

CAPCA Fall 2007 SC Program Update

October 25, 2007

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Overview

- Organizational Changes
- Ozone and PM2.5
 - Local efforts
- Monitoring Network Review
- Regulation Update
- Compliance & Enforcement
- Expedited Review & Permitting
- “Climate” Activities

Organizational Changes



Bureau of Air Quality



Myra Reece
Bureau Chief



Renee Shealy
Assistant Bureau Chief



Rhonda Thompson
Assistant Bureau Chief

Robbie Brown
Director



**Planning, Regs,
Data, ...**

Henry Porter
Director



**Modeling, Air
Toxics, El...**

Keith Frost
Director




**Comp. Mgt.,
Enforcement, ...**

??????

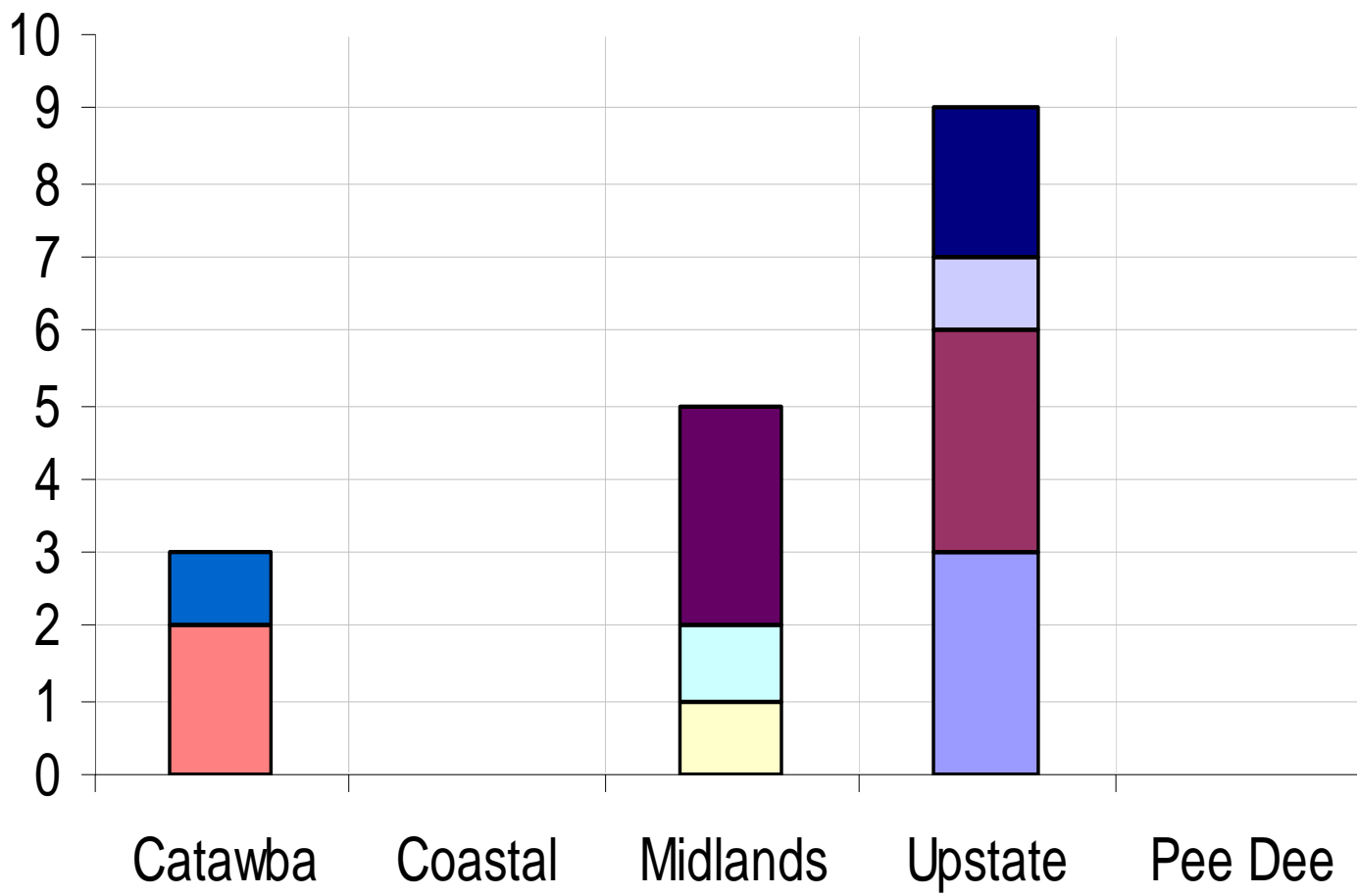


Permitting



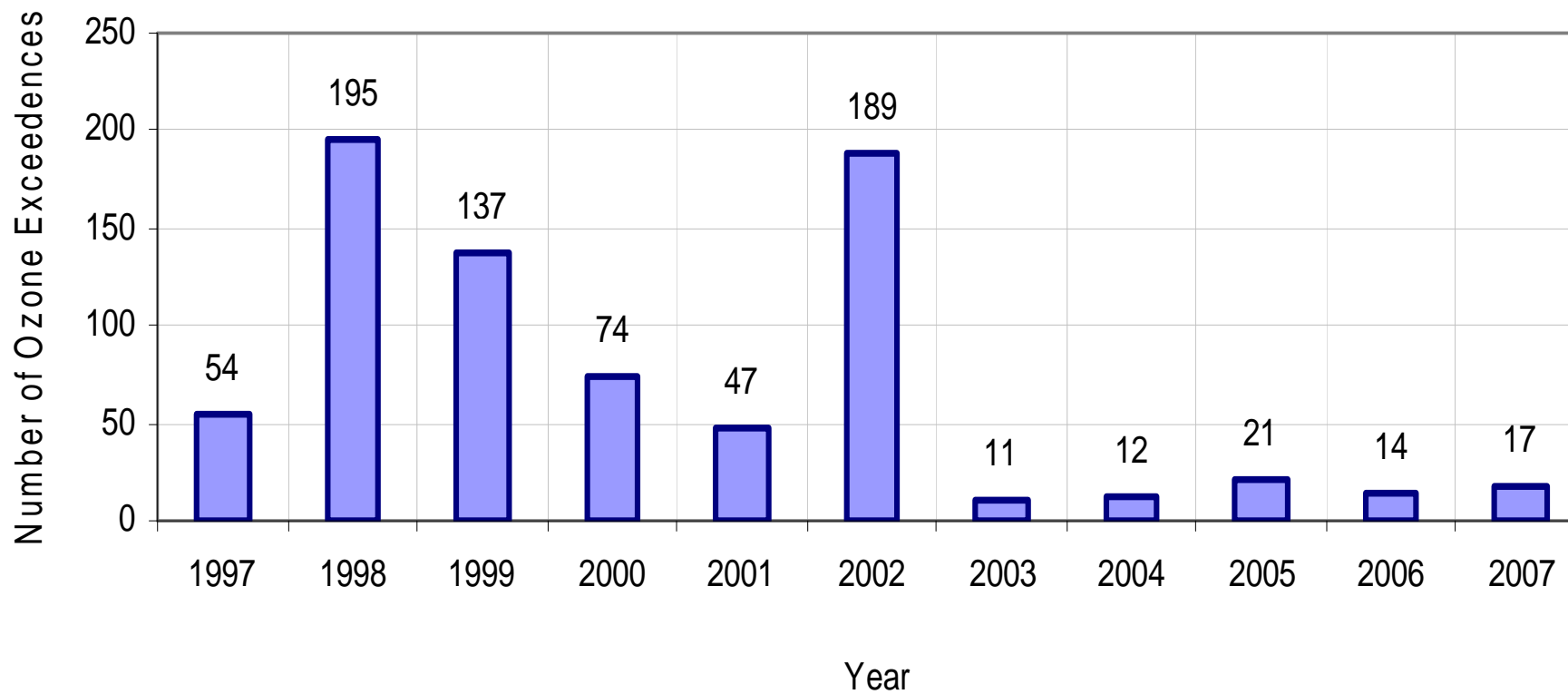
Ozone &
Particulate Matter_{2.5}

2007 Number of Hits per Region/Monitor



- Clemson
- Longcreek
- York
- Chester
- Sandhill
- Parklane
- Congaree
- North
- Spartanburg
- Due West

Number of Ozone Exceedences from 1997-2007

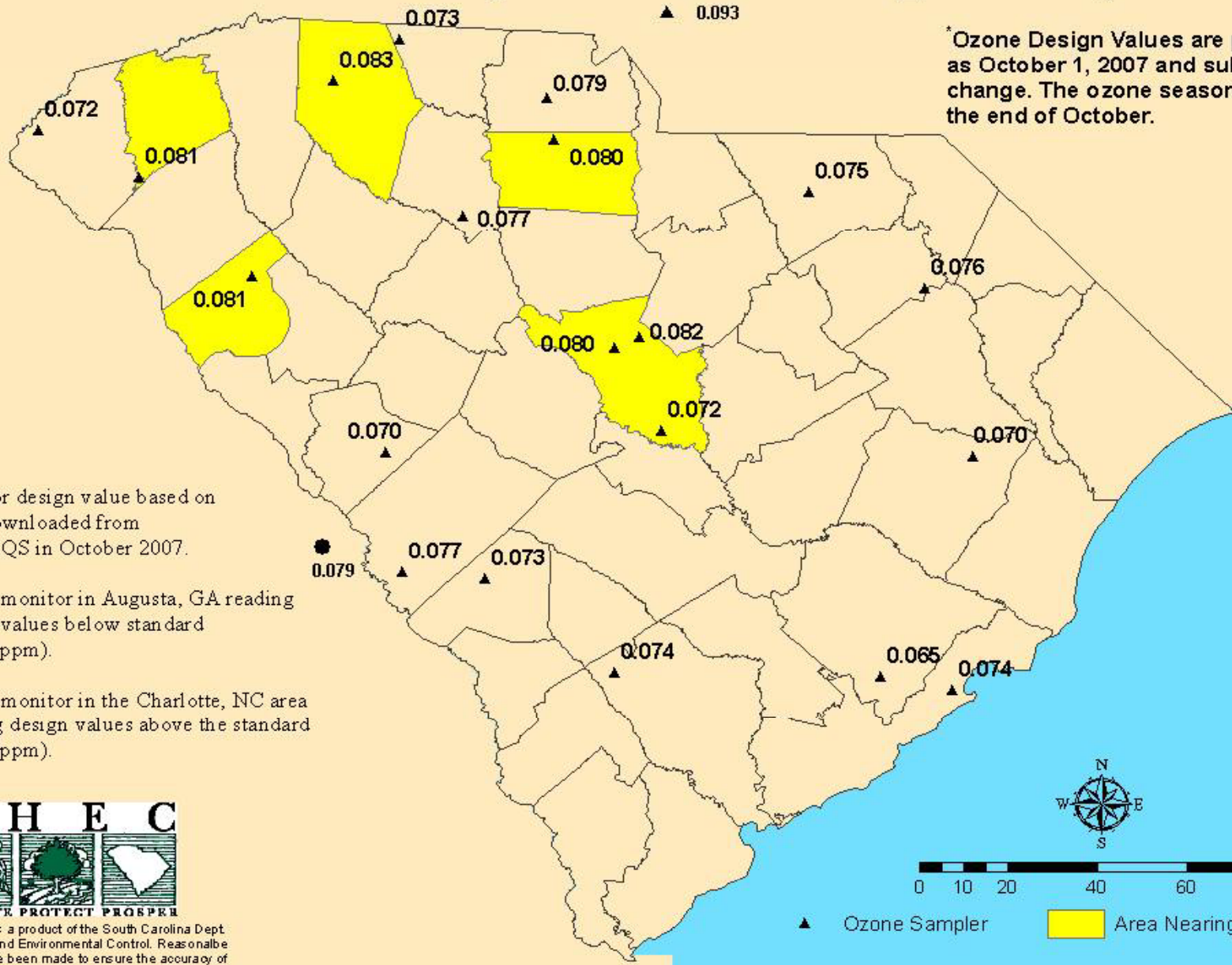


Ground-level Ozone Status

- All SC monitors meeting the current standard
- Anticipate redesignation of EAC areas to attainment early next year
- Partial York County tied to Charlotte but on target to “attain” by 2010 and be redesignated to attainment

South Carolina Preliminary* 8 hour Ozone Design Values (2005-2007)

*Ozone Design Values are preliminary as October 1, 2007 and subject to change. The ozone season lasts until the end of October.



Monitor design value based on data downloaded from EPA-AQS in October 2007.

- Ozone monitor in Augusta, GA reading design values below standard (0.079 ppm).
- ▲ Ozone monitor in the Charlotte, NC area reading design values above the standard (0.093 ppm).



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baq-2007

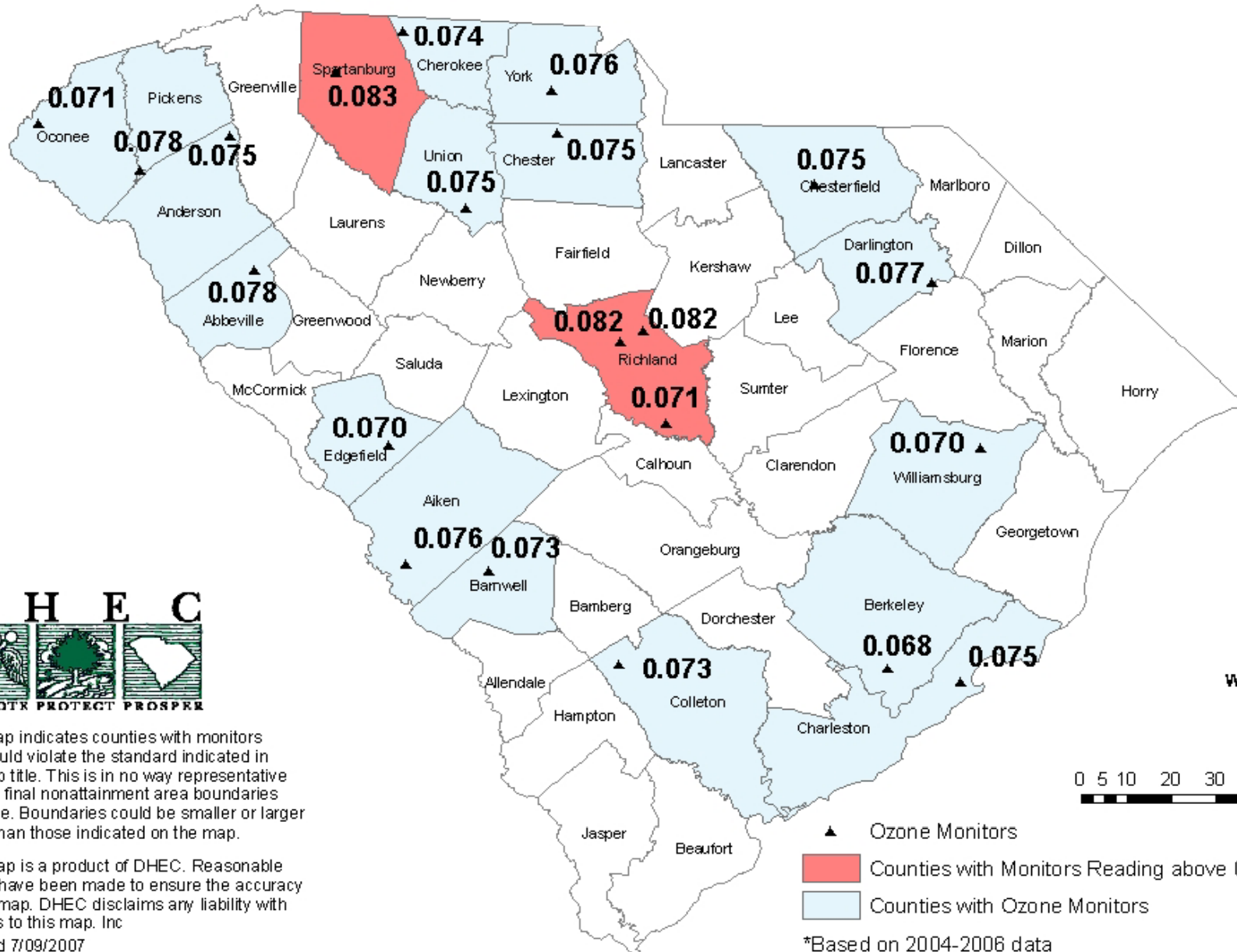


- ▲ Ozone Sampler
- Area Nearing Standard

Proposed Ozone Standards

- EPA has issued a proposed rule to lower the standard. The final rule should be published in March 2008.
- Primary standard
 - Range of 0.070 to 0.075 ppm
 - Taking comment on:
 - As low as 0.060 ppm
 - As high as current standard of 0.080 ppm (without allowing rounding)

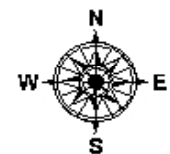
Ozone Monitors in South Carolina with Concentrations above 0.080 ppm*



This map indicates counties with monitors that would violate the standard indicated in the map title. This is in no way representative of what final nonattainment area boundaries might be. Boundaries could be smaller or larger areas than those indicated on the map.

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Created 7/09/2007

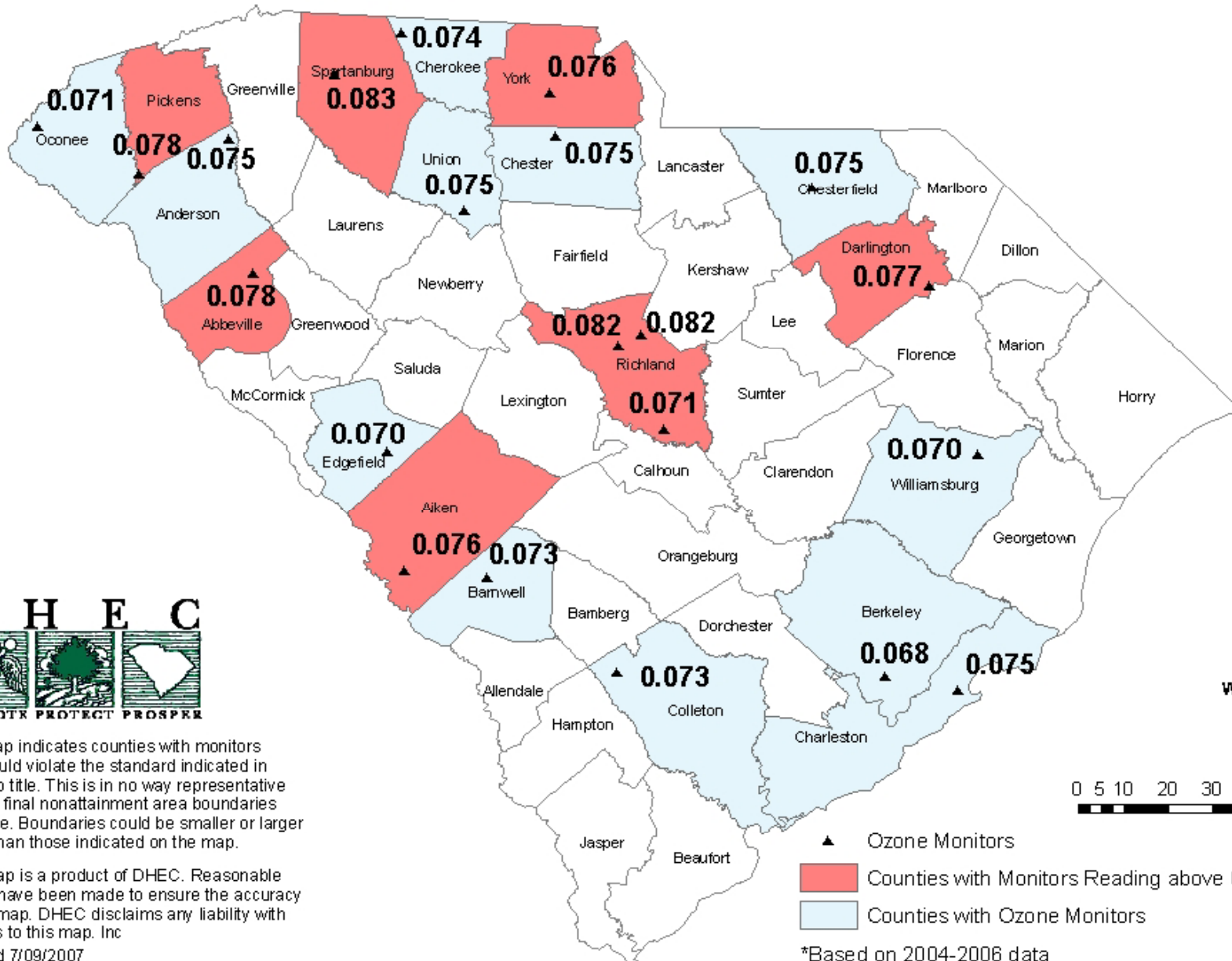


0 5 10 20 30 40 Miles

- ▲ Ozone Monitors
- Counties with Monitors Reading above 0.080 ppm
- Counties with Ozone Monitors

*Based on 2004-2006 data

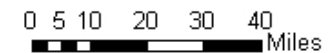
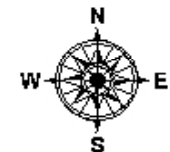
Ozone Monitors in South Carolina with Concentrations above 0.075 ppm*



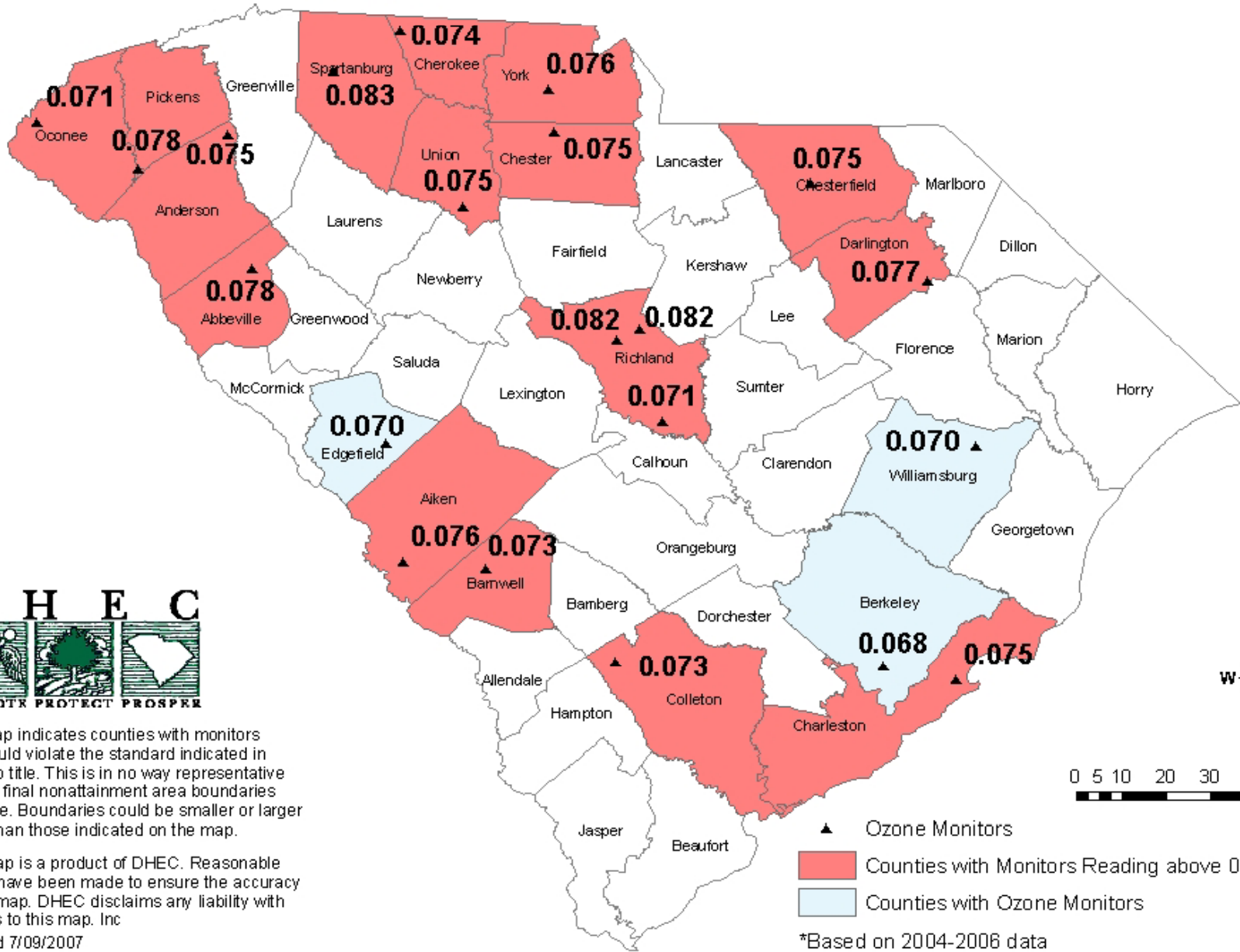
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- ▲ Ozone Monitors
 - Counties with Monitors Reading above 0.075 ppm
 - Counties with Ozone Monitors
- *Based on 2004-2006 data



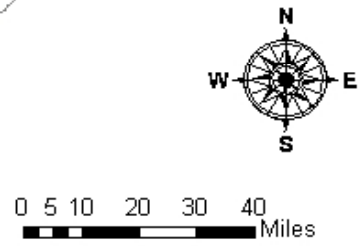
Ozone Monitors in South Carolina with Concentrations above 0.070 ppm*



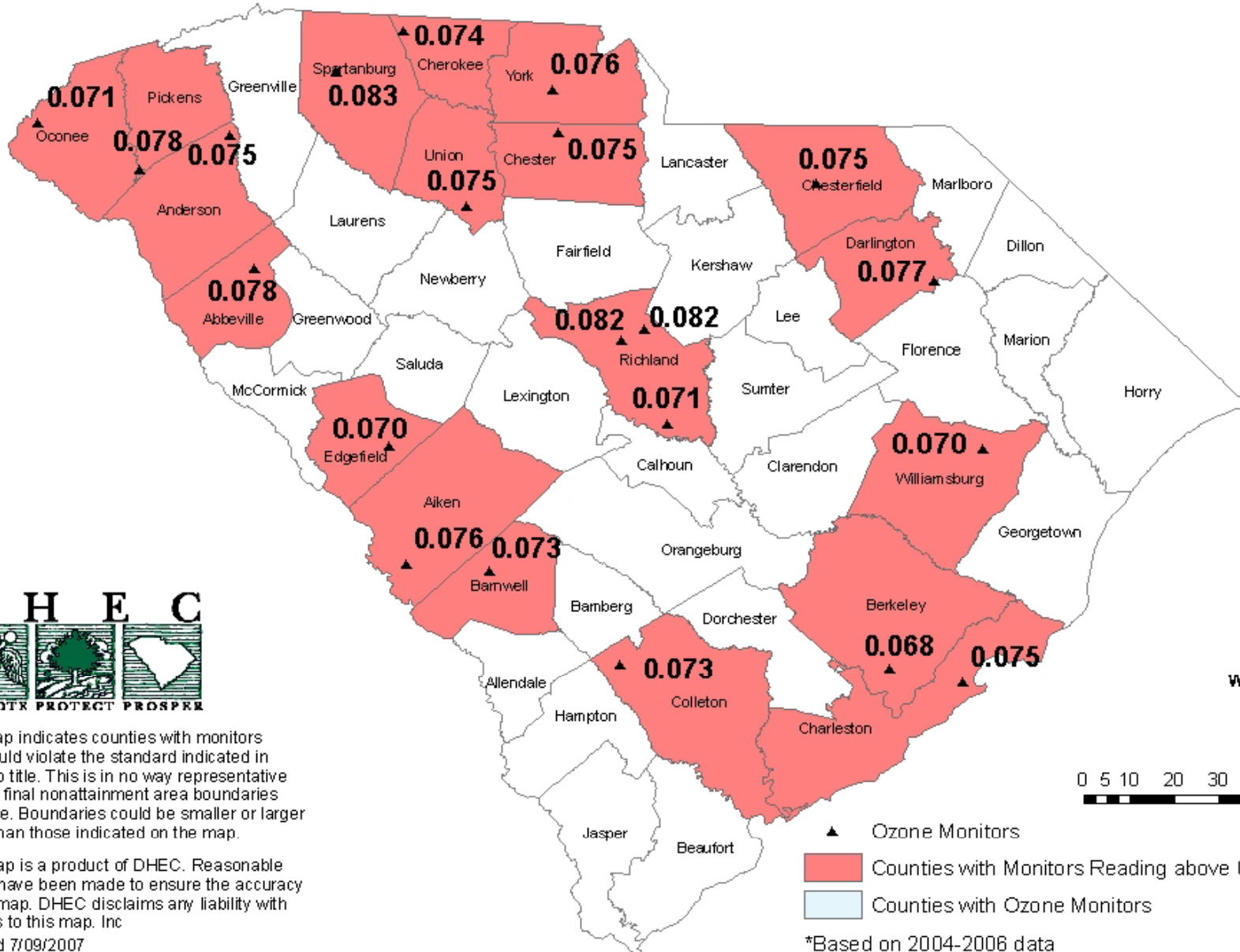
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- ▲ Ozone Monitors
 - Counties with Monitors Reading above 0.070 ppm
 - Counties with Ozone Monitors
- *Based on 2004-2006 data

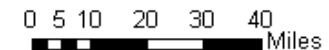
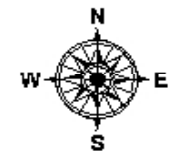


Ozone Monitors in South Carolina with Concentrations above 0.065 ppm*



This map indicates counties with monitors that would violate the standard indicated in the map title. This is in no way representative of what final nonattainment area boundaries might be. Boundaries could be smaller or larger areas than those indicated on the map.

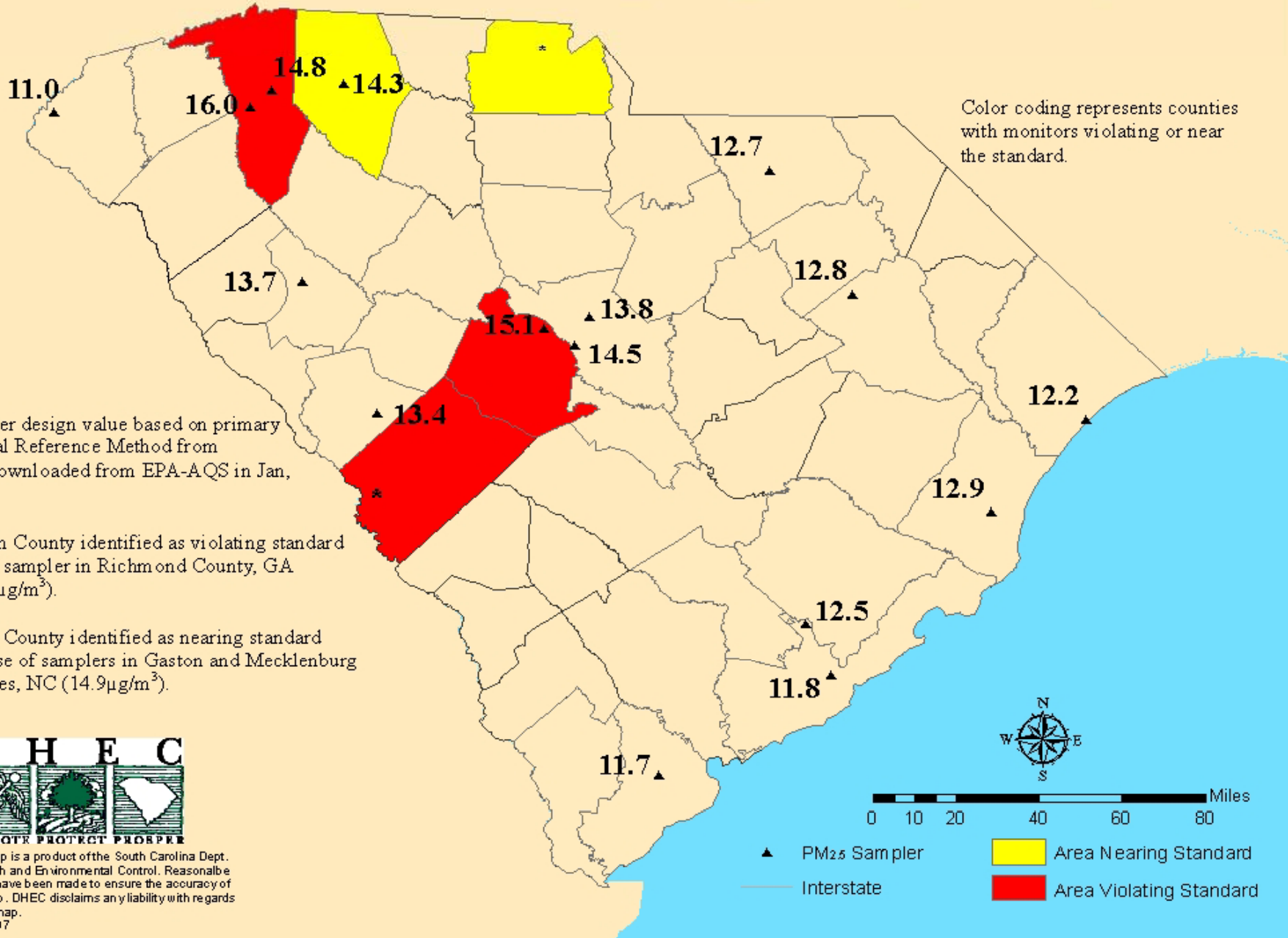
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PM_{2.5} Status

- All SC Monitors Attaining the Daily Standard
- Two SC Monitors Violating the Annual Standard
- Two Georgia Monitors Violating the Annual Standard (Impact SC)

South Carolina Annual PM_{2.5} Design Value (2004-2006)



Sampler design value based on primary Federal Reference Method from data downloaded from EPA-AQS in Jan, 2007.

*Aiken County identified as violating standard due to sampler in Richmond County, GA (16.1 µg/m³).

*York County identified as nearing standard because of samplers in Gaston and Mecklenburg counties, NC (14.9 µg/m³).



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- ▲ PM_{2.5} Sampler
- Interstate
- Area Nearing Standard
- Area Violating Standard



Local Efforts To Improve Air Quality

Open Burning Partner: SC Forestry Commission

- Expanded Fire Prevention Team project to include air quality message
- Targeting “Nonattainment” Counties
 - Partners: FC, DHEC, County officials
 - Intense 2 week outreach/education effort; media blitz
 - Burn site inspections/warnings
 - Follow-up later/enforcement

Lexington County

- **Strengthened open burning ordinance**
 - Increasing the distance for residential yard burning
 - Banning open burning of land clearing and right-of way maintenance during ozone season
- **Formation of stakeholder committee**
- **Lawn Mower Exchange**
 - **Partners: Richland Co, DHEC, Keep the Midlands Beautiful**
 - **April 21, SC State Museum**
- **Civil Penalties/back to AQ projects**

Greenville County

- Public Awareness Campaign
 - Liaison assigned to each City
 - Presentations to City Councils, fire depts., civic groups....
- Car Care Event
 - Partners: AAA, Goodwill, Michelin, Spinx
 - May 12, 2007
- Manager of Environmental Programs
- City of Greenville
 - Full time bicycle pedestrian planner

Greenville County - City of Fountain Inn

- AQ improvement policy – Fall 2006
- B²@ School/ Fountain Inn Elem.
 - Idling Reduction Campaign
 - Community Support
 - Parents, Students, Teachers, City Council, Garden Club
- Gas Can Exchange
 - April 21, 2007
 - Partners: Caterpillar, Spinx Oil

Spartanburg County

Air Quality Advisory Committee

- Formed in Fall 2006
- 3 Work Groups formed to develop and document air quality strategies
- Present Suggestions to County Council

Monitoring Network Review



Monitoring Plan

- Required under 40 CFR Part 58.
- Due to EPA annually by July 1st, first plan under new rule submitted.
- Five year comprehensive assessment required, first due July 2010.
- Public comment periods required for all plans, assessments.

Monitoring Plan (cont'd.)

- Plan was put out for 30-day public comment period in May 2007. Received comments from various stakeholders.
- Plan was submitted to EPA in July 2007.
- Received conditional approval of the plan.
- Implementation is underway.



Regulatory Update

Pending EPA Approval

- **110(a)(2)(D)(i) Plan:** Final package submitted to EPA on 6-25-07; Notice of Final SIP amendment to be published in *SC State Register* on 10-26-07
- **York Attainment SIP:** Final, collective RACT/RACM/Ozone Attainment Demonstration submitted to EPA 08-31-07
- **NOx SIP Call – Phase II:** Final package submitted to EPA 4-14-05
- **Permit Streamlining (R. 61-62.1 & SIP):** Final package submitted to EPA on 9/28/07; became state-effective 5-25-07
- **OSWI:** OSWI plan submitted to EPA 7-05-07
- **CAMR:** Final package submitted to EPA on 8-16-07

EPA Approval

- **CAIR:** EPA published a direct final rule approving SC version of CAIR (and associated SIP modification) on 10-09-07 to become effective 12-10-07; state-effective 6-22-07
- **Ozone and PM2.5 NAAQS (R. 61-62.5, Standard No. 2; & SIP):** EPA published a direct final rule on 8-22-07 to become effective on 10-22-07
- **Consolidated Emissions Reporting Rule – CERR (R. 61-62.1 & SIP):** EPA published a direct final rule on 12-7-06; became effective 2-05-07
- **NSR/PSD:** EPA published a notice of proposed conditional approval on 9-12-07

Upcoming

- **Amendment of R. 61-86.1, Standards of Performance for Asbestos Projects:** Notice of Proposed Regulation to be published in 10-26-07 SC State Register, Staff Informational Forum to be held 11-26-07 and Public Hearing before the Board in December.
- **Emissions Offsets Guidance:** Interim guidance to provide direction to sources that are interested in creating emission offsets for their own and/or others' use and for sources needing to obtain emission offsets from another source for use in accordance with Regulation 61-62.5, Standard No. 7.1, *Nonattainment New Source Review (NSR)*.



Compliance & Enforcement

Compliance

October 1, 2006 – September 30, 2007 (FFY)

- Regional Inspections – 1881
- Open Burning Investigations – 429
- Central Office Inspections (112r and Asbestos) - 360

Enforcement

October 1, 2006 – September 30, 2007 (FFY)

- Number of enforcement referrals received
- 454
- Number of Informal Enforcement Actions Taken (NOVs, Warning Letters, NFA)
- 252
- Number of Orders issued
- 56
- Total amount of penalties assessed -
\$505,250.00

Violations

5 most common violations at permitted facilities:

- 1) Recordkeeping/Reporting
- 2) Permitting (failure to obtain)
- 3) Emissions
- 4) Monitoring
- 5) Source Testing

The background of the slide features a repeating grid of a stylized tree and the word "PROTECT". The tree is depicted with a thick trunk, a dense canopy of leaves, and a small bush at its base. The word "PROTECT" is written in a serif font below the tree. The entire grid is rendered in a light gray color.

Permitting &

Expedited Review

Understanding Your Permit

- **Read your permit carefully when you receive it – call your permit engineer**
- **Note the effective date and expiration date**
- **Review the Emission Limits (short term and annual limits)**
- **Review any Source Testing Requirements and their methods and protocols**
- **Review permit conditions for operating parameters and emissions limitations**
- **Reporting and record keeping requirements**
- **Notification Requirements**

Understanding Your Permit

- **Notification Requirements**

- **30 days of construction commencement**
- **15 days of actual source start-up**
- **90 days prior to expiration of Operating Permit**
- **Notifications must be postmarked within required timeframes**

Expedited Review Program

- Pilot Program effective June of 2007
- Establishes expedited review time frames for various permit types
 - Minor Source Permit – 30 days
 - Synthetic Minor Permit – 65 days
 - PSD Permit -120 days (Class I is 150 days)
 - General Permits – 10 to 55 days

Expedited Review Program

- Pre-application meeting recommended (PSD -required)
- Eligibility Requirements, Procedures, and Time Frames are outlined in the SOP
- One time fees range from \$1500 (General Permit) to \$25,000 (Class I PSD Permit)
- Allows for “fair” application processing

http://www.scdhec.net/environment/baq/docs/permitting/BAQ_Expedited_Review_Program_SOP-20070627.pdf

“Climate” Initiatives



“Climate” & Nonattainment

- “Co-benefits” – measures and conservation efforts that reduce carbon dioxide emissions often also reduce emissions that contribute to ozone, particulate matter and other NAAQS

Bureau of Air Quality – “Climate” Activities

Supporting Governor’s Climate Initiative.



Supporting SC cities with climate action plans and quantifying base emissions.



The Climate Registry – encouraging “reporters” to sign up.

an anti-idling

clean air campaign

b2

breathe better



 Bike to work day.





ENERGY STAR CHANGE A LIGHT, CHANGE THE WORLD

South Carolina

- Pledges: 9,797
- Bulbs: 22,551
- Energy Costs Saved:
\$591,423
- Greenhouse Gases:
9,223,359 pounds



The Climate Registry



The Climate Registry

Climate Registry Invitation

- Voluntary, collaborative partnership of 46 states, tribes, Canadian provinces and Mexican states to manage a common greenhouse gas registry
- SC is a founding member (Board member) and a member of the stakeholder advisory committee



The Climate Registry

Key Principles

- A common accounting standard and infrastructure to support all state policies.
- Policy neutral—leave policy to the states.
- The recognized platform for credible and consistent GHG emissions reporting in North America across borders and industry sectors.
- Independent third-party verification.
- Public reporting while respecting business confidentiality.

State Support for TCR

- SC joined TCR to provide entities within the state the opportunity to participate.
- Voluntary.
- Complements Governor's climate initiative.
 - Policies of energy efficiency, renewables, fuel alternatives, and commerce incentives – all sectors.
- State & Local governments, large indirect emitters, universities, ... can participate in TCR.
 - Greenville, Charleston, Columbia, already working on US Mayor's Climate Protection Agreement.

Three Step Process

1. Gather data annually, input into web-based software

- All 6 Kyoto gases (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆)
- Direct stationary, mobile, process and fugitive emissions
- Indirect emissions: i.e. purchases of electricity and steam
- National reporting
- Tracking mostly through utility bills & vehicle fuel

2. Verify data using third-party verifiers

- Complete within 12 months of end of reporting year

3. Report bottom line data publicly



Bureau of Air Quality
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