

**Assistance Agreement Quarterly Report  
for the period of April 1, 2002, to June 30, 2002**

July 1, 2002

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

**WORK PROGRESS AND STATUS**

Second quarter 2002 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 this quarter.
- California Air Resources Board staff moved the Anderson Continuous Particle Speciation Monitor from the Fresno supersite to their Sacramento laboratory in May 2002 for further testing.

Task 2 – Network Operations and Data Processing.

- Network operations and data processing have continued through this period.

Task 3 – Laboratory Measurements.

- PM<sub>2.5</sub> mass and chemistry analyses of filter samples from FRM and chemical speciation samplers collected every sixth day through 12/27/01 have been completed. Samples dated from 12/27/01 to 4/30/02 have been analyzed and validated for mass only. Chemical speciation is in progress and expected to be completed by 9/1/02.

Task 4 – Quality Assurance.

- No field audits were conducted this quarter. The next scheduled audit is planned during the fourth quarter of 2002.
- Continued to assemble, revise, and update standard operating procedures for the field measurements.

Task 5 – Data Validation and Data Analysis. Level I data validation was completed for continuous gas, particle mass and chemistry, light scattering, light absorption, particle size, and meteorology measurements through 4/30/02. Level II data validation is in progress for all continuous measurements obtained through 4/30/02.

Task 6 – Management and Reporting. The principal investigators visited the Fresno supersite and the instrument trailers for the Fresno Asthmatic Children’s Environment Study (F.A.C.E.S) on April 17-18, 2002, and June 11-12, 2002. Mike Jones, EPA Project Officer, accompanied the principal investigators to the Fresno supersite during their June visit and continued his visit to DRI’s Reno facility on June 13, 2002. Matt Gonzi, data analyst at DRI, visited the Fresno supersite March 4-9, 2002, and June 7-8, 2002, to perform instrument calibrations, conduct routine maintenance, and document quality assurance records. Principal investigators John Watson and Judith Chow, along with data analyst Matt Gonzi, participated in the two-day supersite meeting in Las Vegas, NV, on June 10-11, 2002.

There have been no changes of key personnel related this study.

**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 revised and updated for the field measurements.

**RESULTS**

There are no results to report for this period.

**PLANNED ACTIVITIES FOR THE FORTHCOMING QUARTER:**

During the third quarter of 2002, the principal investigators plan to: 1) continue assembling standard operating procedures, and 2) finalize data validation criteria and database structure.

**PUBLICATIONS AND PRESENTATIONS:**

One manuscript published during this quarter, while a second manuscript was accepted for publication and is currently in press:

- Watson, J.G. and J.C. Chow (2002). A Wintertime PM<sub>2.5</sub> Episode at the Fresno, CA, Supersite. *Atmos. Environ.*, **36**(3):465-475.

- Watson, J.G., J.C. Chow, D. Lowenthal, M.R. Stolzenburg, and N.M. Kreisberg, S.V. Hering (2002). Particle Size Relationships at the Fresno Supersite. *JAWMA*, **52**(7), in press.

Six presentations were given during this quarter:

- Chow, J.C., and J.G. Watson (2002). Recent Developments in Aerosol Monitoring. Presented at the 1<sup>st</sup> International Workshop on Air Quality in Industrialized Urban Centers Vitória, ES, Brazil, 28 April 2002.
- Chow, J.C., and J.G. Watson (2002). Advanced Monitoring Methods at U.S. EPA Supersites. Presented at the Regional Particulate Matter Workshop, Hong Kong, 15 May 2002.
- Chow, J.C., and J.G. Watson (2002). Advanced Monitoring Methods at U.S. EPA Supersites. Presented at the Regional Particulate Matter Workshop, Guangzhou, People's Republic of China, 17 May 2002.
- Chow, J.C., and J.G. Watson (2002). Recent Developments in Aerosol Monitoring. Presented at the Chongqing Academy of Environmental Science, Chongqing, People's Republic of China, 20 May 2002.
- Chow, J.C., and J.G. Watson (2002). Integrated Particulate Mass by Filter Sampling. Presented at the Supersite PI Meeting, Las Vegas, NV, 10 June 2002.
- Watson, J.G., and J.C. Chow (2002). Supersite Operating Parameters. Presented at the Supersite PI Meeting, Las Vegas, NV, 10 June 2002.

**QUARTERLY REPORT SUMMARY:**

See attached.