OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:	* 2. Type of Application:	* If Revision, select appropriate letter(s):
○ Preapplication	● New	
● Application	○ Continuation	* Other (Specify)
○ Changed/Corrected Application	○ Revision	

* 3. Date Received:	4. Applicant Identifier:
04/17/2007	

5a. Federal Entity Identifier:	* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:	7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: South Coast Air Quality Management District

* b. Employer/Taxpayer Identification Number (EIN/TIN):	* c. Organizational DUNS:
953099419	025986159

d. Address:

* Street1:	21865 Copley Drive
Street2:	
* City:	Diamond Bar
County:	
* State:	CA: California
Province:	
* Country:	USA: UNITED STATES
* Zip / Postal Code:	91765-4178

e. Organizational Unit:

Department Name:	Division Name:
Monitoring & Analysis	Science & Tech Advancement

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:	Ms.	* First Name:	Mary
Middle Name:			
* Last Name:	Leonard		
Suffix:			

Title: Financial Analyst

Organizational Affiliation:

* Telephone Number:	909-396-2780	Fax Number:	909-396-2765

* Email: mleonard@aqmd.gov

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

X: Other (specify)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

Special District

*** 10. Name of Federal Agency:**

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Investigations, Demonstrations and Special Purpose Activities Relating to the Clean Air Act

*** 12. Funding Opportunity Number:**

EPA-OAR-OAQPS-07-01

* Title:

Community-Scale Air Toxics Ambient Monitoring

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Orange County and major portions of Los Angeles, San Bernardino and Riverside counties

*** 15. Descriptive Title of Applicant's Project:**

The Impacts of Commercial Airport Operations on Air Toxics Levels in Surrounding Communities

Attach supporting documents as specified in agency instructions.

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: 42
* b. Program/Project: 25-48

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date: 09/01/2007
* b. End Date: 06/30/2009

18. Estimated Funding ($):

* a. Federal	697,669.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	697,669.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

○ a. This application was made available to the State under the Executive Order 12372 Process for review on .

○ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

● c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

○ Yes ● No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☑ **** I AGREE**

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix:	
* First Name:	Barry
Middle Name:	R.
* Last Name:	Wallerstein
Suffix:	D.Env.
* Title:	Executive Officer
* Telephone Number:	909-396-2100
Fax Number:	
* Email:	bwallerstein@aqmd.gov
* Signature of Authorized Representative:	Mary Leonard
* Date Signed:	04/17/2007

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)
Prescribed by OMB Circular A-102

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 4040-0006
Expiration Date 04/30/2008

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Community-Scale Air Toxics Ambient Monitoring				$697,669.00		$697,669.00
2.						$0.00
3.						$0.00
4.						$0.00
5. Totals		$0.00	$0.00	$697,669.00	$0.00	$697,669.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Community-Scale Air Toxics Ambient Monitoring	(2)	(3)	(4)	
a. Personnel	$111,549.00				$111,549.00
b. Fringe Benefits	$39,869.00				$39,869.00
c. Travel	$10,730.00				$10,730.00
d. Equipment	$168,000.00				$168,000.00
e. Supplies	$75,000.00				$75,000.00
f. Contractual	$135,000.00				$135,000.00
g. Construction					$0.00
h. Other	$1,500.00				$1,500.00
i. Total Direct Charges (*sum of 6a-6h*)	$541,648.00	$0.00	$0.00	$0.00	$541,648.00
j. Indirect Charges	$156,021.00				$156,021.00
k. TOTALS (*sum of 6i and 6j*)	$697,669.00	$0.00	$0.00	$0.00	$697,669.00
7. Program Income					$0.00

Standard From 424A (Rev. 7-97)
Prescribed by OMB Circular A-102

SECTION C - NON-FEDERAL RESOURCES				
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. Community-Scale Air Toxics Ambient Monitoring				$0.00
9.				$0.00
10.				$0.00
11.				$0.00
12. TOTAL (sum of lines 8-11)	$0.00	$0.00	$0.00	$0.00

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
13. Federal	$491,000.00	$183,500.00	$183,500.00	$62,000.00	$62,000.00
14. Non-Federal	$0.00				
15. TOTAL (*sum of lines 13 and 14*)	$491,000.00	$183,500.00	$183,500.00	$62,000.00	$62,000.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. Community-Scale Air Toxics Ambient Monitoring	$206,669.00			
17.				
18.				
19.				
20. TOTAL (*sum of lines 16-19*)	$206,669.00	$0.00	$0.00	$0.00

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: $541,648	22. Indirect Charges: $156,021
23. Remarks: 1.0304 is applied to the Personnel & Fringe amounts. This indirect rate was accepted by the DHS and is applied to a grant that the SCQAMD was awarded. The rate is provisional and is subject to change based on more current financial information.	

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The Impacts of Commercial Airport Operations on Air Toxics Levels in Surrounding Communities

Application to the U.S. Environmental Protection Agency's Solicitation: "Community-Scale Air Toxics Ambient Monitoring"

EPA-OAR-OAQPS-07-01

Applicant: South Coast Air Quality Management District
Contact: Henry Hogo
Assistant Deputy Executive Officer
Science and Technology Advancement
Phone No. (909) 396-3184
Fax No. (909) 396-2099
E-mail: hhogo@aqmd.gov

Requested Funding: $697,669

Project Performance Period: September 1, 2007 – June 30, 2009

APRIL 2007

NARRATIVE PROPOSAL

SUMMARY

Project Title:	The Impacts of Commercial Airport Operations on Air Toxics Levels in Surrounding Communities
Category:	Community-Scale Monitoring
Applicant Information:	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765-4178
Contact:	Henry Hogo Assistant Deputy Executive Officer Science and Technology Advancement Phone No. (909) 396-3184 Fax No. (909) 396-2099 E-mail:hhogo@aqmd.gov
Enabling Legislation:	California Health and Safety Code, Chapter 5.5 (Sections 40400-40540) http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=hsc&codebody=&hits=20
Funding Requested from EPA:	$697,669
Total Project Cost:	~$1,000,000
Cost Sharing:	In-kind contributions by the applicant (SCAQMD) are provided via on-going monitoring activities, monitoring platforms, and staff resources in the laboratory and in the field.
Project Period:	September 1, 2007 – June 30, 2009

Pursuant to the U.S. Environmental Protection Agency's (U.S. EPA) solicitation for pilot demonstration projects under the "Community-Scale Air Toxics Ambient Monitoring – Request for Proposals (RFP)" (EPA-OAR-OAQPS-07-01), the South Coast Air Quality Management District (SCAQMD) proposes to conduct a comprehensive community assessment program that would enhance regional air toxics exposure studies currently underway in the South Coast Air Basin (Basin). The proposed project will consist of community-scale studies to identify how emissions from large commercial international airports are dispersed into the surrounding community. These measurements will be used to address community exposure and risk issues within the South Coast Air Basin as they complement other air pollution studies being conducted concurrently in the areas around the commercial airports.

This proposal is prepared for U.S. EPA's consideration and outlines how the project will meet the specific objectives of the solicitation. The following sections further describe the proposed project, proposed budget and timeline for completion.

BACKGROUND

The Basin is a highly urbanized area, home to about 16 million people who own and operate about 11 million motor vehicles, and contains some of the highest concentrations of industrial operations in the country. The Basin is one of the worst areas for ozone and particulate matter air quality in the U.S. In 1986, the SCAQMD conducted the first Multiple Air Toxics Exposure Study (MATES) to determine Basin wide risks associated with major airborne carcinogens. At the time the state of technology was such that only ten known air toxic compounds could be analyzed. In 1998, a second study, MATES-II, (SCAQMD, 2000) was conducted representing one of the most comprehensive air toxics measurement programs conducted in an urban environment. MATES-II included a comprehensive monitoring program consisting of ten fixed sites sampling 40 known air toxic compounds, an updated emissions inventory of toxic air contaminants, and a regional air toxics modeling effort to characterize health risks from toxic air pollutants. Additional sampling was also conducted during MATES-II at 14 various locations near source emissions utilizing two mobile sampling platforms. Two of the ten sites are part of the U.S. U.S. EPA's Photochemical Assessment Monitoring Stations (PAMS) and seven of the ten sites are part of the National Ambient Monitoring Stations (NAMS) network. NAMS and PAMS ambient data are uploaded to the U.S. EPA Air Quality System (AQS). Two of the MATES sites are now part of the U.S. EPA National Air Toxics Trends Stations (NATTS) program.

A third MATES study (MATES-III) was initiated in February 2004 and sampling was completed in April 2006. This is the most comprehensive air toxics exposure study to-date with twice the amount of samples being collected compared to MATES-II. The same ten fixed sites used in MATES-II were used for MATES-III. Trends and general risk levels in the Basin are being calculated as part of MATES-III based on an updated air toxic emissions inventory and the monitoring data.

The high population density within the Basin often results in little separation between source emitters and neighboring communities. In addition, there is heightened community awareness within the Basin of the potential air toxic impacts from nearby sources. These concerns are continually presented at town hall meetings the SCAQMD holds in communities within the

Basin. Programs such as MATES are designed to monitor and characterize toxic emissions over the entire Basin. A limited number of communities located near industrial sources and large mobile source facilities (such as marine ports and commercial airports) were studied under MATES-III.

A community-scale air toxics monitoring campaign funded by the U.S. EPA "National Air Toxics Monitoring Program – Community Assessments" solicitation was initiated in 2004. This study contains three components: one focused on a highly industrial community in Sun Valley, CA; the second on general aviation airports; and the third on hexavalent chromium. Results from these studies are currently being compiled and analyzed.

More recently, goods movement activities have become a major focus relative to regional air quality and community exposure to air toxic pollutants from goods movement related sources. Over 40% of the nation's goods move through Southern California marine ports. As such, a community-scale monitoring program was initiated in January 2007 to characterize the impacts of the Ports of Los Angeles and Long Beach, goods movement operations, and other industrial sources in communities adjacent to these activities. Monitoring at over 12 air monitoring stations includes the full suite of air toxics measured in the MATES studies, all criteria pollutants, as well as continuous instrumentation for black carbon, particle number, and PM2.5. New monitoring techniques are being deployed to enhance the information collected under this program. Additional monitors will be placed adjacent to the Interstate 710 freeway, which has the highest level of diesel truck traffic in the Basin.

Given these previous and on-going air toxics studies, a gap remains in the understanding of community-scale air toxic exposure with respect to large commercial airports, which are considered part of the overall goods movement activities in the region. Emissions from these complex facilities include not only aircraft emissions, but also emissions from ground equipment, and vehicles for ground transportation under often congested conditions. To date, only a few limited studies have been conducted measuring the impacts of large commercial airports on nearby communities. Due to the potential expansion at Los Angeles International Airport (LAX) and community concerns, a work plan is being developed for an extensive air monitoring and source apportionment study to be carried out by the LAX operator, Los Angeles World Airports (LAWA). The SCAQMD staff is involved in the technical aspects of the work plan development. The current plan calls for measurements of a wide range of criteria pollutant, air toxics and particulate characteristics with both time integrated and continuous measurements. Three primary sites are proposed, two at the end of major runways and one community site. A series of 10 – 15 satellite sites are proposed, with less instrumentation and only passive sampling for air toxic volatile organic compounds (VOCs). Given the complex nature of airport-related sources and emissions, the mix of other sources in the surrounding areas such as the busy I405 and I105 freeways, and the very short time scales of emissions variability due to aircraft operations, continuous and more detailed monitoring at more community sites will be essential to distinguish sources and determine short and long term risk to the community.

PROJECT OBJECTIVE

The objective of this proposed study is to further characterize ambient air toxics levels in communities surrounding large commercial airports in the South Coast Air Basin. Several SCAQMD air toxics studies have measured and continue to measure air toxic concentrations. These studies focus on region-wide air toxic levels as well as potential hotspots near sources such as industrial facilities, freeways, general aviation airports, and major seaports. The proposed study will focus on two of the Basin's large and expanding commercial international airports, Los Angeles International Airport (LAX) and Long Beach Airport. The proposed study will greatly enhance the LAWA study mentioned earlier by providing additional capabilities for air toxics monitoring at multiple locations in the surrounding communities. The SCAQMD study to measure air toxics in the communities near the Ports of Los Angeles and Long Beach is proposed to be extended to examine the impacts of nearby Long Beach Airport on surrounding communities. The monitoring efforts at both airports will be accomplished with a unique set of rapidly deployable mobile air toxics monitoring platforms using the latest technologies for air toxics measurements, including continuous instrumentation. The objective of these studies is consistent with several of the community-scale monitoring goals of the U.S. EPA solicitation, including delineation of local air toxic concentration gradients driven by proximity to sources, characterizing near-source concentrations from specific transportation facilities, and developing a baseline reference for longer term measurements tracking airport expansion and or emissions reduction strategies.

A set of mobile and flexible monitoring platforms proposed under this solicitation will provide the means to accomplish this goal. The mobile platforms could be deployable on the time scale of hours rather than weeks, allowing for more spatial coverage and rapid adjustment to locations based on monitoring results. The platforms and equipment should have sufficient flexibility to operate on both land-based power and self-contained battery power. Instrumentation would include both traditional air toxics monitoring equipment, as well as lower power equipment for battery operation. A variety of traditional time-integrated methods would be combined with newer continuous methods for air toxics measurements. Continuous data, combined with continuous meteorological data, is extremely valuable in determining source locations, emission profiles, and exposure variability. While the current proposed LAX program includes some continuous measures or indicators of PM mass and particulate PAH, additional resources are needed to expand the air toxics measurements over a wider area and with more continuous measurement capabilities.

A subset of the air toxics to be measured is included in Table 1. Airports are a complex mix of many source types, including aircraft, ground equipment, terminal operations and road traffic. Therefore, the full suite of pollutants measured as part of MATES-III, the National Air Toxics Trends Stations (NATTS) program, and other SCAQMD air toxics measurement studies will be examined. Of particular relevance to airports are lead, which is a component of general aviation fuel, acetaldehyde and acrolein, which have been shown to be emitted from jet engines at relatively higher levels than internal combustion engines, and the typical mobile source air toxics such as 1,3-butadiene and benzene.

Table 1. Selected substances to be monitored.

Target Pollutants		
Benzene	Carbon Tetrachloride	Chloroform
1,3-Butadiene	Propylene Dichloride	Trichloroethylene, TCE
Methylene Chloride	Tetrachloroethylene (Perchloroethylene)	Beryllium and Compounds
Acrolein	Arsenic and Compounds	Lead and Compounds
Cadmium and Compounds	Hexavalent Chromium	Acetaldehyde
Manganese and Compounds	Nickel and Compounds	Elemental Carbon
Formaldehyde	Organic Carbon	PM_{10}

PROJECT TASKS, DELIVERABLES, AND TIMELINE

The proposed 22- month work effort outlined above would be accomplished in four tasks as follows:

Task 1. Prepare Technical Work Plan (2 months)

A technical work plan will be prepared outlining the technical approach for selecting monitoring sites surrounding each commercial airport, the coordination with the LAX monitoring program and the SCAQMD port area monitoring program, the emission sources of interest within airport operations and activities, sampling methodologies, the analysis of the field samples, and data analysis approaches. The proposed airport emissions sources include aircraft operations, terminal operations, ground equipment, terminal traffic, and surrounding roadway and freeway traffic. The work plan will outline the use of historical wind roses to determine suitable upwind and downwind locations for each of the proposed sources as well as community locations to track the dispersion of emissions. In addition, the work plan will describe the complementary activities of the LAX and port area studies, while outlining synergistic opportunities such as data sharing, site collocation for instrument verifications, and rapid feedback for modification of study designs. The work plan will provide more detailed descriptions of the sampling protocols and laboratory analysis methods to be used in analyzing the field samples and the data analysis methods to be employed. A Quality Assurance Project Plan (QAPP), as required under the U.S. EPA solicitation, will be provided as part of the work plan. The detailed work plan will be prepared within one month from the start date of the project and submitted to U.S. EPA for review and comments. Comments from the U.S. EPA will be integrated into a final work plan.

Task 2: Acquire and Test Instrumentation and Modify Mobile Platforms for Community Monitoring (4 months)

Significant effort is already underway to identify potential low-power and continuous monitoring instrumentation for air toxics monitoring. As the work plan (Task 1) is being finalized, instruments will be acquired and tested for inclusion in the mobile platforms. Potential technologies under assessment include semi-continuous gas chromatograph-flame ionization detectors (GC-FID), continuous total non-methane hydrocarbon monitors for possible grab sample triggers, low-power PM10 and carbonyl samplers, continuous solid-state chemical sensor technology, and field deployable gas chromatograph-mass spectrometers (GC-MS). Equipment

will also include meteorological stations for continuous wind speed, wind direction, temperature and humidity measurements. More traditional air toxics sampling equipment for time-integrated samples may also be part of the mobile platform capability. Modification of existing monitoring platforms and vehicles may include battery banks and inverters, connections for land-power hook-ups, inlets and manifolds, and retractable meteorological towers. The goal is to produce two or three rapidly deployable and fully instrumented platforms with different power options.

Task 3: Conduct Field Monitoring at Airports and Surrounding Communities (12 months)
During a 12-month proposed monitoring period, sampling and monitoring will be conducted at both LAX and LGB and the surrounding communities. Sampling would be conducted at a minimum in two different seasons in each area, depending on timing and coordination with the other monitoring programs. At least two monitoring platforms will be deployed simultaneously to capture concurrent data. Different siting criteria will be used depending on the purpose. Upwind/downwind configurations may be used to track increases in pollutant levels and signatures for certain sources. Alternatively a near source site combined with one or two concurrent downwind sites will help track dispersion of pollutants into the community. Multiple community sites will provide data on pollutant gradients. Finally, collocation with the fixed sites of the other monitoring programs will provide data on instrument comparability as well as additional data that one of the programs may not be collecting. It is envisioned that monitoring at a given location would last between one day and two weeks, depending on meteorological conditions and monitoring results. This approach will allow for greater spatial coverage and achieve multiple monitoring objectives in a cost-effective manner over a short time period. It is clear that rapidly deployable platforms with continuous measurement capability are essential to the success of the approach.

This task also includes laboratory analysis of the field samples and preliminary data analysis that will provide feedback to a flexible study design. Data analysis techniques will include analysis of continuous and semi-continuous data using wind and pollution roses to identify source areas or directions, back trajectory calculations to locate source areas, comparisons to other air toxics monitoring stations nearby and elsewhere in the Basin, and source signature identification using background subtraction. If source signatures for multiple source types are available or determined, source apportionment techniques such as chemical mass balance will be used. If complete source profiles are not available, factorization and clustering methods may be used. Side-by-side instrument performance within and across methods will also be evaluated for precision and accuracy. Laboratory analysis of the samples collected will be conducted by SCAQMD staff. A variety of analytical methods to measure ambient chemical compounds will be utilized, following protocols, where applicable, outlined for the National Air Toxics Trends System (NATTS) sites.

Task 4. Prepare Draft and Final Technical Report (4 months)
A technical report will be prepared describing the field monitoring program, monitoring results, data analysis and findings, and comparisons with the other concurrent and previous air toxic studies in the Basin. A draft technical report will be prepared within three months after completion of the 12-month monitoring period for review by U.S. EPA. Comments from U.S. EPA will be incorporated into a final technical report.

Deliverables. The final report, including data summaries, analysis, and findings, is the primary work product. All data that is appropriate for reporting to the U.S. EPA AQS database will be reported in a timely fashion. Some data from newer instrumentation or from very temporary sites may not be appropriate for AQS reporting, but all data collected as part of this project will be publicly available upon completion of the final report.

ENVIRONMENTAL OUTPUTS AND OUTCOMES

There are several important environmental outputs expected to result from this project. First, community groups near LAX and Long Beach Airport have voiced concerns about emissions resulting from airport operations. The proposed study will provide a detailed community-level assessment of air toxics levels in those communities of concern. Another important output will be the publicly available database of air toxics measurements in those communities (through the U.S. EPA AQS database). This data can be used by others to validate models designed to predict emissions, dispersion, exposure and risk. The continuous and semi-continuous data along with meteorological data will allow the identification of the most important air toxics sources within the overall airport operations. Emissions profiles for those sources can potentially be derived from near source measurements.

Once the data and findings are finalized, several important outcomes may result. In the short-term, the development of the mobile air toxics platforms will provide an important tool to respond quickly and effectively to community concerns. Any potential air toxics levels of concern to human health in the communities near the airports will have been identified. As with other major monitoring study conducted by the SCAQMD, a technical advisory group consisting of experts in the field of ambient measurements, representatives from the community, airport authorities, and sister air and health agencies including the California Air Resources Board and U.S. EPA, will be convened to solicit input and comments on the proposed study, to educate the public on monitoring and air pollution issues, and to encourage dissemination of results. If elevated air toxic levels are found due to airport operations or other sources, a potential mid-term outcome would be regulatory or other actions to mitigate the problem. Furthermore, the results of this study could serve as the basis for other commercial airports to conduct similar studies.

In the mid-term, the results of this study will provide valuable information on the utility of newer measurement methods for other applications. These techniques can be adopted by other agencies to respond to air toxics issues. In the long-term, the information collected under this study will assist regulatory agencies in developing measures to reduce air toxics emissions in conjunction with criteria pollutant emissions reduction programs to meet national ambient air quality standards.

ROLES AND QUALIFICATIONS

The SCAQMD was formed in 1977 as a result of state legislation when four county level districts were merged. It is now one of the largest local air pollution control agencies in the United States. Its jurisdictional boundaries include a population of over 16 million. The SCAQMD has made significant progress in improving air quality through a long history of innovative regulations and control measures. It also has demonstrated technical excellence and innovation in air quality monitoring and analysis technology. As outlined above, the SCAQMD has engaged in numerous large and small scale air toxics monitoring campaigns to assess air