



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

File Code No. 540.10

# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** January 11, 2011

**TO:** Mayor and Councilmembers

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

**SUBJECT:** Contract For Water Chemistry Analysis Services For The Cater Water Treatment Plant

### **RECOMMENDATION:**

That Council authorize the Public Works Director to execute a contract in the amount of \$59,800 with Water Quality & Treatment Solutions, Inc. (WQTS), for water chemistry analysis at the Cater Water Treatment Plant (Cater), and authorize the Public Works Director to approve expenditures of up to \$5,980 for extra services of WQTS that may result from necessary changes in the scope of work.

### **DISCUSSION:**

Cater is the City's potable water treatment plant. It treats water from the Santa Ynez River for the City of Santa Barbara, along with the Montecito and Carpinteria Valley Water Districts. Cater is operated in compliance with drinking water rules and regulations prescribed by the US Environmental Protection Agency (EPA) and enforced by the California Department of Public Health (CDPH).

The Stage 1 Disinfectant Byproduct Rule (DBP Rule) is a drinking water rule that went into effect in 2002. A sub-part of the DBP Rule is the Enhanced Coagulation Rule (EC Rule), which requires water agencies to remove 15% of the Total Organic Carbon (TOC) in their raw water using chemical coagulants. The EPA and CDPH recognize that the chemistry of some source waters makes them not amenable to TOC reduction through coagulation. Water agencies treating such water sources can apply for a three-year waiver from the EC Rule by submitting data that demonstrates that a 15% reduction of TOC in their raw water source is not reasonably attainable using enhanced coagulation.

Santa Ynez River water has high alkalinity, making it difficult to comply with the EC rule for required TOC reduction. Historically, Cater staff has contracted with a consulting firm to perform the necessary water chemistry analysis and to present their findings in a

report to CDPH for the City to receive a waiver from the EC Rule. The City's current three-year waiver from the EC Rule expires on January 1, 2012.

Staff invited proposals from qualified consulting firms to develop the water chemistry analysis and documentation necessary to apply for an extension of the City's waiver from the EC Rule. Staff is also seeking professional assistance with testing the performance of water treatment chemicals proposed for Cater's treatment process, and for on-call technical support services to address issues with water treatment that arise from time to time.

Two proposals were received from qualified firms. WQTS ("Consultant") was chosen to perform the work based on their successful performance with providing similar services to the City in the past, and their acceptable bid of \$59,800, which was the lowest bid of the two proposals received. Staff is also requesting authorization of \$5,980 in change order authority for unforeseen changes in the scope of work, for a total contract award of \$65,780.

#### **PROPOSED WORK:**

##### **Task 1 – Data Collection for Enhanced Coagulation Waiver Application (\$29,400)**

To renew the waiver for the EC Rule, the Consultant will prepare a test plan for approval by CDPH. Upon approval by CDPH, the Consultant will conduct quarterly enhanced coagulation testing, and will submit the results and a letter to CDPH requesting an extension of the City's existing Enhanced Coagulation Waiver.

##### **Task 2 – Comparison Testing of Proposed Water Treatment Chemicals (\$20,400)**

The City has pre-qualified four treatment chemical suppliers whose products appear to be compatible with Cater's treatment process. Each supplier was chosen based on previous successful performances of their chemicals at Cater, including the supplier's ability to reliably deliver chemicals of a consistent quality. The Consultant will bench-scale test each proposed treatment chemical for its ability to remove particulate matter from the City's source water, while maintaining acceptable filtered water turbidity levels. The Consultant will prepare a test plan detailing the testing methods and procedures as well as proposed water quality analyses, analytical methods, quality control procedures, and test schedule. After completing the testing and receipt of all laboratory data, the Consultant will compile and summarize the findings in a final report.

Based on the final report, full-scale trials of selected treatment chemicals will be run at Cater for one to two weeks per chemical to verify the bench-scale results in a real-world application. The Consultant will assist Cater staff with identifying the best performing chemical(s). This information will ultimately be used to convert the weight-based price quotes received from the suppliers to performance-based price quotes. Staff will then return to Council for award of contract for supply of the treatment chemical.

**Task 3 – On-Call Technical Services (\$10,000)**

On an as-needed basis, Cater staff will call upon the Consultant to provide general consultation regarding various water quality and/or water treatment issues or concerns. These services may include analysis of water quality data, preparation of technical memoranda, or review of technical data and/or reports. The Consultant will charge an hourly rate for these services for a total not-to-exceed amount of \$10,000.

**BUDGET/FINANCIAL INFORMATION:**

At their monthly meeting, held on December 13, 2010, the Water Commission voted 3-0 in support of this proposed work effort. There are sufficient appropriated funds in the Water Fund for these services.

**PREPARED BY:** Catherine Taylor, Water System Manager/mh

**SUBMITTED BY:** Christine F. Andersen, Public Works Director

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