

# OZONE OVERVIEW

7/11/06

## OZONE SIP DEVELOPMENT COMPLETED TO DATE

1. **Characterization Study.**
2. **Comprehensive Emissions Inventory of Ozone precursors.**
  - a. Consumer Products
  - b. Biogenics
  - c. Stationary Sources
  - d. Area Sources
3. **2005 Clark County Regional Ozone Precursor Study.**
  - a. Monitoring Network Adequacy Study
  - b. Aloft Measurements of Wind Patterns using RADAR and SODAR
  - c. Aloft Measurements ozone levels using Gliders and Aircraft
  - d. Ambient Monitoring of VOC
  - e. Ambient Monitoring of NO<sub>y</sub>

## OZONE SIP DEVELOPMENT CURRENTLY IN PROGRESS

1. **Biogenics Emissions Factor Study**
2. **Sunset Park Ozone Saturation Study**
3. **Mobile Sources Emissions Inventory**

## OZONE SIP DEVELOPMENT NEXT STEPS

1. **Trends Analysis.** Review and analyze ambient air quality data on ozone and ozone precursors in Clark County from 1985 to 2006 and produce a trend analysis.
2. **Control Measures.** Review existing federal, state, and local ozone control measures for on-road mobile, off-road mobile, minor stationary and major stationary sources. Determine expected emission levels in horizon years selected by Clark County for each existing control technology and measure to be incorporated into the Clark County ozone SIP.
3. **Program Review.** Evaluate existing DAQEM compliance and enforcement programs relating to ozone precursor pollutants. Identify problem areas and recommend improvements to rule effectiveness (i.e., ability of regulatory program to achieve emission reductions required by regulation) and rule penetration (i.e.,

4. **Emission Inventories.** Review, analyze, and evaluate Clark County emission inventories for the 2002 base year and emission projections for the required horizon years by source category to identify feasible emission reductions.
5. **Ozone Control Technologies, Control Measures, and Contingency Measures.** Identify new ozone control technologies and measures (including contingency measures) to be incorporated into the ozone SIP and provide a cost-benefit analysis for each. Provide a summary of the computations, assumptions, and judgments used to determine the degree of emission reduction that will result from recommended control technologies and measures proposed for incorporation into the ozone SIP.
6. **Modeling.** Model emissions and air quality. Review modeling results for accuracy and for compliance with EPA guidelines and approved modeling protocols.
7. **Weight of Evidence Determination.** A document, which describes analyses performed, data bases used, key assumptions and outcomes of each analysis, and why it is believed that the evidence viewed as a whole, supports a specific conclusion. This is a genuine attempt to consider all factors in determining the attainment status and control implementation for ozone. The weight of evidence determination may consist of several corroborative analyses: (1) grid model performance and degree of confidence in model input database and predictions, length of projection period, etc.; (2) trend analysis based on the extent of the monitoring network, quality of the statistical model for trend predictions, the length, persistence and significance of a downward trend, etc.; (3) consistency in direction of control between observation-based model results and grid model predictions; (4) severity of episodes selected for modeling; (5) incremental cost/benefit analyses addressing potential lack of alternatives for reducing emissions, lack of model responsiveness for variety of strategies as the level of the standard is approached.
8. **Completeness Check.** The "Completeness Check" shall be carried out in accordance with Title 40, Chapter 1, Part 51 - Requirements for Preparation, Adoption, and Submittal of Implementation Plans, in the Code of Federal Regulations.
9. **Innovative And Voluntary Emission Control Programs** Identify innovative and voluntary emission control programs for future development and implementation to ensure maintenance of the ozone NAAQS, including:
  - a) Economic Incentive Policies.
  - b) Voluntary Measures Policy for Stationary Sources.
  - c) Voluntary Measures for Mobile Sources.
  - d) Energy Efficiency & Renewable Energy Programs for SIP credits.