

# SPRING 2009 CAPCA UPDATE



Asheville, NC

April 16, 2009

*North Carolina Division of Air Quality*  
Keith Overcash, PE  
Director

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# TOPICS TO BE COVERED

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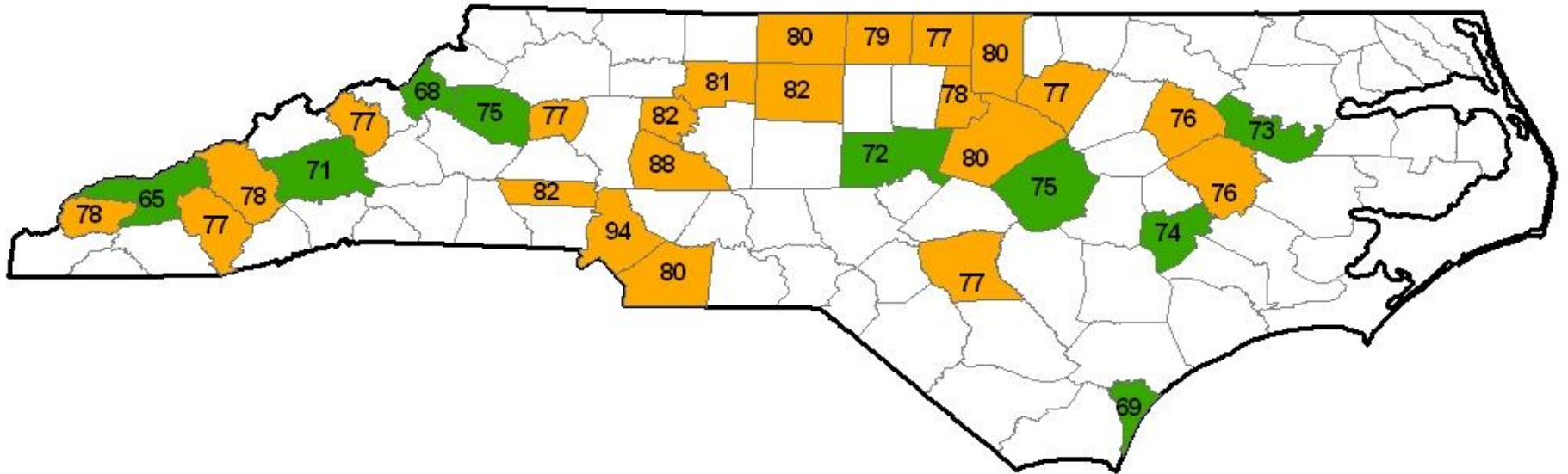
- ✘ Ozone Non-Attainment Recommendations
- ✘ PM 2.5 Attainment Status
- ✘ Legislative Stuff
- ✘ Mobile Source Emission Reduction Grants
- ✘ 112(j) Procedures
- ✘ Enforcement Statistics for 2008
- ✘ Miscellaneous



## CURRENT OZONE STANDARD REVISED IN MARCH 2008

- ✘ Primary Standard 0.075 ppm.
- + The 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm.
- + This new standard is more stringent than the existing standard of 0.08 ppm, which was issued by EPA in 1997.

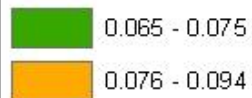
# 8-hour Ozone Current Design Values (Maximum value per county, based on 2006 - 2008 Monitoring data)



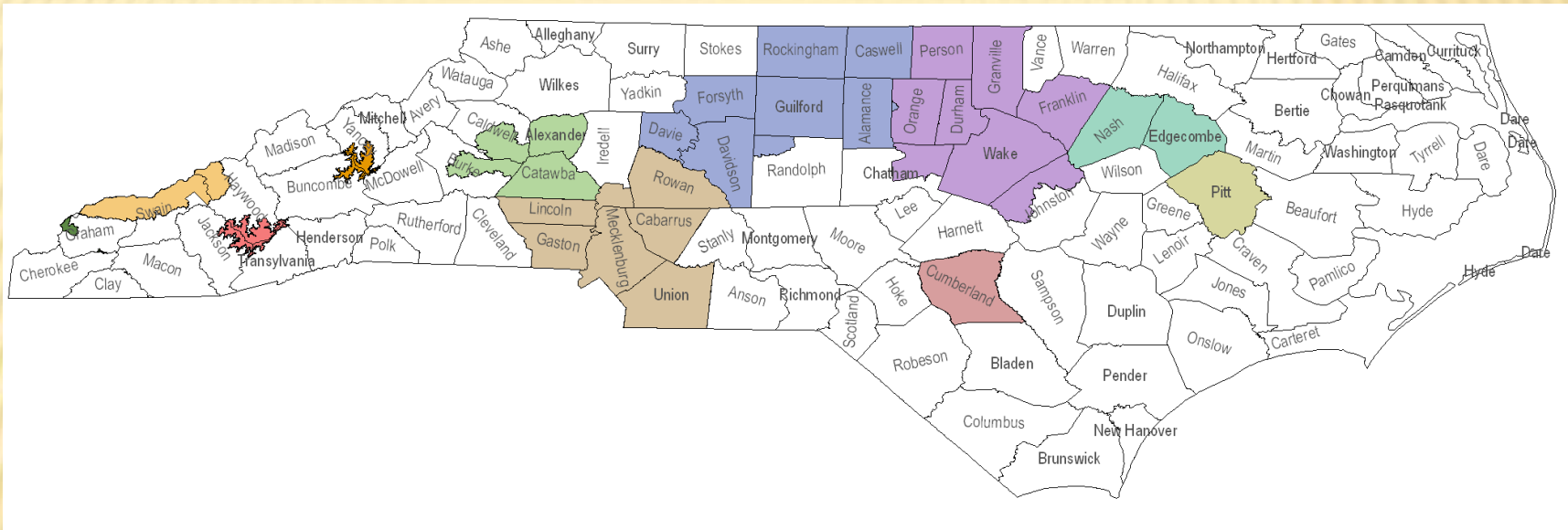
## Legend

### Design Value

2006 -2008



# NORTH CAROLINA'S NONATTAINMENT BOUNDARY RECOMMENDATIONS



## Potential 8-hour Ozone Nonattainment Boundaries

- Snow Bird Mountains (4000 feet & greater) - Joyce Kilmer-Slickrock Wilderness, Nonattainment
- Great Smoky Mountains National Park, Nonattainment
- Great Balsam Mountains (4000 feet & greater) - Shining Rock Wilderness Area, Nonattainment
- Black Mountains (4000 feet & greater), Nonattainment
- Hickory-Lenoir-Morganton, Nonattainment
- Charlotte-Gastonia-Salisbury, Nonattainment
- Greensboro-Winston-Salem-High Point, Nonattainment
- Raleigh-Durham-Cary, Nonattainment
- Fayetteville, Nonattainment
- Rocky Mount, Nonattainment
- Greenville, Unclassifiable

Map Drawn To Approximate Scale  
 North Is Represented As Up  
 Map Valid: 03-12-2009



## WHAT'S NEXT?

- ✘ March 12, 2009 – North Carolina submitted its nonattainment boundary recommendations to EPA
- ✘ November 12, 2009 – If EPA's initial assessment is different than the State's recommendations, EPA must notify the State within 120 days before final designations are made
  - + Provides the State with an opportunity to argue its case and provide additional documentation if needed
- ✘ March 12, 2010 – EPA makes final nonattainment designations
- ✘ March 12, 2013 – NC must submit an attainment demonstration plan
  - + Challenge will be identifying and implementing additional control measures

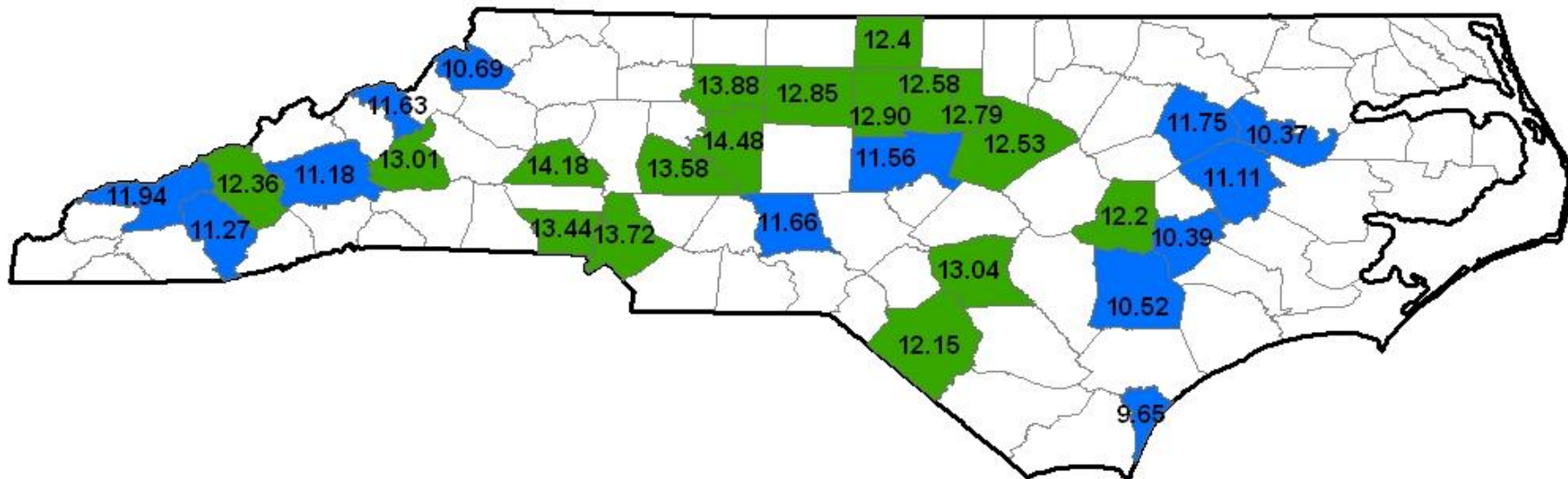
# PM 2.5 ATTAINMENT STATUS

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- ✘ Two Monitors (Catawba & Davidson Co.) now meet the annual standard of  $15\mu\text{g}/\text{m}^3$
- ✘ Request to redesignate to attainment anticipated
- ✘ All monitors in state show compliance with the new 24 hour standard of  $35\mu\text{g}/\text{m}^3$  based upon 2006-2008 data

# Annual PM2.5 Current Design Values (Maximum value per county, based on 2006 - 2008 Monitoring data\*)

\* Based on preliminary data as of 2-11-2009; Not Certified Data - Subject to change



## Legend

### Annual PM2.5 Design Value 2006 - 2008

- 9.65 - 11.99
- 12.00 - 14.99
- > = 15.00



# 2009 NC LEGISLATIVE SESSION

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## *Bills of Interest*

- × SB 688 NC Low Emissions Vehicle Program
- × SB 699 Cement Plant Moratorium & Study
- × SB 849 Repeal Motor Vehicle Safety Inspections
- × SB 857 Eliminate Safety/Emissions Inspect. Frequency
- × SB 1044 Moratorium on Coal-Fired Power Plants
- × SB 1068 Permitting of Wind Energy Facilities
- × HB 1335 No Duplicative Regulation of Air Toxics

# SB 688

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## *NC Low Emission Vehicle Program*

- ✘ Adopts California program by reference
- ✘ Would include requirement to reduce CO2 emissions beginning with model year 2012
- ✘ Sets up purchasing requirements for state government

# SB 699

## Cement Plant Moratorium & Study

- Prohibits DENR from considering a permit application or issuing a permit for a cement plant until September 1, 2010
- Instructs Environmental Review Commission of GA, with assistance of DENR, to study “issues related to cement plants”
- ERC to report its findings to 2010 Regular Session of GA

# SB 849

## *Repeal Motor Vehicles Safety Inspections*

- Eliminates NC safety inspection program
- Requires DMV to implement a management improvement plan for the emission program with the assistance of DAQ
- Requires Fiscal Research Division of GA to do fiscal review of emissions inspection program

# SB 857

## Eliminate Safety Inspect./Emissions Inspect. Frequency

- Eliminates safety program
- Requires Management improvement plan from DMV
- Requires fiscal review by Fiscal Research Division
- Requires DAQ to study how to comply with NAAQS w/o vehicle emissions inspections of first three model years
- Study by DAQ due by 12/31/2009
- Exclusion of model years contingent on EPA approval

# SB 1044

## *Moratorium on Coal-Fired Power Plants*

- Prohibits NC Utilities Commission from issuing a certificate for any application filed on or after July 1, 2009 until July 1, 2014
- Suspends certificate for any coal-fired generating unit for which construction has not been completed by July 1, 2009 until July 1, 2014
- Purpose – economic relief to the electric ratepayers

# SB 1068

## *Permitting of Wind Energy Facilities*

- Defines wind energy facilities and sets criteria for permitting in Coastal area and “outside of the coastal counties”
- CAMA program to handle coastal permits?
- Division of Land Resources to handle other areas?

# HB 1335

## *No Duplicative Regulation of Air Toxics*

- Proposes to exempt sources subject to 40 CFR Part 61 & Part 63 from state air toxics program
- As written, would exempt all sources subject to NESHAPS, MACT and GACT

# Mobile Source Emission Reduction Grants

- Regular MSER grant + DERA for 2009
- DERA competitive grant - LEADER
- ARRA/NCDEER grant
- ARRA/DERA competitive grant (LEADER 2009)
- HB 1912 School Bus Retrofits

**DERA = Diesel Emission Reduction Act**

**LEADER = Leading in Early Adoption of  
Diesel Emission Reduction**

**ARRA = American Recovery &  
Reinvestment Act**

**NCDEER = NC Diesel Emissions Economic  
Recovery Grant**

# REGULAR MSER GRANT + DERA FOR 2009

- ✘ Gas tax + DERA = \$1.42 million
- ✘ Awarded 21 projects in 15 counties
- ✘ Included electric ground equipment at an airport, electric motorcycles, replacement of gas vehicles with electric, biodiesel infrastructure equipment
- ✘ [http://ncair.org/motor/ms\\_grants](http://ncair.org/motor/ms_grants)

# LEADER COMPETITIVE GRANT

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- ✘ DERA money for which state had to compete
- ✘ \$750,000 awarded
- ✘ Targeted off-road diesel construction equipment for replacement, repowering, engine upgrade, etc
- ✘ Application period ended on March 31, 2009
- ✘ <http://www.ncair.org/motor/LEADER/>

# ARRA/DERA GRANT

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- × Non-competitive grant to all states
- × NC to receive \$1.73 million
- × Quick turnaround; request for proposals by April 30
- × \$600k for contractor as sub-grant to handle a rebate program for APUs and engine replacements
- × \$1.1 million for NCDEER for “shovel-ready” projects
- × <http://ncair.org/motor/NCDEER/>

# ARRA/DERA COMPETITIVE GRANT

- × DAQ to seek funds for LEADER II
- × \$500k to \$2 million possible
- × Plan to fund replacement, repowering, retrofits for non-road equipment such as construction, locomotives, marine engines, and stationary pumps and generators

# HB 1912 – 2007 SESSION

## *Retrofits for School Buses*

- ✘ \$500K from state appropriations + \$2 million from DOT CMAQ funds
- ✘ DAQ to contact school superintendents in ozone/PM nonattainment areas
- ✘ Diesel Particulate Filters in combination with Closed Crankcase Ventilation Systems given highest priority

# DAQ 112(J) PROCEDURES

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- ✘ 112(j) referred to as MACT “hammer”
- ✘ Hammer used when EPA fails to promulgate MACT
- ✘ February 24, 2009 NC Dept. of Justice memorandum states vacatur constitutes “failure to promulgate”
- ✘ Three MACTs affected – plywood & composite wood products; Brick and Structural Clay; Boiler
- ✘ DAQ Procedures Memorandum developed

# DAQ 112(J) PROCEDURES (CONT.)

## PLYWOOD & COMPOSITE WOOD PRODUCTS SUBPART DDDD

- ✘ Part 1 applications submitted in 2002
- ✘ Some Part 2 applications were submitted but not all
- ✘ Now with vacatur, only sources seeking sub-categorization need to submit Part 2 application

# **DAQ 112(J) PROCEDURES (CONT.)**

## **BRICK & STRUCTURAL CLAY, SUBPART JJJJ**

- ✘ All applicable sources in NC submitted applications before vacatur
- ✘ DAQ to use case-by-case determinations
- ✘ State toxics rule to remain in effect

# DAQ 112(j) Procedures (cont.)

## Boiler MACT, Subpart DDDDD

- Most Part 1 applications submitted in 2002
- Very few Part 2 applications submitted before 112(d) rule was promulgated
- Part 1 applications not submitted are due by August 1, 2009
- Part 1 applications due by September 30, 2009
- DAQ to provide model 112(j) prior to due date of Part 2 applications

# ENFORCEMENT ACTIVITIES IN 2008

<b>Measure</b>	<b>Permitted Facilities</b>	<b>Other</b>	<b>Total</b>
<b>Number of Inspect.</b>	<b>2,214</b>	<b>1,134</b>	<b>3,348</b>
<b>Number of NOVs</b>	<b>408</b>	<b>542</b>	<b>950</b>
<b>Number of Enforce. Cases</b>	<b>89</b>	<b>201</b>	<b>290</b>
<b>Amount Assessed</b>	<b>\$287,900</b>	<b>\$390,525</b>	<b>\$678,425</b>

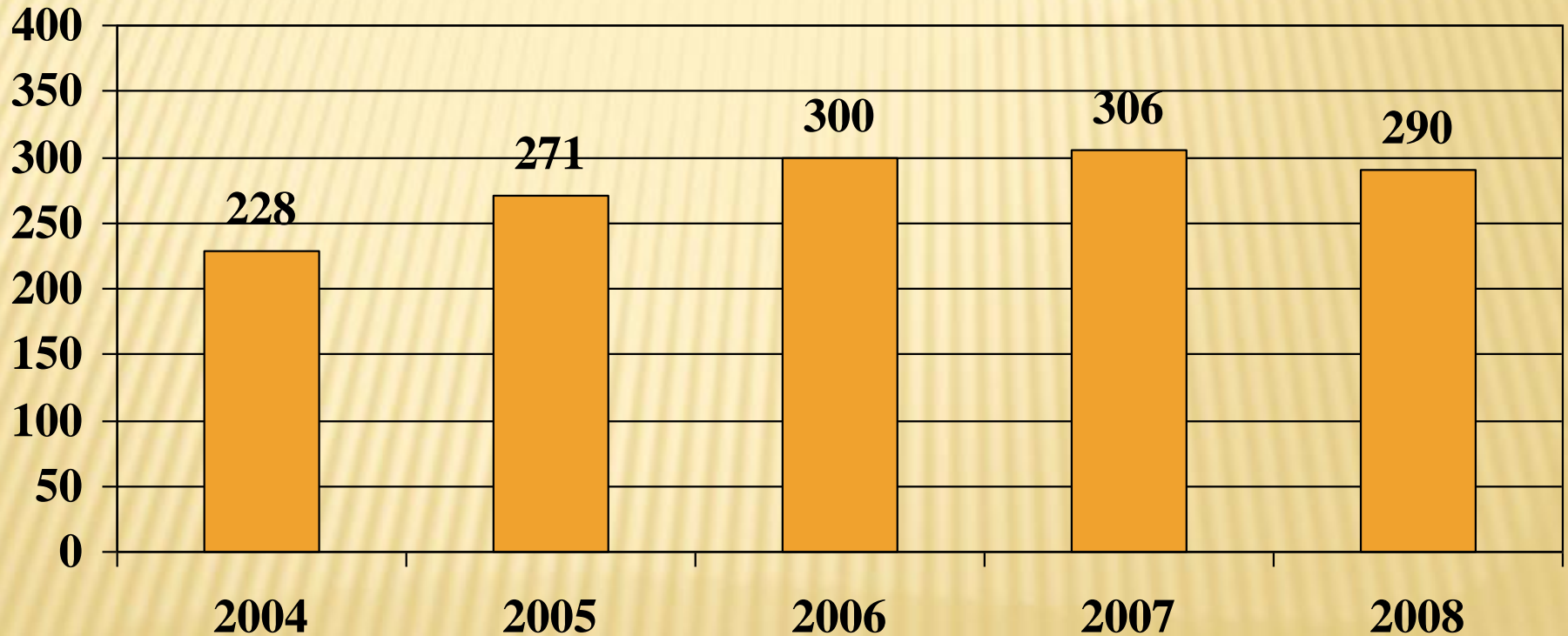
# ENFORCEMENT ACTIVITIES IN 2008

## Dollar Amount of Penalties Assessed



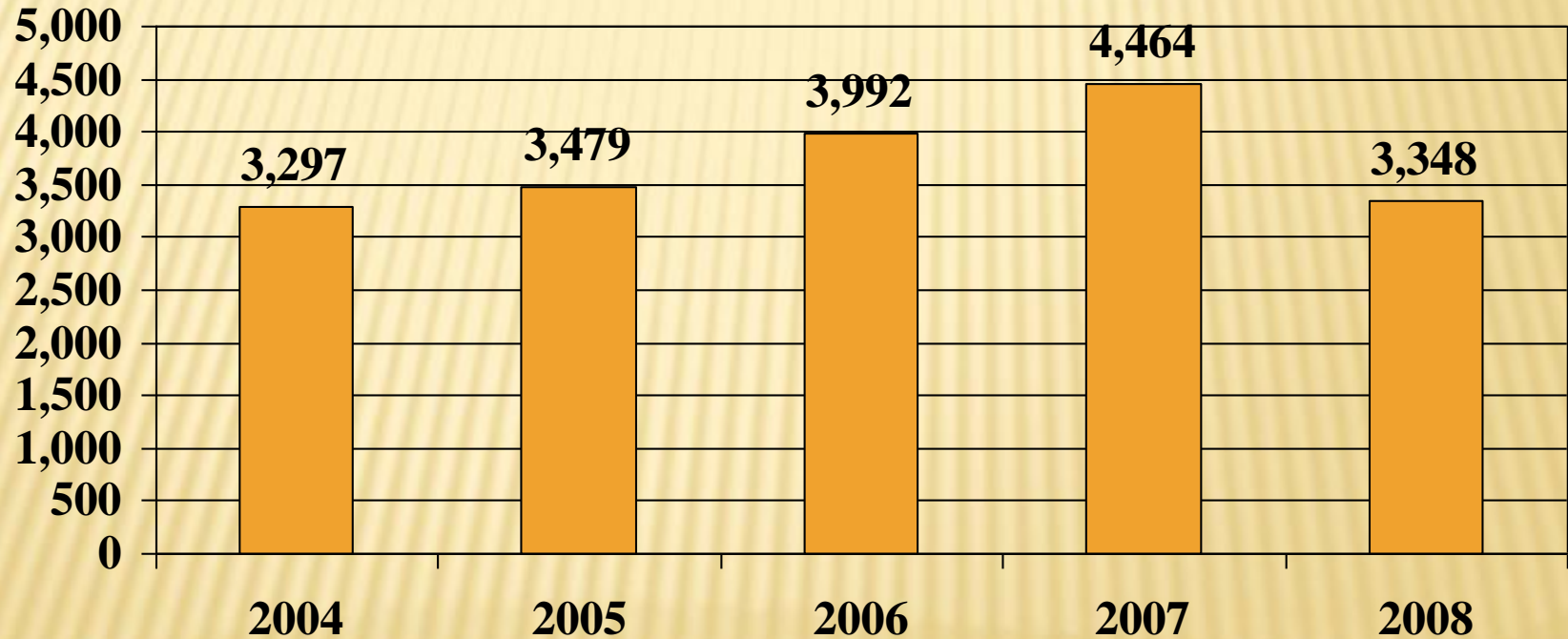
# ENFORCEMENT ACTIVITIES IN 2008

## Number of Penalty Assessments



# ENFORCEMENT ACTIVITIES IN 2008

## Number of Inspections



# ENFORCEMENT CASES – 290 IN 2008

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- ✘ **Open Burning – 199**
  - + 158 cases in 2007
  
- ✘ **Other Non-permitted – 2**
  - + Visible Emissions violations for a In-Place Asphalt Process
  
- ✘ **Permitted Facilities – 89**

# TYPES OF VIOLATIONS ASSESSED

## Five Most Common Violations Assessed at Permitted Facilities in 2008 (~81% of total)

- + Recordkeeping and Reporting: 52%
- + Failure to submit emission inventories and/or permit renewals: 12%
- + Improper operation and maintenance: 7%
- + Operating without a permit: 6%
- + Failure to pay permit fees: 5%

# MISCELLANEOUS

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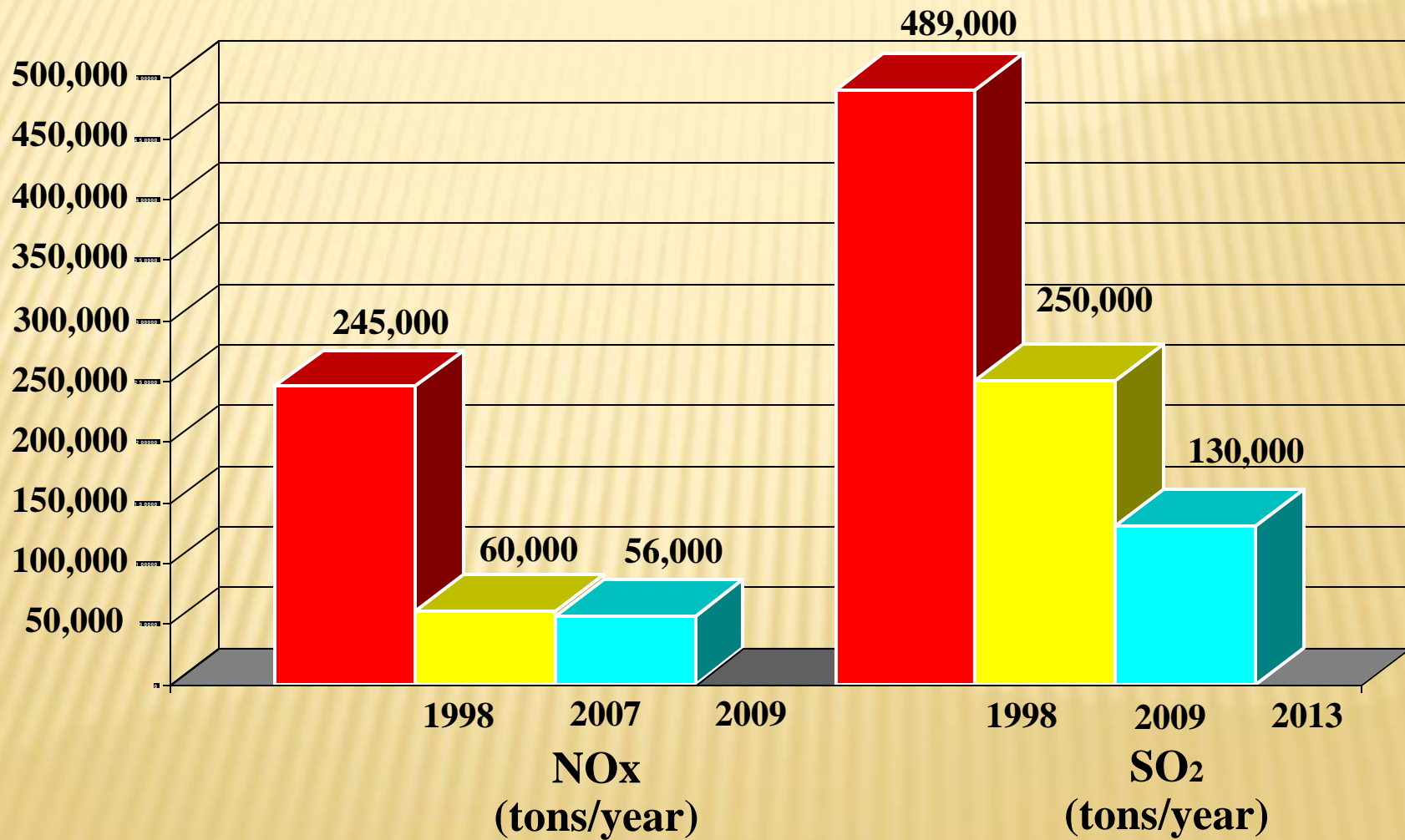
- × Budget
- × Clean Smokestakes Update
- × Rule Making Update
- × Carolina Cup

# BUDGET

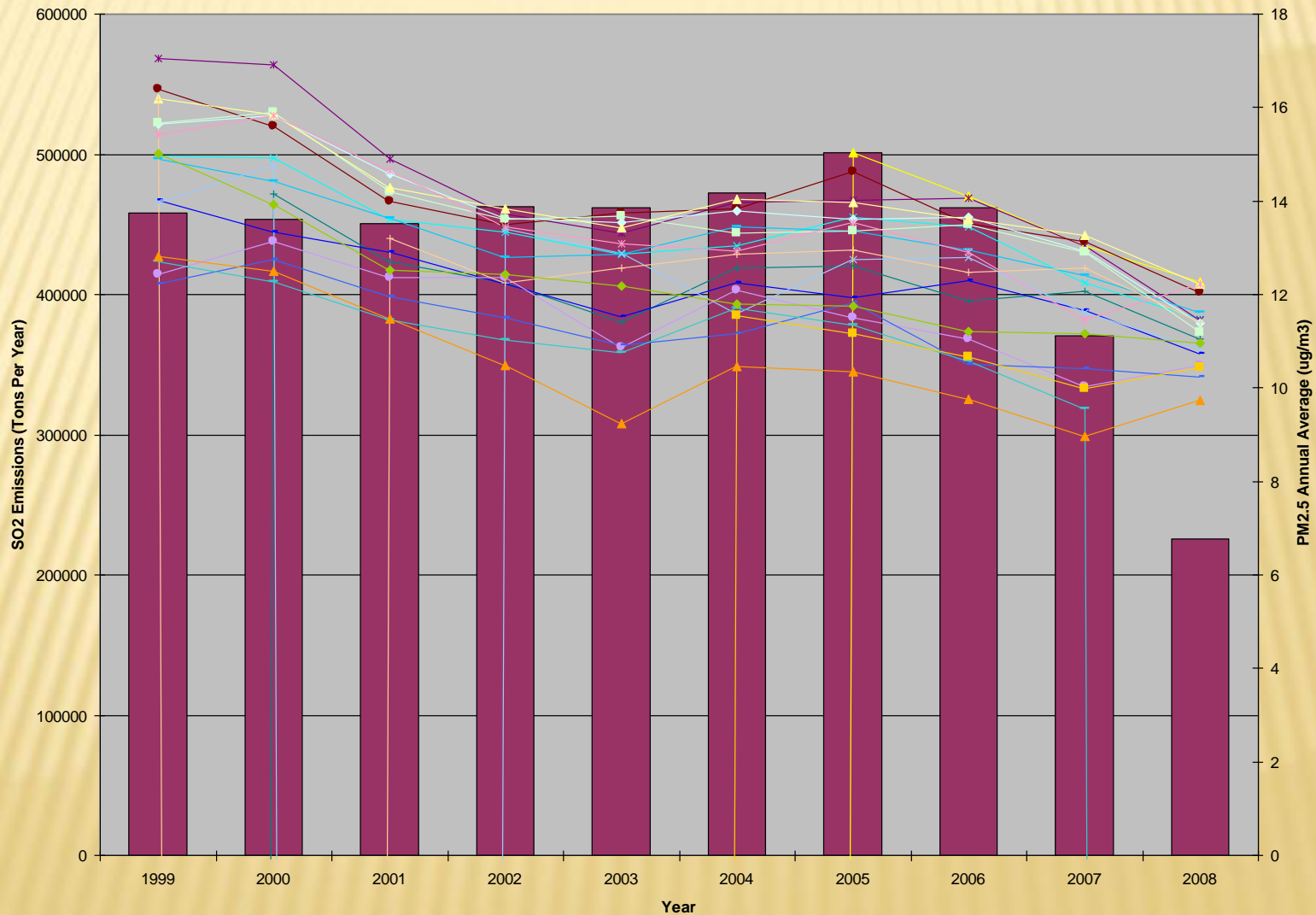
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- ✘ NC has huge deficit (>\$3 billion)
- ✘ Effects on DAQ
  - + travel restrictions
  - + slow down on all spending
  - + Slow down on hiring
  - + Any takings??

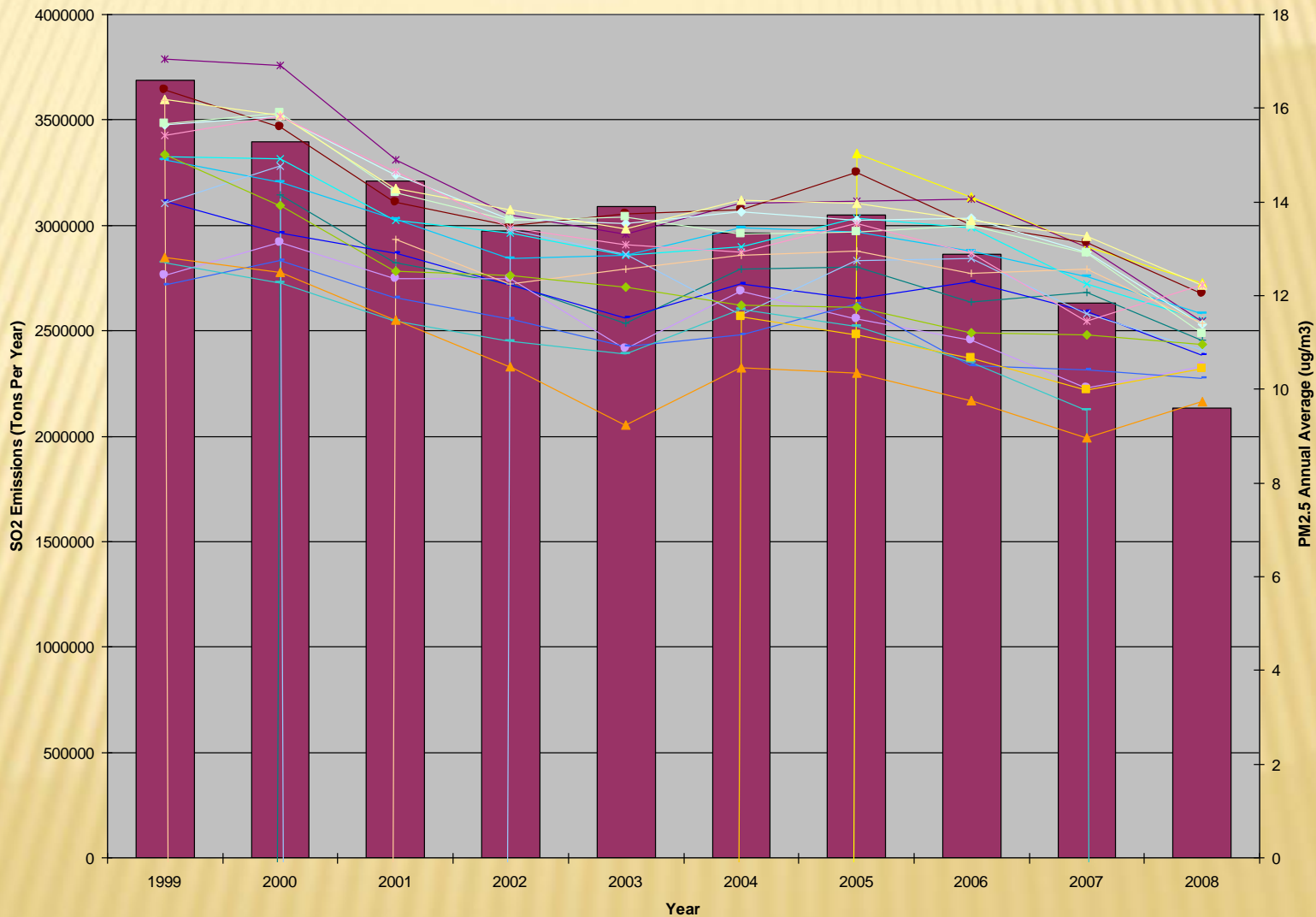
# EMISSIONS REDUCTIONS UNDER CLEAN SMOKESTACKS BILL



# NORTH CAROLINA SO<sub>2</sub> EMISSIONS & PM<sub>2.5</sub> ANNUAL AVERAGES



# EPA REGION 4 SO<sub>2</sub> EMISSIONS & PM<sub>2.5</sub> ANNUAL AVERAGES



# RULE MAKING UPDATE

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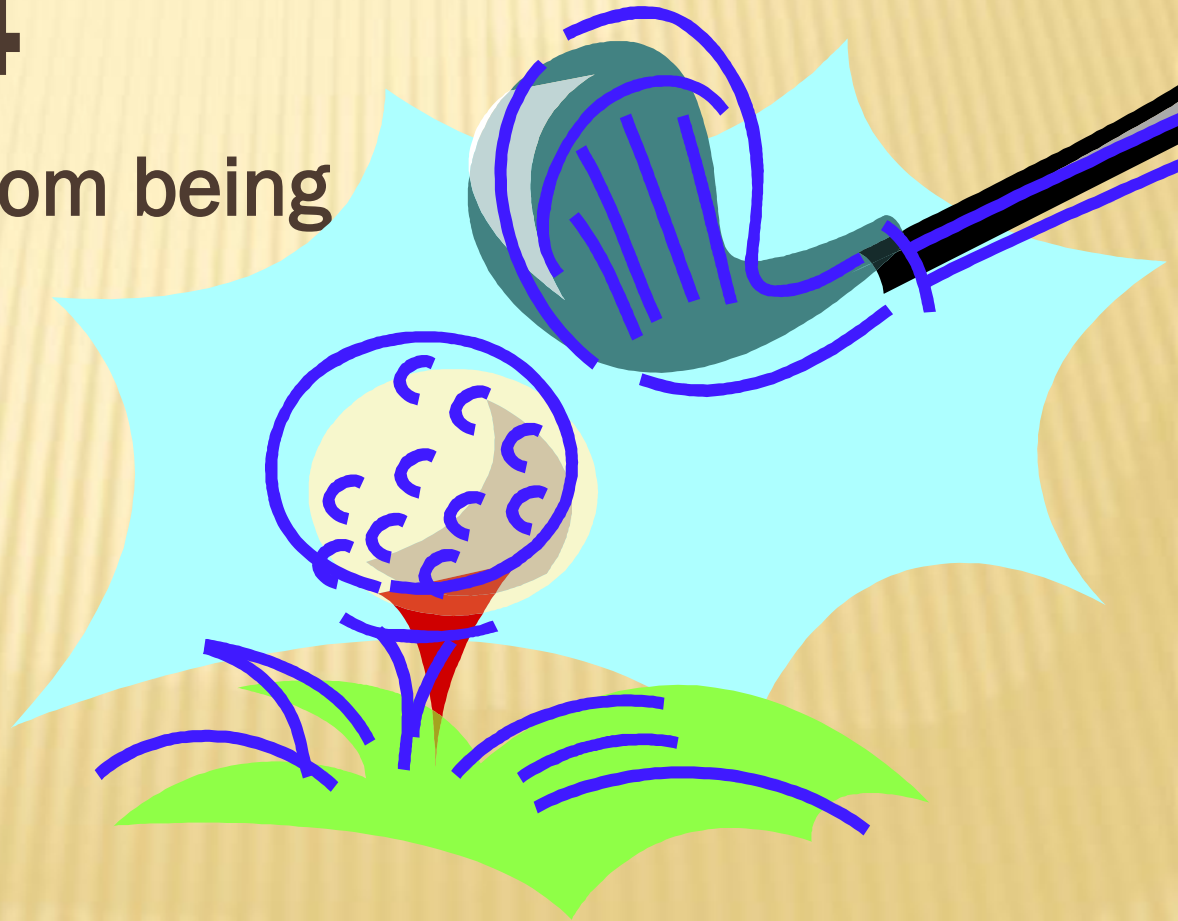
- × Idle Reduction Rule
- × GHG Reporting Rule
- × Air Toxics Rule

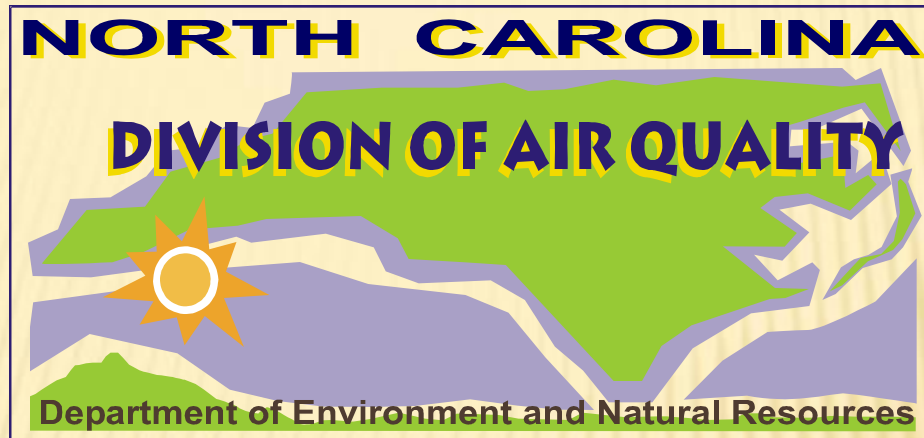
# CAROLINA CUP UPDATE

✘ NC's Record

**1-7-4**

✘ Only 4 strokes from being almost even





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