

**Energy and the Environment:**  
*Likely Winners & Losers in the Second Obama  
Administration*



ACG Breakfast - December 14, 2012

# Overview of EPA's Regulatory Agenda in the Second Obama Administration

- National Ambient Air Quality Standards (NAAQS) for ozone
- Cooling water intake rule
- Report on the potential impacts of hydrofracking on drinking water resources
- Final guidance on Underground Injection Control (UIC) Class II permitting
- Final guidance on petroleum vapor intrusion
- Mercury and Air Toxics Standards Rule
- NAAQS for sulfur dioxide
- NAAQS for fine particle pollution (PM<sub>2.5</sub>)

# NAAQS For Ozone – Affects Wide Range Of Industries

- Projected costs range between \$19 billion to \$90 billion annually
- Volatile Organic Compounds (VOCs) emitted by:
  - Automotive Components and Automotive Manufacturing
  - Bakery Products – Yeast leavening at commercial and some retail bakeries
  - Fabric Printing, Coating and Dyeing
  - Flexographic Printing
  - Industrial Adhesives
  - Industrial Solvents
  - Marine Surface Coating
  - Metal Can and Metal Furniture Surface Coating
  - Metal Coil Surface Coating
  - Oil and Natural Gas Production
  - Paper and Other Web Coating
  - Product and Rotogravure Printing
  - Rubber/Plastics Coating
  - Wood Product Surface Coating

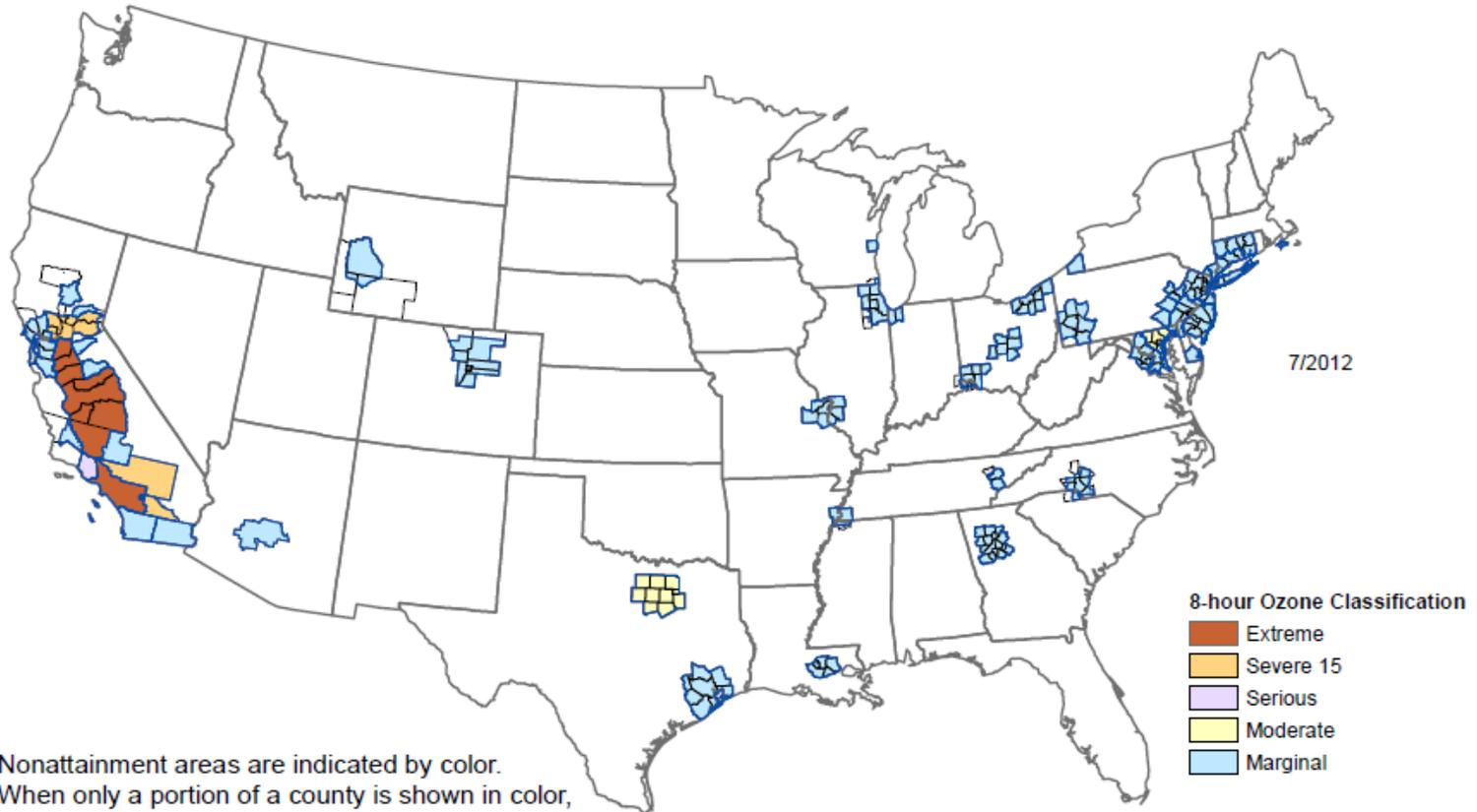


# NAAQS For Ozone – Affects Wide Range Of Industries

- Nitrogen Oxides (NO<sub>x</sub>) emitted by:
  - Agricultural Feedstock Production
  - Any industry using ICI boilers, utility boilers, or process heaters
  - Cement Manufacturing
  - Glass Manufacturing
  - Iron & Steel Industry
  - Lime Kilns
  - Nitric Acid Manufacturing
  - Petrochemical Industry
  - Pulp & Paper Mills

# NAAQS For Ozone – Current Nonattainment Areas

## 8-Hour Ozone Nonattainment Areas (2008 Standard)



Nonattainment areas are indicated by color. When only a portion of a county is shown in color, it indicates that only that part of the county is within a nonattainment area boundary.

Source: Epa.gov

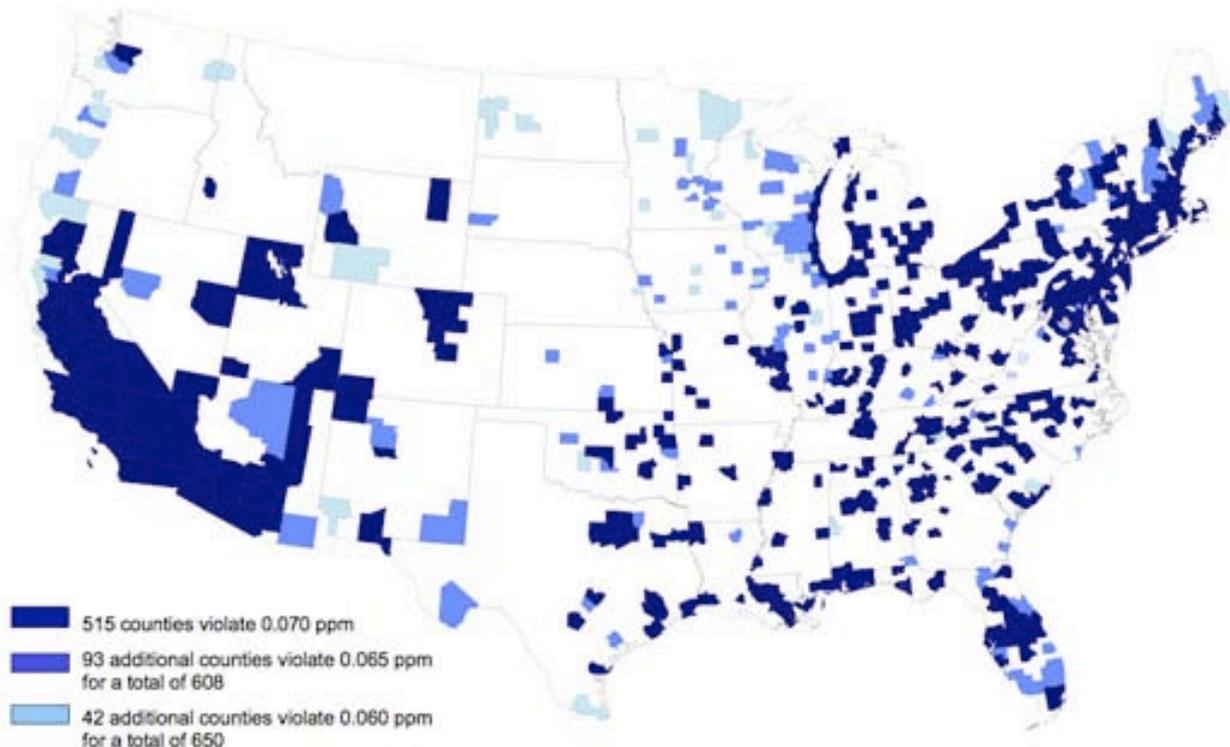


# NAAQS For Ozone – Future Nonattainment Areas

## Counties With Monitors Violating Primary 8-hour Ground-level Ozone Standards 0.060 - 0.070 parts per million

(Based on 2006 – 2008 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



### Notes:

1. No monitored counties outside the continental U.S. violate.
2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

Source: Epa.gov



# Cooling Water Intake Rule – Affects Major Industries

- Projected costs are \$4.9 billion annually for electric generating units and \$181 million annually for manufacturers
- Affects approximately 1,260 existing facilities:
  - Aluminum industry (26 facilities)
  - Chemicals industry (179 facilities)
  - Electric Generating Units (670 facilities)
  - Food products industry (38 facilities)
  - Paper industry (225 facilities)
  - Petroleum refining industry (39 facilities)
  - Steel industry (68 facilities)

# NAAQS for PM2.5 – Affects Wide Range Of Industries

- Projected costs range between \$2.9 to \$69 million annually
- PM2.5 can be emitted as a primary pollutant from stationary and mobile sources:
  - Asphalt production
  - Construction
  - Industrial processes such as smelting and manufacturing
  - Stationary and mobile sources that burn fossil fuels
- PM2.5 can be emitted as a secondary pollutant when a combination of sulfur dioxide, NOx, VOCs, or ammonia react in the presence of sunlight:
  - Cement and lime kilns
  - Gasoline fueling and refining
  - Mining
  - Surface coating operations

# Consequences for Facilities Located in Ozone or PM 2.5 Nonattainment Areas

- Very difficult for any significant facility in an ozone or PM2.5 nonattainment area to obtain a permit to either modify an existing facility or to build a new facility that will increase emissions of NOx, VOCs, or PM2.5
- 3 years after designation of the nonattainment areas, states will be required to adopt state implementation plans (SIPs) to reduce ozone levels to achieve the new NAAQS for ozone and PM2.5 (if they don't, EPA will impose a federal implementation plan (FIP))
- Under the applicable SIP or FIP, individual plants in the nonattainment areas may have as little as 2 years after SIP or FIP adoption to come into compliance by implementing stringent control technologies or modifying processes to achieve reductions (under certain circumstances, the attainment date may be extended)
- Some counties and regions will be forced to impose transportation restrictions

# Penalties for Violations of the Clean Air Act

- Civil Penalties:
  - \$37,500 per day, per source
- Criminal Penalties:
  - Imprisonment up to 5 years for knowingly violating an implementation plan (10 years if a repeat offender)
  - Imprisonment up to 2 years for knowingly making a false material statement or representation, omitting material information, or failing to notify or report as required by the Clean Air Act
  - 371 environmental crimes cases were opened by DOJ in 2011