

ITEM 5

Agenda Item No. _____

File Code No. _____



CITY OF SANTA BARBARA COUNCIL AGENDA REPORT

DRAFT

AGENDA DATE: January 11, 2011

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Water Chemistry Analysis For The Cater Water Treatment Plant

RECOMMENDATION:

That Council authorize the Public Works Director to execute a contract with XXXX in the amount of \$XX,XXX for Water Chemistry Analysis at the Cater Water Treatment Plant (Cater), and authorize change order authority of \$X,XXX for unforeseen 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 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. Under 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 certain source waters are not amenable to TOC reduction through coagulation. Water agencies treating such water sources can apply for a waiver from the EC Rule by submitting data that sufficiently demonstrates a 15% reduction of TOC in their raw water source is not reasonably attainable using enhanced coagulation.

Santa Ynez River water does not reliably meet the EC rule for required TOC reduction using coagulants. Historically, Cater staff has contracted with a consultant 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 waiver from the EC Rule expires on January 1, 2012. Staff invited proposals from qualified consultant 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 for the proposed work. XXXX has submitted an acceptable proposal in the low-bid amount of \$XX,XXX^[RBL]. XXXX has successfully performed similar services to the City in the past. Staff is requesting authorization of \$X,XXX in change order authority for unforeseen changes in scope of work, for a total contract amount of \$XX,XXX.

PROPOSED WORK:

Task 1 – Data Collection for Enhanced Coagulation Waiver Application.

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 Coagulants

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 coagulants 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

On and 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:

There are sufficient funds in the Water Fund for these services. [RB2]

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SUBMITTED BY: Christine F. Andersen, Public Works Director

APPROVED BY: City Administrator's Office