State and Local Air Agencies and Agriculture Emissions

Amy Royden-Bloom
Senior Staff Associate
STAPPA/ALAPCO

STAPPA & ALAPCO

- State and Territorial Air Pollution Program Administrators (STAPPA) & Association of Local Air Pollution Control Officials (ALAPCO)
- Two national associations representing state and local clean air agencies nationwide

Clean Air Act Roles and Responsibilities

- Implementation of the Clean Air Act is a joint responsibility among EPA, states, localities and tribes
- “[A]ir pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source), and air pollution control at its source is the primary responsibility of States and local governments.” CAA section 101(a)(3).

State and Local Air Agencies Perform Most of the Work

- Collect 99% of the data included in EPA's AIRS databases
- Handle 90% of all enforcement actions
- Receive delegation of over 80% of environmental programs
- Write SIPs demonstrating attainment/maintenance of NAAQS

More on State Implementation Plans (SIPs)

- Contain enforceable measures for reducing emissions
- Must demonstrate attainment by attainment date
- Federal measures help, but ultimately states and localities on hook to find emission reductions

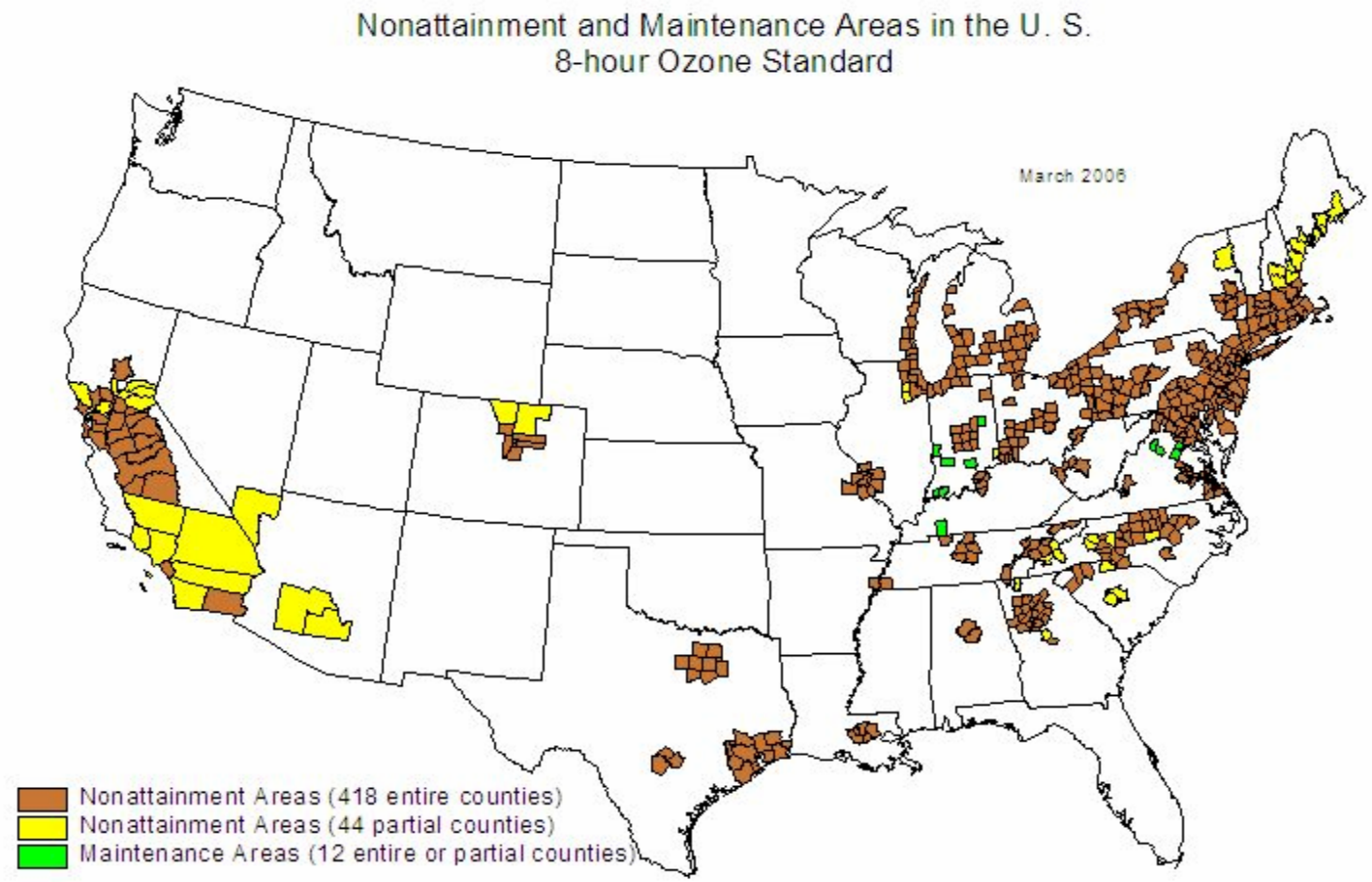
More on SIPs

- Pollution control requirements apply to all industry sectors
  - Electric utilities but also dry cleaners, bakeries, auto body shops, e.g.
- Nonattainment areas: new sources LAER; existing RACT
- Attainment areas: new sources BACT; existing PSD increment

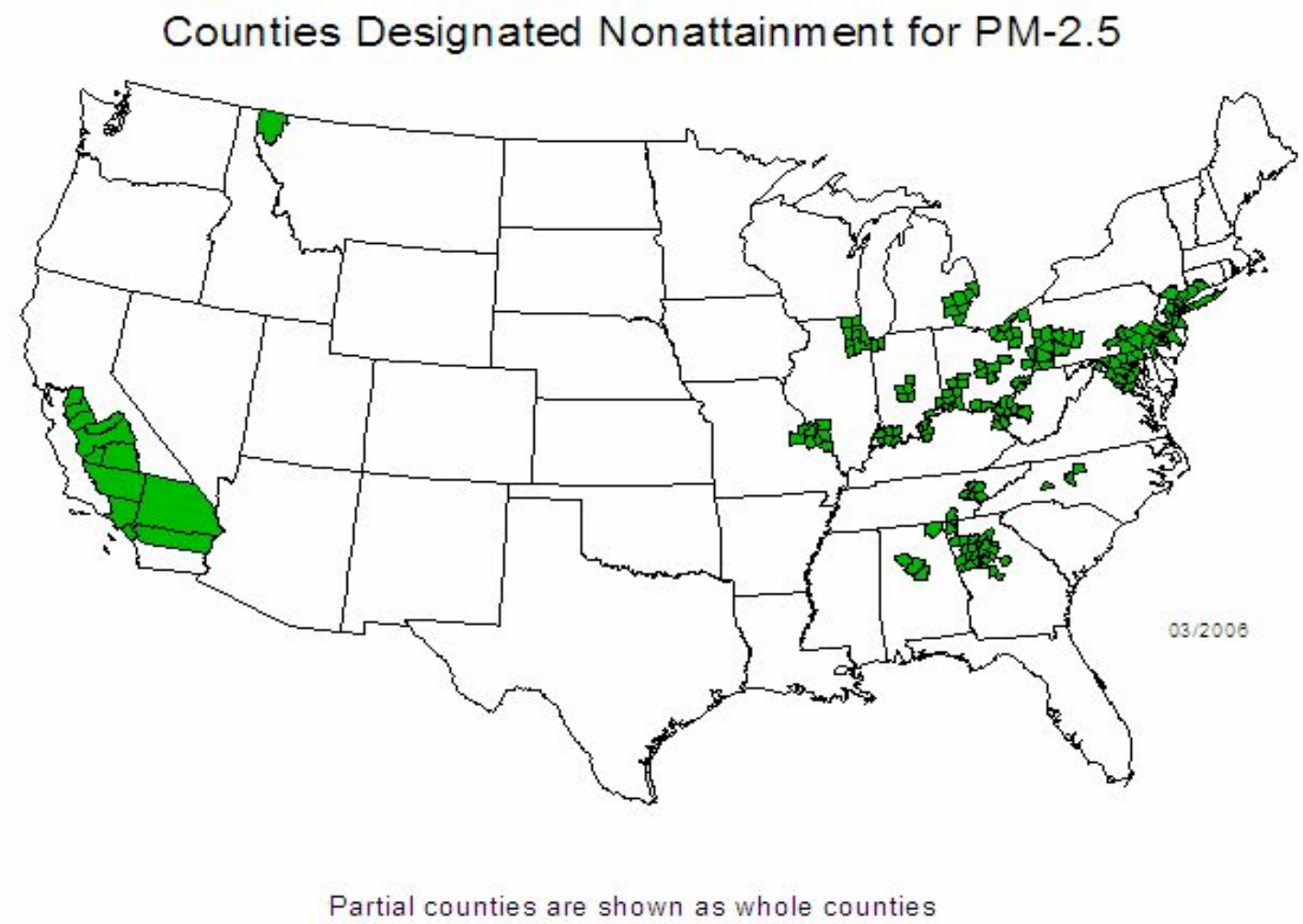
More on SIPs

- Zero sum game – if one industry does not reduce emissions, will need to seek emission reductions from another sector
- Ultimate test: monitoring data – are pollution concentrations going down? Three years of clean data needed.

8-Hour Ozone Standard

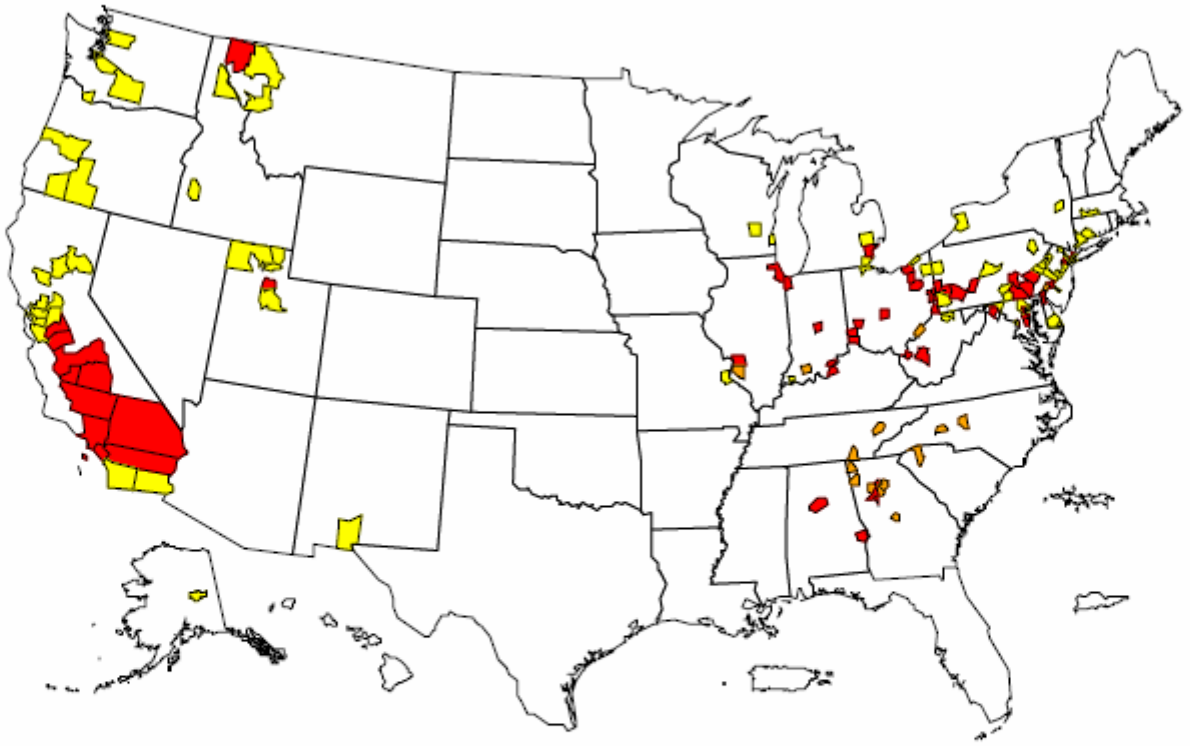


$PM_{2.5}$ Standard



Counties Exceeding 15 μg/m³ Annual and/or 35 μg/m³ 24-hour PM2.5 Standard

Based on 2002-2004 Data*

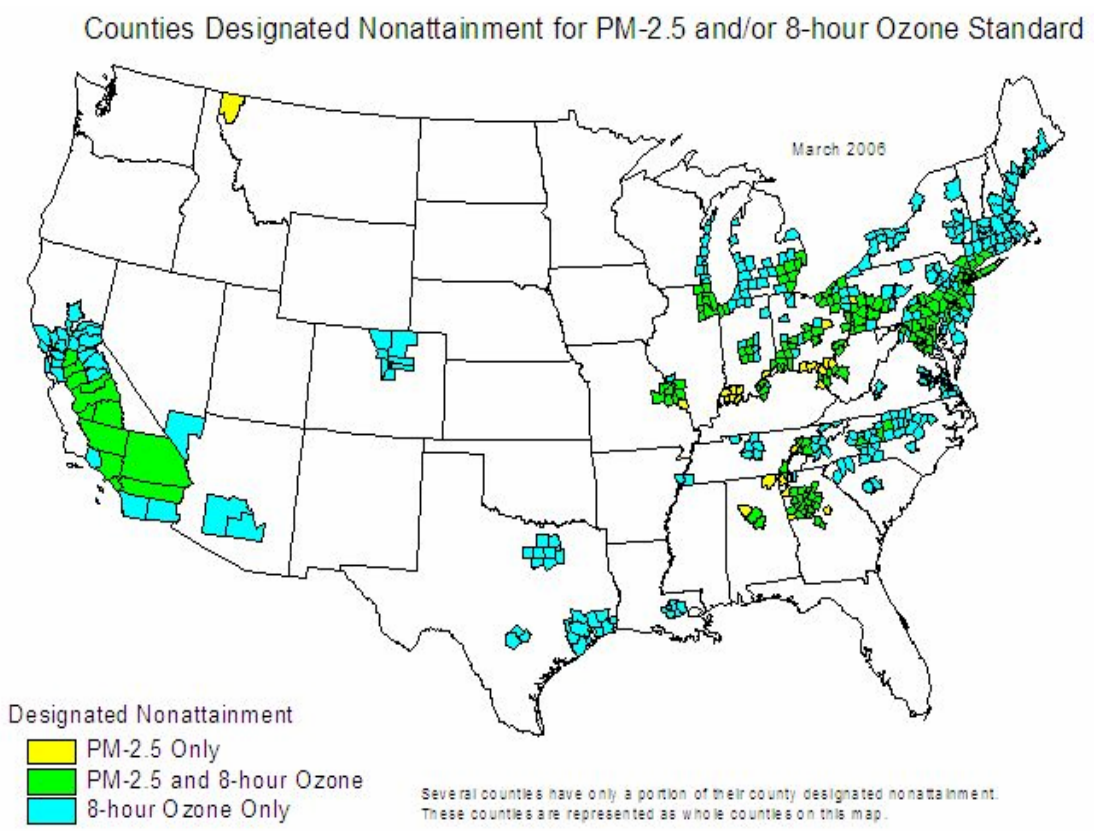


- Annual and 24-hour $PM_{2.5}$ Nonattainment (53 counties)
- 24-hour Only $PM_{2.5}$ Nonattainment (69)
- Annual $PM_{2.5}$ Only Nonattainment (15)

(2002-2004; includes all sites w/ 11+ observations per quarter or those deemed complete via 'data substitution') (137 counties)

***These projections are based on the most recent data (2002-2004). EPA will <u>not</u> designate areas as nonattainment on these data, but likely on 2006-2008 data which we expect to show improved air quality.** Exceptional events (e.g., fires) that may contribute to violations of the proposed standards may be included in this dataset.

8-Hour Ozone and $PM_{2.5}$ Standards

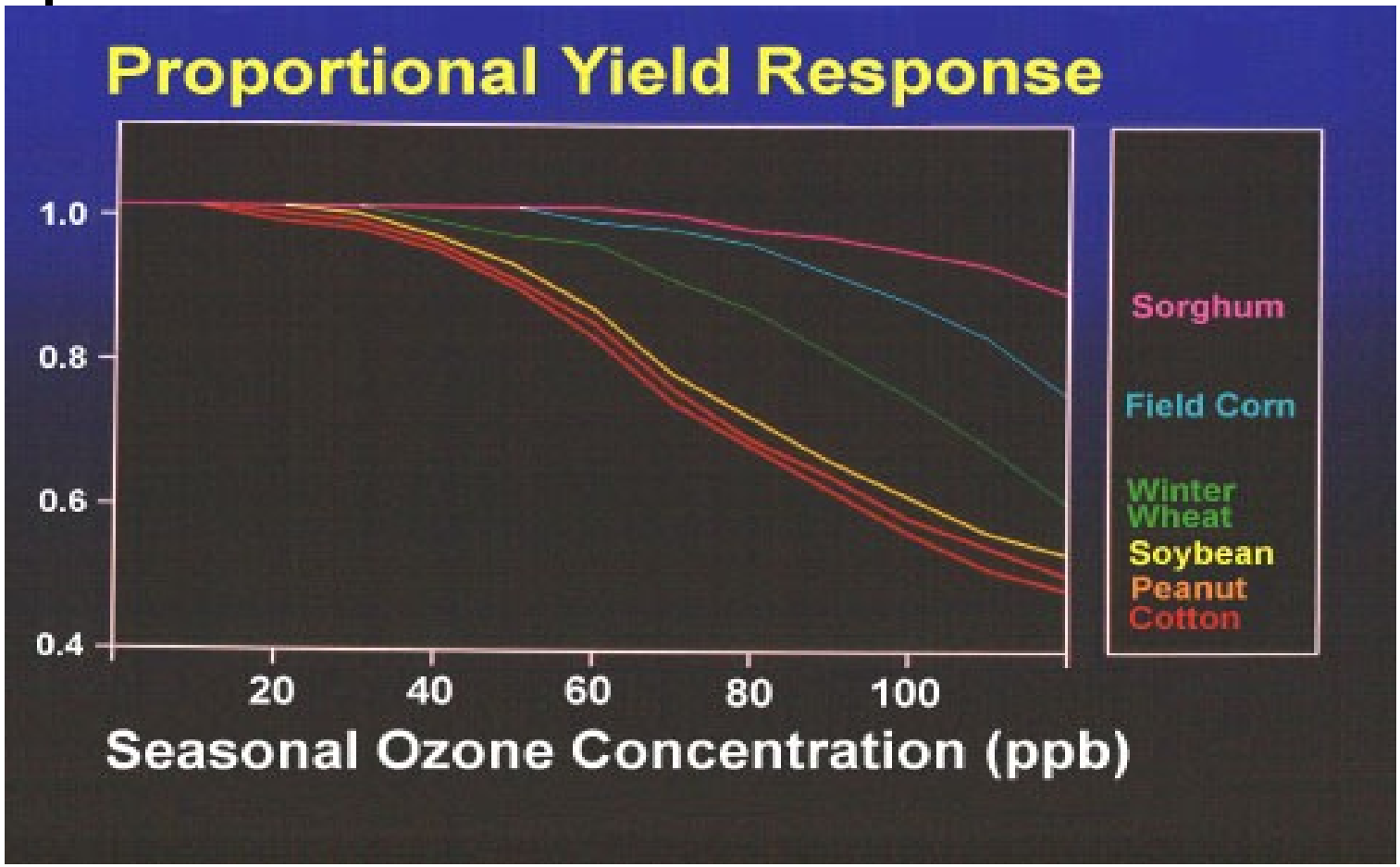


8-Hour Ozone and $PM_{2.5}$ Deadlines Facing States & Localities

Action	Deadline
8-hour ozone	
Attainment demonstration SIPs due	June 2007
Attainment deadlines	June 2007-June 2024 (areas with more severe pollution problems get more time)
Fine Particulate Matter ($PM_{2.5}$)	
SIPs due	April 2008
Attainment Date	April 2010
Attainment Date w/extension	April 2015

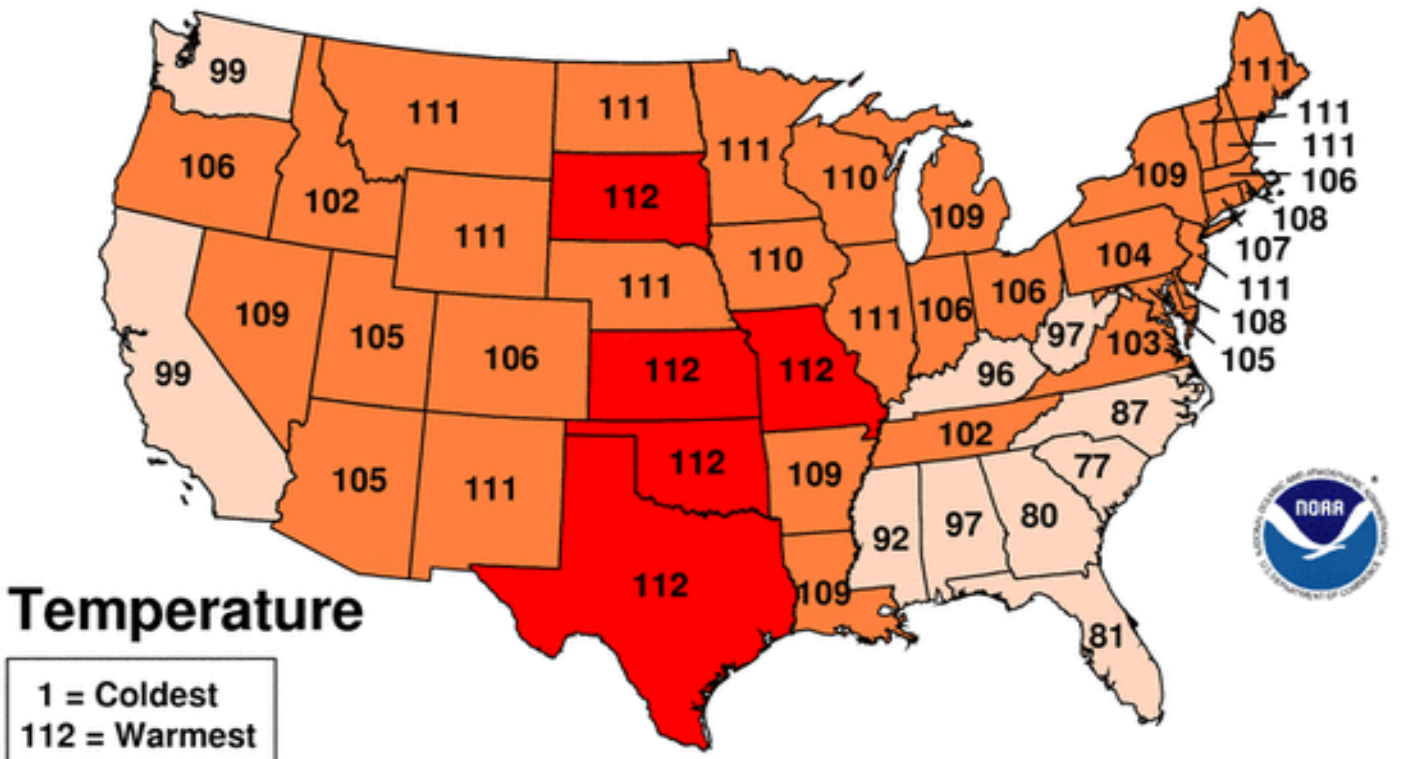
Ozone harms plants

Ozone decreases plant yield



Jan - Jul 2006

National Climatic Data Center/NESDIS/NOAA



Air Emissions from Ag

- Manure lagoons and piles
- Land application of manure
- Barns
- Feed preparation/storage & handling
- Unpaved areas
- Internal combustion engines
- Agricultural burning
- Field dust

AFO Air Emissions

- 50% of U.S. NH_3 emissions
- 25% of U.S. N_2O emissions
- 18% of U.S. methane emissions
- NO_x & VOCs are ozone precursors
- NH_3, H_2S and NO are $PM_{2.5}$ precursors
- Direct emissions of $PM_{10\text{-}2.5}$
- Odor

Concerns with Safe Harbor Agreement

- Enforcement waiver
- SIP issues
- Results not timely
- No study of BMPs and no requirement to put on BMPs
- Industry control of study
- Only 14 monitoring sites

Other concerns

- EPA deeming emissions from barns and lagoons fugitive
  - Emissions still have an impact on air quality even if don't "count"
- Legislative exemptions? (e.g., manure & EPCRA and CERCLA)
  - Same concern as above
- Coarse PM standard
  - Exemption of agricultural activities from control to meet standard

Opportunities for Collaboration

- BMPs that limit or avoid release of air pollution
- Control technologies
- Win-wins
  - Methane as an energy source
  - Reduce odor/reduce nuisance complaints
  - Avoid need for regulation if emissions below permitting thresholds
  - ↓emissions = ↓impact of pollution on agriculture

Contact Information

Amy Royden-Bloom
STAPPA/ALAPCO
202-624-7864
aroyden-bloom@4cleanair.org
www.4cleanair.org