

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 6

PROPOSAL: Recognize Revenue and Transfer and Appropriate Funds for Air Monitoring Programs, and Issue Solicitations and Purchase Orders for Air Monitoring and Laboratory Equipment Plus One Vehicle

SYNOPSIS: SCAQMD has applied for U.S. Government Enhanced Particulate Monitoring Program grant funds for FY 2018-19 and, based on the estimate included in the FY 2018-19 Budget, is asking the Board to recognize additional revenue in anticipation of the FY 2018-19 grant award. In addition, U.S. EPA is expected to award up to \$238,502 for the NATTS Program for FY 2018-19. These actions are to recognize revenue and appropriate funds for the Enhanced Particulate Monitoring and NATTS Programs and remaining balances of the PAMS, Near-Road NO₂ and Community Scale Air Toxics Programs; transfer and appropriate funding for the remaining balance of the Community Air Toxics Initiative Program, funded by the BP ARCO Settlement Projects Fund (46); and issue solicitations and purchase orders for air monitoring and laboratory equipment plus one vehicle.

COMMITTEE: Administrative, June 8, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize federal revenue up to \$1,508,619 and appropriate funds up to \$891,889, upon receipt, into the FY 2018-19 Budget as set forth in Attachment 1 (and further detailed in Attachments 2-6).
2. Issue solicitations and authorize the Executive Officer or Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to issue purchase orders for the following (and as listed in Table 1):
 - a) One vehicle in an amount not to exceed \$40,000;
 - b) Up to four NO₂ monitors in an amount not to exceed \$50,000;
 - c) One Direct (True) NO₂ monitor based on Cavity Attenuated Phase Shift technology in an amount not to exceed \$20,000; and
 - d) Two PM₁₀ samplers in an amount not to exceed \$19,000.

3. Transfer and appropriate up to \$115,100 from the BP ARCO Settlement Projects Fund (46) to Science & Technology Advancement's FYs 2018-19 and/or 2019-20 Budget, Services & Supplies and/or Capital Outlays Major Objects, for up to 25 integrated filter-based samplers (as listed in Table 2).
4. Issue solicitation(s) and authorize the Executive Officer or Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to issue a purchase order(s) for up to 25 integrated filter-based samplers in an amount not to exceed \$115,100 from Science & Technology Advancement's FY 2018-19 and/or 2019-20 Budget.

Wayne Nastri
Executive Officer

MMM:JCL:AP:AK:KD

Background

Enhanced Particulate Monitoring Program

SCAQMD has been providing enhanced particulate monitoring support as part of a national monitoring program since 2003. Sample collection began in early February 2003 and will continue for the foreseeable future.

NATTS Program

There are currently 188 hazardous air pollutants (HAPs) or air toxics regulated under the Clean Air Act that are associated with a wide variety of adverse health effects, including cancer and neurological effects. U.S. EPA Government Performance Results Act commitments specify a goal of reducing air toxic emissions by 75% from 1993 levels to significantly reduce health risks. The NATTS Program was developed to fulfill the need for long-term national HAP monitoring data. In 2007, U.S. EPA expanded the NATTS Program and awarded Section 103 funds to conduct monitoring for toxic air contaminants at two existing SCAQMD monitoring sites, Central Los Angeles and Rubidoux. The air toxics data serves as a continuum between past and future air toxic measurement programs, such as MATES, and allows for more accurate evaluation of toxic trends on a regional basis.

PAMS Program

In February 1993, U.S. EPA promulgated the PAMS regulations for areas classified as serious, severe or extreme non-attainment for ozone. These regulations require SCAQMD to conduct monitoring for ozone precursors with enhanced monitoring equipment at multiple sites. The PAMS Program is also funding the meteorological upper air profilers sited at LAX and Ontario airports, Moreno Valley, Irvine and Whiteman Airport in the San Fernando Valley. Since the onset of the PAMS Program, U.S. EPA has annually allocated Section 105 supplemental grant funds in support of this requirement.

In 2011, U.S. EPA along with local and state agencies evaluated the PAMS network and recommended changes to regulations published on October 1, 2015, as part of the Ozone National Ambient Air Quality Standards (NAAQS) review. Changes to requirements include co-locating PAMS sites with existing National Core (NCore) sites, development of enhanced monitoring plans (EMPs) for non-attainment areas, hourly VOC measurements using auto-gas chromatographs, direct nitrogen dioxide (NO₂) measurements and monitoring of multiple meteorological parameters including mixing height. PAMS monitoring at NCore sites is required by June 1, 2019, and EMPs are required by October 1, 2019. SCAQMD intends to be an early adopter at one site of required changes and implement the changes including hourly VOC, direct NO₂ and enhanced meteorological measurements in advance of the 2019 deadline. U.S. EPA has already provided funding of \$200,000 for this effort.

Near-Road NO₂ Monitoring Program

On February 9, 2010, U.S. EPA promulgated new monitoring requirements for the NO₂ monitoring network in support of newly revised 1-hour NO₂ NAAQS and the retained annual NAAQS. The new monitoring requirements stipulated that state and local air monitoring agencies were required to install near-road NO₂ monitoring stations at locations where peak hourly NO₂ concentrations are expected to occur as well as to consider traffic volumes, fleet mix, roadway design, traffic congestion patterns, local terrain or topography, and meteorology in determining where a required near-road NO₂ monitor should be placed. In addition to those required considerations, there are other factors that impact the selection and implementation of a near-road monitoring station including satisfying siting criteria, site logistics and population exposure. SCAQMD's current near-road NO₂ monitoring network consists of four sites (Anaheim, Long Beach Route 710, Ontario Etiwanda and Ontario Route 60), which were implemented in January 2014 and 2015.

Community Scale Air Toxics Monitoring

On November 7, 2014, U.S. EPA released RFP #EPA-OAR-OAQPS-15-01 to announce the availability of funds for "Community-Scale Air Toxics Ambient Monitoring" projects. Specifically, the RFP solicited proposals for projects designed to assist state, local and tribal communities in identifying and profiling air toxics sources, assessing emerging measurement methods, characterizing the degree and extent of local-scale air toxics problems and tracking progress of air toxics reduction activities. To be considered for funding under this RFP, each project had to address only one of the following four categories: community-scale monitoring, monitoring in the near-road environment, methods evaluation; or analysis of existing data. SCAQMD staff submitted a grant proposal to U.S. EPA within the community-scale monitoring category requesting funding in the amount of \$569,682. On June 25, 2015, U.S. EPA informed staff that the SCAQMD proposal was selected for award based on its score, rank and technical merit. Since that time, staff has been conducting monitoring activities in communities near refineries and other potential sources of air toxics using optical remote sensing and other advanced air monitoring technology.

Community Air Toxics Initiative (CATI) Program

On October 6, 2017, the Board approved the transfer and appropriation of up to \$150,000 to Science & Technology Advancement's FYs 2017-18 and/or 2018-19 Budget, Services and Supplies Major Object (Small Tools, Instruments, Equipment Account), from the BP ARCO Settlement Projects Fund (46). This action was to purchase integrated samplers for deployment on light or electrical poles to keep pace with the increasing demand for more extensive metal monitoring in Paramount and Compton and the projected expansion of current monitoring and analysis activities in other parts of the Basin. Seven portable Omni samplers manufactured by BGI, Inc., were acquired for this purpose and \$115,100 is still available for the purchase of additional samplers.

Proposal

The federal revenue to be recognized, funds to be transferred and FY 2018-19 appropriations are summarized in Attachment 1. Specific details are below (and in Attachments 2-6).

Enhanced Particulate Monitoring Program (FY 2018-19)

The SCAQMD is expected to receive funding from the U.S. Government for the ongoing Enhanced Particulate Monitoring Program for FY 2018-19 in an amount up to \$2,100,000. This action is to recognize, upon receipt, additional revenue up to \$1,050,000 into the FY 2018-19 Budget and appropriate up to \$433,270 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 2. The difference between the proposed revenue and expenditure amounts is due to the revenue estimate included in the FY 2018-19 Budget, which can vary year to year.

NATTS Program (FY 2018-19)

U.S. EPA is expected to provide Section 103 Grant funding in an amount up to \$238,502 to continue the NATTS Program for the period from July 1, 2018, to June 30, 2019. Revenue for this grant in the amount of up to \$83,000 has already been included in the FY 2018-19 Budget. This action is to recognize, upon receipt, the remaining revenue up to \$155,502 into the FY 2018-19 Budget and appropriate up to \$155,502 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 3. U.S. EPA concurs with staff's proposed allocation.

PAMS Program (FY 2017-18)

As in previous years, there is a need to reallocate PAMS funding in the final quarter of the federal fiscal year ending September 30, 2018. This action is to recognize the remaining balance up to \$90,000 into the FY 2018-19 Budget and appropriate up to \$90,000 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 4. U.S. EPA concurs with staff's proposed reallocation.

Near-Road NO2 Monitoring Program (FY 2017-18)

U.S. EPA has provided Section 103 Grant funds for the implementation of the Near-Road NO2 Monitoring Program. There is a need to reallocate the estimated remaining balance in FY 2018-19. This action is to recognize the remaining balance up to \$29,117 into the FY 2018-19 Budget and appropriate up to \$29,117 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 5. U.S. EPA concurs with staff's proposed allocation.

Community Scale Air Toxics Monitoring (FY 2017-18)

U.S. EPA has provided funding in Section 103 Grant funds for the Community Scale Air Toxics Monitoring Program. There is a need to reallocate the estimated remaining balance in FY 2018-19. This action is to recognize the remaining balance up to \$184,000 into the FYs 2018-19 and/or 2019-20 Budget and appropriate up to \$184,000 to Science & Technology Advancement's FYs 2018-19 and/or 2019-20 Budget, as set forth in Attachment 6. U.S. EPA concurs with staff's proposed allocation.

Proposed Purchase Orders through Solicitation Process

Vehicle

At the outset of the Enhanced Particulate Monitoring Program over eight years ago, several dedicated vehicles were purchased to meet the mileage-intensive needs of the Program. Several of these original vehicles now have over 150,000 miles, and the U.S. Department of Homeland Security, which is the funding agency, concurs that replacing one or more of these vehicles is appropriate. At this time staff proposes to replace one vehicle with a vehicle with the lowest possible emissions at an estimated cost of \$40,000, following a formal solicitation process.

NO2 Monitors

The PAMS Program requires the measurement of ambient concentrations of nitric oxide (NO) and NO2 concentrations. The NO and NO2 measurements are used to better characterize the nature and extent of the ozone (O3) problem, track NOx emissions inventory reductions, assess air quality trends and make attainment/nonattainment decisions. Several of the NO2 monitors in the PAMS network have been in operation for many years and are in need of replacement. Up to four NO2 monitors will be replaced at an estimated total cost of \$50,000, after obtaining quotes through a formal solicitation process.

Direct (True) NO2 Monitor

Changes to PAMS requirements include monitoring for NO and NOy (total oxides of nitrogen) in addition to direct NO2, where the latter must be taken with extremely sensitive, fast and accurate NO2 measurements based on Cavity Attenuated Phase Shift (CAPS) technology. One monitor will be procured at an estimated cost of \$20,000. Quotes will be solicited from an informal solicitation process, as allowed by the SCAQMD Procurement Policy and Procedure which authorizes informal bids for equipment or supplies under \$25,000.

PM10 Samplers

U.S. EPA's NATTS Program requires the analysis of air toxics samples collected on filters from PM10 samplers. The current PM10 samplers have been in operation since the inception of the NATTS Program and are in need of replacement. The cost for two PM10 samplers is approximately \$19,000. Quotes will be solicited through an informal solicitation process, as allowed by the SCAQMD Procurement Policy and Procedure which authorizes informal bids for equipment or supplies under \$25,000.

Proposed Purchase through Sole Source Purchase Order

CATI Program

Seven portable Omni samplers manufactured by BGI, Inc., have been acquired for installation on light or electrical poles near potential sources of hexavalent chromium emissions (e.g., metal processing facilities, batch plants, others); this equipment is categorized as instruments within the Services & Supplies Major Object. However, light or electrical poles are not always available around a facility of interest, so staff may need to purchase samplers that can be operated at a secure location inside or outside of a facility where power is available. This type of sampler, based on the pricing, would be categorized as a Capital Outlay within the Capital Outlay Major Object. This proposed action is to transfer and appropriate the remaining balance of \$115,100 to Science & Technology Advancement's FYs 2018-19 and/or 2019-20 Budget, Services & Supplies and/or Capital Outlays Major Objects, from the BP ARCO Settlement Projects Fund (46) for the purchase of up to 25 portable and/or powered integrated filter-based samplers (Table 2).

Outreach

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the solicitations and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the solicitations will be emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids."

Sole Source Justification

Section VIII, B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified for procurement. The request for sole source purchase of the integrated filter-based samplers is made under Sections B.2.b and B.2.c(2) of the Procurement Policy and Procedure. Delay of the purchases for the integrated filter-based samplers (Table 2) could potentially endanger public health or property and the filter samplers are available from only the sole-source due to the use of proprietary technology.

Resource Impacts

U.S. Government funding will fully support the Enhanced Particulate Monitoring Program.

U.S. EPA Section 103 Grant funding will support the continuation of the NATTS, Near-Road NO₂, and Community Scale Air Toxics monitoring programs, including equipment, contracts and supplies necessary to meet the objectives of these programs.

U.S. EPA Section 105 Grant funding supports the continuation of the PAMS Program, including equipment, small tools and supplies necessary to meet the objectives of the Program.

In summary, up to \$1,508,619 in federal revenue will be recognized into the FY 2018-19 Budget and up to \$891,889 will be appropriated to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 1 (and further detailed in Attachments 2-6). Equipment listed in Table 1 will use these federal funds.

The BP ARCO Settlement Projects Fund (46) will be used to fund the proposed purchases listed in Table 2. These expenses will not exceed \$115,100. Any unused funds will be returned to the BP ARCO Settlement Projects Fund (46).

Table 1
Proposed Purchase Orders through Solicitation Process

Description	Qty	Funding Source	Estimated Cost
Vehicle	1	U.S. Government 2018-19	\$40,000
NO ₂ Monitor	Up to 4	PAMS FY 2017-18	\$50,000
Direct (True) NO ₂ CAPS Monitor	1	PAMS FY 2017-18	\$20,000
PM ₁₀ Samplers	2	NATTS FY 2018-2019	\$19,000
Total Proposed Purchase Orders through Solicitation Process			Not to Exceed \$129,000

Table 2
Proposed Purchase through Sole Source Purchase Order(s)

Description	Qty	Estimated Cost
Integrated filter-based samplers	Up to 25	\$115,100
Total		\$115,100

Attachments

1. Proposed Federal Revenues and Expenditures for FY 2018-19
2. Proposed Enhanced Particulate Monitoring Program Expenditures for FY 2018-19
3. Proposed NATTS Expenditures for FY 2018-19
4. Proposed 25th Year PAMS Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)
5. Proposed Near-Road NO2 Monitoring Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)
6. Proposed Community Scale Air Toxics Monitoring Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Attachment 1
Proposed Federal Revenues and Expenditures for FY 2018-19

Program Year	Funding Agency	Program Name	Proposed Revenues	Proposed Expenditures	Detailed Appropriations
FY 2018-19	U.S. Govt.	Enhanced Particulate Monitoring (a)	1,050,000	433,270	Attachment 2
FY 2018-19	EPA-Section 103	National Air Toxics Trends Stations (NATTS)	155,502	155,502	Attachment 3
FY 2017-18*	EPA-Section 105	Photochemical Assessment Monitoring Stations (PAMS)	90,000	90,000	Attachment 4
FY 2017-18*	EPA-Section 103	Near-Road NO2 Monitoring	29,117	29,117	Attachment 5
FY 2017-18*	EPA-Section 103	Community Scale Air Toxics	184,000	184,000	Attachment 6
			1,508,619	891,889	

(a) The difference between the proposed revenue and expenditure amounts is due to the revenue estimate included in the FY 2018-19 Budget which can vary from year to year.

* Recognize revenue and appropriate funds representing the remaining balance from FY 2017-18

Attachment 2
Proposed Enhanced Particulate Monitoring Expenditures for FY 2018-19

Account Description	Account Number	Program Code	Appropriation not to Exceed
*Salaries & Employee Benefits Major Object:			
Overtime	52000	44505	\$ 38,257
Total Salaries & Employee Benefits Major Object			\$ 38,257
Services & Supplies Major Object:			
Temp Agency Services	67460	47505	253,280
Maintenance of Equipment	67600	47505	500
Building Maintenance	67650	47505	200
Auto Mileage	67700	47505	99,833
Clothing	68000	47505	500
Office Expense	68100	47505	200
Small Tools	68300	47505	500
Taxes, License, Fees	69600	47505	0
Total Services & Supplies			\$ 355,013
Capital Outlay Major Object:			
Vehicle (1)	77000	47505	\$ 40,000
Total Capital Outlay Major Object:			\$ 40,000
FY 2018-19 Appropriations			\$ 433,270

* Salaries, Benefits and Indirect Costs (excluding Overtime) are already included in the adopted FY 2018-19 Budget

Attachment 3
Proposed NATTS Expenditures for FY 2018-19

Account Description	Account Number	Program Code	Estimated Expenditures
Services & Supplies Major Object:			
Professional and Specialized Services	67450	47468	\$ 1,000
Maintenance of Equipment	67600	47468	56,000
Travel	67800	47468	3,000
Laboratory Supplies	68050	47468	68,000
Office Expense	68100	47468	1,002
Small Tools	68300	47468	7,500
Total Services & Supplies			\$ 136,502
Capital Outlay Major Object:			
PM10 Monitors (2)	77000	47468	\$ 19,000
Total Capital Outlay Major Object:			\$ 19,000
FY 2018-19 Appropriations			\$ 155,502

Note: Salaries, Benefits and Indirect Costs are already included in the adopted FY 2018-19 Budget

Attachment 4

Proposed 25th Year PAMS Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Account Description	Account Number	Program Code	Initial Appropriation (a)	Appropriations not to Exceed
Services & Supplies Major Object:				
Maintenance of Equipment	67600	47530	-	5,000
Laboratory Supplies	68050	47530	-	10,000
Small Tools	68300	47530	-	5,000
Total Services & Supplies			-	20,000
Capital Outlay Major Object:				
Nitrogen Dioxide Monitor (up to 4)	77000	47530	50,000	50,000
Direct (True) Nitrogen Dioxide CAPS Monitor (1)	77000	47530	20,000	20,000
Total Capital Outlay Major Object:			\$ 70,000	\$ 70,000
FY 2018-19 Appropriations			\$ 70,000	\$ 90,000

(a) This is the estimated amount for the first quarter of FY 2018-19. The remaining amount will be appropriated upon reconciliation of FY 2017-18 expenditures.

Attachment 5

Proposed Near-Road NO2 Monitoring Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Account Description	Account Number	Program Code	Initial Appropriation (a)	Appropriations not to Exceed
Services & Supplies Major Object:				
Maintenance of Equipment	67600	47469	2,000	7,617
Travel	67800	47469	2,000	15,500
Laboratory Supplies	68050	47469	500	1,000
Small Tools	68300	47469	2,000	5,000
Total Services & Supplies			\$ 6,500	\$ 29,117
FY 2018-19 Appropriations			\$ 6,500	\$ 29,117

(a) This is the estimated amount for the first quarter of FY 2018-19. The remaining amount will be appropriated upon reconciliation of FY 2017-18 expenditures.

Attachment 6

Proposed Community Scale Air Toxics Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Account Description	Account Number	Program Code	Initial Appropriation (a)	Appropriations not to Exceed
Services & Supplies Major Object:				
Professional and Specialized Services	67450	47469	\$ 50,000	\$ 110,000
Maintenance of Equipment	67600	47469	7,000	14,000
Communications	67900	47469	5,000	10,000
Small Tools *	68300	47469	25,000	50,000
Total Services & Supplies			\$ 87,000	\$ 184,000
FY 2018-19 Appropriations			\$ 87,000	\$ 184,000

(a) This is the estimated amount for the first quarter of FY 2018-19. The remaining amount will be appropriated upon reconciliation of FY 2017-18 expenditures.

* This amount includes \$9,000 for Automatic Information Systems (AIS), which during the procurement process may be categorized as Capital Outlays or Services & Supplies depending on whether the item is purchased or contracted as a service.