

Spring 2007 CAPCA Update
Asheville, N.C.
April 12, 2007

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



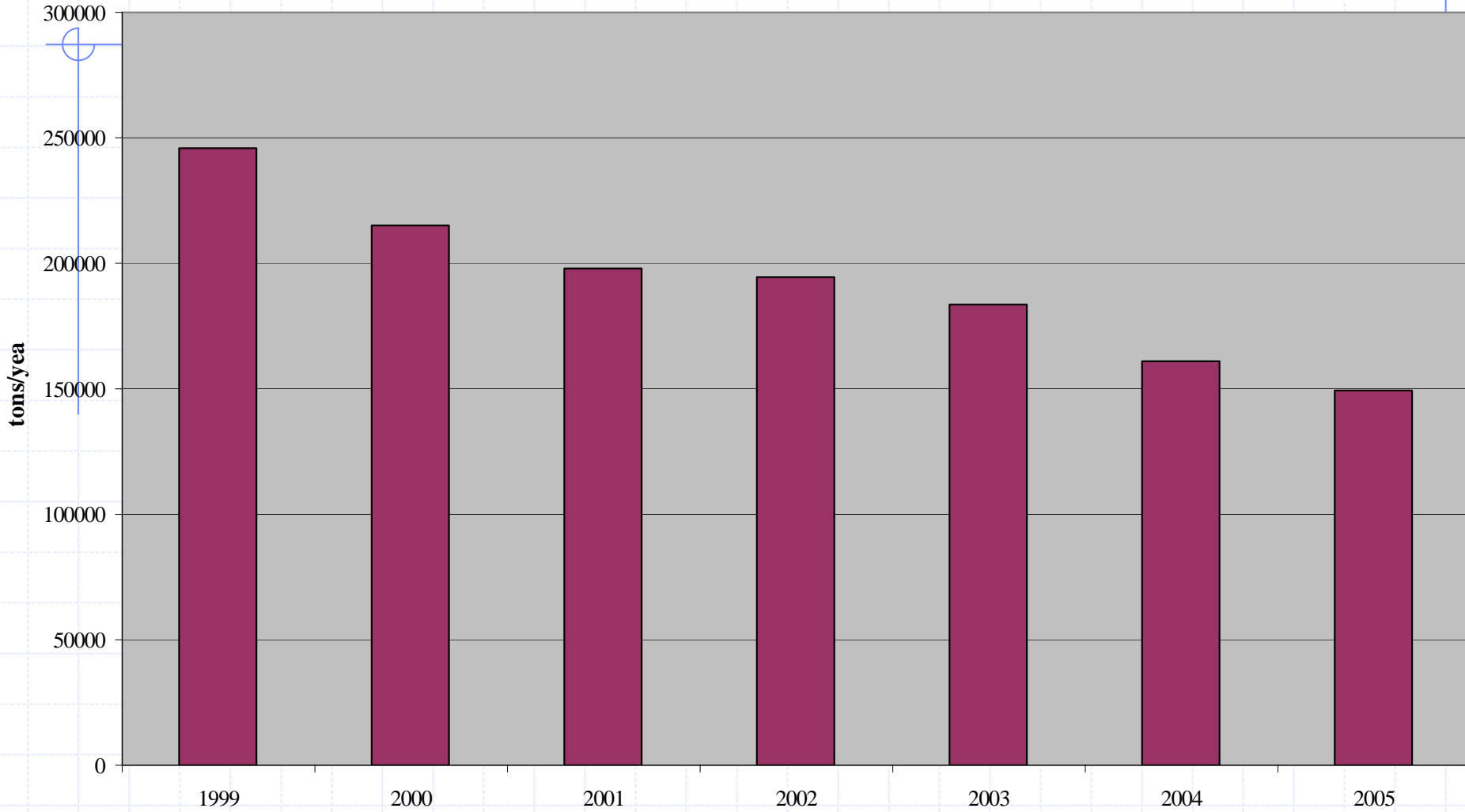
Topics to be Covered

- **Improving Air Quality**
- **Ozone/Particulate Updates**
- **Implications of New Standards**
- **N.C. Mercury Rule**
- **Enforcement Statistics**
- **Miscellaneous**
- **Other**

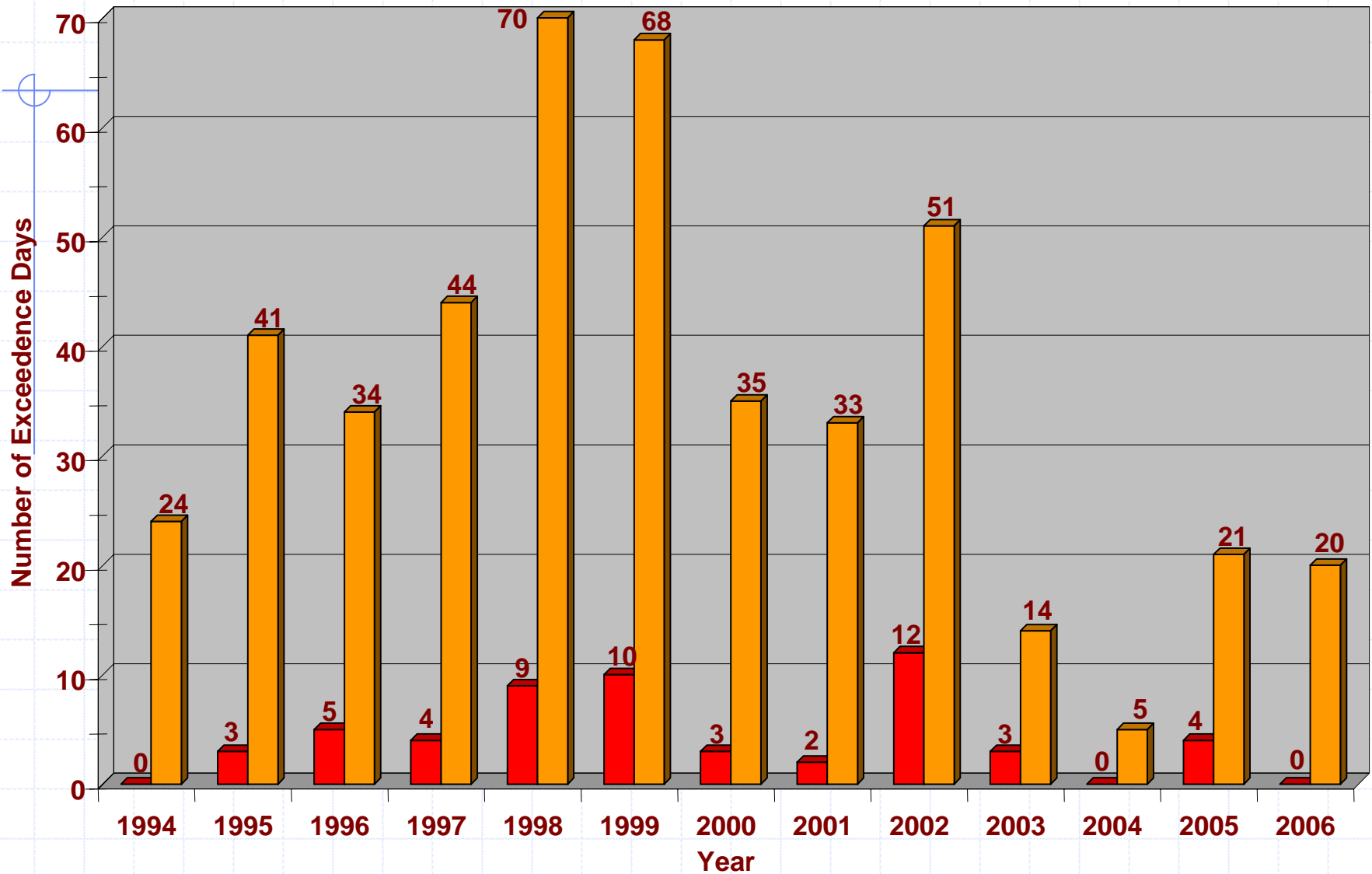
Air Quality in North Carolina

- **Emissions Reductions are Continuing to Work!**
- **Air Quality is Getting Better!**

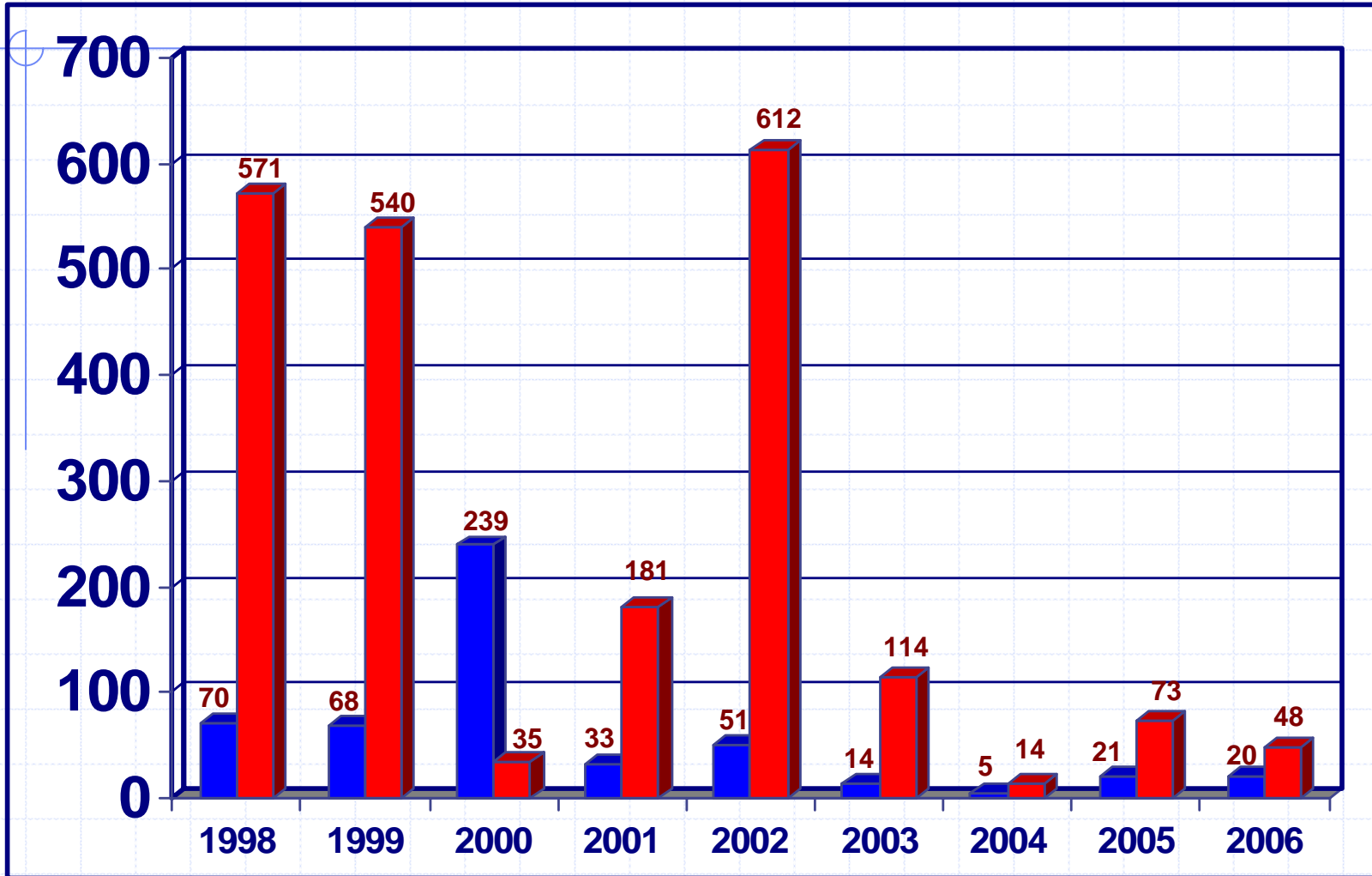
North Carolina Point Source NO_x Emissions



NC Statewide 1-Hr and 8-Hr Ozone Exceedance Days

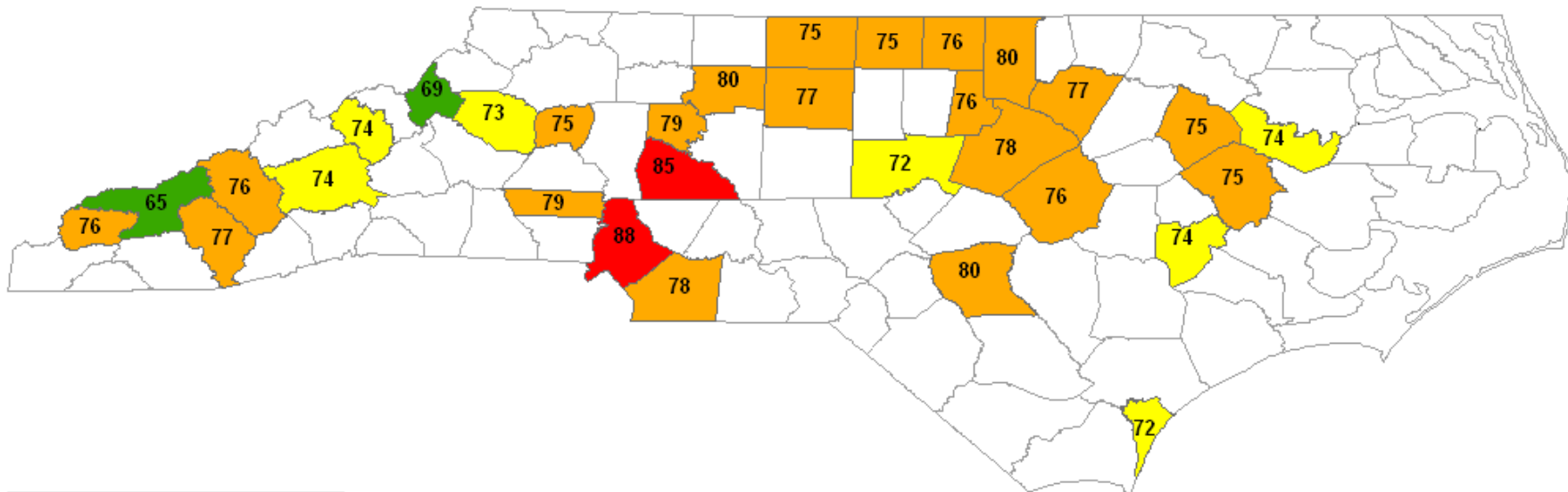


NC Statewide 8-Hour Exceedance Days & Total Measured Exceedances



■ Exceedances ■ Monitors w/Exceedances

8-hour Ozone Current Design Values for 2004 - 2006 (Maximum value per county)



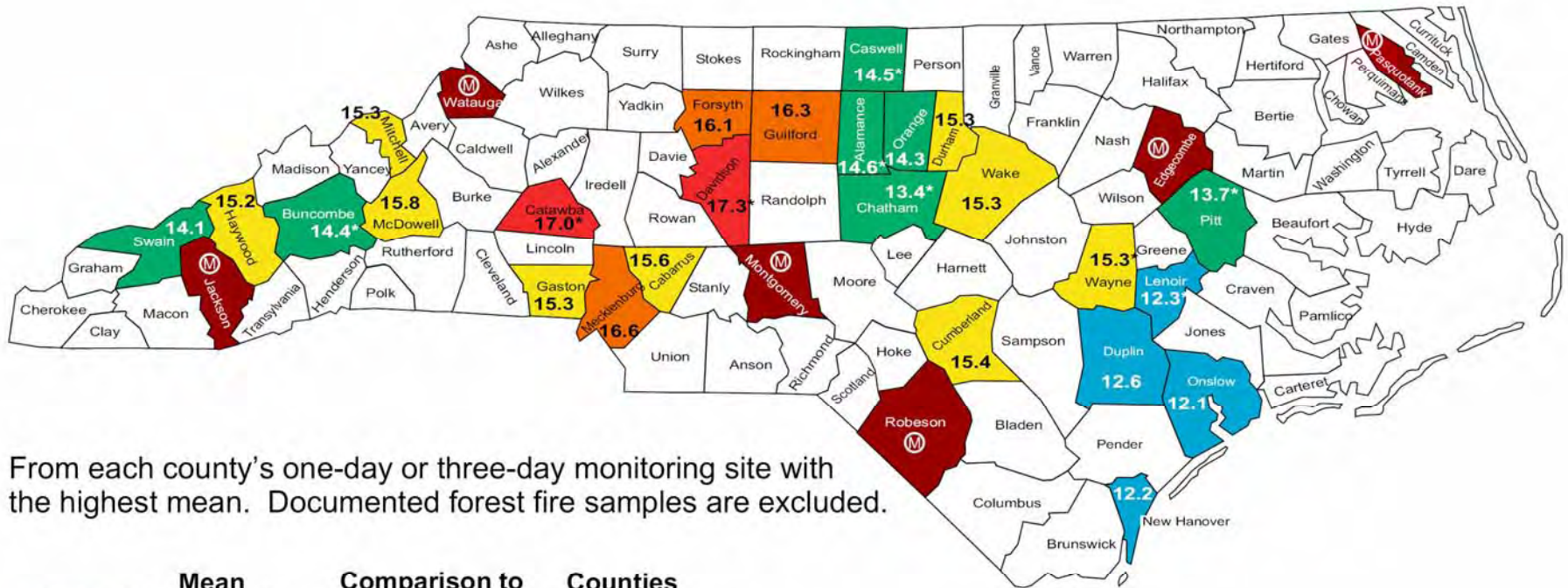
Legend

Current Design Values

(2004 - 2006)

- 65 - 69
- 70 - 74
- 75 - 84
- 85 - 88

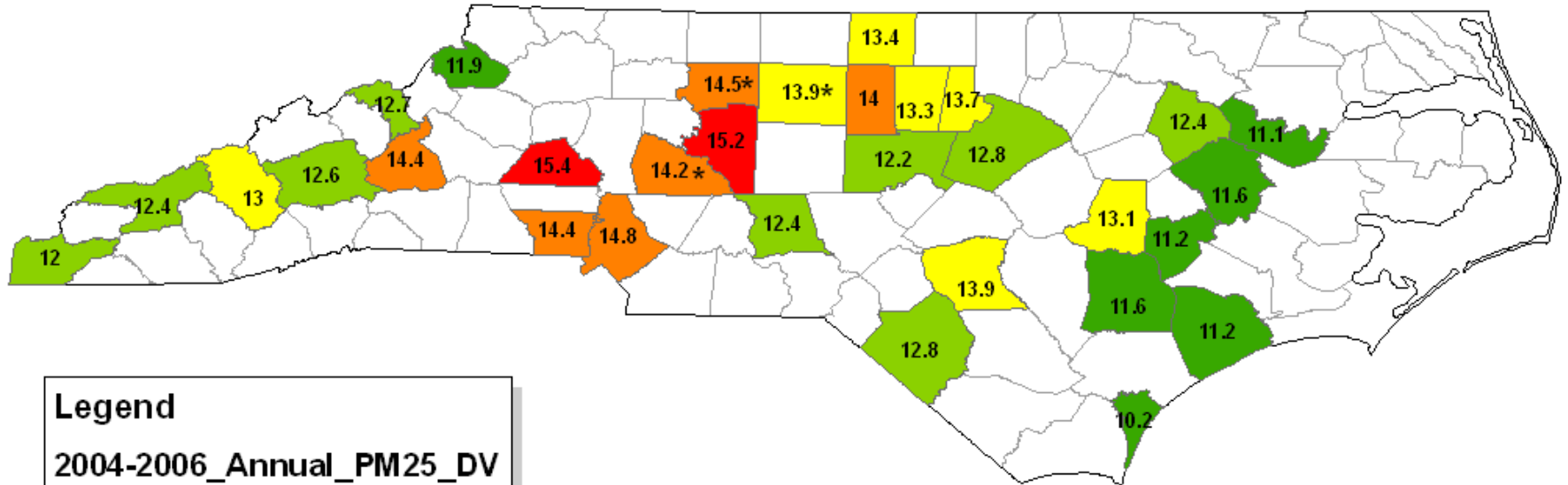
Estimated Annual Mean PM 2.5 - 24 Hour Concentrations for January 1999 through December 2001



From each county's one-day or three-day monitoring site with the highest mean. Documented forest fire samples are excluded.

* In one or more of 12 calendar quarters, less than 75% of expected valid sampling occurred.
 Ⓜ In one or more of 12 calendar quarters, 0% valid sampling occurred.

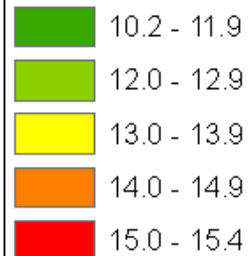
Annual PM2.5 Current Design Values (Maximum value per county, based on 2004 - 2006 Monitoring data**)



Legend

2004-2006_Annual_PM25_DV

04_06_PMDV



* Denotes sites with limited data availability

** 4th quarter 2006 data has not been through final QA

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

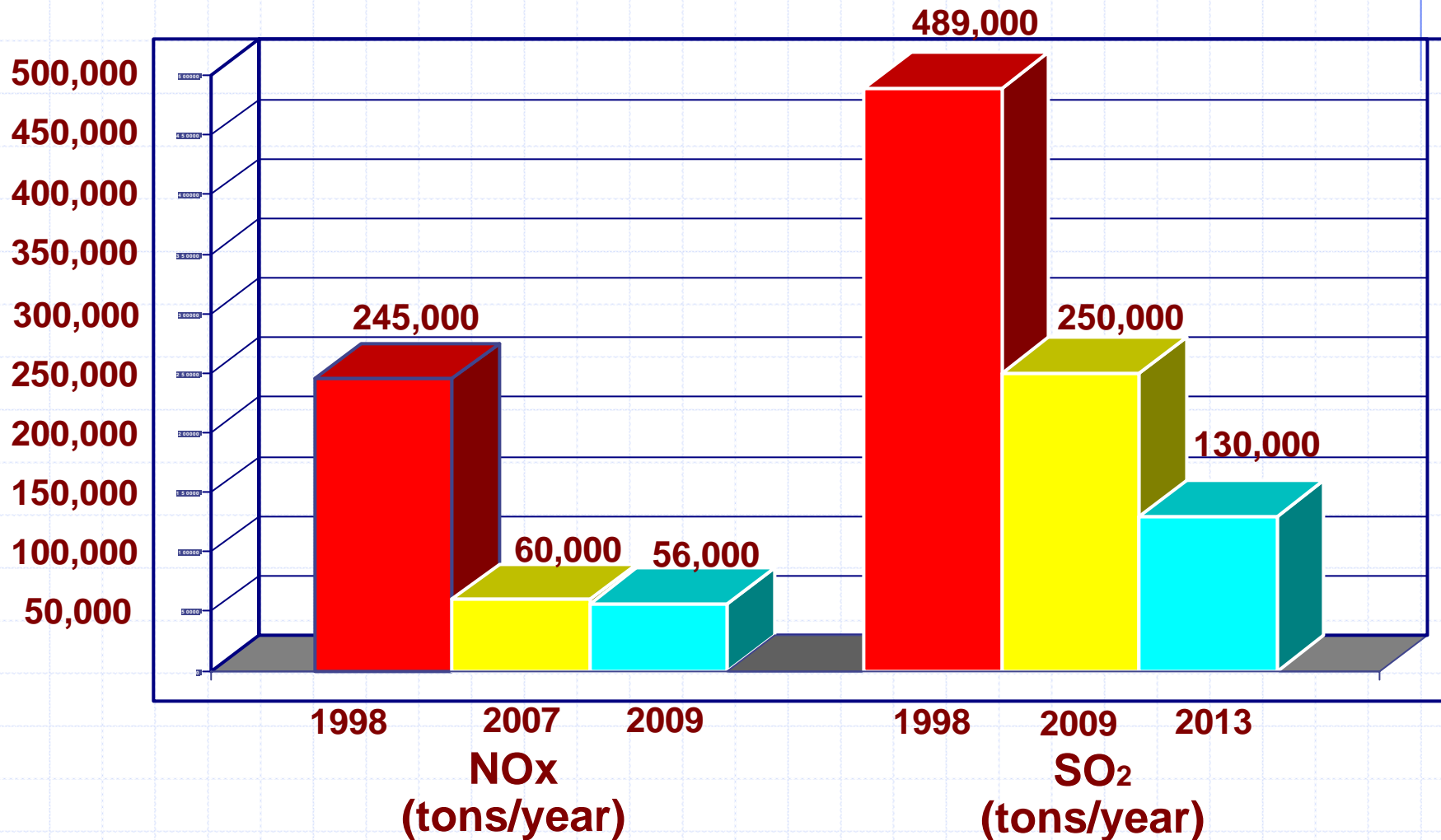
State

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

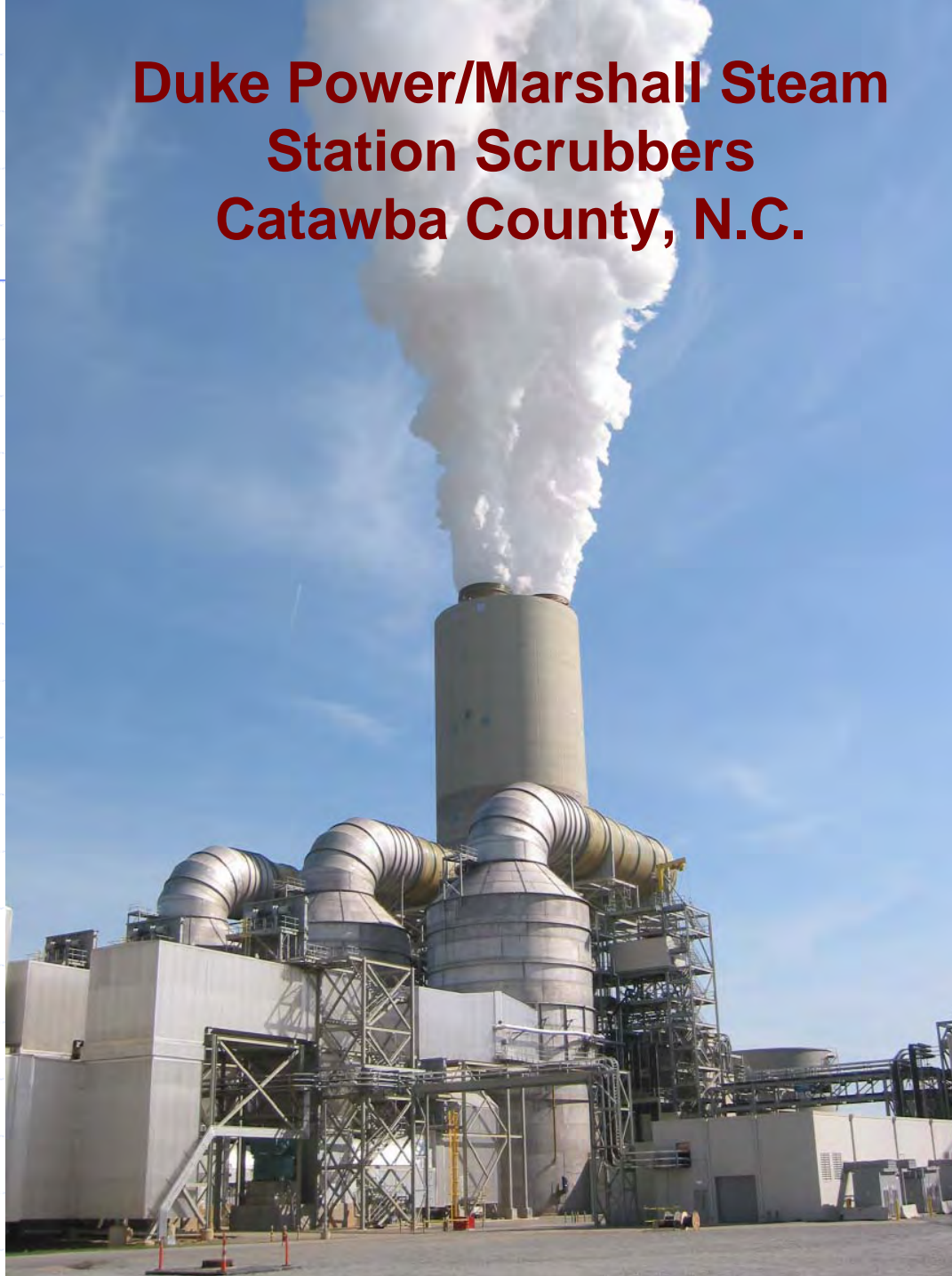
Local

- 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.



SIP Submittal Schedule

 **Ozone June 15, 2007**

 **PM2.5 April 8, 2008**

 **Regional Haze December 17, 2007**

New PM2.5 Standard

➤ Annual $15\mu\text{g}/\text{m}^3$

➤ 24-hour $35\mu\text{g}/\text{m}^3$

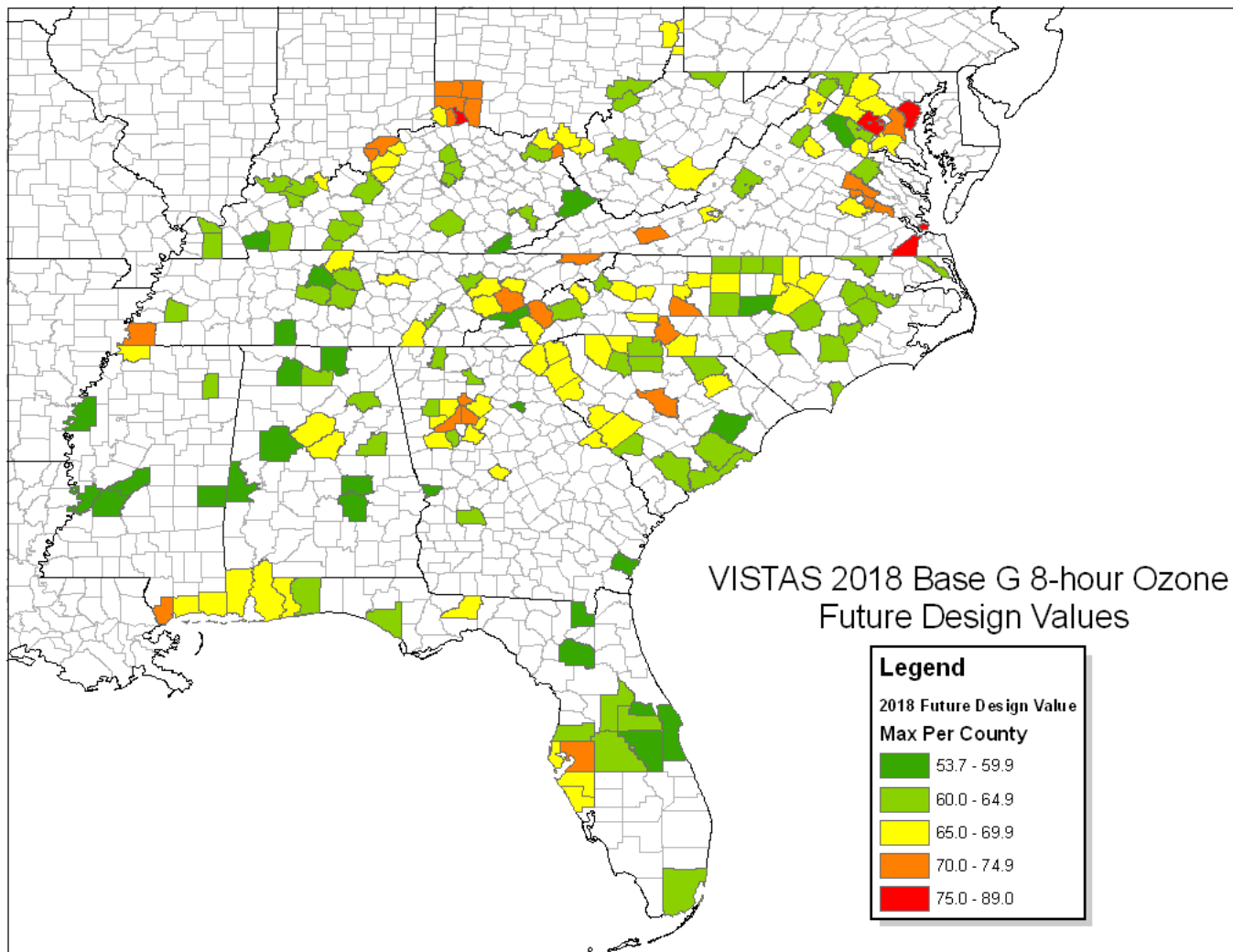
New Ozone NAAQS

- **Proposal: June 20, 2007**
- **Final: March 12, 2008**
- **CASAC says it needs to be lower to protect health (0.060 to 0.080 ppm)**
- **“Significant figures” in Standard**



New Ozone Standard?

Modeling results (2018)



Orange =
70-74 ppb

Red >
75 ppb

North Carolina Mercury Rule

- **Approved by Environmental Management Commission in November 2006**
- **Approved by Ruler Review Commission in December 2006**
- **No Letter of Protest**
- **Became Effective January 1, 2007**

N.C. Mercury Rule (cont.)

■ Phased Implementation

- 2010; expect to comply w/Co-benefits from CSA
- 2018; all units in N.C. controlled or shut down

■ Federal Trading Program Available in 1st Phase

- Must Meet Budget in N.C. in 2018 if
 - technically & economically feasible

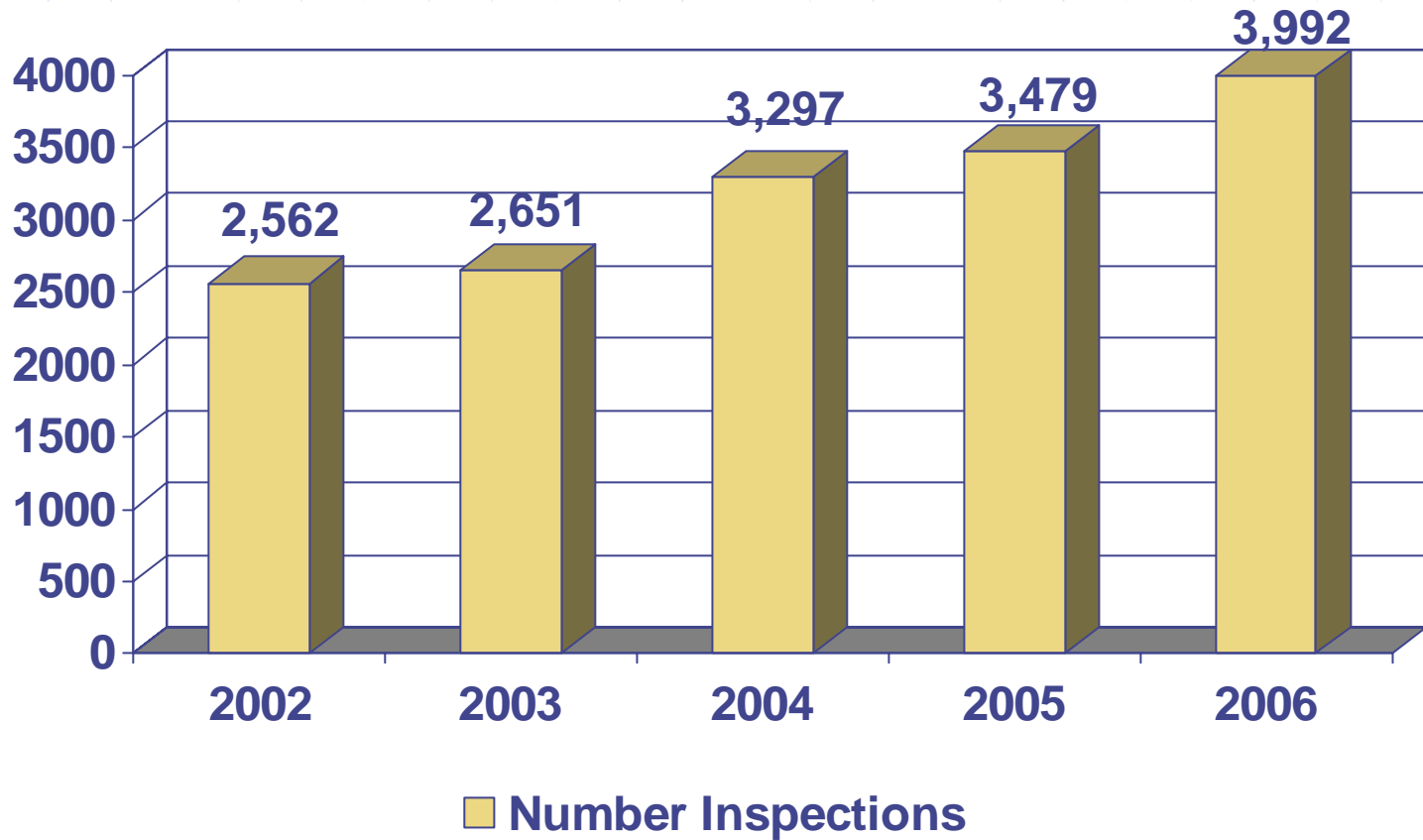
N.C. Mercury Rule (cont.)

- **Look Back by EMC in 2013**
- **Two DAQ Reports Due to EMC in 2008 and 2012**
- **BACT Analysis for New Sources**

Enforcement Activities in 2006

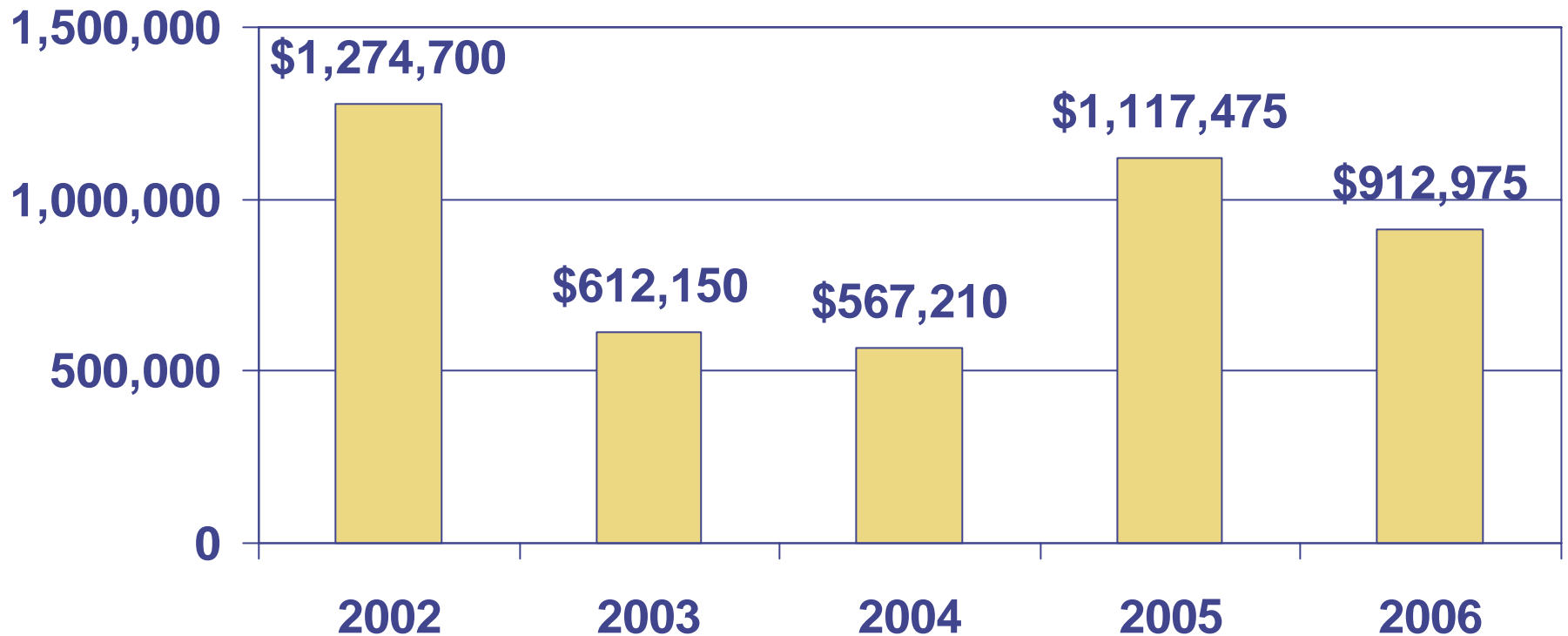
Measures	Permitted Facilities	Other	Total
Number of Inspections	2,499	1,493	3,992
Number of NOVs	507	767	1,274
Number of Enforcement Cases	118	182	300
Amount Assessed	\$592,950	\$320,025	\$912,975

Enforcement Activities in 2006 (cont.)



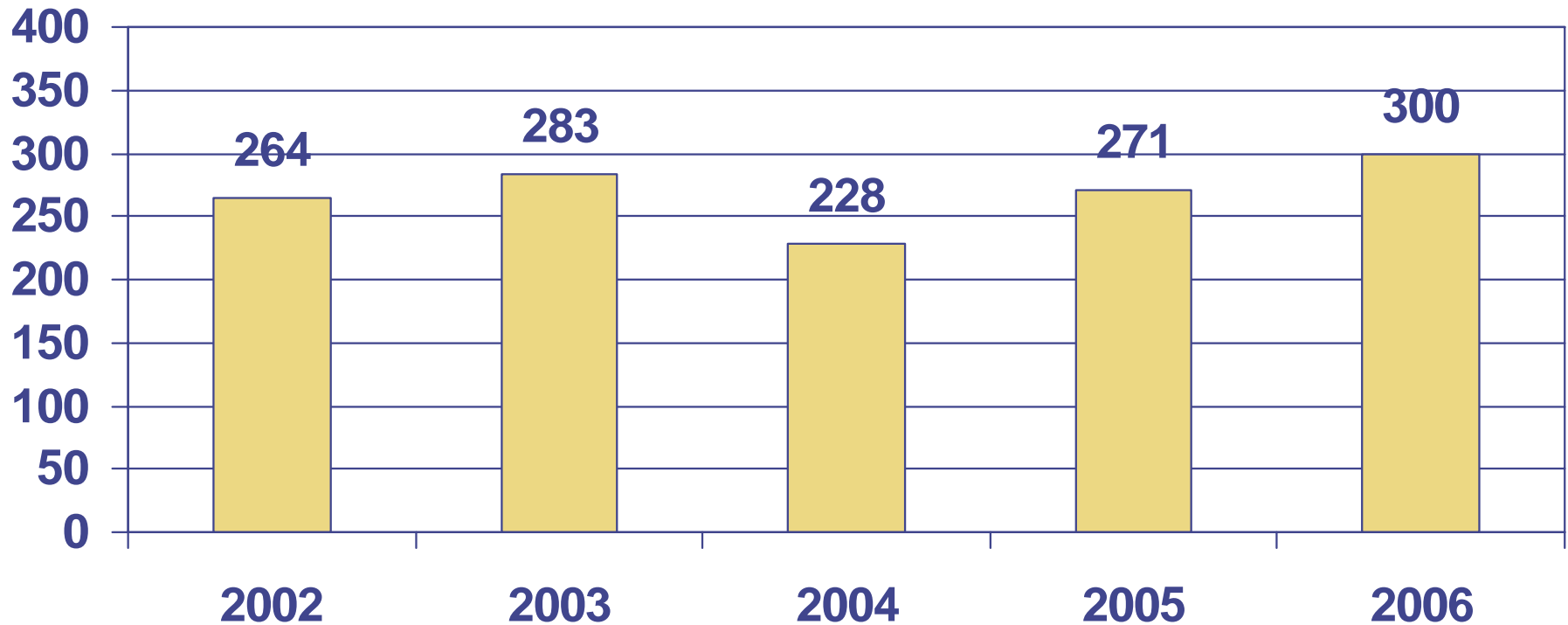
Enforcement Activities in 2006 (cont.)

Dollar Amount of Penalties Assessed



Enforcement Activities in 2006 (cont.)

Number of Penalty Assessments



Enforcement Cases – 300 in 2006

■ Open Burning – 156

- 145 cases in 2005

■ Other Non-permitted – 26

- Violations at Stage I Vapor Recovery and Bulk Plants

■ Permitted Facilities – 118

Types of Violations

Five Most Common Violations at Permitted Facilities in 2006 (~87% of total)

- **Recordkeeping and Reporting: ~50%**
- **Failure to submit emission inventories and/or permit renewals: 13%**
- **Operating without a permit: 9%**
- **Failure to pay permit fees: 9%**
- **Improper operation and maintenance: 4%**

Mobile Source Emissions Reduction Grant Program

Background

- Began in 1995
- Funding is provided by a tax of 1/64 of a cent per gallon of gasoline sold


Purpose

- Reduce emissions from cars, trucks, and other mobile sources in N.C.

Project Solicitation and Selection

- **Proposals are Solicited Through Press Releases, Postcard Mailings to Target Groups, Word of Mouth, and the MSERG Website**
- **Projects are Selected by a Review Committee Using the Project Selection Criteria Contained in the Application Package**

2007 Grant Winners

 **14 projects from 11 Counties were Selected Totaling \$798,398**

 **Types of Projects this year:**

- School Bus Retrofits
- Biodiesel Equipment
- Construction Equipment retrofits
- GEM Electric Vehicle

For information or details on projects selected, please visit our website at: http://daq.state.nc.us/motor/ms_grants

Supervisor Rotations

**Stationary Source
Compliance Supervisor**

**Washington Regional Office
Regional Supervisor**

Mike Aldridge

Donnie Redmond

William Willets

Rob Fisher

Special Projects

TV Coordinator

**PSD/NSR
Air Permits
Section Supervisor**

**Asst. Chief
Planning Section**

Mike Abraczinskas

Fern Paterson

Legislative Stuff

- **Consumer Price Index Increase in TV Fees**
- **Increase in Maximum Civil Penalties**
- **I & M Bills**

Miscellaneous

- **Ambient Network Review**
- **Climate Action Plan Advisory Group**
- **Letter to Golf Courses**
- **Stump Dump Fires**
- **Employee Recognition**

DAQ 35 Years Club



2006 DAQ Team of the Year



2006

DAQ Employee of the Year



Guardians of The Air

By Steven Carr

Guardians of The Air

By Steven Carr

Carolinas' CAPCA, Guardians of the Air

In this goal we share

Carolinas' CAPCA, Guardians of the Air

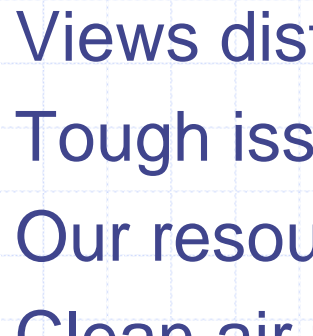
Guardians of the Air

With backgrounds different coming from the north and
the south,

The tools of our trade we bring

Great cause for clean air working to improve the health,
Of men and all living things

CHORUS



Views distant and varied yet the purpose endures,
Tough issues our task at hand
Our resources together joined success is assured
Clean air throughout all the land

BOTH VERSES BACK TO BACK, then CHORUS TWICE at END



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