

# CENRAP EI Update

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June 9, 2005

# Approach

- **CENRAP selected EGAS 5 growth factors, along with recommendations for selected sources**
- **Provided alternative growth surrogates for top 10 emitting SCCs in CENRAP region**
  - **NO<sub>x</sub>, PM-2.5, SO<sub>2</sub>, VOC, NH<sub>3</sub>**

# Growth Surrogates

- **EGUs—IPM**
- **Oil and gas production —AEO projections**
- **Prescribed burning—average historical values**
- **Architectural coating and commercial pesticide applications—regression equations not yet incorporated in beta version of EGAS 5**

# Growth Surrogates con't

- **Crop tilling—USDA projections of planted acreage for major crops and percentage of acreage using conservation tilling**
- **VMT—DOE projections combined with population projections and MOBILE6 VMT mix**
- **Paved road dust—VMT**
- **Swine, cattle, calves, and poultry—USDA livestock projections**

# Non-Road

- **Revised approach**
  - **Focuses on top 5 emitting categories**
  - **Reflects State-level growth based on surrogate indicators expected to correlate to activity in category**
  - **Growth data are from REMI and are included in EGAS**

# Non-Road Growth Surrogates

- **Diesel construction—construction employment (SICs 15, 16, 17)**
- **Diesel farm—agricultural services output (SIC 07)**
- **Gasoline lawn and garden—population**
- **Gasoline rec marine, ATVs, off-highway motorcycles, snowmobiles, personal watercraft—real disposable personal income**

# Mobile Sources

- **Requested VMT growth information from State and local agencies**
- **Reviewed conformity data where available for local VMT growth rates**

# Federal and State Controls

- Federal MACT Standards
- TX Ozone SIPS
  - Beaumont/Port Arthur
  - Houston/Galveston
  - Dallas/Fort Worth
- MO NOX SIP Call Controls
  - St. Louis City
- KS Bakery VOC Controls
  - Kansas City area
- LA NO<sub>x</sub> Controls During Ozone Season
  - Baton Rouge area

# National Measures

- **Locomotives—VOC and NO<sub>x</sub>**
- **Commercial marine vessels—NO<sub>x</sub>**
- **Residential wood combustion—VOC and NO<sub>x</sub>**
- **Refueling VOC controls calculated using MOBILE6 emission factors—Stage II controls included where appropriate**

# Additional State Area Source Information

- **TX**
  - **Commercial/institutional natural gas combustion**
  - **Mobile equipment repair and refinishing**
  - **Industrial open top degreasing**

# Point Source

- CEM Data
  - Temporal Profiles prepared for each unit using 2000 through 2003 CEM data
    - Seasonal
    - Daily by season
    - Hourly by season
- PM Augmentation
  - Applied to ensure PM10-PRI and PM25-PRI emissions available for all PM sources

# Area Sources – PM Augmentation

- Applied to ensure PM10-PRI and PM25-PRI emissions available for all PM sources
- Added PM-CON for fuel combustion sources if missing in S/L/T EI