



## Agenda Report

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

**SUBJECT:**

### **PURCHASE OF AN IMAGING FLOWCYTOBOT (IFCB)**

### **GENERAL MANAGER'S RECOMMENDATION**

#### RECOMMENDATION:

Approve a sole source purchase order to McLane Research Laboratories, Inc. for an Imaging FlowCytobot for an amount not to exceed \$148,939 including estimated tax and shipping.

### **BACKGROUND**

The Imaging FlowCytobot (IFCB) is needed for real-time sampling and analysis of plankton, including harmful algal species, for our core and regional ocean monitoring studies as required by our ocean discharge permit administered by the California Regional water Quality Control Board and the United States Environmental Protection Agency. This request is for the purchase of new equipment to enhance our understanding of harmful algal blooms (HABs) in our ocean discharge area and to integrate it into a larger statewide sampling effort.

### **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
- Cultivate a highly qualified, well-trained, and diverse workforce

### **PROBLEM**

The Orange County Sanitation District (Sanitation District) discharge of nutrients "*shall not cause objectionable aquatic growths*" as defined in the California Ocean Plan. Previous studies have shown that nutrients such as nitrogen and phosphorous in wastewater effluents can promote and support the growth of phytoplankton that may cause harmful algal blooms, or HABs. The California Ocean Protection Council (OPC) recently initiated a 5-year project to develop a statewide, real-time HAB monitoring program that utilizes IFCB technology to sample and analyze marine phytoplankton.

Currently, the Sanitation District's ocean monitoring program does not routinely sample for phytoplankton. There is a notable gap in our understanding of this potential emerging threat to Orange County's coastal waters.

McLane Research Laboratories, Inc. is the only company that commercially produces the IFCB.

## **PROPOSED SOLUTION**

Award a sole source purchase order to McLane Research Laboratories, Inc. for an Imaging FlowCytobot (IFCB) in the amount not to exceed \$148,939. The data generated from the IFCB at the Newport Pier site will be integrated with comparable data from the statewide OPC HAB monitoring program and will improve our understanding of the presence and potential causes of HABs in the Sanitation District's sampling area.

## **TIMING CONCERNS**

There is an approximately 6-month delivery period for an IFCB. The initial statewide IFCB deployments will begin in the Summer 2021. Integration into the larger monitoring program would be delayed if the IFCB is not purchased in a timely manner.

## **RAMIFICATIONS OF NOT TAKING ACTION**

Inability to comply with the requirements of our ocean discharge permit.

## **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 IFCB system has been budgeted as capital equipment for fiscal year 2020-2021. The quoted amount of \$135,300 includes the IFCB system, IFCB beads, and a one (1) year warranty. Sales tax is estimated to be \$ 11,839, and Shipping estimated at \$1,800.00 for a total of \$148,939.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
02/10/2021	NTE \$148,939	

## **ATTACHMENT**

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

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