

Spring 2008 CAPCA Update

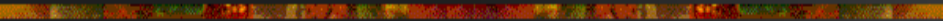
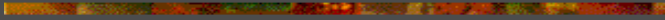
Asheville, N.C.

April 3, 2008

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

Director



- 
- New Title V Fees
 - Audit of Title V Permitting Process
 - Duke Power Cliffside Permit
 - Implications of New Ozone Standard
 - Area Source MACTs/GACTs
 - Enforcement Statistics for 2007
 - Miscellaneous
 - Other ?
- 

Title V Permit Fees

- Fees were initially set in 1994
 - Annual inflation adjustment is allowed, but not always applied

Year	Tonnage Factor	Basic Permit Fee	Nonattainment Area Added Fee
1994	\$14.63	\$5,100	\$2,600
2007	\$18.10	\$6,311	\$3,297

Title V Program: Looming Deficits

- No Consumer Price Index (CPI) adjustment for a number of years, revenues were flat
 - Expenses increased
 - Office space, utilities, other support costs
 - Recent legislative pay raises to employees
 - Zero appropriations
 - Cost of program must be met through permit fees
-

Title V Program: Looming Deficits

- Workload is not decreasing
 - Growing state economy
 - Increasing regulatory demands
 - Tighter environmental standards (ozone, fine particles)
 - New issues (climate change)
 - Maintain service to industry and public
 - Timely permit issuance
 - Timely response to concerns
 - Timely response to requested permit modifications
-

TV Permit Fee Increases

- Discussed concept with affected industry last summer (2007)
 - Took draft rule to the EMC in September
 - Public hearing was held in November
 - EMC approved rules in January 2008
 - Fee increases became effective on March 1, 2008
-

TV Fee Increases

Year	Tonnage Fee	Basic Permit Fee	Nonatt't Area Added
2007	\$18.10	\$6,311	\$3,297
2008	\$22.50	\$6,500	\$3,500
2009	\$25.00	\$6,500	\$3,500
2010	\$27.50	\$6,500	\$3,500
2011	\$30.00	\$6,500	\$3,500
2012 and on	Fee increase would match the Consumer Price Index (CPI) to keep up with inflation		

Current Title V Permit Fees of Neighboring States (\$/ton)

North Carolina	\$18.10 (prior to 03/01/2008) \$30.00 (effective 2011)
Virginia	\$42.55
Tennessee	\$37.00
Georgia	\$28.05
South Carolina	\$41.02

Consequences of Inadequate Title V Funding

- Title V is required by the Federal Clean Air Act
 - EPA has delegated operation of program to NC DAQ
- If NC's program is deemed inadequate by EPA
 - EPA could revoke the delegation
 - EPA would operate the program themselves out of their regional office in Atlanta, GA
- EPA's program would cost more (\$42/ton)
 - Title V permits issued by EPA employees
 - Inspections performed by EPA employees
 - Enforcement (penalties) determined by EPA managers

Audit of TV Permitting Process

- State Auditor's Office recently started offering performance audits
 - Approached DENR about a "Volunteer" permit program
 - DAQ volunteered to be guinea pig
 - TV Permitting Process chosen to reduce backlog
 - LEAN Office / NCSU Industrial Extension Services
-



Current Backlog

- Current Total Backlog: 241 Applications
 - In 2007, Total Backlog increased by 17
- Current Renewal Backlog: 105 Renewals
 - In 2007, Renewal Backlog increased by 5
- FTE Permit Engineers: 14
 - Each FTE Engineer has ~17.2 applications



Action Items



Increase Application “First Pass Rate”

- Revise Renewal Application to Include a REQUIRED “CAM Applicability” Form
- Provide an OPTIONAL “Permit Application Checklist”



Reduce Added Time Resulting From Add-Info Requests

- Permit Application “Triage”
- Send Applications Back When Applicant Fails to Fulfill Add-Info Requests



Application “Triage”

- Each Application to Receive a Comprehensive Technical Completeness Review by the Supervisor & Engineer Within 2-3 Weeks of Receipt
 - Improve Supervisor Involvement in Problem Solving & Information Sharing
 - Reduce Applications with MULTIPLE Add-Info Requests
 - Provide Add-Info Request While Application is Still “Fresh” to the Applicant/Consultant
- Excellent Initial Feedback!!



FUTURE STATE

Projections:

- Full Implementation by June 2008
- 52% Improvement in Overall Efficiency
- Reduce Backlog by 31% in 17 Months
 - 12 Applications per Permit Engineer

Duke Power Cliffside Permit

- Original application for two 800-Mw electric generating units (EGUS)
 - NC Utilities Commission said only one needed
 - Application modified to one 800-Mw EGU
 - Controls proposed for the EGU included SCR, dry absorbers, bag filters and wet scrubber
-

Cliffside Permit (cont.)

- Draft permit noticed 8/14/2007
 - Public hearing held on 9/18/07
 - 300 people attended hearing
 - Over 1,900 oral and written comments received
 - Some in favor of new unit, more opposed to it
-

Cliffside Permit (cont.)

- Permit issued on January 29, 2008
- Notable Conditions
 - BACT limits for NO_x & SO₂ on new unit
 - Requirement to continuously operate existing unit's scrubbers
 - Mercury limit tighter than NSPS standards in place at time of issuance – based upon BACT requirement in NC Hg rule

Cliffside Permit (cont.)

- Notable conditions (cont.)
 - CO₂ mitigation for new unit emissions by shutting down 800-Mw of “old” coal units by 2018
 - Requirement to shut down four smaller old units at Cliffside
 - Several re-opener conditions
-

Cliffside Permit (cont.)

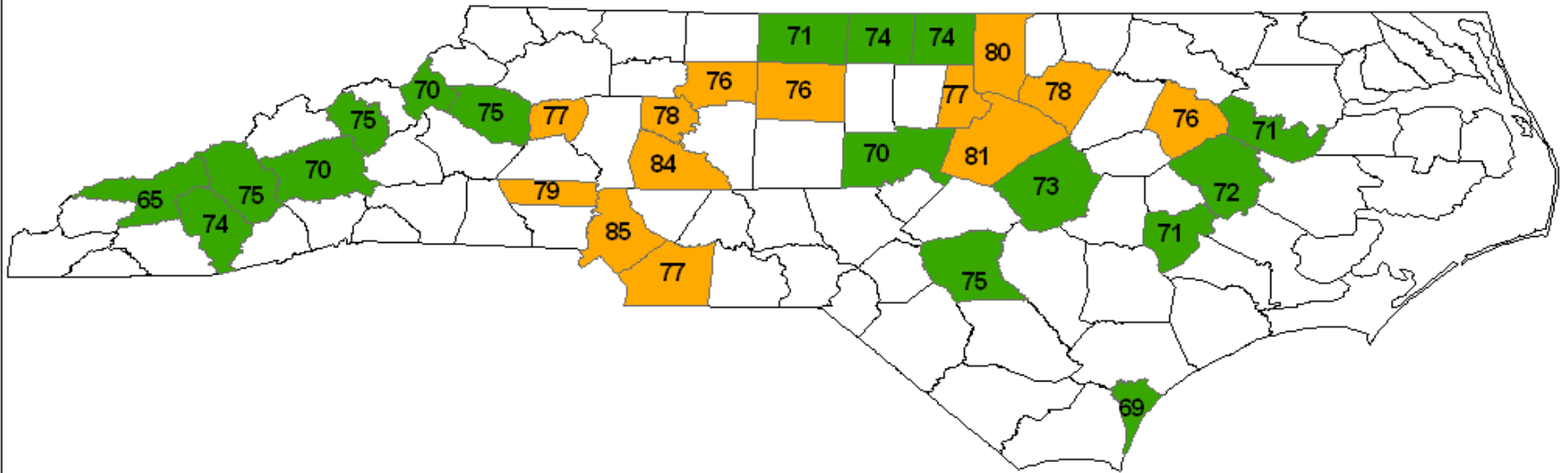
- Resulting emissions from Cliffside
 - 80% less SO₂ emissions
 - 50% less Mercury emissions
 - 50% less NO_x emissions
 - CO₂ emissions neutralized
 - Seems like a Win-Win
-

Expected Implementation Timeline for Revised Ozone NAAQS

Milestone	Date
Signature—Final Rule	March 12, 2008
State Designation Recommendations to EPA	No later than March 12, 2009
Final Designations	No later than March 12, 2010*
Attainment Demonstration SIPs Due	2013*
Attainment Dates	2013-2030 (depends on severity of problem)

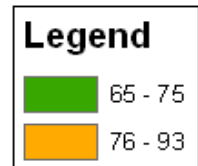
* In the event the Administrator has insufficient information to promulgate the designations by March 12, 2010, the date of final designations may be extended up to one year, but no later than March 12, 2011. SIPs will be due three years from final designations.

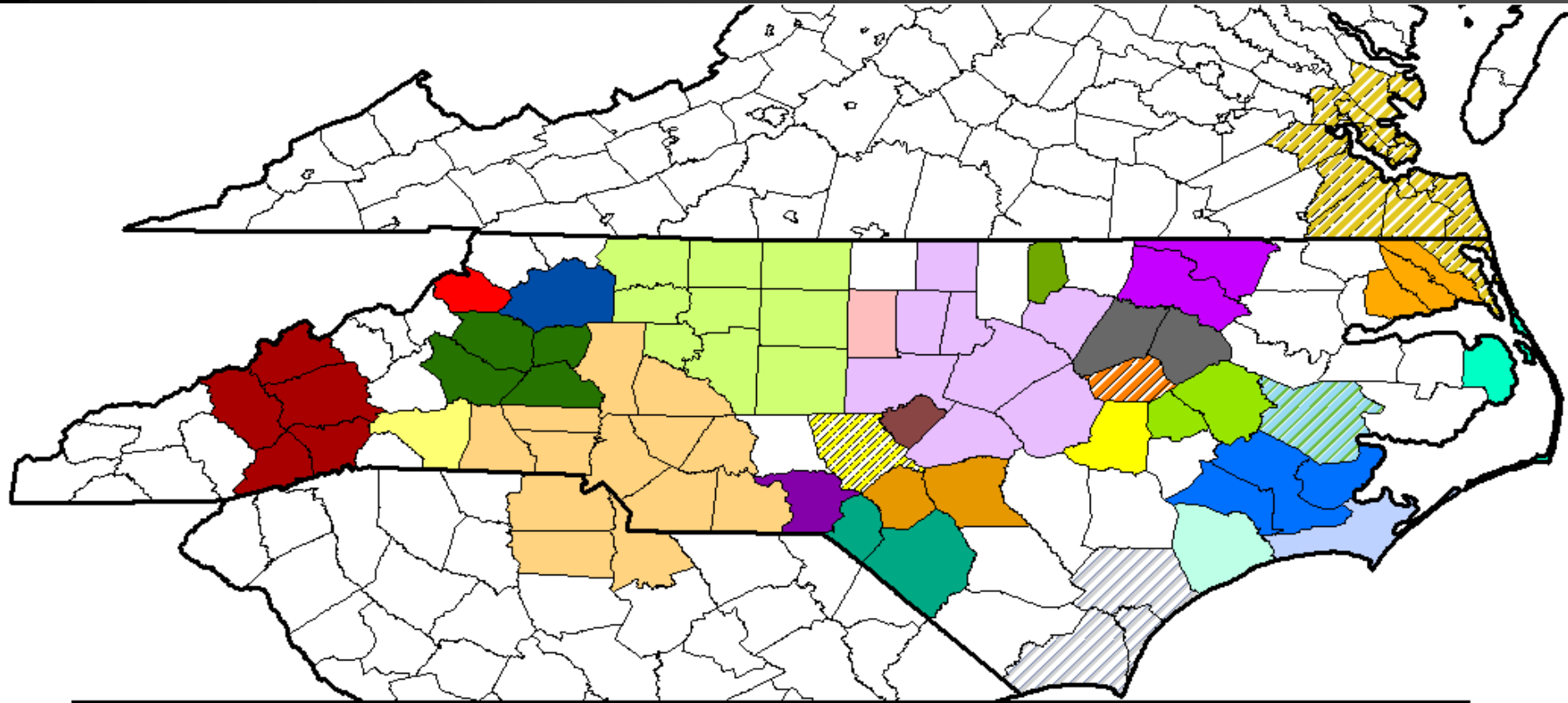
2009 Ozone Projections from VISTAS/ASIP Modeling.



This map displays counties with monitors only and does not represent potential nonattainment area boundaries.

Designations will be based on 2007-2009 ambient data.





Legend

NC_CSAa

CSA_MSE

Asheville-Brevard, NC

Boone, NC

Burlington, NC

Charlotte-Gastonia-Salisbury, NC-SC

Elizabeth City, NC

Fayetteville, NC

Forest City, NC

Goldsboro, NC

Greensboro-Winston Salem-High Point,

Greenville, NC

Henderson, NC

Hickory, NC

Jacksonville, NC

Kill Devil Hills, NC

Lumberton-Laurinburg, NC

Morehead City, NC

New Bern, NC

North Wilkesboro, NC

Raleigh-Durham_Cary, NC

Roanoke Rapids, NC

Rockingham, NC

Rocky Mount, NC

Sanford, NC

Souther Pines, NC

Virginia Beach-Norfolk-Newport News,

Washington, NC

Wilmington, NC

Wilson, NC

Area Source MACT/GACT

- Clean Air Act, Section 112(c)(3)
 - Requires EPA regulate
 - “90% of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health”
 - EPA is issuing rules for 70 area source categories
-

Scope of Program

- 70 area source MACTs/GACTs expected
 - 40 are promulgated
 - Court-ordered schedule for the rest
 - 10 by June 2008
 - 10 by Dec 2008
 - 10 by June 2009
-

National Issue

- Will states accept delegation of these rules?
- NC adopts all by reference
- Other states are still deciding
 - Balking at resource issues
 - Identifying/notifying so many sources, even without permitting and inspecting
 - EPA is threatening withholding of 105 grant funds

NC DAQ Efforts

- MACT team is taking lead
 - Planning, permits, compliance, toxics, local programs
- Carefully consider resources versus benefits
 - Intent is to avoid overwhelming regions/facilities with a new layer of permits and inspections
- Work with sister agencies where possible
 - Examples are dry cleaner, Stage I gasoline vapor
- Work closely with Small Business (SBO) and Pollution Prevention (DPPEA)
 - Some rules may be implemented through an information campaign

General Approach

- Identify leader for each rule
 - Review the rule and develop a short summary
 - Expand to sub-group if necessary
 - Estimate the affected source population of permitted and unpermitted facilities
 - Identify questions with the rule
 - Evaluate the environmental benefits of the rule
-

General Approach (cont.)

- Suggest implementation approach (including the resources needed)
 - Recommend an implementation strategy back to the MACT Workgroup
 - MACT Workgroup recommends an implementation strategy to NCDAQ management.
-

Most Significant Area Source MACTs/GACTs

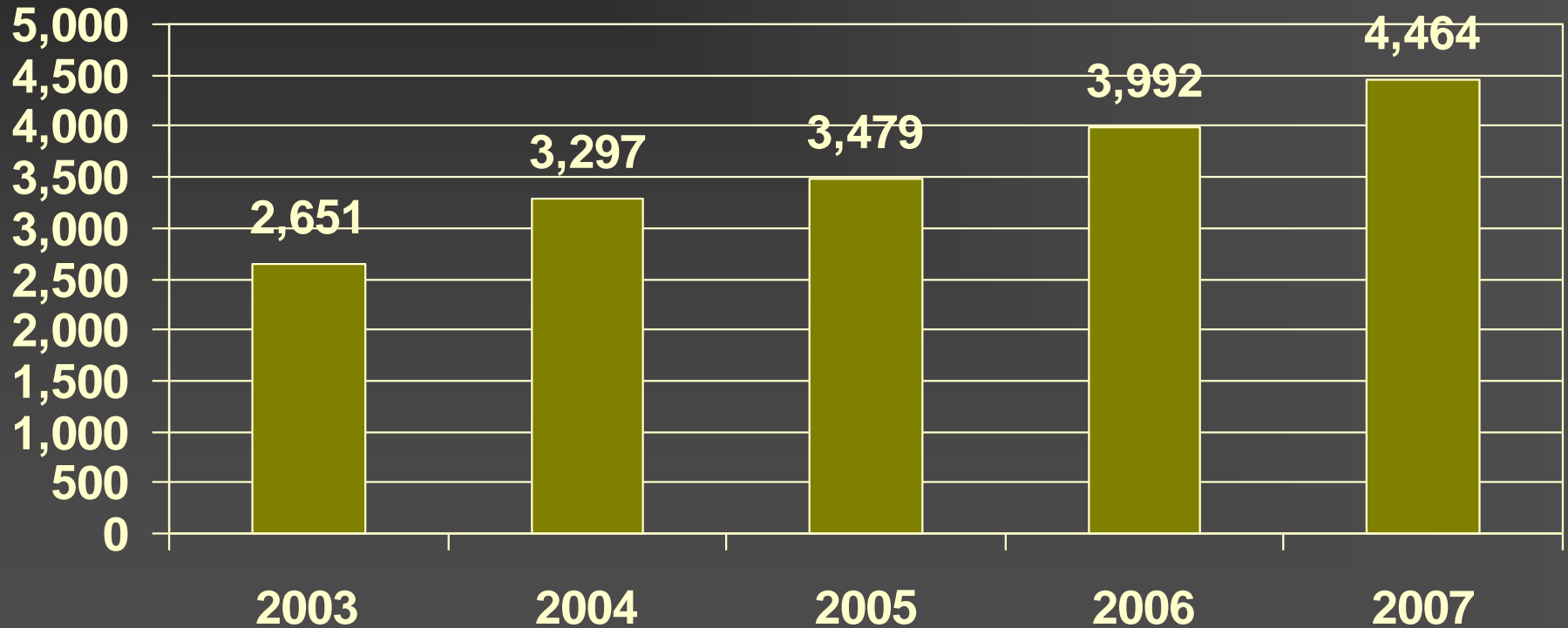
- HHHHHH: Paint stripping and misc. coating (AKA “auto body shop”)
 - ZZZZ: Reciprocating Internal Combustion Engines
 - CCCCCC: Gasoline Dispensing Facilities
 - OOOOOO: Flexible Polyurethane Foam
-

Enforcement Activities in 2007

Measures	Permitted Facilities	Other	Total
Number of Inspections	2,585	1,879	4,464
Number of NOVs	662	688	1,350
Number of Enforcement Cases	117	189	306
Amount Assessed	\$902,210	\$314,750	\$1,216,960

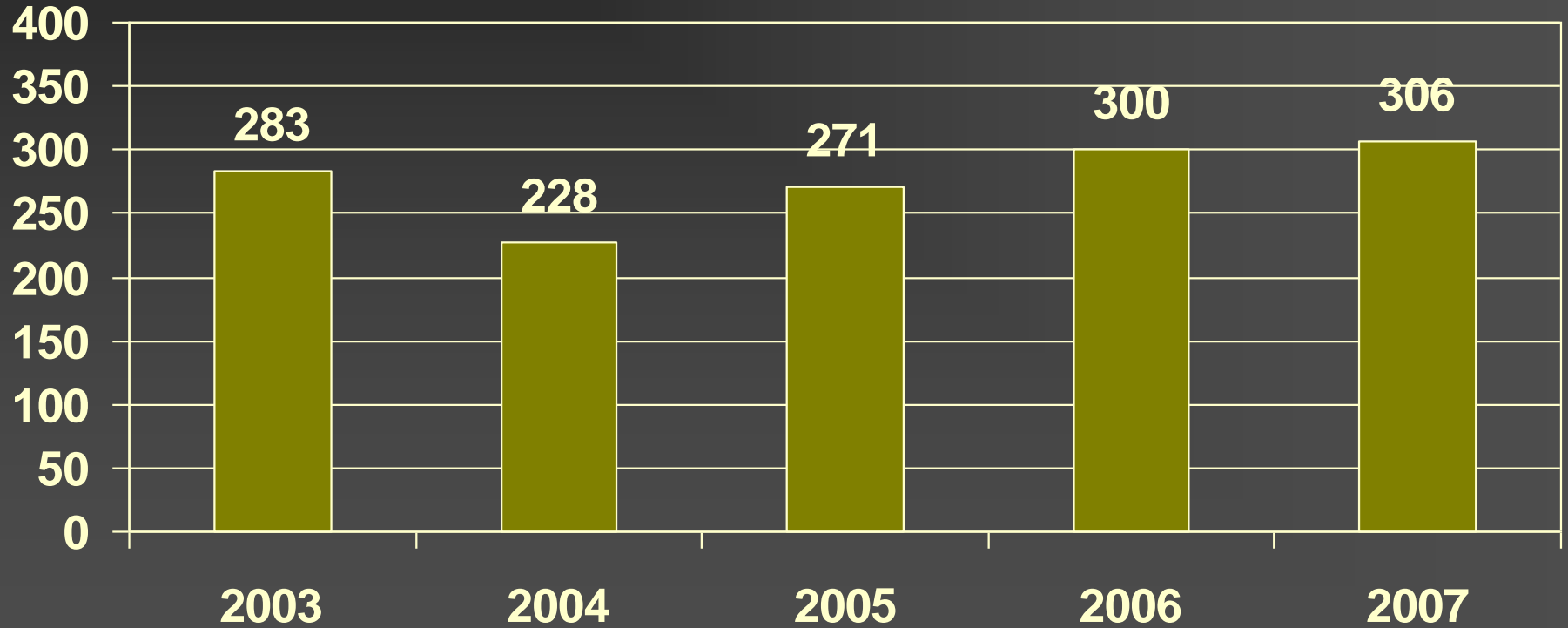
Enforcement Activities in 2007

Number of Inspections



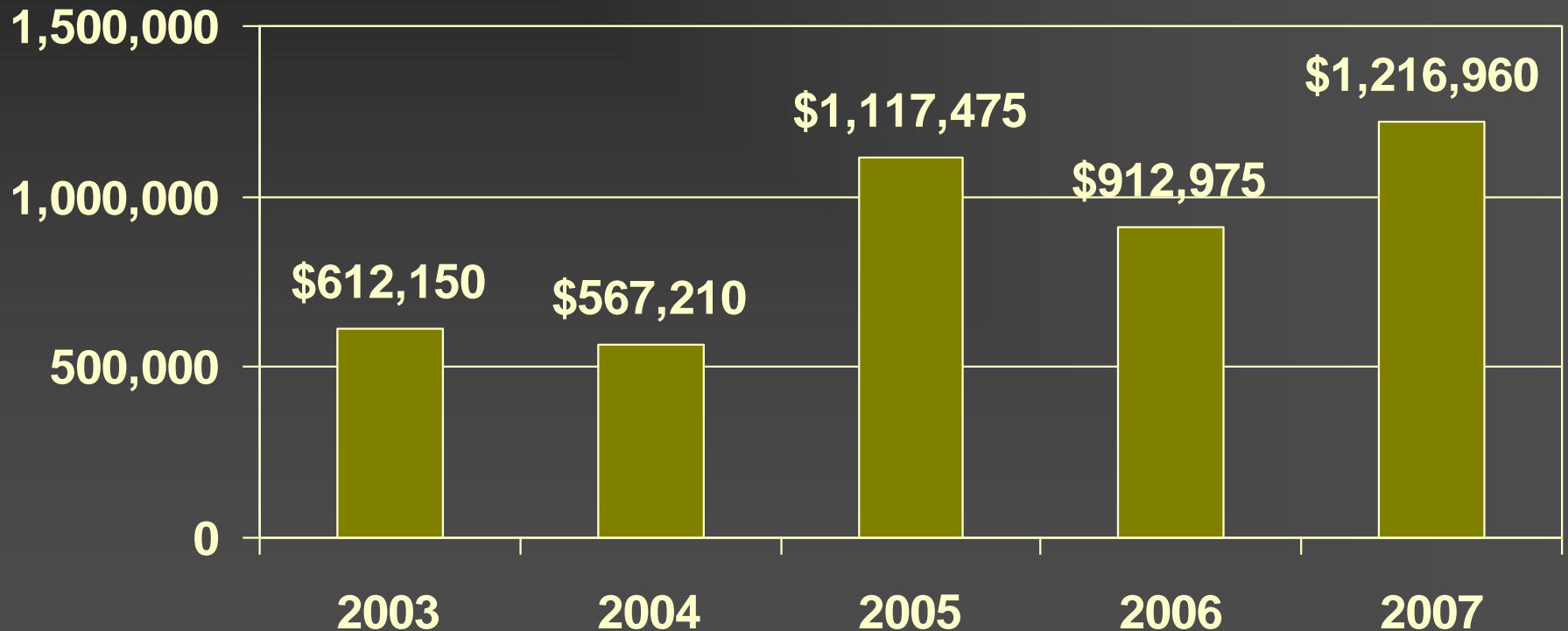
Enforcement Activities in 2007

Number of Penalty Assessments



Enforcement Activities in 2007

Dollar Amount of Penalties Assessed



Enforcement Cases – 306 in 2007

- Open Burning – 158
 - 156 cases in 2006
 - Other Non-permitted – 31
 - Violations at Stage I Vapor Recovery and Bulk Plants
 - Permitted Facilities – 117
-

Types of Violations Assessed

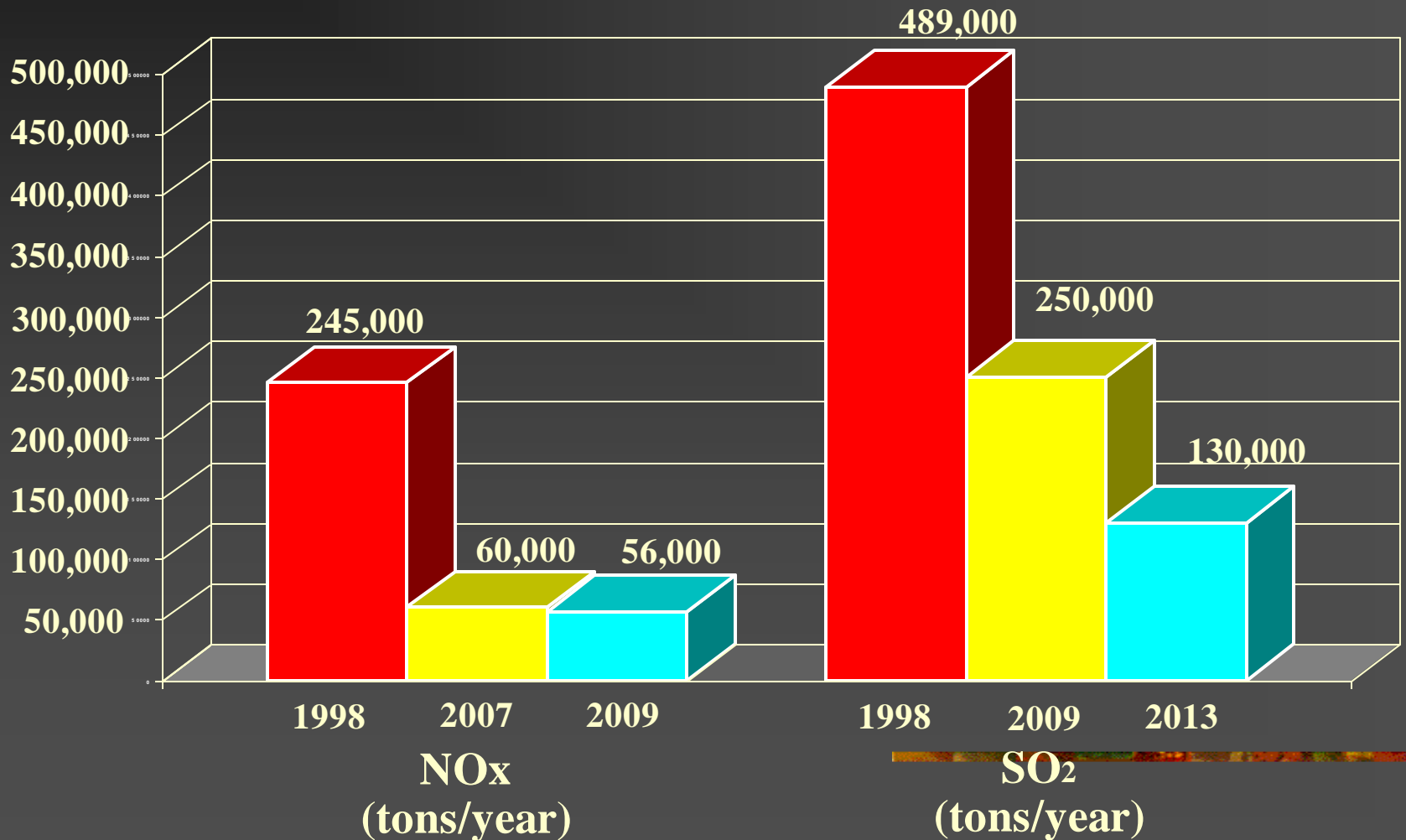
Five Most Common Violations Assessed at Permitted Facilities in 2007 (~83% of total)

- Recordkeeping and Reporting: 37%
- Operating without a permit: 14%
- Improper operation and maintenance: 14%
- Emissions standard exceedance (includes toxics exceedances, exceedance of PSD avoidance limits, synthetic minor and prohibitory small emission limit exceedances, and failed stacked tests (emission standard exceedance)): 9%
- Failure to submit emission inventories and/or permit renewals: 9%

Miscellaneous

- Clean Smokestacks Compliance
 - CAMR / NC Mercury Rules
 - Mobile Source Grants
 - Ozone / PM_{2.5} updates
 - Rotations
-

Emissions Reductions Under Clean Smokestacks Bill



CSA Compliance

- First Deadline for NOx December 31, 2007
 - Total of 60,000 Tons allowed from Progress Energy (25,000) and Duke Energy (35,000)
 - Progress Energy total - 24,384.4
 - Duke Energy total - 33,015.8
 - Total from both - 57,400.2 tons of NOx
-



CAMR / NC Mercury Rules

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
- As of 2008, 132 grants totaling \$8.6 million

■ Purpose

- Reduce emissions from cars, trucks, and other mobile sources in NC

Project Solicitation and Selection

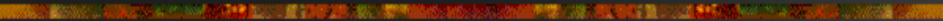
- Proposals are solicited through press releases, mailings to targeted groups, word of mouth, and the MSERG website
- Projects are selected by a review committee using the project selection criteria contained in the application package

2008 Grant Winners

- 16 projects from 12 counties were selected
 - totaling \$800,000 in awards

Types of projects funded this year include:

- School Bus/Transit bus retrofits
 - Locomotive idle reduction
 - Biodiesel equipment
 - Repower/replace/retrofit construction equipment
 - Electric vehicle purchases
 - Alternative fuel vehicles/off-road engines
- For more information: <http://www.ncair.org>

- 
- Ozone / PM_{2.5} updates
 - Rotations
- 