

BOARD MEETING DATE: November 6, 2015

AGENDA NO. 8

PROPOSAL: Recognize Revenue and Appropriate Funds for U.S. EPA PAMS, U.S. EPA PM2.5 and U.S. Government Programs, Amend Contracts for Technical Support for U.S. EPA PAMS, and Issue RFQs and Purchase Orders for Air Monitoring Equipment and Upper Air Meteorology Equipment Warranty Services

SYNOPSIS: SCAQMD expects to be awarded Section 105 funds by the U.S. EPA in the estimated amount of \$1,217,270 for the 24th Year of the U.S. EPA PAMS Program, Section 103 funds by the California Air Pollution Control Officers Association in the estimated amount of \$25,000 for the U.S. EPA PM2.5 Program, and funds by the U.S. Government in the estimated amount of \$20,000 for the Enhanced Particulate Monitoring Program. These actions are to: 1) recognize revenue and appropriate funds into the FY 2015-16 Budget for the 24th Year PAMS, PM2.5 and Enhanced Particulate Monitoring Programs; 2) amend contracts for technical support for the PAMS Program and; 3) issue RFQs and purchase orders for air monitoring equipment and upper air meteorology equipment warranty services.

COMMITTEE: Administrative, October 9, 2015; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue and appropriate funds, upon receipt, in the amount of \$825,091 (\$392,179 was previously included in Salary and Employee Benefits within the FY 2015-16 Budget), as part of the estimated U.S. EPA Section 105 24th Year PAMS award of \$1,217,270, into the Services and Supplies and Capital Outlays Major Objects in the FY 2015-16 Budget, divided between Science & Technology Advancement and Planning, Rule Development & Area Sources, as set forth in the attached, and adjust appropriations as required once the final award amount is determined.
2. Recognize revenue and appropriate funds, upon receipt, in the amount of \$25,000, as part of the estimated additional U.S. EPA Section 103 PM2.5 funding awarded by the California Air Pollution Control Officers Association (CAPCOA), as needed, into the Services and Supplies and Capital Outlays Major Objects in Science & Technology Advancement's FY 2015-16 Budget

(Org 47) in Lab Supplies (\$6,000), Small Tools (\$5,000) and Capital Outlays (\$14,000).

3. Recognize revenue and appropriate funds, upon receipt, in the amount of \$19,000 (\$1,000 was previously included in Salary and Employee Benefits within the FY 2015-16 Budget), as part of the estimated additional U.S. Government funding for the Enhanced Particulate Monitoring Program, into the Services & Supplies Major Object in Science & Technology's FY 2015-16 Budget (Org 47).
4. Authorize the Executive Officer to amend the following contracts as budgeted in the 24th Year PAMS award:
 - a) a contract with Sonoma Technology, Inc. by adding additional funds not to exceed \$100,000 for upper air meteorological station technical support; and
 - b) a contract with Technical & Business Systems, Inc. (T&B Systems) by adding additional funds not to exceed \$20,000 to upgrade the meteorological systems and data communications at the air monitoring stations.
5. Issue RFQs, in accordance with SCAQMD Procurement Policy and Procedure, for equipment listed in the table and described in this letter.
6. Authorize the Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to issue:
 - a) Purchase orders, based on the results of RFQs, for air monitoring equipment in an amount not to exceed \$226,100 listed in the table and described in this letter; and
 - b) Sole source purchase order with Atmospheric Systems, Inc. in an amount not to exceed \$30,000 for upper air meteorology warranty services as described in this letter.

Barry R. Wallerstein, D.Env.
Executive Officer

MMM:LT:JCL:cv

Background

PAMS Program

In February 1993, the U.S. EPA promulgated the PAMS regulations for areas classified as serious, severe or extreme nonattainment. These regulations require SCAQMD to conduct monitoring for ozone precursors with enhanced monitoring equipment at multiple sites. The PAMS Program also funds the meteorological upper air profilers sited at LAX and Ontario airports, the upper air site installed at Moreno Valley in Riverside County and the upper air site in Orange County. Since the onset of the PAMS

Program, the U.S. EPA has annually allocated Section 105 supplemental grant funds in support of program requirements.

PM2.5 Program

Since 1998, U.S. EPA has provided funds under a Section 103 Grant for a comprehensive PM2.5 Air Monitoring Program. To date, there are 20 ambient SCAQMD monitoring stations operating 23 Federal Reference Method (FRM) PM2.5 monitors under U.S. EPA funding and 17 Federal Equivalent Method (FEM) PM2.5 continuous monitors. In addition, U.S. EPA has supported the expansion of the network to collect continuous PM2.5 mass and chemical speciation at several sites within the South Coast Air Basin. This augmentation substantially adds to the fine particulate data which will help in the characterization of PM2.5 sources, current air quality conditions and health impacts.

U.S. Government Enhanced Particulate Monitoring Program

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

Proposal

24th Year PAMS Program Funds

The U.S. EPA estimates that the 24th Year PAMS Program will be funded at \$1,217,270. This action is to recognize revenue, upon receipt, and appropriate a portion of the estimated funds in the amount of \$825,091 (\$392,179 was previously included within the FY 2015-16 Salary and Employee Benefits Budget) into Services and Supplies and Capital Outlays Major Objects in the FY 2015-16 Budget divided between Science & Technology Advancement and Planning, Rule Development & Area Sources, as set forth in the attachment. The U.S. EPA concurs with staff's proposed allocation.

PM2.5 Program

SCAQMD estimates that the U.S. EPA PM2.5 Program for FY 2015-16 will receive additional Section 103 Grant funding in the amount of \$25,000 awarded by CAPCOA. This action is to recognize revenue and appropriate funds, upon receipt, in the estimated amount of \$25,000 into Services and Supplies and Capital Outlays Major Objects in Science & Technology Advancement's FY 2015-16 Budget (Org 47) as follows: Lab Supplies (\$6,000), Small Tools (\$5,000) and Capital Outlays (\$14,000). CAPCOA and U.S. EPA concur with staff's proposed allocation.

Enhanced Particulate Monitoring Program

SCAQMD estimates that the ongoing Enhanced Particulate Monitoring Program for FY 2015-16 will receive additional funding in the amount of \$20,000. The purpose of the augmentation is to provide additional support and capacity to the U.S. Government regional office for conducting training and inter-agency communications. Revenue in the amount of \$2,836,157 for this grant has already been included in the FY 2015-16

Budget. This action is to recognize the additional revenue and appropriate, upon receipt, \$19,000 (\$1,000 was already included in Salary and Employee Benefits within the FY 2015-16 Budget) into the Services & Supplies Major Object in Science & Technology Advancement's (Org 47) FY 2015-16 Budget.

Amend Existing Contracts for Technical Support

Technical Support – Upper Air

As part of the U.S. EPA PAMS Program, comprehensive measurements of meteorological parameters have been collected in the South Coast Air Basin since 1994, using a network of radar wind and temperature profilers, acoustic wind profilers and tower-mounted meteorological sensors. Data from the upper air measurement stations is routinely used for air quality forecasting and event analyses and has been invaluable for regional modeling efforts. SCAQMD utilizes consultants to provide operational support, due to the limited availability of staff resources to maintain this network. On January 10, 2014, the Board awarded a contract to Sonoma Technology, Inc. for the initial year of the current contract effort, with future year annual renewals of up to \$100,000, based upon availability of funds and satisfactory contractor performance. Contractor performance has been satisfactory and funds will be available. This action is to authorize the Executive Officer to exercise the renewal option with Sonoma Technology, Inc. for the third year of the current contract to amend the contract by adding additional funds not to exceed \$100,000 for SCAQMD PAMS Upper Air Meteorological Monitoring Network, as budgeted in the 24th Year PAMS award.

Meteorology Network Upgrades

T&B Systems is currently under contract to provide technical support to upgrade the meteorological systems and data communications at various air monitoring stations. Upgrades at approximately 22 stations have been completed. Amending the contract will continue the work needed to upgrade the network and ensure consistency and quality of this highly specialized work across the SCAQMD network. This action is to authorize the Executive Officer to amend the contract with T&B Systems by adding additional funds not to exceed \$20,000 for upgrades to the SCAQMD meteorology network as budgeted in the 24th Year PAMS award.

Proposed Purchase Orders through an RFQ Process

Hydrogen Generator

The U.S. EPA PAMS Program requires the measurement of VOCs using instrumentation which uses hydrogen to perform analyses. Hydrogen generators provide a reliable and cost-effective source of this gas. A current hydrogen generator in service has failed, cannot be repaired, and thus is in need of replacement. The approximate cost for one (1) hydrogen generator is \$7,100. Quotes for this RFQ will be solicited through informal bids, in accordance with SCAQMD Procurement Policy and Procedure.

Gas Dilution Systems

Gas calibration dilution systems are used to precisely blend specific concentrations of calibration gases at air monitoring stations collecting data to support the U.S. EPA PAMS Program. Some of the current dilution systems have been in service beyond their expected life span, have difficulty achieving required quality control criteria, lack many needed remote diagnostic capabilities, and are in need of replacement. The cost for six (6) gas calibration dilution systems is approximately \$96,000. Quotes for this RFQ will be solicited through competitive formal bids, in accordance with SCAQMD Procurement Policy and Procedure.

Sample Storage System

As part of the U.S. EPA PAMS Program, carbonyl compound measurement requirements, samples from the field must be stored under specific temperature criteria at sub-ambient temperatures. These refrigerated storage systems must have sufficient capacity to store multiple samples until analysis occur to maintain sample integrity and increase long term reliability. The cost for one (1) sample storage system is approximately \$10,000. Quotes for this RFQ will be solicited through informal bids, in accordance with SCAQMD Procurement Policy and Procedure.

NO2 Monitors

The U.S. EPA PAMS Program requires the analysis of NO₂ in the air. Measurements are conducted in near real time and preliminary data from monitors are incorporated into the SCAQMD air quality map. Some of the current monitors have been in service beyond their expected life span, have difficulty achieving required quality control criteria, and are in need of replacement. The cost for two (2) NO₂ monitors is approximately \$32,000. Quotes for this RFQ will be solicited through competitive formal bids, in accordance with SCAQMD Procurement Policy and Procedure.

Gas Chromatograph Preconcentrator

The U.S. EPA PAMS Program requires the analysis of VOCs in the air. Samples are collected in canisters at select stations and analyzed using gas chromatographs (GCs) equipped with preconcentrators. These analytic systems measure up to 57 VOCs while meeting quality control criteria of the PAMS Program. Current GC preconcentrators are no longer supported or compatible with current Windows operating systems and are in need of replacement. The approximate cost for one (1) GC preconcentrator is \$67,000. Quotes for this RFQ will be solicited through competitive formal bids, in accordance with SCAQMD Procurement Policy and Procedure.

PM2.5 FRM Monitor

Since 1998, U.S. EPA has provided funds under a Section 103 Grant for a comprehensive PM_{2.5} Air Monitoring Program. To date, there are 20 ambient SCAQMD monitoring stations operating 23 PM_{2.5} samplers under U.S. EPA funding. There are samplers that have been in operation since the inception of the PM_{2.5} air

monitoring program and are in need of replacement. The approximate cost for one (1) PM2.5 FRM Monitor is \$14,000. Quotes for this RFQ will be solicited through informal bids, in accordance with SCAQMD Procurement Policy and Procedure.

Proposed Purchase through Sole Source Purchase Order

Extended Warranty Services for Upper Air Meteorology Equipment

The U.S. EPA PAMS Program requires measurements of upper air meteorology including wind speed and direction. This is currently conducted by four sodar (SONIC Detection And Ranging) profiling systems in addition to other instrumentation. These systems have been in service beyond their designed usage, are unique and are costly to repair. The approximate cost for the warranty service from Atmospheric Systems, Inc. is \$30,000.

Outreach

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFQs 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 RFQs 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.3 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified for federally funded procurement. The requests for sole source purchase of the extended warranty is made under Section B.3.a of the Procurement Policy and Procedure which states: For contracts funded in whole or in part with federal funds, written justification for sole source award must be provided documenting that awarding a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and that one of the following circumstances applies: (a) The item is available only from a single source; (b) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation; (c) The awarding federal agency authorizes noncompetitive proposals; or (d) After solicitation of a number of sources, competition is determined inadequate. Atmospheric Systems, Inc. is the only company capable of providing repair parts and services for the equipment they manufacture. U.S. EPA staff concur with the sole source purchases as also meeting U.S. EPA requirements for category (a).

Resource Impacts

U.S. EPA Section 105 Grant funding will support the operation of the 24th Year PAMS Program, including the purchase of equipment, supplies and services, and Salaries and Employee Benefits, to meet necessary objectives of the Program. The U.S. EPA Section 103 Grant funding awarded by CAPCOA will support the purchase of an FRM monitor, lab supplies and small tools in support of the PM 2.5 program. Finally, the augmented funds provided by the U.S. Government will support training and inter-agency communication activities. Total revenue to be received is estimated at \$1,262,270, comprised of \$1,217,270 for the U.S. EPA Section 105 24th Year PAMS Program, \$25,000 from U.S. EPA Section 103 PM2.5 funding awarded by CAPCOA, and \$20,000 in U.S. Government funding for the Enhanced Particulate Monitoring Program. The following table outlines purchases proposed through RFQ processes, and the attachment to this Board letter details where the \$1,217,270 for the U.S. EPA Section 105 funds shall be appropriated in the FY 2015-16 Budget.

Proposed Purchase Orders through RFQ Process

Description	Qty	Funding Source	Estimated Cost
Hydrogen Generator	1	PAMS FY 15-16	\$7,100
Gas Dilution Systems	6	PAMS FY 15-16	\$96,000
Sample Storage System	1	PAMS FY 15-16	\$10,000
NO2 Monitor	2	PAMS FY 15-16	\$32,000
Gas Chromatograph Preconcentrator	1	PAMS FY 15-16	\$67,000
PM2.5 FRM Monitor	1	PM2.5 FY 15-16	\$14,000
Total Proposed Purchase Orders through RFQ Process			Not to Exceed \$226,100

Attachment

Proposed PAMS 24th Year Expenditures for FY 2015-16

ATTACHMENT

PROPOSED PAMS 24th YEAR EXPENDITURES FOR FY 2015-16

	Budget Code	Program Code	Quantity	Estimated Expenditure
A. Fixed Assets				\$212,100
Hydrogen Generator	77000	47530	1	\$7,100
Gas Dilution Systems	77000	47530	6	\$96,000
Sample Storage System	77000	47530	1	\$10,000
NO2 Monitor	77000	47530	2	\$32,000
Gas Preconcentrator	77000	47530	1	\$67,000
B. Laboratory Supplies				\$75,000
Misc. Supplies	68050	47530		\$75,000
C. Maintenance of Equipment				\$85,900
Misc. Parts	67600	47530		\$50,900
Misc. Parts	67600	26530		\$35,000
D. Office Expense				\$15,800
Office Supplies	68100	47530		\$5,800
Office Supplies	68100	26530		\$10,000
E. Building Maintenance Operation				\$10,000
Building Maintenance	67650	47530		\$5,000
Building Maintenance	67650	26530		\$5,000
F. Contracts				\$320,000
Upper Air Warranties (Atmos. Sys. Corp.)	67450	26530		\$30,000
Technical Support - Upper Air (Sonoma)	67450	26530		\$100,000
Meteorology Network Upgrades (T&B Systems)	67450	47530		\$20,000
Data Management and Analysis	67450	47530		\$50,000
Air Monitoring Station Renovations	67450	47530		\$70,000
Photochemical Modeling	67450	26530		\$50,000
G. Small Tools				\$33,600
Miscellaneous Tools	68300	47530		\$33,000
Miscellaneous Tools	68300	26530		\$600
H. Communications				\$13,000
Communications Expenses	67900	26530		\$13,000
I. Travel				\$9,000
Travel Expenses	67800	47530		\$7,000
Travel Expenses	67800	26530		\$2,000

	Budget Code	Program Code	Quantity	Estimated Expenditure
J. Rents and Leases of Structures				\$27,000
Upper Air Leases	67350	26530		\$25,000
Station Leases	67350	47530		\$2,000
K. Training				\$2,000
Training Expenses	69500	26530		\$2,000
L. Conference Registration				\$1,000
Conference Registration	69500	26530		\$1,000
M. Demurrage				\$20,000
Demurrage Expenses	67550	47530		\$20,000
N. Postage				\$150
Misc. Postage	68060	26530		\$150
O. Taxes				\$141
Misc. Taxes	69600	47530		\$141
P. Rents and Leases of Equipment				\$400
Misc. Equipment	67300	26530		\$200
Misc. Equipment	67300	47530		\$200
Subtotal (FY 2015-16 Appropriations)				\$825,091
Q. Salaries and Benefits*				\$392,179
Salaries and Benefits	51000	44530		
Salaries and Benefits	51000	26530		
Total (EPA Estimated 24th Year 105 Grant)				\$1,217,270

*previously included in the FY 2015-16 Budget