

BOARD MEETING DATE: May 2, 2025

AGENDA NO. 6

PROPOSAL: Transfer Funds Between Major Objects and Issue Purchase Order for AQ-SPEC Program

SYNOPSIS: The AQ-SPEC Program performs systematic technical evaluations of currently available air monitoring sensors using both field and laboratory-based testing and communicates the results to the public. AQ-SPEC funds are included as part of Monitoring and Analysis' FY 2024-25 adopted budget. Based on an assessment of the priorities and resources of this program, there is a need to reallocate funds for enhancing VOC sensor testing capabilities. This action is to transfer up to \$60,000 between Major Objects and issue a purchase order for air monitoring equipment.

COMMITTEE: Administrative, April 11, 2025; Recommended for Approval

RECOMMENDED ACTIONS:

1. Transfer up to \$60,000 from the Services and Supplies Major Object to the Capital Outlays Major Object in Monitoring and Analysis' (MAD's) FY 2024-25 Budget (Org 43); and
2. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue a sole source purchase order for one Entech 7200A Cryogenic Pre-concentrator in an amount not to exceed \$60,000 as listed in Table 1.

Wayne Natri
Executive Officer

JCL:AP:BF:ld:ir:ns

Background

South Coast AQMD established the AQ-SPEC program to characterize the performance of commercially available air quality sensors using both field and laboratory-based testing. Results of the air quality sensors are uploaded on the South Coast AQMD's website. Air quality sensors that produce reliable data can augment and supplement current ambient air monitoring capabilities that predominantly rely on more

sophisticated and expensive fixed-site federal-reference monitoring devices and methods. In addition, air quality sensors achieving levels of performance criteria have become effective tools to introduce the public to air quality matters. The type and number of sensors that have been tested through the AQ-SPEC program have increased substantially over the years. To date, South Coast AQMD has evaluated over 250 sensors measuring particle and gaseous pollutants (mainly fine particulate matter, ozone, NOx and other criteria pollutants) for their accuracy and overall quality. Interest is rapidly increasing in the use of air quality sensors for measurements of VOCs, with potential applications for ambient air monitoring, hotspot detection, personal exposure, and fence-line monitoring. The program requires replacement of specialized laboratory equipment to support continued performance testing of VOC sensors.

Proposal

This action is to transfer up to \$60,000 from the Services and Supplies Major Object to the Capital Outlays Major Object in MAD's FY 2024-25 Budget (Org 43). This action is also to authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue a sole source purchase order to purchase an Entech 7200A Cryogenic Pre-Concentrator for an amount not to exceed \$60,000 as listed in Table 1.

Entech 7200A Cryogenic Pre-Concentrator

The analysis of VOC samples for sensor testing is performed in the laboratory using cryogenic pre-concentration followed with quantification by gas chromatography with flame ionization detection. Pre-concentration of the samples is necessary to achieve adequate detection limits for the analytes of interest. The current cryogenic pre-concentrator is more than 15 years old and has been discontinued, replacement parts are no longer available, and the software operating system is no longer supported. The proposed Entech 7200A pre-concentrator would ensure the ability to continue conducting VOC sensor testing reliably with an instrument that can be supported and repaired. The estimated cost for a cryogenic pre-concentrator is \$60,000 and this equipment will be purchased through a sole source process.

Sole Source Justification

Section VIII.B.2 of South Coast AQMD's Procurement Policy and Procedures identifies four major provisions under which sole source awards can be made. The request for sole source purchase of the Entech 7200A Cryogenic Pre-Concentrator are made under provisions VIII.B.2.c(1), "The unique experience and capabilities of the proposed contractor or contractor team" and VII.B.2.c(2), "The project involves the use of proprietary technology." The proposed Entech 7200A pre-concentrator uniquely uses a differential pressure vacuum reservoir technique to accurately measure flow and volume of a complex VOC gas mixture, and as such the technical specifications of the cryogenic pre-concentrator are proprietary and only available from one vendor.

Benefits to South Coast AQMD

The proposed purchase is necessary to maintain the current AQ-SPEC testing capabilities of VOC sensors. These sensors are proliferating in the market and are becoming increasingly popular for public use. Continued testing of these sensors within laboratory settings will provide invaluable information regarding how well these emerging technologies compare to traditional more accepted VOC analysis methods.

Resource Impacts

Sufficient funding is currently available to transfer funds and purchase the instrument needed to maintain the laboratory VOC sensor testing capabilities of the AQ-SPEC program.

Table 1
Proposed Purchase through Sole Source Purchase Order

Description	Account Number	Qty	Estimated Amount
Entech 7200A Cryogenic Pre-Concentrator	77000	1	\$60,000
Total			\$60,000