



ADMINISTRATION COMMITTEE

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Agenda Report

File #: 2021-1568

Agenda Date: 4/14/2021

Agenda Item No: 2.

FROM: James D. Herberg, General Manager
Originator: Lan C. Wiborg, Director of Environmental Services

SUBJECT:

PURCHASE OF A FOURIER TRANSFORM INFRARED MICROSCOPE

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve a Sole Source purchase to Thermo Electron/Thermo Fisher for a Fourier Transform Infrared Microscope (FTIM) for an amount not to exceed \$109,713, including estimated tax and shipping.

BACKGROUND

This purchase is for a new Fourier Transform Infrared Microscope (FTIM). A FTIM is being requested primarily as a tool to support the investigation and tracking of microparticles, including microplastics, at Orange County Sanitation District (OC San). The FTIM is an analytical instrument that identifies the chemical fingerprint of a substance by measuring its response to infrared light. This allows the user to determine the identity and chemical properties of unknown materials.

This instrument will be used by staff at OC San to accurately characterize and quantify suspected microplastics and microfibers in OC San's wastewater treatment plants. Staff will be able to use it to understand the potential sources, properties, and fate of microparticles throughout the wastewater treatment train. The FTIM may be used for any matrix including influent, grit, biosolids, offshore sediments, and fish tissues. The FTIM will become an important tool as the efforts to monitor and regulate microplastics in wastewater expand. The FTIM has become the industry standard for measuring suspected microplastics in wastewater and is regarded as the best available technology.

RELEVANT STANDARDS

- Ensure that investment proposals and decisions are based on clearly defined standards
- Ensure the public's money is wisely spent
- Comply with environmental permit requirements
- Listen to and seriously consider community input on environmental concerns
- Maintain influential legislative advocacy and a public outreach program
- Maintain collaborative and cooperative relationships with regulators, stakeholders, and neighboring communities

TIMING CONCERNS

OC San is required to conduct several Strategic Process Studies (SPS) by its National Pollutant Discharge Elimination System Permit (NPDES Permit). One of the SPS studies has been jointly developed by OC San and regulatory agencies to characterize microplastics in wastewater.

Timely procurement will provide staff with the necessary time to analyze samples and adhere to the SPS timeline that has been approved by the regulatory agencies. Timely procurement will also enable staff to participate in the ongoing statewide microplastic analytical method development and standardization effort.

RAMIFICATIONS OF NOT TAKING ACTION

Failure to obtain the FTIM would prevent OC San from meeting the SPS requirement in OC San's NPDES permit and would also prevent OC San from participating in the ongoing statewide microplastics method development and standardization effort.

The budget for the FTIM would be forfeited if not purchased and delivered by June 30, 2021. There is an approximate 6-8-week delivery period for the FTIM. The allocated funds would not roll over to the Fiscal Year 2021-2022.

ADDITIONAL INFORMATION

OC San requested quotes from scientific equipment supply company VWR pursuant to the terms and conditions of the National Association of State Procurement Officials (NASPO), Value Point Master Agreement No. MA16000234-2.

VWR provided two quotes for comparable FTIM system, one from PerkinElmer for \$118,883, and the other from Thermo Electron for \$126,700.

The direct quote from Thermo Electron is \$109,713 for the same FTIM system offered through VWR.

Summary information on the quotes received for the purchase of a FTIM is as follows:

<u>Vendor</u>	<u>Quote Amount</u>
Thermo Electron (Nicolet iN10 MX FTIM)	\$ 109,713
VWR (Perkin Elmer - Spotlight 400 FTIM)	\$ 118,883
VWR (Thermo Electron - Nicolet iN10 MX FTIM)	\$ 126,700

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. (FY 2020-2021 Budget: Section 8, Page 100). The cost for the FTIM has been budgeted as capital equipment for fiscal year 2020-2021. The quoted amount includes \$100,792 for the equipment, sales tax estimated to be \$8,571, and shipping estimated at \$350 for a total of \$109,713.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
04/14/2021	\$109,713	

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