



Nonattainment Designations

How does it affect me?

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NC DAQ



Ozone Nonattainment

- ✍ NC has identified and designated areas within the state as “nonattainment” under the new, more stringent federal ozone ambient standard
- ✍ NC believes that rules currently in place will effectively allow areas in in nonattainment to become in attainment
- ✍ Industrial NO_x and VOC emissions are one area of focus



Ozone Nonattainment

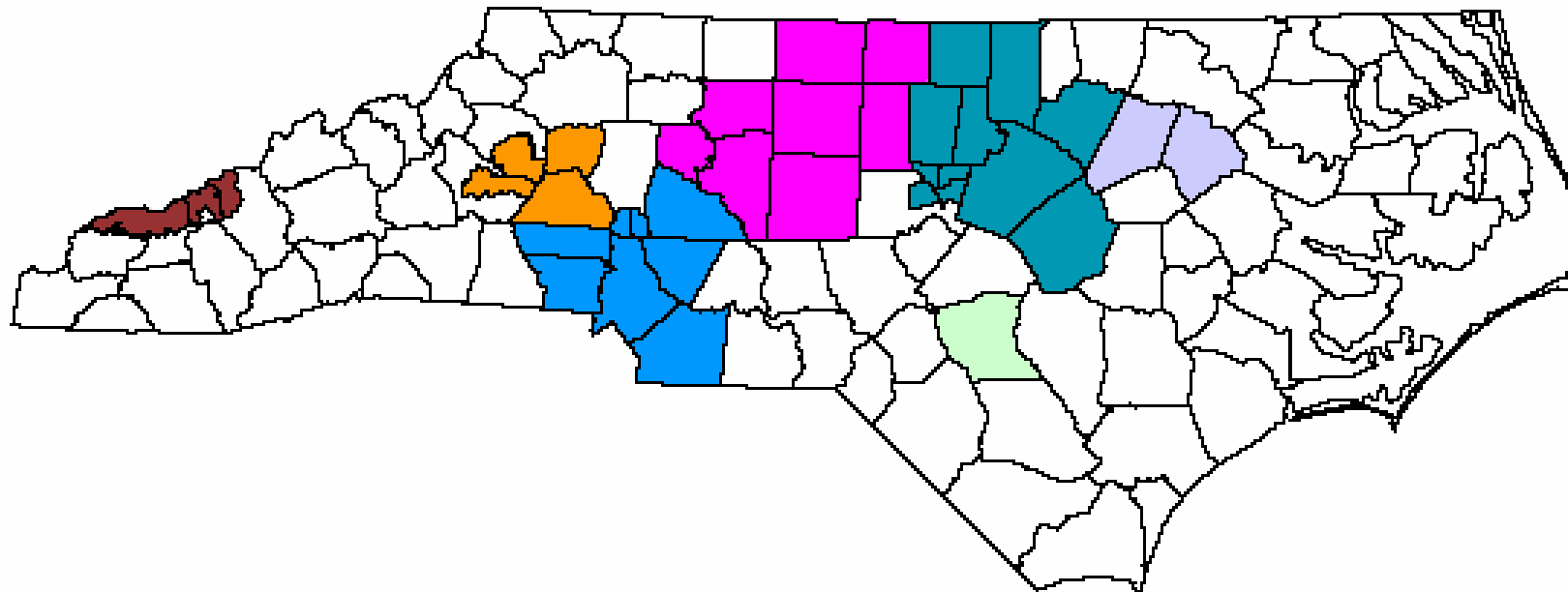
- ✍ NC DAQ submitted initial recommendations to EPA in July 2003 including both whole and partial counties
- ✍ Some counties were “reclassified” after the July submittal and removed in a February 2004 update



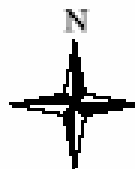
Ozone Nonattainment

- ✍ EPA made final determination on April 15, 2004
- ✍ Effective date for redesignation was June 15, 2004
- ✍ EPA determinations included whole counties and whole Metropolitan Statistical Areas (MSAs) with some exceptions

EPA's Boundary Designations for 8-Hour Ozone Standards for North Carolina (4/15/04)



- Triangle_cty_415.shp
- ncco_meter.shp
- charlotte_cty_415.shp
- Charlotte_twn_1.shp
- Triad_cty_415.shp
- Triangle_twn.shp
- unifour_cty_415.shp
- Mpo_hick_m
- Great Smoky Mtn.
- Fayetteville Area.shp
- Rockymount_cty_415.shp



Notes:

- Charlotte area: Moderate, Max. attainment date: June 2010
- Triad area (EAC): Moderate, Max. attainment date: Dec. 2007
- Triangle area: Basic, Max. attainment date: June 2009
- Unifour area(EAC): Basic, Max. attainment date: Dec 2007
- Haywood & Swain cos: Basic, Max. attainment date: June 2009
- Fayetteville area(EAC): Basic, Max. attainment date: Dec 2007
- Rocky Mount area: Basic, Max. attainment date: June 2009



Who is in Nonattainment?

- ✍ Final determination affects 26 whole counties and 6 partial counties
- ✍ Partial counties are: Burke and Caldwell (Unifour boundary), Chatham, Great Smokey Mountains National Park (Haywood and Swain), and Iredell



Affected Counties

Alamance*

Alexander*

Burke* (P)

Cabarrus

Caldwell* (P)

Caswell*

Catawba*

Chatham (P)

Cumberland*

Davidson*

Davie*

Durham

Edgecombe

Forsyth*

Franklin

Gaston

Granville

Guilford*

Haywood (P)

Iredell (P)

Johnston

Lincoln

Mecklenburg

Nash

Orange

Person

Randolph*

Rockingham*

Rowan

Swain (P)

Union

Wake

P – partial counties

* – Early Action Compacts (EAC) Counties



Early Action Compacts

- ✍ EAC Counties –

- ✍ 3 of the 7 “Areas” covered by EAC
- ✍ 13 of the 32 counties
- ✍ NNSR Postponed in EAC counties
- ✍ PSD review applies in EAC counties
 - ✍ Treated as attainment area



How am I Affected?

- ✍ VOCs and NO_x are ozone precursors
- ✍ The PSD/NSR Major Source threshold is reduced from 250 tpy to 100* tpy for VOCs and for NO_x for non “named” source categories

*based on Basic/Moderate Nonattainment Category Status



How am I Affected?

- ✍ All other PSD/NSR pollutants remain 250 tpy (non “named”)
- ✍ Major modification significance thresholds are unchanged
 - ✍ 40 tpy for VOC, NO_x, SO₂
 - ✍ 100 tpy CO
 - ✍ 15 tpy for PM₁₀



How am I Affected?

- ✍ Major modifications for VOC and NO_x require NSR review for LAER and Offsets at Major Sources
- ✍ Major modifications for all other pollutants require PSD review for BACT



LAER and Offsets

✍ LAER:

- ✍ Lowest Achievable Emission Rate

✍ Offsets:

- ✍ Reductions for NO_x and/or VOC from other sources within the nonattainment area
- ✍ Requires that new emissions be less than reductions by specified ratio (to-be-determined, e.g. 1:1 or 1:1.15)



Example 1

- ✍ Facility with the following PTEs in a Nonattainment county (no EAC):
 - ✍ 120 tpy VOC
 - ✍ 2 tpy NO_x
 - ✍ 150 tpy SO₂



Example 1, continued

- ✍ Source proposes adding new source with the following additional PTEs:
 - ✍ 15 tpy VOC
 - ✍ 45 tpy NO_x
 - ✍ 50 tpy SO₂



Example 1, continued

- ✍ New PTE is 47 tpy NO_x and 135 tpy for VOC
 - ✍ **Facility already major for ozone/VOC (> 100 tpy)**
 - ✍ **Modification PTE < 40 tpy for VOC**
 - ✍ **Modification PTE > 40 tpy for NO_x**
- ✍ LAER and Offsets required for NO_x



Example 1, continued

- ✍ New SO₂ PTE is 200 tpy
 - ✍ No PSD/NSR review for SO₂
 - ✍ Although modification PTE > 40 tpy
 - ✍ Facility still minor for SO₂ (<250 tpy)



Example 2

- ✍ Facility with the following PTEs in a Nonattainment county (no EAC):
 - ✍ 30 tpy NO_x
 - ✍ 500 tpy SO_2



Example 2, continued

- ✍ Source proposes adding new source with the following additional PTEs:
 - ✍ 50 tpy NO_x
 - ✍ 50 tpy SO_2



Example 2, continued

- ✍ New PTE is 80 tpy for NO_x
 - ✍ Still minor for NSR-nonattainment
 - ✍ Modification > 40 tpy

- ✍ New PTE is 550 tpy for SO₂
 - ✍ PSD Major source before modification
 - ✍ Modification > 40 tpy



Example 2, continued

- ✍ PSD Major Modification

- ✍ PSD review for SO_2 and NO_x

- ✍ BACT for SO_2 and NO_x

- ✍ **No LAER or Offsets for NO_x because NO_x is less than 100 tpy**

- ✍ **BACT for NO_x because PSD major status for SO_2 triggers review for > 40 tpy increase in NO_x**



What else?...RACT

- ✍ "Reasonably available control technology" (RACT) means the lowest emission limit which a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology which has been applied to similar, but not necessarily identical, source categories.



RACT

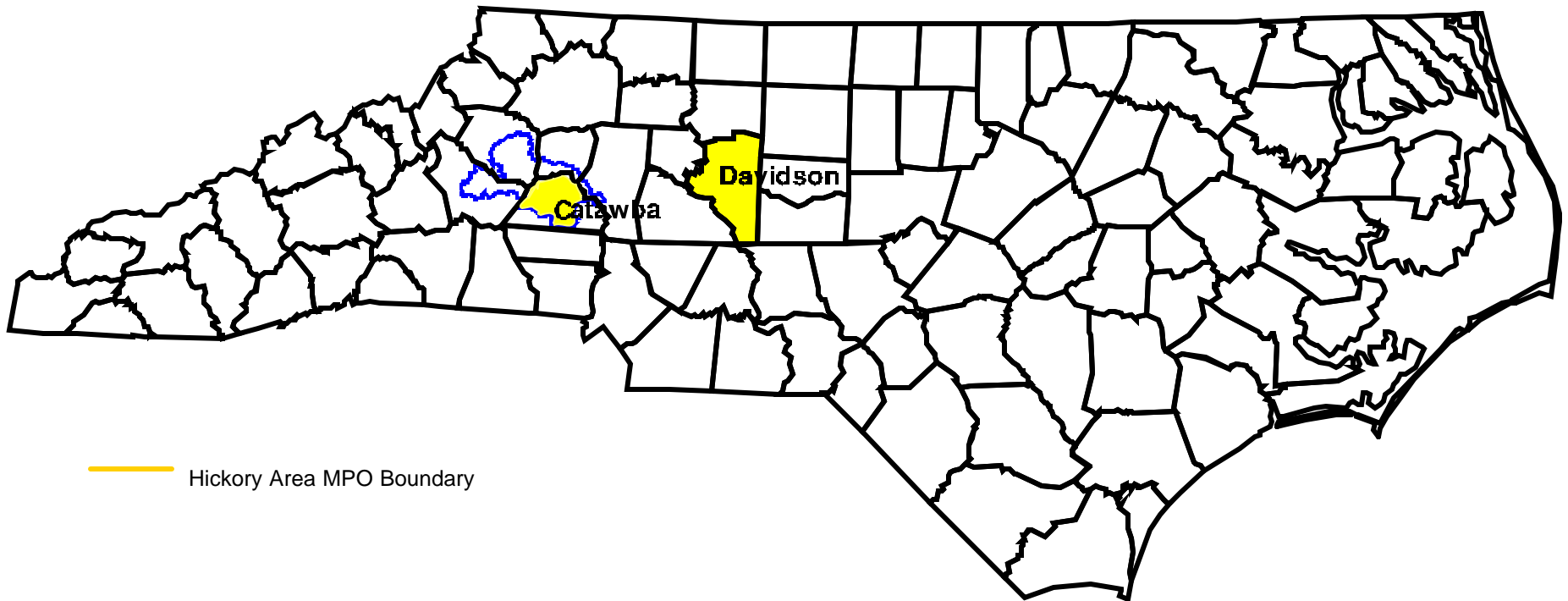
- ✍ NC DAQ may develop new rules as needed in order to return to attainment
 - ✍ 2D .0900 regulations for VOCs
 - ✍ 2D .1400 regulations for NO_x
- ✍ Existing regulations are anticipated to sufficient
 - ✍ Clean Smoke Stacks Bill/ NO_x SIP Call
 - ✍ 2D .0900 and 2D .1400



PM-2.5 Nonattainment

- ✍ NC DAQ submitted initial recommendations to EPA in February 2004
- ✍ NC DAQ submittal included two counties
 - ✍ Catawba
 - ✍ Davidson

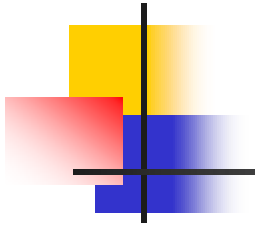
North Carolina's Recommendations on Boundaries for PM_{2.5} Nonattainment Areas.





PM2.5 Nonattainment

- ✍ EPA will make a final determination by December 31, 2004
- ✍ Current EPA recommendations include whole counties and whole Metropolitan Statistical Areas (MSAs)





PM2.5 Nonattainment Effects?

- ✍ May include new regulations for
 - ✍ SO₂
 - ✍ NO_x
 - ✍ PM
 - ✍ VOCs
 - ✍ Ammonia
- ✍ Stay Tuned...