

Environment Department Air Quality Bureau

Mary Uhl
Chief



Our Mission

To protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality



Historic Air Pollution Episodes

- ◆ Meuse Valley, Belgium – 1930. 60 people died, thousands sickened.
- ◆ Los Angeles, CA – 1943. First recognized episode of smog. Visibility of 3 blocks.
- ◆ Donora, PA – 1948. 20 people died, 6,000 ill.
- ◆ London, England – 1952. 4,000 people died.

Donora, PA, 10/29/48 - Noon



London Killer Fog - 1952



Air Quality Regulatory History

- ◆ June 10, 1947 – California Governor Earl Warren signs into law the Air Pollution Control Act
- ◆ 1955 – Federal Air Pollution Control Act provided funds for federal research.
- ◆ 1967 – Air Quality Act authorized studies of emission inventories, monitoring, and air pollution control strategies.

Air Quality Regulatory History

- ◆ 1970 – Federal Clean Air Act authorized state and federal regulation of air quality.
- ◆ 1971 – the Environmental Protection Agency was created – proposed by President Nixon.
- ◆ 1977, 1990 – Major Clean Air Act Amendments

New Mexico's Authority

- ◆ Federal Clean Air Act
- ◆ Code of Federal Regulations
- ◆ New Mexico Environmental Improvement Act
- ◆ New Mexico Air Quality Control Act (AQCA)
- ◆ New Mexico Administrative Code
- ◆ State Implementation Plan

National Ambient Air Quality Standards (NAAQS)

- ◆ Clean Air Act required EPA to establish standards for pollutants of concern
- ◆ EPA established 6 criteria pollutants:
 - Sulfur dioxide (SO₂)
 - Nitrogen dioxide (NO₂)
 - Ozone (O₃)
 - Particulate matter (PM₁₀ and PM_{2.5})
 - Carbon monoxide (CO)
 - Lead (Pb)

Performance or Equipment Standards

- ◆ Set for specific source types (for example, refineries, boilers, incinerators)
- ◆ May include control equipment, recordkeeping and reporting requirements
- ◆ Set by EPA and then NM usually adopts (if not, EPA will enforce)
- ◆ Include New Source Performance Standards (NSPS), Maximum Achievable Control Technology (MACT), and National Emission Standards for Hazardous Air Pollutants (NESHAP)

Hazardous Air Pollutants (HAP)

- ◆ Clean Air Act identified 187 chemicals as HAP
- ◆ EPA required to identify sources of these chemicals and develop regulations to control them
- ◆ New Mexico adopts EPA requirements by reference and implements program for HAP reduction (MACT/NESHAP)
- ◆ Ongoing updates – both EPA and NM

Clean Air Act Requirements

◆ State Implementation Plan

- Includes plans, rules and programs
- Incorporates U.S. EPA requirements so that EPA doesn't implement in New Mexico
- EPA must approve

◆ Small Business Assistance Program

- Assist small businesses with permit applications
- Prepare outreach materials for small businesses on new state and federal requirements

Clean Air Act Requirements

◆ Permitting

- Title V (over 100 tons/year of criteria pollutants)
- Prevention of Significant Deterioration (over 250 tons/year of criteria pollutants)
- Minor source (over 10 pounds/hour or 25 tons/year)
 - ◆ General Construction Permits for Source Types
 - ◆ Streamline Permits for Oil & Gas Facilities
- Notices of Intent (over 10 tons/year, less than 25 tons per year)
- Dispersion modeling to ensure sources comply with ambient air quality standards
- Permit appeals heard by EIB

Clean Air Act Requirements

◆ Compliance/Enforcement

- Inspections of permitted facilities to ensure compliance
- Penalty provisions

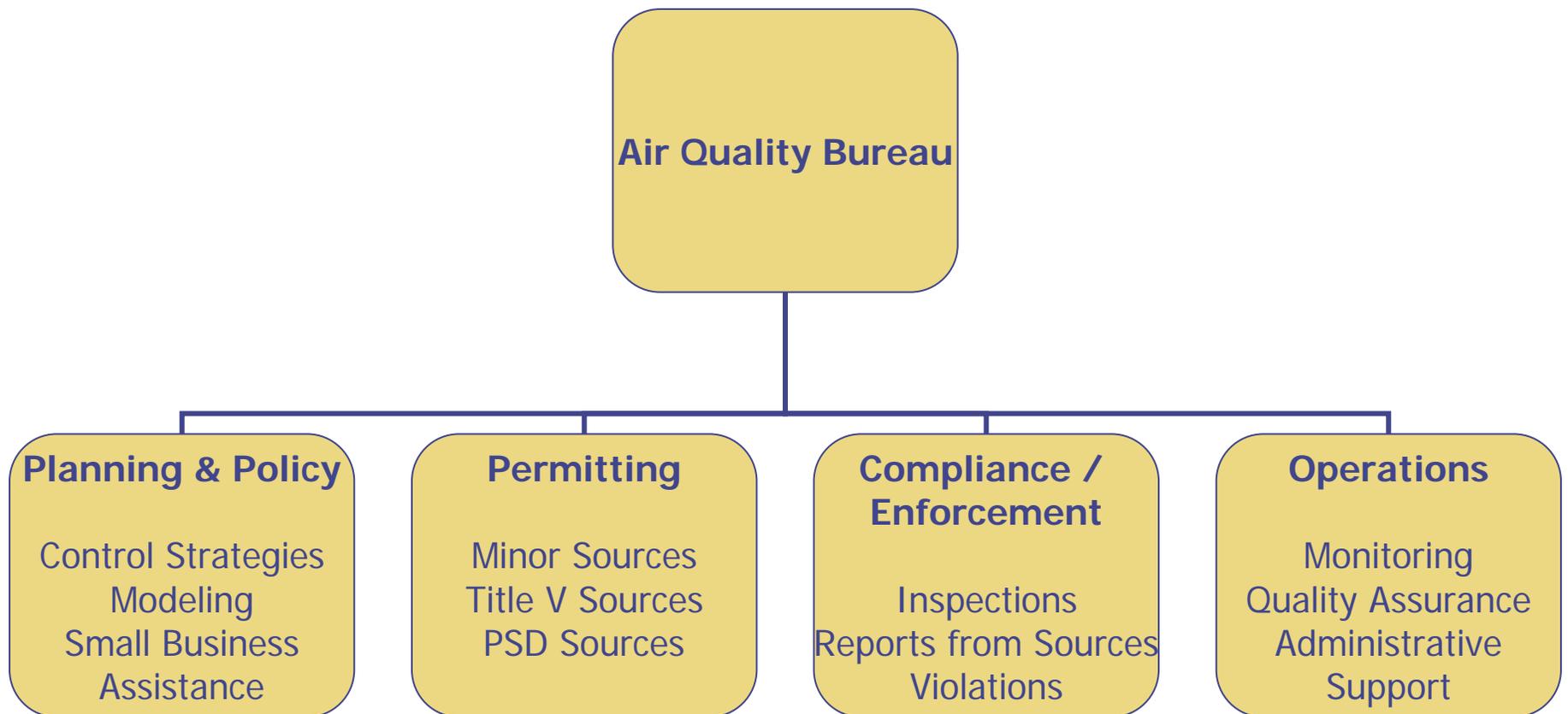
◆ Monitoring

- Monitoring of criteria air pollutants
- Basis of attainment determinations

◆ Quality Assurance

- Ensure monitoring data is accurate
- Prepare QA plans for other grants as needed

Air Quality Bureau: Programs



87.5 FTEs in the Air Quality Bureau

Jurisdiction over entire state except Bernalillo County and tribal lands.

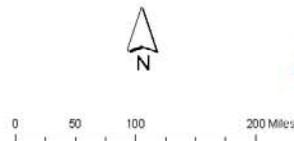
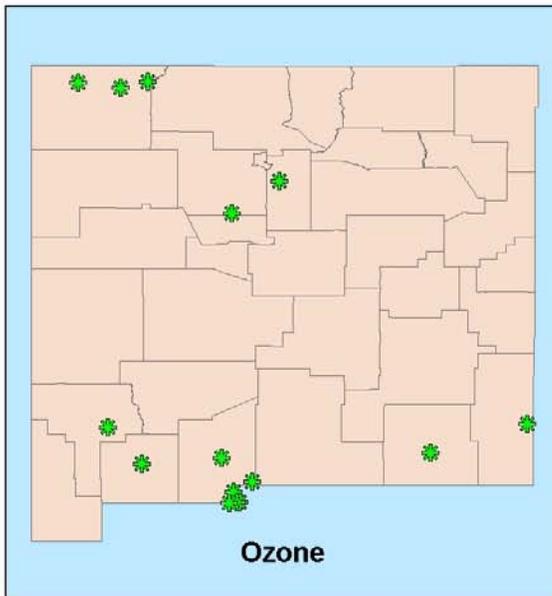
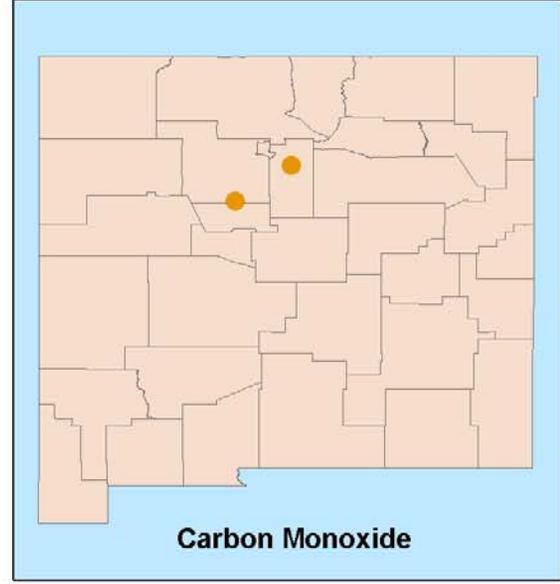
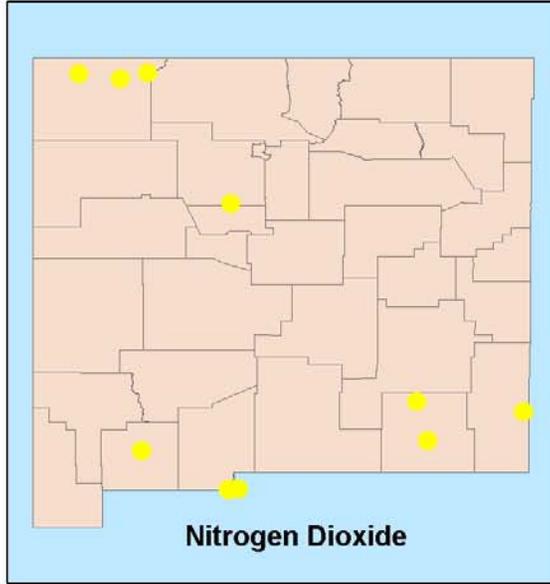
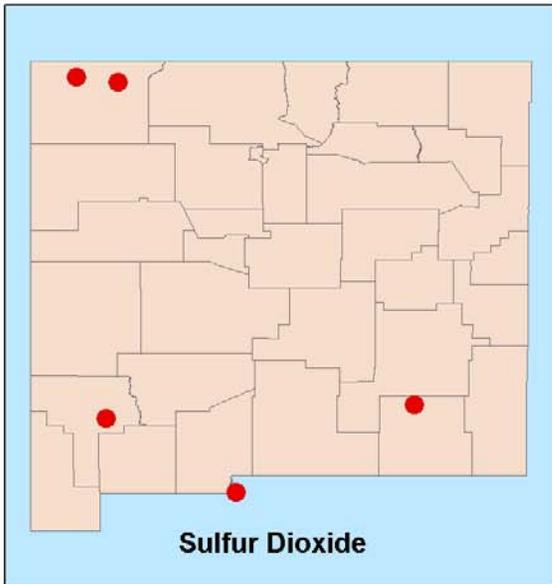
Stringency and the NM Air Quality Control Act

- ◆ In adopting regulations, the EIB may be no more stringent than (but at least as stringent as) federal requirements in these areas:
 - Visibility
 - Prevention of Significant Deterioration
 - Nonattainment Areas
 - Standards, including performance standards, including for hazardous air pollutants

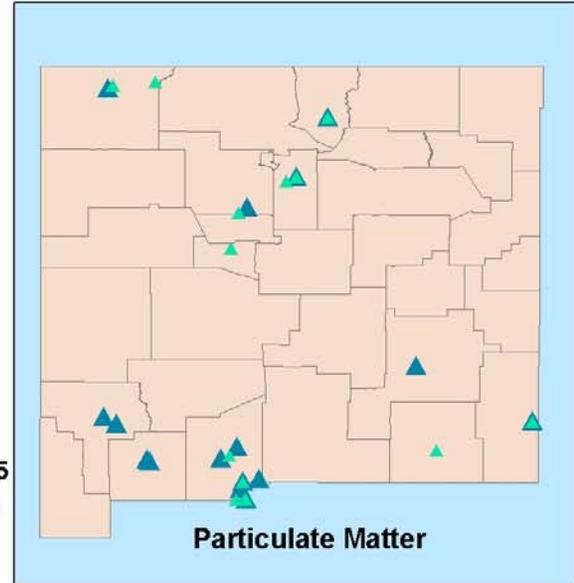
Stringency and the NM Air Quality Control Act

- ◆ In adopting regulations, the EIB may be more stringent than (but at least as stringent as) federal requirements in these areas:
 - Solid waste incineration
- ◆ Specific requirements for:
 - Ozone – EIB shall adopt a plan, including regulations, when an area is within 95% of federal ozone standard
 - Mercury from power plants – Best available control technology or 90% control, whichever is more stringent for power plants built after 7/1/2007

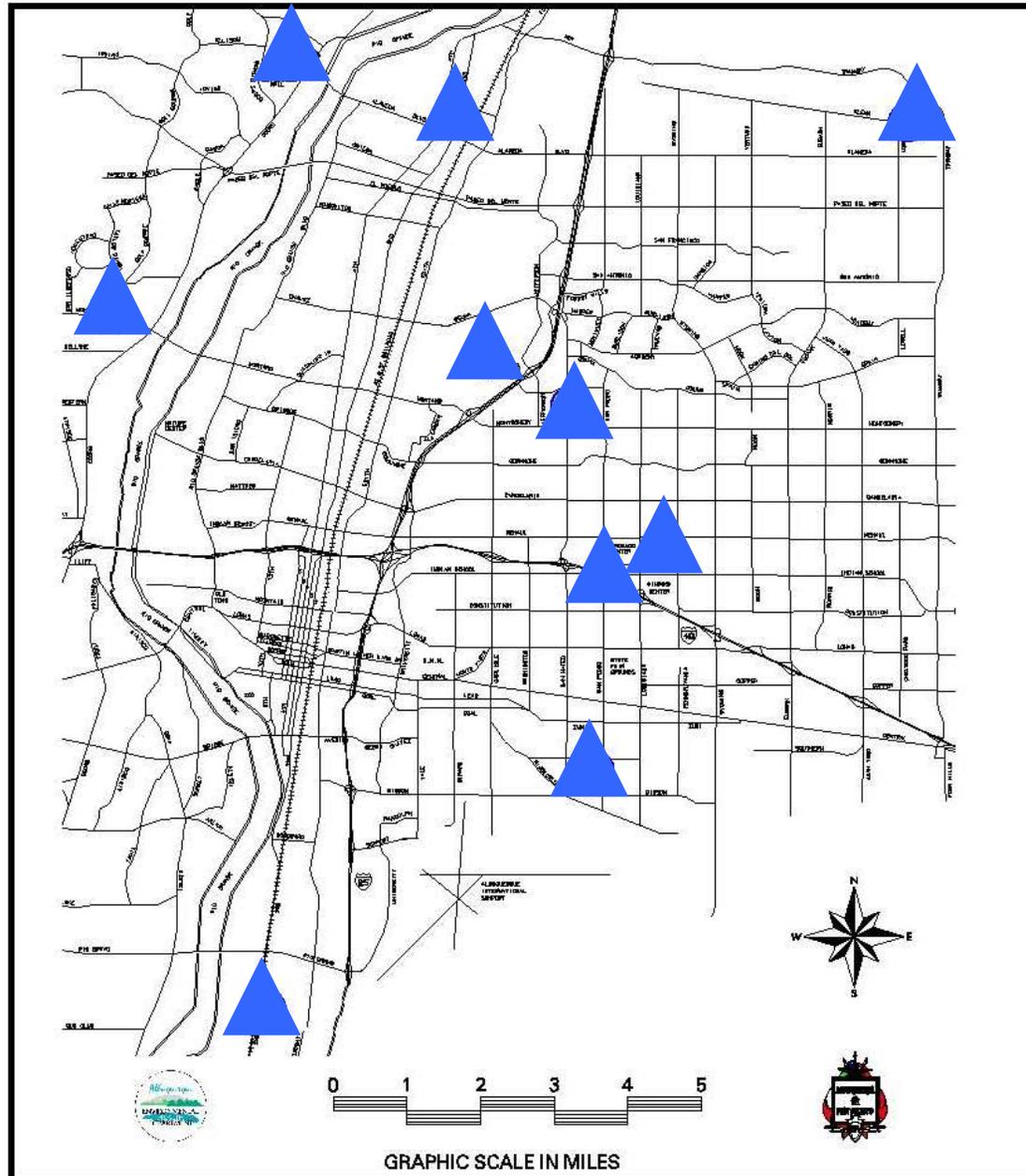
Monitoring Stations



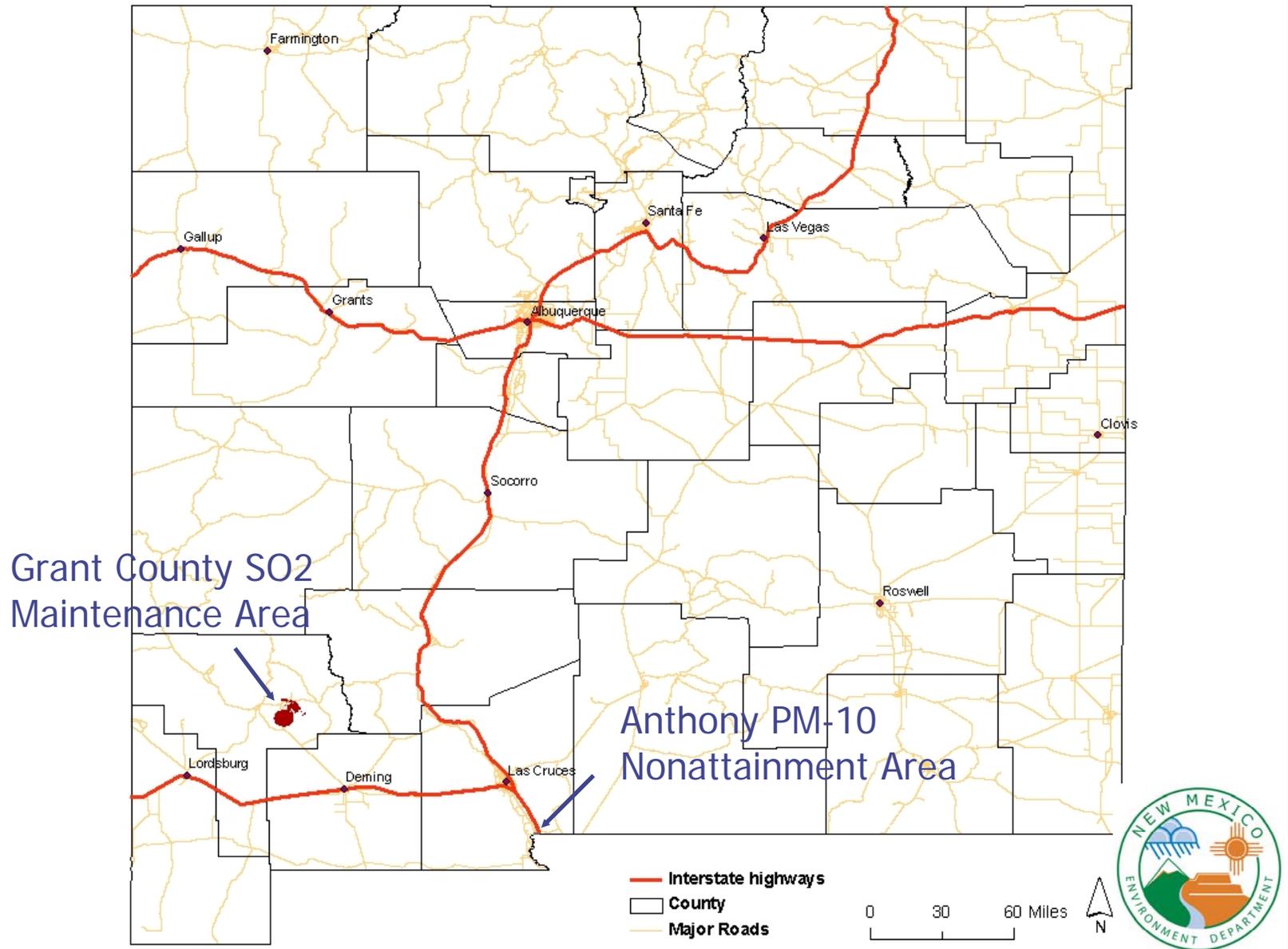
- ▲ PM 2.5
- ▲ PM 10



Albuquerque – Bernalillo County Ambient Air Quality Monitoring Network



NM Nonattainment and Maintenance Areas



Upcoming Hearings – 2011

- ◆ Revise 20.2.74 (Prevention of Significant Deterioration Permitting) and 20.2.79 (Nonattainment Permitting) NMAC to add PM-2.5 requirements
- ◆ Regional Haze & Interstate Transport SIP
- ◆ Updates to equipment standards regulations (NSPS, MACT, NESHAP)
- ◆ Transportation Conformity
- ◆ General Conformity Repeal
- ◆ Interstate Transport for Revised Lead Standard