

File #: 2023-2926

Agenda Date: 4/26/2023

Agenda Item No: 14.

FROM: Robert Thompson, General Manager
Originator: Lan C. Wiborg, Director of Environmental Services

SUBJECT:

TRIPLE QUADRUPOLE GAS CHROMATOGRAPH MASS SPECTROMETER (TQ-GC/MS)

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve a purchase order to VWR for the purchase of a Triple Quadrupole Gas Chromatograph Mass Spectrometer (TQ-GC/MS) System using the National Association of State Procurement Officers (NASPO) Agreement No. MA16000234-2 for a total amount not to exceed \$295,649 which includes installation and training, 2-year extended warranty, sales tax, and freight.

BACKGROUND

The laboratory has budgeted for three TQ-GC/MS systems to replace several aging single-quadrupole GC/MS instruments. This TQ-GC/MS system (#2 in the below table) is needed to analyze fish tissue and sediment samples for the ocean monitoring program as required by Orange County Sanitation District's (OC San) NPDES permit and various special projects.

New Instrument	Existing Instrument	Age of Existing Instruments	Regulatory Requirement	Budgeted
TQ-GC/MS #1	Bruker Scion GC/MS	8 years	NPDES	June 2020
TQ-GC/MS #2	2 Thermo Scientific GC/MS units	15 years	NPDES	FY 22/23
TQ-GC/MS #3	LECO Pegasus GC/MS Time of Flight (TOF) analyzer	19 years	NPDES	FY 23/24

RELEVANT STANDARDS

- Ensure the public's money is wisely spent
- Comply with environmental permit requirements
- Maintain a culture of improving efficiency to reduce the cost to provide the current service level or standard
- Maintain a proactive asset management program
- Participate in local, state, and national cooperative purchasing programs

PROBLEM

This request is to replace two 15-year-old analytical instruments that have exceeded the manufacturer-recommended serviceable life of 7-10 years. One instrument is completely inoperable and, for the remaining instrument, instances of instrument breakdown have increased due to age and sample turnaround time has consequently increased due to the need to repeat analyses. In combination, these occurrences have increased OC San's expenditure on staff time, replacements parts, and repair services. Both instruments are also no longer supported by the manufacturer for service or parts. In the past, this workgroup utilized three GC/MS systems to accomplish all required analyses; one was replaced in 2020 by a TQ-GS/MS system, which is currently the only reliable instrument within the workgroup. Should any issues arise with the existing TQ-GC/MS, there is no suitable backup option to ensure that samples can be analyzed on time and with the required level of data quality.

PROPOSED SOLUTION

Approve a purchase order to VWR for the TQ-GC/MS system in the amount of \$295,649 to replace the two existing GC/MS system. Purchasing the TQ-GC/MS system will equip OC San with a more reliable system that uses the most up-to-date technology and provides enhanced instrument capabilities to better support regulatory compliance, for both current and future regulatory requirements. As a result of the increased reliability and sensitivity of the TQ-GC/MS, the team will be able to perform the same scope of analyses which previously required three instruments. This system will also provide valuable redundancy and backup to the existing TQ-GC/MS system within the workgroup.

TIMING CONCERNS

Potential cost and down time may increase if the current system is not replaced in a timely manner.

RAMIFICATIONS OF NOT TAKING ACTION

Without the TQ-GCMS system, it will be difficult to meet compliance for the analysis of chemicals in support of the core monitoring of sediment and fish samples as required by the NPDES permit. If NPDES permit compliance is not met, OC San could be subject to enforcement action and daily penalties up to \$25,000 for each violation, in addition to other actions deemed appropriate by the EPA and SARWQCB.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

NASPO agreements are available to all State of California governmental entities (e.g., state agencies, cities, counties, special districts, school districts, universities) that expend public funds for the acquisition of both goods and services. Under these agreements, the State of California

purchases a wide variety of goods and services ranging from pencils to temporary labor. Annual purchases total nearly \$10 billion. The Procurement Division is the central purchasing authority for all State departments and local government agencies. With a massive marketplace and billions of dollars in purchasing power, they can offer a lower procurement cost to California's state, county, city, special districts, education, and other government entities through their Leveraged Procurement Agreements. Leveraged Procurement Agreements allow entities/agencies to buy directly from suppliers through existing contracts and agreements. One of these that the state offers to California governmental agencies is the NASPO for Commodities, IT Goods & Services, and Telecommunication Goods and Services.

OC San is utilizing NASPO Agreement No. MA16000234-2 with VWR, under Ordinance No. OC SAN -56, Section 2.03(B), Cooperative Purchases.

The total cost of \$295,649 includes the TQ-GC/MS system, installation and training, 2-year extended warranty, sales tax, and freight.

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San's Purchasing Ordinance. This item has been budgeted in Division 630 2022/2023 Capital Equipment.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
04/26/2023	\$295,649	N/A

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

N/A