



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: January 28, 2014

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Atomic Absorption Spectrometer System Purchase Authorization

RECOMMENDATION:

That Council find it in the City's best interest to waive the formal bidding process, as authorized by Municipal Code Section 4.52.070(L), and authorize the City General Services Manager to issue a Purchase Order in the amount of \$40,721 for the purchase of an atomic absorption spectrometer, PinAAcle™ 900F flame main module controller with WinLab™ 32 elemental lamps and extended warranty to Perkin Elmer® Health Science, Inc.

DISCUSSION:

The City's Water Resources Laboratories produce and provide laboratory analytical data and related services for drinking water, groundwater, wastewater, pretreatment, recycled water, biosolids, and creeks. The majority of the laboratory analyses are for regulatory compliance programs and treatment process control.

The laboratory utilizes an atomic absorption spectrometer for a large portion of its water-based analyses. This spectrometer is a sophisticated computer-controlled instrument that is used for water and wastewater sample analysis of trace elemental metals. The spectrometer passes light through a sample and measures how much light of a specific wavelength is absorbed by the sample.

The current laboratory atomic absorption (AA) spectrometer system (Perkin Elmer® *AAnalyst*™ 300) has been in operation since 1997 for analysis of inorganic trace and elemental metals for drinking water and wastewater samples. This testing equipment has reached its useful life because of outdated technology, increased maintenance costs, and unavailability of component replacement parts. Additional analyses required to be run on the spectrometer have increased as a result of the Ortega Well Treatment Plant becoming operational. The spectrometer must be reliable and operate with a minimum of downtime in the coming years to ensure water and wastewater quality tests can be conducted efficiently for regulatory reporting purposes.

Since all of our inorganic trace metal measurement equipment is manufactured by Perkin Elmer[®] Health Science, Inc., it is most practical, efficient, and cost effective to purchase the spectrometer. Perkin Elmer[®] Health Science, Inc., has been providing maintenance to the existing system since 1997 and is familiar with our operational use of the equipment. Continued use of a Elmer Perkins AA spectrometer will also allow for the exchange of parts common to other Elmer Perkins laboratory equipment the City already owns.

Staff recommends waiving the competitive bidding process and purchasing the atomic absorption spectrometer from Perkin Elmer because [it is](#) the only company that can provide [a new unit](#) compatible with our existing water laboratory's [equipment](#).

BUDGET/FINANCIAL INFORMATION:

Expenditures for the atomic absorption spectrometer system were anticipated and have been budgeted in the Water and Wastewater Laboratories operating funds.

PREPARED BY: Chris Toth, Wastewater System manager/LC/mh

SUBMITTED BY: Rebecca Bjork, Acting Public Works Director

APPROVED BY: City Administrator's Office