

**Assistance Agreement Quarterly Report
for the period of January 1, 2003, to March 31, 2003**

April 1, 2003

Fresno, California, Particulate Matter (PM) Supersite Monitoring Program
EPA Assistance Agreement No. R-82805701-01

WORK PROGRESS AND STATUS

First quarter 2003 activities are summarized based on applicable tasks stated in the Fresno Supersite QAPP.

Task 1 – Equipment Procurement and Installation.

- No new equipment has been procured or installed during this quarter.
- The Met One GT-640A Light Scattering Photometer was removed from service on 1/31/03.
- The single-wavelength Aethalometer was replaced with a dual-wavelength Aethalometer (at 570 and 880 nm) in February 2003.
- Two newly designed beta attenuation monitors (BGI Model FPM) are to be installed during the next calendar quarter, 2003. A PM_{2.5} and PM₁₀ version will be used.

Task 2 – Network Operations and Data Processing.

- Network operations and data processing have continued through this period. Based on the contract, Fresno Supersite Phase II field operations will cease as of March 31, 2003.

Task 3 – Laboratory Measurements.

- PM_{2.5} mass and chemistry analyses of filter samples from FRM and chemical speciation samplers, collected every sixth day through 5/31/02, have been completed. Samples dated through 12/31/02 have been analyzed and validated for mass only. Chemical speciation and data validation is in progress and expected to be completed by 6/30/03.

Task 4 – Quality Assurance.

- Continued to revise and finalize standard operating procedures for the field measurements and data analysis methods.

Task 5 – Data Validation and Data Analysis.

- Level 1a and 1b data validation is in process for continuous gas, particle mass and chemistry, light scattering, light absorption, particle size, and meteorological measurements through 3/31/03. Data validation criteria for the continuous instruments are being finalized. The majority of the continuous data, collected through 12/31/02, has been submitted to the California Air Resources Board's CCAQS FTP site. Data collected through the end of February 2003 is also being uploaded on a regular basis. This task should be completed during the second quarter of 2003. Level II validation on this data set will then resume. Submission of Supersite data to the NARSTO database is also underway and should also be completed during the second quarter of 2003.

Task 6 – Management and Reporting.

- Dana Trimble and Matt Gonzi visited the Fresno Supersite during the last week of January 2003. Matt Gonzi also visited on March 12-14, 2003, to conduct instrument maintenance including cleaning, calibrations, and upkeep.

EXPENDITURES

Budget expenditures to date are on target, and no revisions to the approved budget are expected to be necessary at this time.

QUALITY ASSURANCE

Standard operating procedures continue to be updated for the data analysis procedures.

RESULTS

There are no results to report for this period.

PLANNED ACTIVITIES FOR THE FORTHCOMING QUARTER:

During the second quarter of 2003, the principal investigators plan to: 1) finalize procedures for the data handling protocols for the FACES study (the concurrent health study conducted by U.C. Berkeley), 2) finalize data validation criteria and database structure, and 3) continue work on upgrading Data Acquisition System (upgrade to existing computer equipment currently in progress).

PUBLICATIONS, PRESENTATIONS, AND REPORTS:

No manuscripts were published during this quarter.

One presentation was given this quarter:

- Chow, J.C., and J.G. Watson (2003). Recent Developments in Ambient PM Measurement. Presented to the Japan Automobile Manufacturers Association, Tokyo, Japan, 14 March 2003.

No reports were prepared this quarter.

QUARTERLY REPORT SUMMARY:

See attached.