



Agenda Item No. \_\_\_\_\_

File Code No. \_\_\_\_\_

# CITY OF SANTA BARBARA

**(DRAFT)**

## COUNCIL AGENDA REPORT

**ITEM 5-D**

**AGENDA DATE:** November 17, 2015

**TO:** Mayor and Councilmembers

**FROM:** Water Resources Division, Public Works Department

**SUBJECT:** Contract To Provide Consulting Services For The Laboratory Information Management System

### **RECOMMENDATION:**

That Council authorizes the Public Works Director to execute a Contract for Professional Services with Astrix Technology Group in the amount of \$74,096.00, to provide consulting services for the upgrade of City's Laboratory Information Management System.

### **DISCUSSION:**

#### **BACKGROUND**

The City's Water Resources Laboratory (located at El Estero Wastewater Treatment Plant) is an environmental laboratory, which provides analytical services for the City's water treatment, wastewater treatment, and industrial pretreatment programs, as well as for water distribution and collection. The laboratory is certified and registered by the State of California – State Water Resources Control Board Environmental Laboratory Accreditation Program (CA SWRCB - ELAP) in seven separate fields of testing. The Laboratory performs and produces analytical data from various sources, including drinking water, wastewater, biosolids, recycled water, industrial pretreatment water, storm water runoff, surface water, groundwater, creeks, and on-shore receiving waters.

The great majority of analyses performed in the laboratory are for regulatory compliance programs and treatment process control. The laboratory's main goal is to report and deliver scientifically based analytical test results of high quality, valid information promptly to treatment operations staff, departmental division staff, and regulatory agencies. To ensure that the analytical test results and related data meet treatment operation staff's needs and regulatory requirements, in-house Quality Control and Quality Assurance (QA/QC) programs are enforced in every step of the testing procedures and daily operations. All QA/QC practices, from sample collection, storage and preservation to analytical testing, reporting and certification must follow the established standard operating procedures and acceptance criteria.

The laboratory collects approximately 15,000 samples, and performs over 50,000 analyses annually. All required wastewater and reclaimed water analytical data are compiled on the

approved reporting forms using Microsoft® Excel™ and then uploaded into the State Water Resources Control Board California Integrated Water Quality System (CWIQS) and Electronic Self-Monitoring Reporting System (e-SMR). Drinking water data results are generated using the State Write-On™ Electronic Data Transfer (EDT) Program.

The laboratory is in need of a single commercially Off-The Shelf (COTS) Laboratory Information Management System (LIMS) product that will simultaneously support all units of the laboratory and provide automation. The LIMS must comply with Good Automated Laboratory Practices (GALP), American Association for Laboratory Accreditation (AALA), National Environmental Laboratory Accreditation Conference (NELAC), the United States Environmental Protection Agency (USEPA) requirements and the CA SWRCB – ELAP. Additionally, the laboratory needs to have a LIMS completely operational, with all related City personnel, and properly trained.

#### PROJECT DESCRIPTION AND OBJECTIVES

The overarching goal of the upgraded LIMS project is to provide, integrate, support, and maintain an overall LIMS solution that accomplishes the following business process objectives:

1. Laboratory Test Processing: Securely deliver correct and complete test result reports to the submitting customer and other regulatory agencies.
2. Test Scheduling: Optimize the use of laboratory personnel and instruments in order to maximize the use of resources available to the laboratory, and be able to adapt to sudden surges in a specific test request volume or load.
3. Proactive Sample Collection (Prescheduled Tests): Receive prescheduled samples in an efficient and timely manner.
4. Sample Tracking/Chain of Custody: Create accurate and timely specimen and sample tracking and chain of custody documentation.
5. Media, Reagent, Stains, Controls, etc., Manufacturing: Efficiently prepare media and other materials for use in the laboratory and ensure they will work as intended.
6. Inventory Control, Including Kits & Forms Management: Manage appropriately all items inventoried by a laboratory.
7. General Laboratory Reporting: Create timely and efficient general laboratory reports addressing all laboratory external obligations and internal management needs.
8. Statistical Analysis and Surveillance: Create appropriate statistical analyses, surveillance outputs, and reports needed internally, and supplied to external partners for statistical and surveillance purposes, and quality control (QC), quality assurance (QA) services.
9. Performance Monitoring of Laboratory Services: Record and track metrics related to sample receiving, handling, analyses and reporting. Reduce time and effort needed to maintain laboratory accreditation by providing the necessary checks and balances through automated tools and electronic documentation.
10. Training, Education and Resource Management: Provide appropriate staff and customer training and education, and manage overall personnel resources.

## PROPOSED WORK

The consultant will be required to support City's WTR s staff during all phases of the Needs Assessment and Functional Requirements Development processes. The supported tasks include those outlined below:

PHASE I: Project planning, needs assessment, development of Functional Requirements Specifications (FRS), and LIMS vendor RFP development.

PHASE II: Review of LIMS vendor proposal, scheduling of demonstrations, evaluation of LIMS proposals, and selection of a LIMS vendor/product.

PHASE III: Implementation of the selected LIMS product

## FUNDING

### ESTIMATED TOTAL PROJECT COST BY EACH PHASE

Phase I: Planning, assessment of needs and RFP development	\$45,385.00
Phase II: Review of proposals, demonstrations, evaluations, vendor selection	\$ 6,975.00
Phase III: Installation, configuration and training schedule	\$15,000.00
10% Contingencies	\$ 6,736.00
<b>Total</b>	<b>\$74,096.00</b>

There are sufficient appropriated funds in the Water and Wastewater Funds to cover these costs.

**PREPARED BY:** Chris Toth, Wastewater Systems Manager/LC/mh

**SUBMITTED BY:** Rebecca J. Bjork, Public Works Director

**APPROVED BY:** City Administrator's Office