

BOARD MEETING DATE: December 2, 2016

AGENDA NO. 3

**PROPOSAL:** Recognize Revenue and Appropriate Funds for U.S. EPA PAMS and Near-Road Monitoring Programs, Amend Technical Support Contracts for U.S. EPA PAMS, and Issue RFQ and Purchase Orders and/or Contracts for CNG Vehicles and Air Monitoring and Analysis Equipment

**SYNOPSIS:** SCAQMD expects to be awarded Clean Air Act Section 105 Grant funds by the U.S. EPA in the estimated amount of \$1,217,822 for the 25th Year U.S. EPA PAMS Program. These actions are to: 1) recognize revenue and appropriate funds into the FY 2016-17 Budget for the 25th Year PAMS Program; 2) appropriate funds into the FY 2016-17 Budget for the U.S. EPA FY 2015-16 PAMS and Near-Road Monitoring Programs; 3) amend technical support contracts for the 25th Year PAMS Program; and 4) issue an RFQ and purchase orders for air monitoring equipment and CNG vehicles.

**COMMITTEE:** Administrative, November 18, 2016; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Recognize revenue and appropriate funds, upon receipt, in the amount of \$825,643 (\$392,179 was previously included in Salary and Employee Benefits within the FY 2016-17 Budget), as part of the estimated U.S. EPA Section 105 25th Year PAMS award of \$1,217,822, into the Services and Supplies and Capital Outlays Major Objects in the FY 2016-17 Budget, divided between Science & Technology Advancement (Org 47) and Planning, Rule Development & Area Sources (Org 26), as set forth in the attachment, and adjust appropriations as needed once the final award amount is determined.
2. Authorize the Executive Officer to amend the following contracts as budgeted in the proposed 25th Year PAMS grant as listed in the attachment:
  - a) Add funds not to exceed \$110,000 to the contract with Sonoma Technology, Inc., for upper air meteorological station technical support; and
  - b) Add funds not to exceed \$20,000 to the contract with Technical & Business Systems, Inc., (T&B Systems) to upgrade the meteorological systems and data communications at the air monitoring stations.

3. Appropriate \$48,000 (in addition to \$67,000 previously appropriated by the Board on July 8, 2016) to Science & Technology Advancement's FY 2016-17 Budget (Org 47), Capital Outlays Major Object, towards the purchase of one high-pressure liquid chromatograph (HPLC) with a diode array detector (DAD) funded with the FY 2015-16 U.S. EPA PAMS grant.
4. Issue an RFQ, in accordance with SCAQMD's Procurement Policy and Procedure, for equipment listed in Table 1 and described in this letter.
5. Authorize the Procurement Manager, in accordance with SCAQMD's Procurement Policy and Procedure, to issue purchase orders and/or contracts for:
  - a) Air monitoring equipment, based on the results of the RFP, in an amount not to exceed \$115,000 as listed in Table 1 and described in this letter; and
  - b) Vehicles and air monitoring equipment in an amount not to exceed \$228,000 as listed in Table 2 and described in this letter.
6. Appropriate up to \$23,000 to Science & Technology Advancement's FY 2016-17 Budget (Org 47), Capital Outlays Major Object, for the purchase of one black carbon monitor with U.S. EPA Near-Road Monitoring funds.

Wayne Natri  
Acting Executive Officer

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## **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 Clean Air Act Section 105 Grant funds in support of program requirements.

### Near-Road NO2 Monitoring Program

On February 9, 2010, U.S. EPA promulgated new monitoring requirements for the nitrogen dioxide (NO2) monitoring network in support of newly revised 1-hour NO2 National Ambient Air Quality Standards (NAAQS) and the retained annual NAAQS. In the new monitoring requirements, state and local air monitoring agencies are required to install near-road NO2 monitoring stations at locations where peak hourly NO2 concentrations are expected to occur. State and local air agencies are required 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.

### **Proposal**

#### 25th Year PAMS Program Funds

The U.S. EPA estimates that the 25th Year PAMS Program will be funded at \$1,217,822. This action is to recognize revenue, upon receipt, and appropriate a portion of the estimated funds in the amount of \$825,643 (\$392,179 was previously included in Salary and Employee Benefits within the FY 2016-17 Budget) into Services and Supplies and Capital Outlays Major Objects in the FY 2016-17 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.

#### Amend Technical Support Contracts

##### *Technical Support – Upper Air Meteorological Station*

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 for the initial year of the current contract effort, with future year annual renewals up to \$110,000, 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 for the third year of the current contract and amend the contract by adding additional funds not to exceed \$110,000 for the PAMS Upper Air Meteorological Monitoring Network.

### *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 ensure continued upgrades to the network for 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 meteorology network.

### Proposed Purchase Orders through RFQ Process

#### *High Pressure Liquid Chromatograph (HPLC) with a Diode Array Detector (DAD)*

An HPLC is used for the analysis of carbonyl compounds as part of the required measurements of the PAMS program. The current HPLC is no longer supported by the manufacturer and is in need of replacement. On July 8, 2016, the Board approved the purchase of a gas chromatograph (GC) preconcentrator in the amount of \$67,000. It has been determined that an HPLC with a DAD is a higher priority, and the purchase of the GC preconcentrator is not needed immediately. Additional funding will allow for better detection of carbonyl compounds and allow for future upgrades for other compound analyses. This action is to appropriate \$48,000 (in addition to the \$67,000 previously appropriated) towards the purchase of one HPLC with a DAD in a total amount not to exceed \$115,000. Quotes for this RFQ will be solicited through competitive formal bids, in accordance with SCAQMD's Procurement Policy and Procedure.

### Proposed Purchases through Cooperative Purchasing, Prior Bid, Last Price and Sole Source Purchase Orders

#### *CNG Vehicle (Truck or Van)*

With an aging fleet of calibration and repair vehicles, staff has identified the need to replace the older high-mileage vehicles with new CNG-powered vehicles. Calibration and repair vehicles are essential for staff to perform routine and non-routine calibration and maintenance and repair of air monitoring equipment for air monitoring stations supporting the PAMS program. Dedicated CNG vehicles are available from vendors under the State of California, Department of General Services, Procurement Division, Alternative Fueled Vehicles Contract 1-16-23-23D. Two CNG trucks and/or vans from the vendor on the list with the most competitive price for these types of vehicles will be selected. The cost of two CNG trucks and/or vans is approximately \$90,000.

#### *Gas Dilution System*

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. An RFQ was previously released for gas dilution systems and Teledyne was selected. The

vendor has agreed to honor the same price as the prior bid. The cost for two gas calibration dilution systems is approximately \$50,000.

#### *Site Node Loggers*

Site node loggers are necessary for air monitoring equipment to communicate to the data acquisition software to transmit data and quality control information in near real time. Upgraded site node loggers are being deployed at the PAMS air monitoring stations for this purpose. Agilaire is the only supplier of compatible site node loggers. The cost for two site node loggers is approximately \$21,000.

#### *Pure Air Generators*

Pure air generators are necessary to deliver contaminant-free air required for the operation of air monitoring equipment that supports PAMS measurements. An RFQ was previously released for pure air generators and Teledyne was selected. The vendor has agreed to honor the same price as the prior bid. The cost for six pure air generators is approximately \$44,000.

#### *Black Carbon Monitor*

Various analytical methods have been developed to quantify the concentration of atmospheric soot particles. Soot can be analyzed by means of different methodologies. When its light-absorbing properties are measured, soot is referred to as black carbon. Black carbon measurements would enhance characterization of mobile sources in the near-road environment, and currently there are two black carbon monitors deployed in the near-road environment in the air monitoring network. On July 8, 2016, the Board authorized the purchase of three traffic counters in the amount of \$30,000. It has been determined that the black carbon monitor is a higher priority, and the purchase of the traffic counters are not needed due to available traffic data provided through Caltrans. An RFQ was previously released for black carbon monitors and Magee was selected. The vendor has agreed to honor the same price as the prior bid. The approximate cost for one black carbon monitor is \$23,000.

#### Near-Road Monitoring Program

U.S. EPA has provided funding in Section 103 Grant funds for the implementation of the Near-Road NO<sub>2</sub> Monitoring Program through May 31, 2017. This action is to appropriate up to \$23,000 to Science & Technology Advancement's FY 2016-17 Budget, Capital Outlays Major Object, for the purchase of one black carbon monitor with U.S. EPA Near-Road Monitoring funds.

#### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFQ 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 RFQ 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."

### **Cooperative Purchasing**

Under Section IV.A.5 of SCAQMD's Procurement Policy and Procedure, the Procurement Manager shall pursue cooperative purchasing opportunities whenever possible. Dedicated CNG vehicles are available from vendors under the State of California, Department of General Services, Procurement Division, Alternative Fueled Vehicles Contract 1-16-23-23D.

### **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 site node loggers 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. Therefore, under circumstance (a) Agilaire is the only supplier of site node loggers fully compatible with the AirVision data acquisition system currently in use.

### **Prior Bid, Last Price**

In addition, SCAQMD's Procurement Policy and Procedure allows for awards based on prior bid, last price if the conditions of the previous purchase are similar. The Board previously released RFQs Q2016-07R, Q2015-13R and Q2016-07R for competitive bids on gas dilution systems, pure air generators and black carbon monitors. Teledyne was the selected vendor for the gas dilution systems and pure air generators, and Magee was the selected vendor for the black carbon monitors. Teledyne and Magee have agreed to honor the same price as the last bid for these items. U.S. EPA staff concur with these purchases.

**Resource Impacts**

U.S. EPA Section 105 Grant funding will support the operation of the 25th Year PAMS Program and fund Capital Outlays, Supplies and Services, and Salaries and Employee Benefits to meet necessary objectives of the Program. Total revenue to be received is estimated at \$1,217,822 from the U.S. EPA Section 105 25th Year PAMS Program. The following tables outline proposed purchases and the attachment to this letter details appropriations of \$825,643 for Services and Supplies and Capital Outlays. Of the \$1,217,822 for the 25th Year PAMS Program, \$392,179 was previously included in Salaries and Employee Benefits within Science & Technology’s FY 2016-17 Budget. Funding of \$23,000 for the black carbon monitor is available from the U.S. EPA Near-Road Monitoring grant.

**Table 1  
Proposed Purchase Order and/or Contract through RFQ**

<b>Description</b>	<b>Qty</b>	<b>Funding Source</b>	<b>Estimated Cost</b>
HPLC with a DAD	1	PAMS FY 15-16	\$115,000
<b>Total</b>			<b>Not to Exceed \$115,000</b>

**Table 2  
Proposed Purchases through Cooperative Purchasing, Prior Bid, Last Price and  
Sole Source Purchase Orders and/or Contracts**

<b>Description</b>	<b>Qty</b>	<b>Funding Source</b>	<b>Estimated Cost</b>
CNG Vehicle	2	PAMS FY 16-17	\$90,000
Gas Dilution System	2	PAMS FY 16-17	\$50,000
Site Node Logger	2	PAMS FY 16-17	\$21,000
Pure Air Generator	6	PAMS FY 16-17	\$44,000
Black Carbon Monitor	1	Near-Road 15-16	\$23,000
<b>Total</b>			<b>Not to Exceed \$228,000</b>

**Attachment**

Proposed 25th Year PAMS Expenditures for FY 2016-17

**Attachment**  
**Proposed 25th Year PAMS Expenditures for FY 2016-17**

<b>Account Description</b>	<b>Account Number</b>	<b>Program Code</b>	<b>Estimated Expenditure</b>
<b>Services &amp; Supplies Major Object:</b>			
<b><u>Planning, Rule Development &amp; Area Sources</u></b>			
Rents & Leases Structure	67350	26530	\$ 20,000
Professional and Specialized Services: Technical Support - Upper Air (Sonoma)	67450	26530	110,000
Professional and Specialized Services: Upper Air Warranties	67450	26530	30,000
Rents & Leases Equipment	67600	26530	500
Maintenance of Equipment	67600	26530	35,000
Building Maintenance	67650	26530	5,000
Travel	67800	26530	3,000
Communications	67900	26530	13,000
Postage	68060	26530	150
Office Expense	68100	26530	5,000
Small Tools	68300	26530	500
Training	69500	26530	2,000
			\$ 224,150
<b><u>Science &amp; Technology Advancement</u></b>			
Rents & Leases Structure	67350	47530	\$ 2,000
Professional and Specialized Services: Meteorology Network Upgrades (T&B Systems)	67450	47530	20,000
Professional and Specialized Services: Station Upgrades	67450	47530	70,000
Professional and Specialized Services: Data Management and Analysis	67460	47530	15,000
Temp Agency Services	67460	47530	5,000
Demurrage Expenses	67550	47530	20,000
Rents & Leases Equipment	67600	47530	500
Maintenance of Equipment	67600	47530	82,441
Building Maintenance	67650	47530	5,000
Travel	67800	47530	6,000
Laboratory Supplies	68050	47530	75,552
Office Expense	68100	47530	5,000
Small Tools	68300	47530	45,000
Training	69500	47530	10,000
			\$ 361,493
<b>Total Services &amp; Supplies Major Object:</b>			<b>\$ 585,643</b>
<b>Capital Outlay Major Object:</b>			
CNG Vehicle (2)	77000	47530	90,000
Gas Dilution System (2)	77000	47530	50,000
Site Node Logger (2)	77000	47530	21,000
Pure Air Generator (6)	77000	47530	44,000
Carbonyl Sampler (2)	77000	47530	35,000
<b>Total Capital Outlay Major Object:</b>			<b>\$ 240,000</b>
<b>FY 2016-17 Appropriations</b>			<b>\$ 825,643</b>