

***St. Louis - Midwest Fine Particulate Matter Supersite***

---

**ASSISTANCE AGREEMENT QUARTERLY REPORT SUMMARY**

for the reporting period October 13, 2000 through January 12, 2001

February 27, 2001

**St. Louis - Midwest Particulate Matter (PM) Supersite Monitoring Program**

EPA Assistance ID No. R-82805901-0

Investigators and Institutions:

Dr. Jay Turner, PI	Washington University, St. Louis, MO
Dr. Judith Chow, Co-PI	Desert Research Institute, Reno, NV
Dr. Petros Koutrakis, Co-PI	Harvard University, Cambridge, MA
Dr. Peter McMurry, Co-PI	University of Minnesota, Minneapolis, MN
Dr. John Ondov, Co-PI	University of Maryland, College Park, MD
Dr. James Schauer, Co-PI	University of Wisconsin, Madison, WI
Dr. Warren White, Co-PI	Washington University, St. Louis, MO
Mr. George Allen	Harvard University, Cambridge, MA
Dr. Tina Bahadori <sup>1</sup>	Electric Power Research Institute, Palo Alto, CA
Dr. Edward Macias	Washington University, St. Louis, MO
Dr. Bret Schichtel <sup>2</sup>	Washington University, St. Louis, MO
Dr. John Watson	Desert Research Institute, Reno, NV

Lead Institution: Washington University in St. Louis  
Research Category: Particulate Matter Supersites Program  
Project Period: January 13, 2000- January 12, 2004

Objective of Research:

This project will provide an atmospheric measurement study which is designed to address and integrate objectives of the atmospheric, health and exposure research communities.

Progress Summary/Accomplishments:

Fourth quarter activities focused on finalizing the measurement and equipment matrix, procuring instruments, and arranging for infrastructure installation at the monitoring sites. The St. Louis Supersite hosted a Supersites PI Meeting in conjunction with the AARR Meeting in St. Louis (November 2000). A full-day St. Louis Supersite science team meeting was also held to discuss program implementation, with emphasis on data management. A draft plan for enhanced speciation monitoring was developed in collaboration with Illinois Environmental Protection Agency and the Missouri Department of Natural Resources.

Two additions to the measurement matrix are being formalized: high-volume trichot sampling to support toxicological studies; and an additional instrument for

---

<sup>1</sup> Current affiliation: American Chemistry Council, Washington, D.C. (Dr. Alan Hansen is currently serving as the official EPRI liaison to the St. Louis Supersite)

<sup>2</sup> Current affiliation: NPS-CIRA, Fort Collins, CO

## *St. Louis - Midwest Fine Particulate Matter Supersite*

---

semicontinuous measurement of PM major ions. These efforts will be described in the next Quarterly Report Summary upon executing the agreements.

Figure 1 shows the monitoring locations chosen for the St. Louis - Midwest Supersite. Monitoring is scheduled to commence on April 1, 2001.

### Publications/Presentations:

Project overview briefings were presented at: (1) 14<sup>th</sup> Annual St. Louis Regional Environmental Conference (organized by the St. Louis Chamber & Growth Association), October 18, 2000; and Washington University 1<sup>st</sup> Annual Environmental Engineering Symposium, October 31, 2000.

### Future Activities:

The next quarter will feature infrastructure installation, equipment deployment, shakedown testing, and finally full implementation of the St. Louis Supersite measurement program.

### Supplemental Keywords:

particulate matter, PM-2.5, monitoring, air quality

Relevant Web Sites: St. Louis - Midwest Supersite: <http://capita.wustl.edu/StLSuperSite>



Figure 1. St. Louis - Midwest Supersite monitoring locations: East St. Louis, IL (core); North St. Louis City, MO (satellite); and Park Hill, MO (satellite). PM<sub>2.5</sub> compliance monitoring sites are also shown.