

Phase II Workplan

**Understanding Relationships Between Changes in Ambient Ozone and
Precursor Concentrations and Changes in VOC and NOx Emissions
from 1990 to 2004 in Central California**

Contract No. 05-6CCOS

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prepared for

**San Joaquin Valleywide Air Pollution Study Agency
c/o
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submitted by

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Task 5. Prepare Month-Specific Gridded Emissions Inventories

- Generate gridded inventories from the existing county-level monthly and annual inventories prepared in December 2006. The gridded emission inventory estimates will cover each month from May through October of each year from 1990 through 2004. Use historical surrogate files, if available.
- Develop monitor-specific emission trends for each long-term station from the gridded inventories. Use 3x3 to 7x7 grid cells around each monitor.

Task 6. Relate Ambient Air-Quality Trends To Emission Trends

- Compare ambient primary pollutant trends to monitor-specific emission trends (including CO, NO_x, NMOC) from the gridded inventories. Determine if systematic differences exist between ambient and emission trends. Compare and contrast with results found in Phase I (comparisons of monitor trends to county-level emission trends). Determine if findings provide evidence for overestimation or underestimation of emission reductions in any subregions.
- Subdivide meteorological classes based on previous-day classes. Re-analyze ozone trends. Determine how peak ozone concentrations have changed by site, meteorological class and subclass, month, and day of week. Relate ozone changes to precursor changes.

Task 7. Prepare Final Report and Journal Article

- Submit final report November 30, 2007.
- Submit draft manuscript December 31, 2007.

Task 8. Provide Data, Documentation, and Software

- Provide copies of modeling software, input and output files to the program manager.
- Provide documentation and graphics as requested.