Orange County Sanitation District

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Agenda Report

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SUBJECT:

SCRIPPS INSTITUTION OF OCEANOGRAPHY BEST PRACTICE DEVELOPMENT AND SEAWATER ANALYSIS FOR PH

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve and authorize the Purchasing and Contracts Manager to enter into a one (1) year Sole Source Service Contract with The Regents of the University of California on behalf of its San Diego campus' Scripps Institution of Oceanography, for a total amount not to exceed $40,000, with two (2) optional one (1) year renewals at $40,000 per renewal, for a total amount not to exceed $120,000 for the three-year period, to develop best practices and analyze seawater for pH in compliance with permit mandated data quality requirements and regional comparability as recommended by the Bight'13 Nutrients Study.

BACKGROUND

The Orange County Sanitation District (Sanitation District) is required to measure acidity/alkalinity (i.e., pH) in order to comply with the California Ocean Plan (COP). However, commercially available pH sensors for oceanographic instrumentation (CTD - conductivity, temperature, depth) are not currently capable of achieving the required data quality. Thus, the Sanitation District participated in the Bight'13 Nutrients Study to explore improvements for oxygen, pH, and transmissivity sensors that would provide consistency across all ocean discharges and increase sensor stability and precision. The Bight'13 Nutrients Study recommended a follow-up project for Bight'18 to develop best practices for pH measurements and enhance data quality.

RELEVANT STANDARDS

- Comply with environmental permit requirements
- Listen to and seriously consider community input on environmental concerns
- Build brand, trust, and support with policy makers and community leaders

PROBLEM

The Sanitation District's ocean discharge permit mandates that we meet compliance standards with physical, chemical, and biological state and federal environmental criteria, including pH. However,

commercially available pH sensors for use on oceanographic equipment currently have significant limitations. The Scripps Institution of Oceanography (SIO) is a leading authority on measuring ocean water chemistry and has the capability to develop best practices for this equipment that are compatible with the mandated data quality objectives and comparability requirements.

PROPOSED SOLUTION

Staff recommends that the Administration Committee approve the SIO contract to initiate best practice method development for pH as determined by the Bight'13 Nutrients study method in order to meet the Sanitation District's permit requirements.

TIMING CONCERNS

The Sanitation District has initiated Bight'18 sample collection and requires that these samples, and future samples, be analyzed to meet program deadlines.

RAMIFICATIONS OF NOT TAKING ACTION

Sanitation District will not be able to collaborate with SIO and other regional dischargers to develop best practices for CTD calibration and will not be able to meet the pH/ocean acidification monitoring requirements of its ocean discharge permit.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted. Sufficient funds have been allocated in the Laboratory, Monitoring, and Compliance Operating Budget. (Budget Update FY 2019-20, Page 43, Operating Expense, Research, and Monitoring). Project contingency funds will not be used for this contract.

Date of Approval	Contract Amount	Contingency
09/11/2019	$ 120,000	$0

ATTACHMENT

The following attachment(s) may be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

N/A