EWEB Board Consent Calendar Request

For Contract Awards, Renewals, and Increases

The Board is being asked to approve an Equipment Purchase Contract with **Process Solutions, Inc.** for **On-Site Sodium Hypochlorite Disinfection System Equipment.**

Board Meeting Date: May 1, 2018

Project Name/Contract#: Onsite Sodium Hypochlorite Disinfection System Equipment / RFP 015-2018

Primary Contact: Mel Damewood Ext.7145

Purchasing Contact: Collin Logan Ext.7426

Contract Amount:

Original Contract Amount: $1,285,000

Additional $ Previously Approved: $0

Invoices over last approval: $0

Percentage over last approval: 0 %

Amount this Request: $1,285,000

Resulting Cumulative Total: $1,285,000

Contracting Method:

Method of Solicitation: Formal Request for Proposal

If applicable, basis for exemption: n/a

Term of Agreement: One-Time Purchase

Option to Renew? No

Approval for purchases *"as needed"* for the life of the contract No

Proposals/Bids Received (Range): 3 proposals received ($897,720 - $1,285,000)

Selection Basis: Formal Evaluation Process

NARRATIVE:

The Board is being asked to approve the purchase of equipment associated with the new disinfection system at the Hayden Bridge Filtration Plant. The equipment includes new brine tanks, three onsite hypochlorite generators, three sodium hypochlorite tanks, five metering pumps, blowers, brine pumps, and 4 water softener pairs.

Currently, the Hayden Bridge Filtration Plant disinfects the drinking water using gas chlorine. Disinfection is the most important process at the treatment plant, it is what ensures that the water is safe to drink. Gas chlorine, while effective at protecting drinking water, by its nature is extremely dangerous and requires special safety precautions, certifications and equipment to maintain a stable and safe environment for the workplace and local surroundings. The trend in drinking water treatment has been to move away from gas systems to either bulk liquid hypochlorite systems or onsite generation systems. This trend has made it so that obtaining gas chlorine has become difficult, there is only one supplier in the western US, which means following a disaster, chlorine will be unavailable and without chlorine the plant cannot produce potable water and will need to shut down.

In 2014, staff, working with Jacobs (formerly CH2M Hill), completed a Disinfection Evaluation to replace the gas chlorine disinfection system because gas chlorine is increasingly difficult to find and because of the safety risks. The evaluation included a triple bottom line alternatives analysis that looked at upgrading the existing gas chlorine system, converting the system to a bulk liquid hypochlorite system, and replacing the existing system with a new system where sodium hypochlorite (liquid chlorine) is generated on-site using a mix of water from the plant and salt. Jacobs' recommended moving forward with onsite generation of sodium hypochlorite because it is the most reliable and resilient solution. In addition, it is much safer than both gas and bulk liquid hypochlorite.

In 2017, staff began a preliminary and detailed design project with Jacobs to install an onsite generation system at the plant. In addition to the design of the on-site generation equipment, the project includes a new building to house the equipment. Final design for the building will be complete in the beginning of May 2018 with a construction contract

being submitted to the board for approval in summer of 2018.

The on-site generators, chemical storage tanks, and metering pumps can all potentially have long lead times and can vary in quality as well as price. In order to ensure that the system is operating prior to the 2019 peak season, staff made the decision to move forward with pre-purchasing these long lead time items.

Staff issued a Formal Request for Proposals in March, 2017. EWEB received three proposals from WM. H. Reilly & Co. (Portland, OR), PumpTech (Canby, OR), and Process Solutions, Inc. (Vancouver, WA). After evaluating the proposals for their ability to meet the minimum qualifications, how the equipment would fit in the new building, redundancy, safety, availability of service and parts, warranty, references and costs, Process Solutions, Inc. was determined to be the highest ranked offeror based on the evaluation criteria. The advantages of the Process Solutions, Inc. system is that it can run at a reduced capacity during maintenance and repair activities, reference checks indicated that service and parts are readily available reducing downtime, and the system, in the opinion of the evaluation team, seemed to be the safest to operate. The lowest cost option was also the lowest ranked option. The metering equipment provided did not meet the specification requirements, the manufacturer has less than 60 installations worldwide of the size or larger than what is required at EWEB, and reference checks indicated that there are reliability issues and problems getting support and parts resulting in the system having long down times. The middle priced option has a large number of similar sized installations worldwide, however a reference check for a system in Oregon indicated that parts take a long time to receive.

In summary, the evaluation team prioritized that redundancy and reliability were the most important aspects of the system and are recommending moving forward with the purchase of the Process Solutions, Inc system because the evaluation team deemed it is the most reliable and redundant system.

ACTION REQUESTED:
Management requests the Board approve the purchase of the On-Site Generation Equipment from Process Solutions, Inc. Funds for this equipment were budgeted for 2018, and are included in the Capital Improvement Plan for 2018. The Type 2 Capital Expenditures Budget for 2018 for this project is $3,183,000.

SIGNATURES:

Project Coordinator: _____

Manager: _____

Purchasing Manager: _____

Board Approval Date: _____