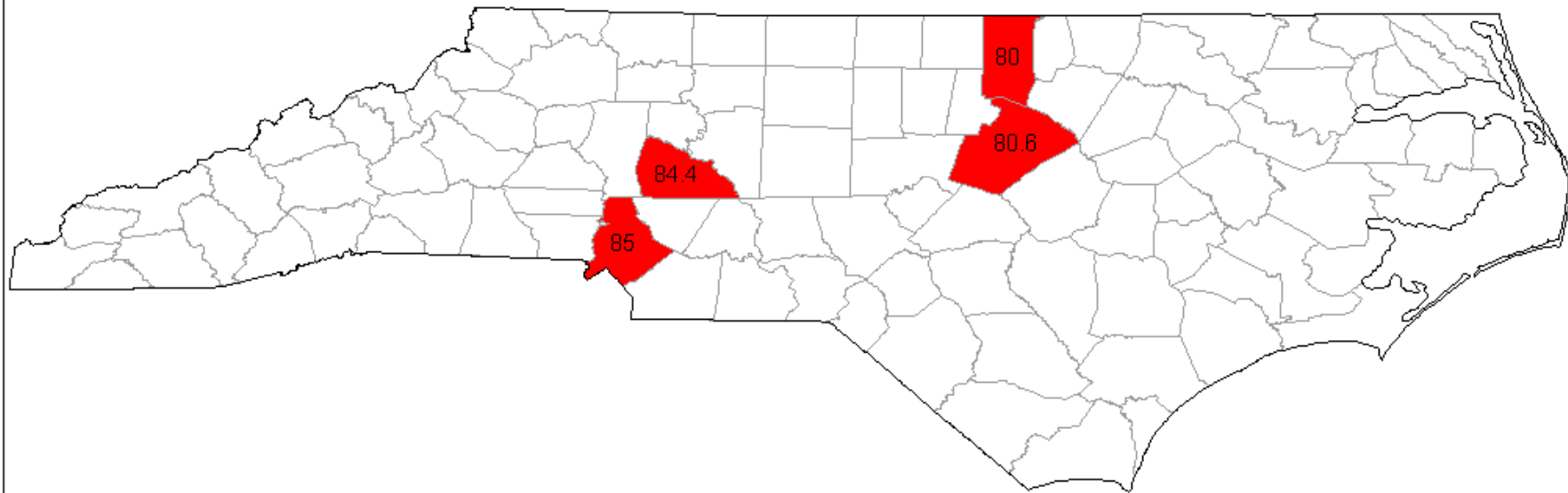


# The “New” Ozone Standard

## Possible Timeline for Ozone Standard

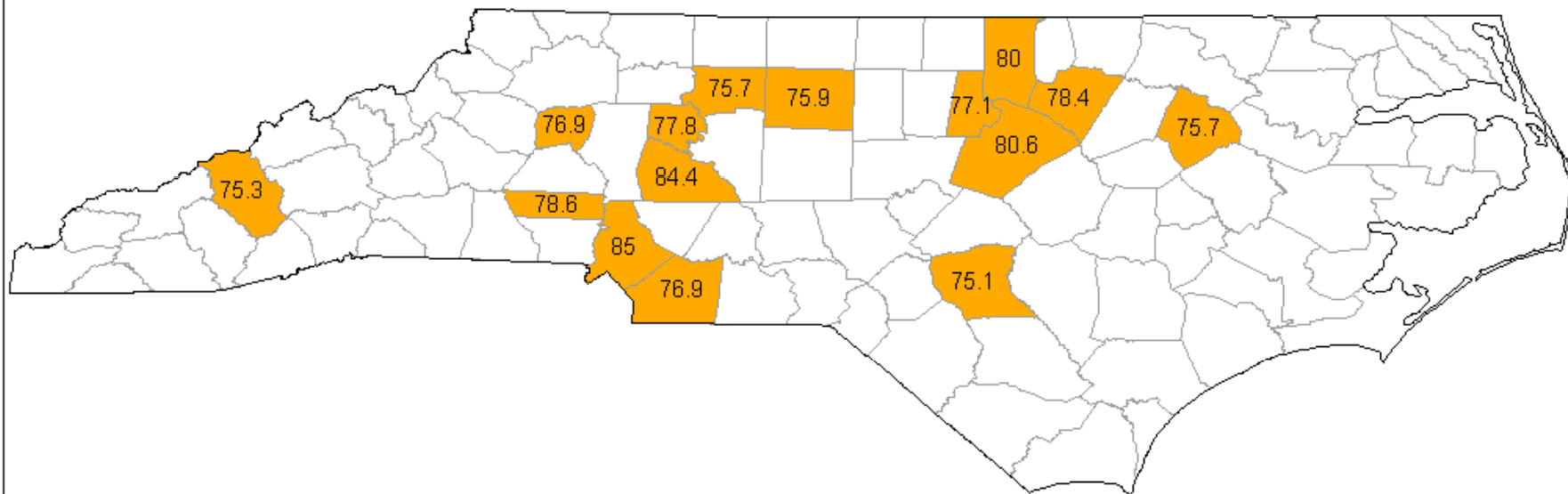
Milestone	Date
Signature—Final Rule	March 2008
Effective Day of Rule (60 days following publication in Federal Register)	Approximately June 2008
State Designation Recommendations to EPA	June 2009 (based on 2006-2008 monitoring data)
Final Designations Signature	Approximately June 2010
Effective Date of Designations	Approximately 2010
SIPs Due	Approximately 2013
Attainment Dates	2013-2030 depending on severity of problem

VISTAS Base G2 Projections for 2009 Ozone  
Counties whose maximum DVF exceeds possible revised standard of 0.080.



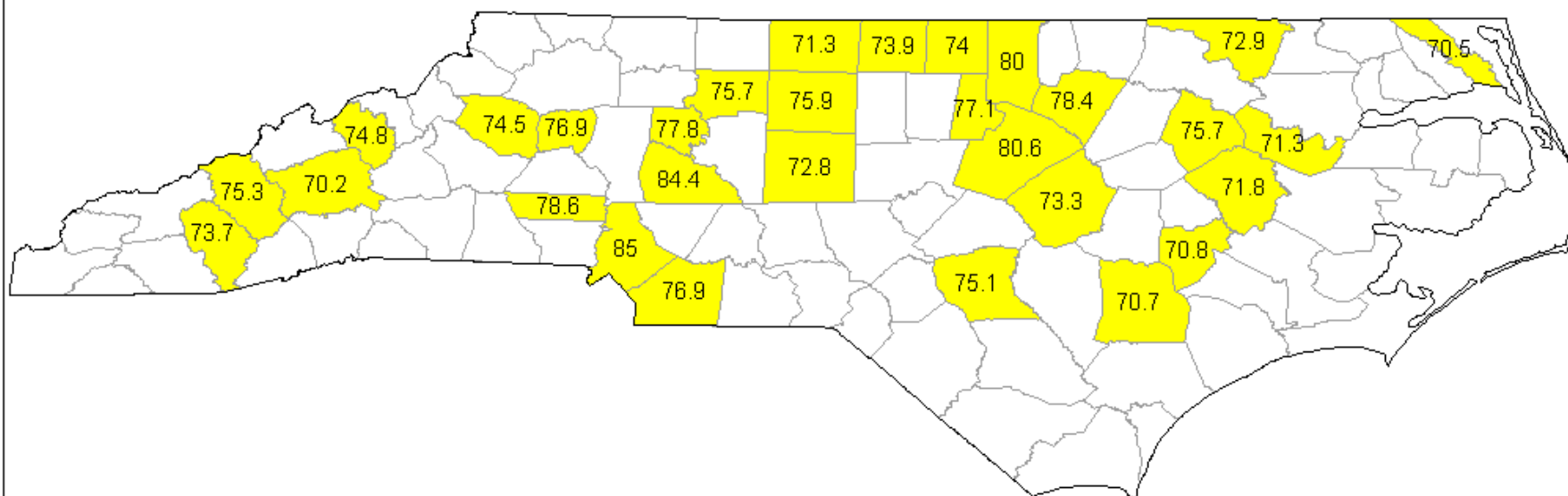
# VISTAS Base G2 Projections for 2009 Ozone

Counties whose maximum DVF exceeds possible revised standard of 0.075.



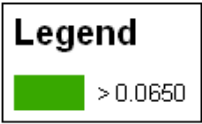
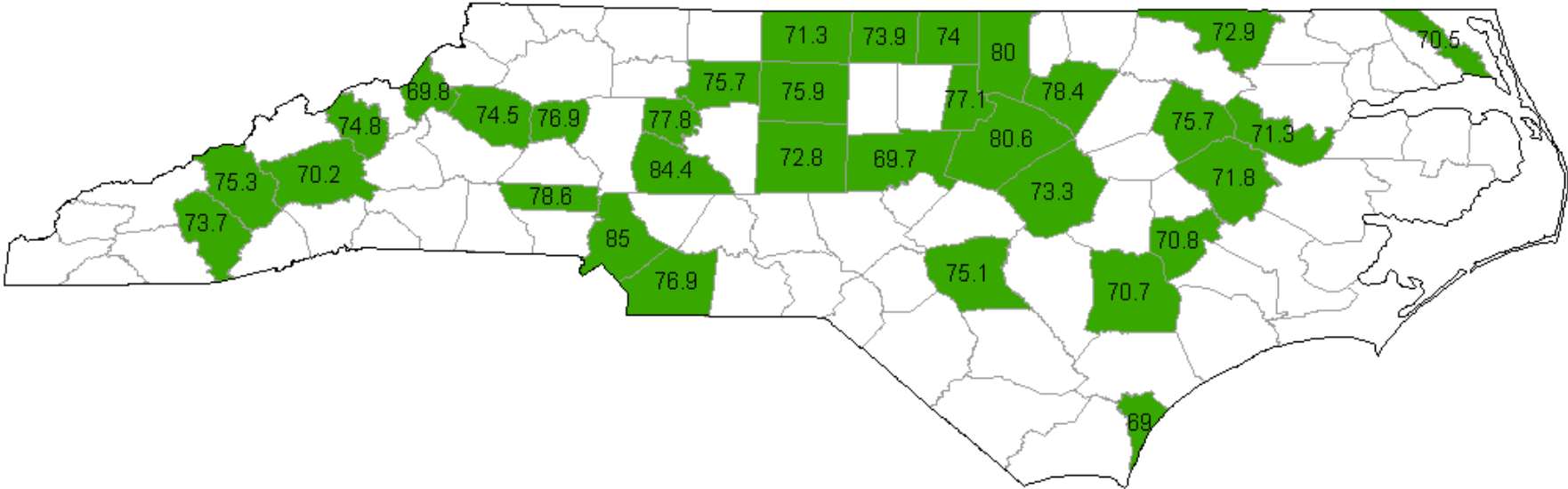
# VISTAS Base G2 Projections for 2009 Ozone

Counties whose maximum DVF exceeds possible revised standard of 0.070.

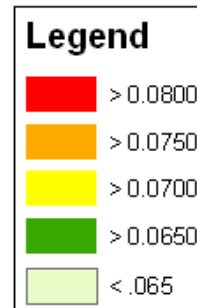
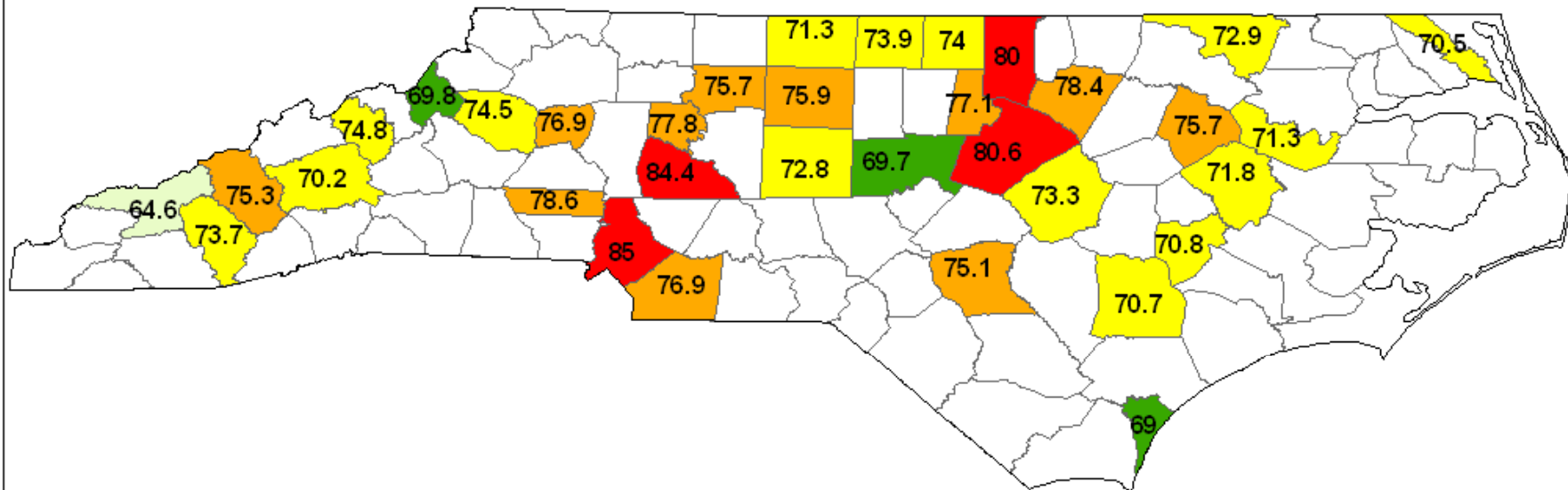


**Legend**  
[Yellow Box] > 0.0700

VISTAS Base G2 Projections for 2009 Ozone  
Counties whose maximum DVF exceeds possible revised standard of 0.065.

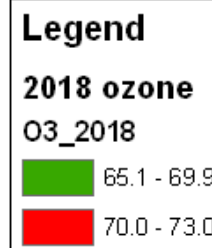
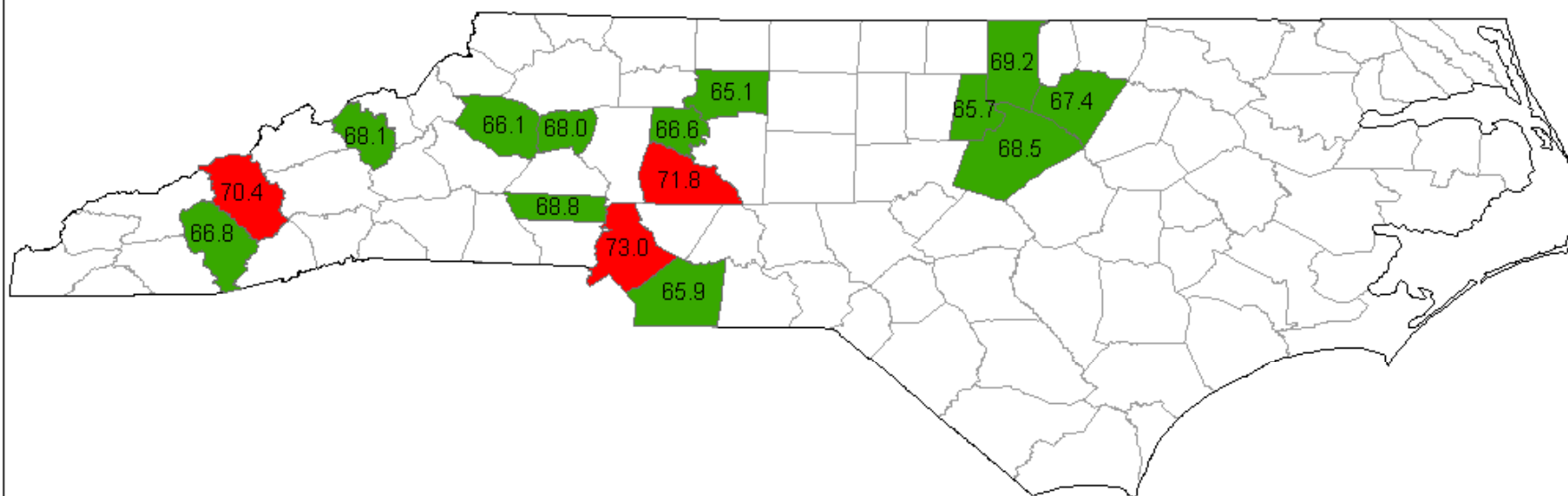


VISTAS Base G2 Projections for 2009 Ozone  
Counties whose maximum DVF exceeds possible revised standard.  
Color indicates at what level of a new standard the county  
would fall out of attainment.



VISTAS Base G2 Projections for 2018 Ozone  
Counties whose maximum DVF exceeds possible revised standard.  
Color indicates at what level the county will still be out in 2018,  
with controls currently on the books.

Labeled with 2018 values.



# **2007 Legislative Overview**

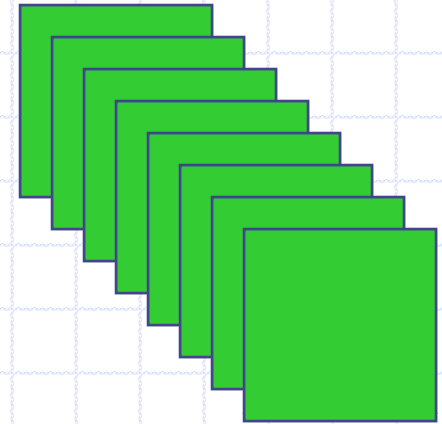
**Items Relevant to DAQ**

# Pay Raises!

- 4% annual salary increase for permanent employees of State Agencies and Departments



# Green Square



- **\$25,000,000 appropriated for:**
  - **Planning**
  - **Site development**
  - **Early Construction**
- **172,000 sq ft of office space for DENR**
- **79,400 sq ft for expansion of the NC Museum of Natural Sciences (research center)**
- **SECU would also be a tenant**
- **418 parking spaces underground**
- **Total projected cost of project: \$118,250,000**

# HB 1912

## School Bus Retrofit Pilot Program

- **Purpose:** Reduce diesel emissions from school buses
- **Background:** Fine particles from the bus engine and exhaust stream can enter the bus. Concern for students health in and near the bus.
- **NCDAQ** was appropriated \$500,000 to serve as a match for up to \$2,000,000 of Congestion Mitigation and Air Quality Improvement Program (CMAQ) money.
- **CMAQ** money can only be used in non attainment and maintenance areas (19 full counties, 5 partial counties)

# HB 1912

## School Bus Retrofit Pilot Program



**NCDAQ will:**

- **Administer this grant program**
- **Consult with Department of Public Instruction (DPI) and Department of Transportation (DOT) in the development of guidelines and standards for matching appropriate technology with suitable buses/routes**
- **Submit a report to DPI, DOT and the Environmental Review Commission (ERC) on the program by September 2008**

# HB 1646

## Increase in the Maximum Civil Penalty

- Increases our maximum civil penalty from \$10,000 per day to \$25,000 per day per violation
- We have only assessed the maximum amount 17 times since September 2002, which is 1% of all penalties assessed
- Penalties for first time violators will not change (for now)

# 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)

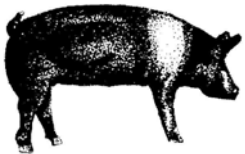
# SB 3

## 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

# HB 679

## Safety and Emissions Electronic Stickers

- Aligns your vehicle inspection with your registration renewal starting in October 2008.
- Your registration renewal will include a notice that you have 90 days to go get your vehicle inspected
- Once the inspection is complete, you'll be able to renew your registration (online or via mail)
- If you have a valid registration card, that means you have passed your safety/emissions inspection...thus, no more stickers are needed in the windshield
- Also... The fee for safety inspections went up from \$8.25 to \$12.75.

# SB 509

## Motor Vehicle Inspection Failure/Re-inspection

- Provides 60 days instead of 30 days to get re-inspected after your vehicle fails its original inspection
- Allows DMV to waive the civil penalty for failure to get inspected for active military personnel
- Civil penalty for failure to have your vehicle inspected is reduced from \$250 to \$25
  - Registration denial remains the meaningful deterrent

# **North Carolina Rules Update**

**CAPCA**

**Fall 2007**

# Title V Fee Increases

## Why?

- Clean Air Act – Title V activities must be paid for by Title V fees
- NCDAQ wants to ensure current level of service
- Inflation adjustments were not made 2002-2006
- Legislative pay increases for employees (5.5% in FY07, 4% in FY08)
- Increasing benefit costs
- Increasing retirement and social security payments

# Title V Fee Increases

## 15A NCAC 02Q .0203

### Title V Tonnage Factor Fee

- Raised in four steps beginning on the effective date of the rule amendment

\$18.10/ton, currently\*

\$22.50/ton, upon Rule effective date

\$25.00/ton, January 1, 2009

\$27.50/ton, January 1, 2010

\$30.00/ton, January 1, 2011

\*Inflation adjustment is currently being processed to bring fee up to \$18.50.

# Title V Fee Increases

## 15A NCAC 02Q .0203

- **Title V Basic Permit Fee**
  - Adjusted from current \$6,311 to \$6,500 upon Rule effective date.
- **Nonattainment Area Added Fee**
  - Adjusted from \$3,297 to \$3,500 upon Rule effective date.

# **Title V Fee Increases**

## **15A NCAC 02Q .0204**

- ⊕ This rule amendment would place the inflation adjustment on hold until after the phased increase of the tonnage fee in 15A NCAC 02Q .0203 is complete.**

# Boilers Options

## 15A NCAC 02Q .0204

- US District Court of Appeals mandated the vacatur and remand of the Industrial Boiler MACT rule (subpart DDDDD) on July 30, 2007.
- Uncertainties include:
  - When will USEPA rewrite the rule?
  - Does Section 112(j) apply and under what schedule would states develop equivalent standards?
  - Guidance memo from USEPA soon?

# Boilers Options

- Assuming it will take USEPA a long time to rewrite the rule, the Air Quality Committee (AQC) asked NCDAQ to deliver “all alternatives to waiting on USEPA” or a menu of options that includes:
  - timelines
  - approach (technology vs. risk)
  - impacts.

# Boilers Options

- 1. Wait on USEPA**
- 2. Section 112(j)**
- 3. 2Q .0712 – Director’s Call based on risk-based NC Boiler Study**
- 4. Remove the NC Combustion Source Exemption**
- 5. 2Q .0705 – SIC call**
- 6. Develop a State Combustion source rule that meets 112(j) requirements and takes into consideration risks**

# Miscellaneous

- **Climate Action Plan Advisory Group**
- **Letter to Christmas Tree Growers**
- **Employee Rotations**
- **Change A Light NC**

# Employee Rotations

September 2007 – March 2008

## Raleigh Regional Office Regional Supervisor



# ChangeALightNC.org

Change a Light N.C.

Change a light, Change the **WORLD**

FREE bulbs

Quick Facts

HOME Find out more For Educators Events

## Partners

### What is a CFL?

Compact Fluorescent Lamps—also known as CFLs—are a type of light bulb that can be used in most conventional light fixtures to replace incandescent bulbs. [More...](#)

### Why use CFLs?

If each North Carolina home replaced just one standard light bulb with an energy-efficient CFL, we would:

- Conserve enough energy to light more than 86,000 homes for a year;
- Save more than \$15 million in annual energy costs; and
- Cut greenhouse gases equivalent to emissions from 19,000 cars a year.

### What can I do?

You can **take the pledge**, and help North Carolina towards energy independence. Please **check our events page** to see if there are any CFL giveaways in your area.

Take the Pledge




Conserve Energy  
Cut Air Pollution  
Save Money



# Change a Light NC Campaign Partners:



Your Touchstone Energy® Partner 



N.C. Department of Administration "Ensuring a sustainable energy future"



The Environmental Education Fund

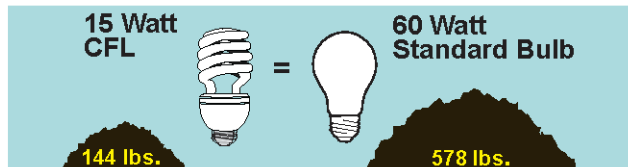


# Change A Light NC



## 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.

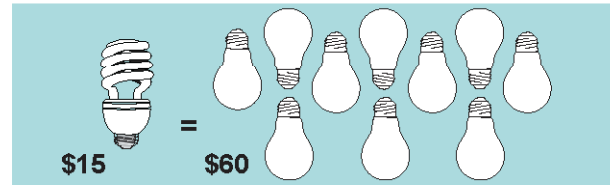


Coal used during 10,000 hour average CFL bulb lifetime.

For more information, go to:  
[ChangeALightNC.org](http://ChangeALightNC.org)

## Save Money

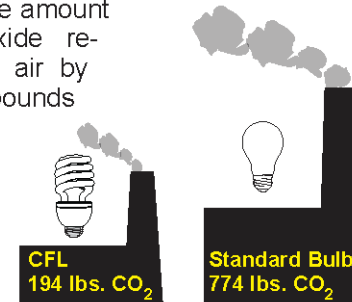
CFLs last up to 10 times longer than standard bulbs, and each CFL saves about \$40 in electricity during its lifetime.



Electricity and bulb cost for one CFL vs. 10 standard bulbs needed for the same hours of operation.

## 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.



Emissions from electric generation for one CFL vs. 10 standard bulbs needed for same hours of operation.

# 2007 NC State Fair Change A Light Exhibit



# 2007 NC State Fair



Volunteers at the Change A Light Exhibit handed out nearly 10,000 free bulbs at the fair to visitors who pledged to use CFLs in their homes.

Progress Energy donated the bulbs for the State Fair and other utilities donated bulbs for smaller exhibits at county fairs and energy workshops across N.C.





# Contact Information

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**Visit our web site:**

**<http://www.ncair.org/>**