BOARD MEETING DATE: June 2, 2017 AGENDA NO. 4

PROPOSAL: Transfer and Appropriate Funding, Execute Contract, Authorize Release of RFQ and Issue Purchase Orders

SYNOPSIS: Field monitoring of PM and gravimetric analysis of PM samples continue to be an important part of ongoing efforts to better characterize air quality in the South Coast Basin. The effectiveness and efficiency of such monitoring and analysis efforts can be enhanced by upgrading existing laboratory facilities and investing in new and updated field platforms and equipment that would allow for more reliable instrument performance, rapid response and reporting. Consequently, this action is to upgrade the laboratory PM weighing room and purchase two state-of-the-art continuous Federal Equivalent Method monitors and two mobile air monitoring platforms. This action is to also transfer and appropriate up to $323,500 into Science & Technology Advancement's FY 2016-17 and/or 2017-18 Budgets for the weighing room upgrade and equipment purchases and to transfer up to $230,000 between Major Objects within Science & Technology Advancement's FY 2016-17 Budget to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program.

COMMITTEE: Administrative, May 12, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Transfer and appropriate up to $323,500 into Science & Technology Advancement's FY 2016-17 and/or 2017-18 Budgets, Capital Outlays Major Object, from the U.S. EPA Section 103 Grant, AES Settlement Projects Fund (35), Supplemental CARB Subvention funds, BP ARCO Settlement Projects Fund (46) and Air Toxics Fund (15), as indicated in Table 1.
2. Authorize the Executive Officer to execute a contract with Willdan Energy Solutions to upgrade the laboratory PM weighing room in an amount not to exceed $140,000 from Science & Technology Advancement's FY 2017-18 Budget, Capital Outlays Major Object, as listed in Table 2.

3. Authorize the Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to:
    a. Issue a sole source purchase order with Teledyne API in an amount not to exceed $65,500 for the purchase of two Federal Equivalent Method (FEM) continuous monitors for measuring PM2.5 and PM10, as listed in Table 3; and
    b. Release an RFQ and based on the results of the RFQ, issue a subsequent purchase order for two mobile air monitoring platforms in an amount not to exceed $118,000, as listed in Table 4.
4. Transfer up to $230,000 in Science & Technology Advancement's FY 2016-17 Budget from Salaries and Employee Benefits Major Object (Org 44), Salaries Account, to Services and Supplies Major Object (Org 47), Temporary Agency Account, to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program.

Wayne Nastri
Executive Officer

MMM:JCL:AP:AK

**Background**

Federal monitoring programs for air quality (i.e., PM2.5 monitoring, near-road monitoring and enhanced particulate monitoring) and special monitoring projects (e.g., Aliso Canyon and Paramount) represent some of the core activities conducted by staff. Furthermore, field monitoring and gravimetric analysis of PM samples continues to be an important part of ongoing efforts to better characterize air quality in the South Coast Basin. The effectiveness and efficiency of such monitoring and analysis efforts, however, can be enhanced by upgrading existing laboratory facilities and investing in new and updated field platforms and equipment that would allow for more reliable instrument performance, rapid response and reporting.

PM Weighing Room Upgrade

In compliance with the U.S. EPA 40 CFR Part 50, the SCAQMD monitors for PM2.5 at approximately 20 locations within the South Coast Basin. These requirements also stipulate that the analysis must be conducted in an environmentally controlled weighing room. On an annual basis, approximately 5,000 filters are processed through the SCAQMD laboratory weighing room before and after distribution to field sites. Improvements are necessary to this room to protect against sample loss and ensure that temperature and relative humidity conditions are maintained within the strict parameters established by the U.S. EPA. An RFP (#P2016-23) to upgrade the PM2.5 weighing room was released in June 2016 in an amount not to exceed $65,000, but no responses

were received. The RFP was re-released without a targeted dollar amount in November 2016, and one response was received.

Continuous PM Monitoring Equipment

Over the last few years, a number of continuous monitors for measuring PM2.5 and PM10 have been approved as Federal Equivalent Methods (FEMs). Data obtained using these continuous FEM instruments are eligible for comparison to U.S. EPA's health-based National Ambient Air Quality Standards (NAAQS) for PM and have the potential to replace several filter-based Federal Reference Method (FRM) samplers. FRMs are more resource intensive as they require the operation of a number of integrated samplers in the field as well as pre- and post-sampling laboratory analysis and provide only 24-hour average data. On the other hand, FEM monitors can provide hourly PM data in addition to 24-hour average concentrations that are required for NAAQS comparison. The SCAQMD received $65,500 in supplemental funds (revenue was already recognized in the FY 2016-17 Budget) through CARB's subvention program for purchasing two near real-time continuous PM samplers to expand its PM2.5 and PM10 monitoring capabilities.

Mobile Air Monitoring Platforms

On June 6, 2014, RFQ #Q2014-11 was released for the purchase of one mobile air monitoring platform to carry and support a variety of air monitoring instruments and samplers. Several bids were evaluated, and the bid provided by Shelter One was selected as the most competitive and responsive to the RFQ specifications. In 2016, staff recognized the need for two additional mobile platforms, identical to the one authorized for purchase in 2014, to house and deploy instruments that can conduct discrete and near real-time measurements of air pollutants. At that time Shelter One agreed to accept the same price for the purchase of the two additional mobile platforms. Consequently, on December 2, 2016, the Board authorized the Procurement Manager to issue a prior-bid, last-price purchase order in an amount not to exceed $118,000 for two mobile platforms. Ultimately, however, the quote received from Shelter One was higher than the original bid price so the purchase could not be completed.

Enhanced Particulate Monitoring Program

Since 2003, SCAQMD has provided enhanced particulate monitoring support including sample collection as part of a national monitoring program and will continue to do so for the foreseeable future. In July 2016, the Board recognized the remaining FY 2016-17 revenue for this Program and approved allocations among Major Objects within Science & Technology Advancement's FY 2016-17 Budget. Staff recommends transferring funds between Major Objects to better align FY 2016-17 expenditures.

**Outreach**
In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP (PM weighing room re-released RFP #P2016-23r) and inviting bids was 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 have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP has been 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).

**Bid Evaluation**
When final bidding closed on December 14, 2016, the re-released RFP to upgrade the weighing room resulted in a single qualified bid from Willdan Energy Solutions in an amount not to exceed $140,000. An internal evaluation panel, consisting of a Laboratory Manager, Principal Chemist and Senior Chemist, evaluated the single qualified bid. The panel's composition comprised two Caucasians and one Hispanic; three males. The bidder's references were verified and the panel deemed that the bid satisfactorily addressed all aspects of the RFP. Thus, staff proposes a contract award to Willdan Energy Solutions.

**Proposal**
This action is to transfer and appropriate up to $323,500 into Science & Technology Advancement's FY 2016-17 and/or FY 2017-18 Budgets for the weighing room upgrade and equipment purchases, from the U.S. EPA Section 103 Grant, AES Settlement Projects Fund (35), Supplemental CARB Subvention funds, BP ARCO Settlement Projects Fund (46) and Air Toxics Fund (15), as indicated in Table 1.

PM Weighing Room Upgrade
Willdan Energy Solutions will engineer a robust solution to account for variability in external ambient temperature and humidity conditions in the laboratory weighing room. The circulation of air through the room will be designed and modeled to stabilize temperature and humidity levels, while ensuring the required conditions are met and are compliant with U.S. EPA regulations. To mitigate any sample loss during construction, Willdan will research and provide a temporary environmental control chamber for sample preparation and weighing. This action is to execute a contract with Willdan Energy Solutions in an amount not to exceed $140,000 to upgrade the PM weighing room (see Table 2).

Continuous PM Monitoring Equipment

Staff has been evaluating PM2.5 continuous FEM monitors over the past several years, but none of the instruments evaluated so far has shown good comparability to more traditional (and more universally accepted) FRM methods. A number of new FEM instruments for measuring PM2.5 and PM10 in near real-time are now available, including PM mass monitors based on broadband spectroscopy recently commercialized by Teledyne API (models T640 and T640x). These instruments have high resolution, fast response, low power consumption, and based on a three-week evaluation conducted by staff, appear to be highly sensitive and precise as well as easy to operate and maintain. Staff proposes to purchase two of these newly commercialized FEM monitors for measuring PM2.5 and PM10 to evaluate their long-term performance and assess the possibility of using them for NAAQS determination at critical monitoring stations, thus potentially replacing existing labor and resource intensive FRM samplers. This action is to issue a sole source purchase order with Teledyne API in an amount not to exceed $65,500 for the purchase of two FEM continuous monitors (see Table 3).

Mobile Air Monitoring Platforms

Mobile platforms are self-contained mobile air quality monitoring shelters that can be rapidly deployed and are flexible in both monitoring capability and power requirements. Previous applications of similar mobile platforms or trailers by SCAQMD staff included monitoring of air pollutants near airports, freeways, metal processing facilities and other locations with limited accessibility. Both trailers will be able to utilize a variety of air monitoring and sampling instrumentation for the measurements of particle and gaseous pollutants, including air toxics. SCAQMD staff will install and change instrumentation depending on specific air monitoring needs. The Procurement Manager will release an RFQ to solicit competitive formal bids, in accordance with SCAQMD's Procurement Policy and Procedure, for the purchase of two trailers. Based on the results of the RFQ, the Procurement Manager will issue a purchase order for two mobile air monitoring platforms not to exceed $118,000 (see Table 4).

Enhanced Particulate Monitoring Program

This action is to transfer up to $230,000 in Science & Technology Advancement's FY 2016-17 Budget from Salaries and Employee Benefits Major Object (Org 44), Salaries Account, to Services and Supplies Major Object (Org 47), Temporary Agency Account, to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program.

**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. Specifically, this request for sole source awards is made under the provisions B.2.c (2): The desired services are available from only the sole-source based upon one or more of the following reasons: The project involves the use of proprietary technology. There is currently only one

vendor, Teledyne API, that produces PM2.5 and PM10 FEM continuous monitors (T640 model and T640x model) based on broadband spectrometry.

**Outreach**
In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFQ (for mobile platforms) 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."

**Benefits to SCAQMD**
The proposed upgrades to the laboratory's PM weighing room will ensure that conditions are maintained within the strict parameters established by the U.S. EPA, hence minimizing PM sample and data loss. The purchase of two FEM monitors based on broadband spectroscopy for measuring PM2.5 and PM10 will allow staff to evaluate their long-term performance and assess the possibility of using them for NAAQS determination at critical monitoring stations such as the Mira Loma and Rubidoux sites. The purchase of two additional monitoring platforms to house and deploy integrated and near real-time instruments will enhance current monitoring capabilities for emergency situations and special monitoring activities such as those currently being conducted in the City of Paramount and other areas of the Basin.

**Resource Impacts**
The transfer and appropriation for the contract award and equipment purchases will not exceed $323,500 as indicated in Tables 1-4 and as follows: $65,000 from the EPA Section 103 PM2.5 Grant; $75,000 from the AES Settlement Projects Fund (35); $65,500 from Supplemental CARB Subvention funds; $59,000 from the BP ARCO Settlement Projects Fund (46); and $59,000 from the Air Toxics Fund (15). The use of the AES Settlement Projects Fund (35) is not restricted by the applicable statutes or settlement agreement. However, while in the past the Board had restricted the use of these funds for fleet rules, they have the authority to direct use of the monies in the AES Settlement Projects Fund (35) for other priorities and have previously done so (i.e., December 2016 action to use funds to procure other laboratory equipment). Finally, the contract with Willdan Energy Solutions will not exceed $140,000 as indicated in Table 2.

U.S. Government funding, previously recognized and appropriated, will fully support the Enhanced Particulate Monitoring Program. The transfer from Salaries and Employee Benefits Major Object (Org 44), Salaries Account, to Services and Supplies Major Object (Org 47), Temporary Agency Account, within Science & Technology's FY 2016-17 Budget to realign expenditures for FY 2016-17 Program will not exceed $230,000.

**Attachments**
Table 1 – Proposed Appropriations and Transfers
Table 2 – Award of Contract
Table 3 – Proposed Purchase through Sole Source Purchase Order
Table 4 – Proposed Purchase through RFQ Process

**Table 1**
**Proposed Appropriations and Transfers**

| Fiscal Year | Item | Funding Source | Action | Amount |
|---|---|---|---|---|
| 2017-18 | Weighing Room | U.S. EPA Section 103 Grant | Appropriate | $65,000 |
| | | AES Settlement Projects Fund (35) | Transfer/ Appropriate | $75,000 |
| 2016-17 | Two Teledyne Samplers | Supplemental CARB Subvention | Appropriate | $65,500 |
| 2017-18 | Two Mobile Air Monitoring Platforms | BP ARCO Settlements Projects Fund (46) and Air Toxics Fund (15) | Transfer/ Appropriate | $118,000 ($59,000 per fund) |
| | | | | **Total: $323,500** |

**Table 2**
**Award of Contract**

| Description | Quantity | Funding Source | Estimated Cost |
|---|---|---|---|
| PM Weighing Room Upgrade | 1 | AES Settlement Projects Fund (35) | $75,000 |
| | | U.S. EPA Section 103 Grant | $65,000* |
| | | | **Total: $140,000** |

*This grant funding recognized in July 8, 2016 Board Letter (#12)

**Table 3**
**Proposed Purchase through Sole Source Purchase Order**

| Description | Quantity | Funding Source | Estimated Cost |
|---|---|---|---|
| PM2.5 and PM10 monitor** | 1 | Supplemental CARB Subvention funds | $26,000 |
| PM2.5 and PM10 monitor*** | 1 | | $39,500 |
| | | | **Total: $65,500** |

**FEM approved method for PM2.5 only
***FEM approved method for both PM2.5 and PM10

**Table 4**
**Proposed Purchase through RFQ Process**

| Description | Quantity | Funding Source | Estimated Cost |
|---|---|---|---|
| Mobile Air Monitoring Platforms | 2 | BP ARCO Settlement Projects Fund (46) and the Air Toxics Fund (15)**** | $118,000 ($59,000 per fund) |

**** As originally requested in the December 2, 2016 Board letter (#4)