

BOARD MEETING DATE: February 2, 2018

AGENDA NO. 6

PROPOSAL: Recognize Revenue and Appropriate and Transfer Funds for U.S. EPA PAMS Program and Issue RFQ and Purchase Orders for Equipment

SYNOPSIS: SCAQMD was awarded \$200,000 in U.S. EPA Clean Air Act Section 105 Grant funds in FY 2018 to be an early adopter of the new PAMS program requirements in advance of the 2019 deadline. Staff recommends that a portion of remaining FY 2017 PAMS funds be reallocated to purchase air monitoring equipment. These actions are to recognize revenue and appropriate funds into the FYs 2017-18 and/or 2018-19 Science & Technology Advancement Budgets for the partial implementation of the FY 2018 (26th Year) PAMS Program, transfer funds between Major Objects, and issue an RFQ and purchase orders for equipment to conduct air monitoring, VOC analyses and meteorological measurements.

COMMITTEE: Administrative, January 12, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue, upon receipt, of up to \$200,000 into the General Fund and appropriate up to \$200,000 from the General Fund Unassigned (Undesignated) Fund Balance into Science & Technology Advancement's FYs 2017-18 and/or 2018-19 Budgets (Org 47), Capital Outlays Major Object, Capital Outlays Account, related to FY 2018 (26th Year) PAMS funding.
2. Transfer up to \$126,080 from remaining FY 2017 (25th Year) PAMS funds in Science & Technology Advancement's FY 2017-18 Budget (Org 47) from the Services and Supplies Major Object to the Capital Outlays Major Object and reallocate remaining Capital Outlays Major Object funds up to \$50,920 for fixed asset purchases totaling \$177,000 as included in Tables 1 and 2.
3. Issue an RFQ, in accordance with SCAQMD's Procurement Policy and Procedure, for ozone air monitoring equipment listed in Table 1 and described in this letter.

4. Authorize the Procurement Manager, in accordance with SCAQMD's Procurement Policy and Procedure, to issue:
 - a. Purchase order(s), based on the results of an RFQ, for up to nine (9) ozone monitors, in an amount not to exceed \$102,000 as listed in Table 1 and described in this letter;
 - b. A purchase order, based on prior bid, last price from a recent RFQ, for one automated gas chromatography system (GC) from Orsat, LLC, in an amount not to exceed \$215,000 as listed in Table 2 and described in this letter; and
 - c. Sole source purchase orders for air monitoring from Teledyne API and meteorological equipment from Vaisala Inc. in an amount not to exceed \$60,000 as listed in Table 2 and described in this letter.

Wayne Natri
Executive Officer

MMM:JCL:AP:AK:KD

Background

Title 40, Code of Federal Regulations, Part 58 (40 CFR 58) requires states to establish PAMS as part of their State Implementation Plan (SIP) monitoring networks in ozone non-attainment areas classified as serious, severe or extreme to collect and report detailed data for VOCs, NO_x, ozone, and meteorological variables. This is done to better understand the underlying causes of ozone pollution, devise effective remedies and measure environmental improvement.

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 NAAQS review. Changes to requirements include co-locating PAMS sites with existing National Core (NCore) sites¹, development of enhanced monitoring plans (EMPs) for non-attainment areas, hourly VOC measurements using auto-gas chromatographs, direct 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 provided funding of \$200,000 for this effort.

¹a national air quality monitoring network comprised of 80 stations where multiple pollutants are measured

In addition, staff recommends that \$177,000 of remaining 25th Year PAMS Section 105 grant funds from FY 2017 be reallocated for ongoing PAMS program efforts. These funds were previously appropriated in the July 7, 2017 Board Letter (#6).

Proposal

These actions are to: (1) recognize revenue and appropriate funds into the FYs 2017-18 and/or 2018-19 Science & Technology Advancement Budgets for the partial implementation of the FY 2018 (26th Year) PAMS Program; (2) transfer funds between Major Objects within Science & Technology Advancement's FY 2017-18 Budget and reallocate funds from the FY 2017 (25th Year) PAMS Program for fixed asset purchases; and (3) issue an RFQ and purchase orders for equipment that performs air monitoring, VOC analysis and meteorological measurements.

Proposed Purchase Order through RFQ Process

Ozone monitors are used to continuously monitor ozone concentrations at air monitoring stations collecting data to support the U.S. EPA PAMS Program. Some of the current ozone monitors have been in service beyond their expected life span and will no longer be supported by the manufacturer. In addition, they do not have the latest digital capabilities and cannot stream data compatible with the SCAQMD data acquisition system. The cost for nine (9) ozone monitors is approximately \$102,000. Quotes for this RFQ will be solicited through competitive formal bids, in accordance with SCAQMD Procurement Policy and Procedure.

Proposed Purchases through Prior Bid, Last Price or Sole Source Purchase Orders

Automated Gas Chromatography System

An automated gas chromatography (GC) system analyzes and quantifies non-methane VOCs including benzene, toluene, ethylbenzene, xylenes and the remainder of the U.S. EPA PAMS target list. The GC system will be used to continuously measure one-hour time integrated air samples at a PAMS air monitoring station. The cost of the GC system is \$215,000 from Orsat, LLC. This price is from a recent RFQ for an identical instrument for the MATES V study. The use of this RFQ is authorized under Section IV.B.5 of the SCAQMD Procurement Policy and Procedure, Prior Bid, Last Price, which states that after confirming the validity of a prior price, an award may be made on the basis of a prior bid or on the basis of a last price, if the conditions of a previous purchase are similar.

Direct Nitrogen Dioxide Monitor

Changes to PAMS requirements include monitoring for NO and NO_y (total oxides of nitrogen) in addition to direct nitrogen dioxide (NO₂), where the latter must be taken with extremely sensitive, fast and accurate NO₂ measurements. The estimated cost of a direct NO₂ monitor is \$25,000. This will be a sole source purchase from Teledyne API.

Ceilometer

A ceilometer instrument continuously measures cloud bases and mixing depth in the lower atmosphere using laser technology. These instruments have been recommended by U.S. EPA as an efficient way to meet the PAMS requirements for continuous measurements of upper air mixing heights. With a ceilometer, SCAQMD staff will be able to better assess the variation in mixing between the coastal plain and the inland portion of the Basin. The cost for one ceilometer is approximately \$35,000. This will be a sole source purchase from Vaisala Inc.

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."

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 and 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.

The request for sole source purchase of the ceilometer for mixing height measurements is made under Section VIII.B.3.a: The items are available only from a single source due to proprietary technology, including unique software for the measurement of boundary layer mixing heights. Vaisala Inc. is currently the only vendor that can provide an instrument and software consistent with that already in use in the SCAQMD Upper Air Network. The request for sole source purchase of the direct NO₂ monitor is also made under Section VIII.B.3.a: The items are available only from a single source due to proprietary technology. Teledyne API is currently the only vendor that can provide an instrument for direct measurement of NO₂ in air. The instrument utilizes a patented

Cavity Attenuated Phase Shift technique to provide extremely sensitive, fast and accurate NO2 measurements.

Resource Impacts

U.S. EPA Section 105 Grant funding will support the partial implementation of the 26th Year PAMS Early Adopter Program by funding Capital Outlays for required changes at one of SCAQMD’s PAMS sites in advance of the 2019 deadline to implement such changes. Upon Board approval, revenue in an amount not to exceed \$200,000 from the U.S. EPA FY 2018 Section 105 Grant will be recognized upon receipt and appropriated to Science & Technology Advancement’s FYs 2017-18 and/or 2018-19 Budgets (Org 47), Capital Outlays Major Object, Capital Outlays account. The FY 2018 PAMS grant will fund the direct NO2 monitor, the ceilometer and a portion of the GC. Funding of \$177,000 from FY 2017 PAMS (25th Year) will also be available for a portion of the purchase of the GC, as well as the purchase of the ozone monitors upon U.S.EPA award of carryover funding. The following tables outline proposed Capital Outlay purchases:

**Table 1
Proposed Purchase Order through RFQ**

Description	PAMS Funding Year	Qty	Estimated Cost
Ozone Monitors	FY 2017	9	\$102,000
Total			Not to Exceed \$102,000

**Table 2
Proposed Purchases through Prior Bid, Last Price or Sole-Source Purchase Orders**

Description	PAMS Funding Year	Qty	Estimated Cost	Vendor
GC	FYs 2017 & 2018	1	\$215,000*	Orsat, LLC
Direct NO2 Monitor	FY 2018	1	\$25,000	Teledyne API
Ceilometer	FY 2018	1	\$35,000	Vaisala Inc.
Total			Not to Exceed \$275,000	

*The GC funding includes \$140,000 allocated from the FY 2018 PAMS early adoption grant and \$75,000 reallocated from the FY 2017 PAMS grant.