

AIR TOXICS MONITORING NEWSLETTER

A PUBLICATION OF THE STAPPA/ALAPCO/USEPA AIR TOXICS MONITORING STEERING COMMITTEE

July 2002

The STAPPA/ALAPCO – USEPA Air Toxics Steering Committee was established in 1999 for the purpose of overseeing the development of a national air toxics monitoring network. Members include representatives from several states and local agencies (Vermont, Massachusetts, New Jersey, Texas, Oregon, California, South Coast, Puget Sound), multi-state organizations (NESCAUM and LADCO), and USEPA (OAQPS and certain Regional Offices). The Steering Committee decided in early 2000 that the national air toxics monitoring network should be “rolled-out” over a several year period. Recent activities related to the national network are discussed in this quarterly newsletter.

Allocation of FY02 Funds

On March 1, 2002, USEPA issued guidance for the allocation of \$3 million in FY2002 money to support national air toxics monitoring activities. Based on their review of the proposals submitted by state and local agencies, the following allocation was approved by the Air Toxics Monitoring Steering Committee in May:

\$1,920K State/local monitoring
(Note: this consists of \$40K each to 46 states plus Washington, D.C. and Puerto Rico. Four states did not apply for the \$40K – KS, LA, MT, and WY.)

480K Initial trends sites (11 urban, 2 rural)
(Note: this additional funding of \$40K per site plus the \$40K per state noted above will provide each trends site with a total of \$80K. The 2 urban sites in Region I will split the additional \$40K.)

480K Data analysis and inter-lab study
(see story below)

120K On-going pilot city work in Seattle, Tampa, and WV

\$3,000K

A key priority with this third year of air toxics monitoring was to establish an initial national trends network. The initial trends network will reflect a limited number of sites. (More trends sites will be added in future years of the program.) The funding priorities are to establish an urban site in each of the 10 EPA regions, and, as resources permit, a few rural sites.

A list of candidate sites was prepared after a statistical analysis was done based on existing air toxics data, National Air Toxics Assessment (NATA) results, and a site's current infrastructure. For example, a site was required to have existing PM_{2.5} speciation and air toxics monitoring sites. After discussions with the EPA Regional Offices (and affected state and local agencies), the following list of initial trends sites were identified (see also figure below):

Region	Urban	Rural
I	E. Providence, RI Boston, MA	
II	New York, NY	
III	Washington, DC	
IV	Decatur, GA	Hazard, KY
V	Detroit, MI	
VI	Houston, TX	
VII	St. Louis, MO	
VIII	Bountiful, UT	Grand Junction, CO
IX	San Jose, CA	
X	Seattle, WA	



Map of Initial Trends Sites

The compounds of most interest at the trends sites include benzene, formaldehyde, acrolein, and chromium. (Current monitoring methods for these compounds will also yield data for a number of other compounds.) The methods for acrolein and chromium capture are currently under investigation by USEPA. A new method for acrolein will be field-tested at some of the trends sites. In addition, because diesel particulate matter is another compound of concern, \$20,000 (from PM_{2.5} monitoring program funds) will be awarded to each of the initial trends sites to purchase an aethalometer to obtain elemental carbon data, which is an indicator of diesel emissions.

Analysis of Pilot City Data

On May 23, 2002, LADCO extended their contract with Battelle Memorial Institute and Sonoma Technology, Inc. to analyze the new pilot city data. This next phase of the data analysis work will include the following tasks:

- (1) Compile and Quality Assure Data
- (2) Assess Inter-lab Variability
- (3) MDL and Reporting
- (4) Monitoring Data Variability
- (5) Other Analyses (e.g, trace metal composition v. particle size, elemental carbon v. diesel particulate, hexavalent chromium v. total chromium, and seasonal variability)
- (6) Reporting

Battelle has received a first batch of pilot city data from ERG, as well as data directly from some individual pilot cities (i.e., data not analyzed by ERG). The data received are currently being reviewed regarding QA/QC, and being converted to appropriate SAS data sets for data analysis. They anticipate additional data in the near future and the compilation of a generally complete database by early summer 2002.

A draft and final written report is expected in early 2003, and presentation of the results at a national workshop in spring 2003.

FY03 Grant Guidance

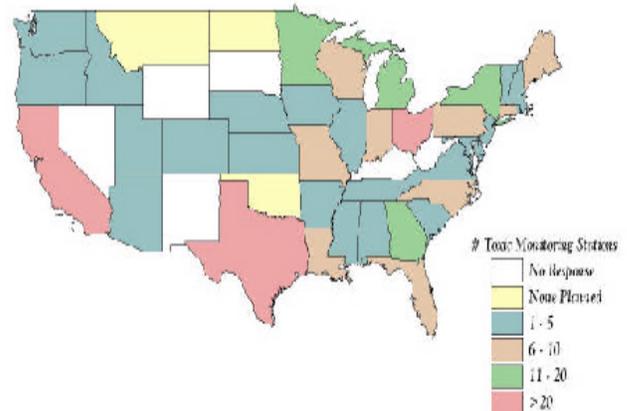
For FY2003, USEPA has earmarked a total of \$9.5 million for air toxics monitoring. This includes another \$3 million plus a redirection of \$6.5 million from implementation of National Ambient Air Quality Standards (NAAQS). This redirection, which is called for in the President's FY03 budget, recognizes the growing health risks associated with air toxics and the complexities of monitoring for hazardous air pollutants as the national strategy moves from technology standards to reduction of residual risk.

By June 15, 2002, USEPA will issue grant guidance for the \$6.5 million. Through the FY 2003 grant negotiation process, USEPA Regional Offices will work with state and local agencies to determine the most practical and effective way to target air toxics funds to meet community-scale monitoring and assessment needs and to ensure these resources support and complement the resources targeted towards the air toxics monitoring pilot effort. (Grant guidance for the additional \$3 million will be finalized in the spring of calendar year 2003.) Suggested activities for the use of these funds include:

- (1) community scale air toxics monitoring (both ambient and deposition monitoring)
- (2) characterization of diesel particulate levels
- (3) application of alternative continuous methods
- (4) meteorological monitoring
- (5) ambient monitoring methodology
- (6) data archiving
- (7) adherence to USEPA ambient monitoring guidance
- (8) strengthening of an area's quality assurance program.

STAPPA/ALAPCO Survey

In April 2002, STAPPA/ALAPCO released an updated survey of existing and planned air toxics monitoring sites operated by state and local agencies. Compared to the previous STAPPA/ALAPCO survey (October 1999), the number of state/local monitoring sites has increased from 252 to 313. (Note, because a few states did not respond to the surveys, the exact number of sites is uncertain.) These results indicate that there is a lot of air toxics monitoring underway, especially in the eastern half of the U.S., Texas, and California. The development of a national air toxics monitoring program should take into account these existing and planned sites.



Map of Existing and Planned State/Local Air Toxics Monitoring Sites

For information on the monitoring pilot project, please contact Sharon Nizich, USEPA, OAQPS, nizich.sharon@epa.gov, 919-541-2825. For information on the data analysis project, please contact Michael Koerber, LADCO, koerber@ladco.org, 847-296-2181. This newsletter is issued on a regular (quarterly) basis to provide status reports on air toxics monitoring activities.