

COUNCIL ACTION FORM

SUBJECT: NEW WPC PLANT PUMPS

BACKGROUND:

Currently there are 14 main pumps at the Water Pollution Control Plant—six in the raw water pump station and eight in the trickling filter pump station. In 2008, Council initiated a five-year program to replace all 14 pumps. Two raw water pumps have been replaced; four first-stage trickling filter pumps have been purchased; and four second-stage trickling filter pumps are in the process of being installed. The four remaining pumps were scheduled for replacement in fiscal year 2011/12, and bids were received in early 2011. After the bid opening, staff discovered that the specifications had failed to require interchangeability between the new and existing pumps. At staff's request, Council rejected the bids and directed staff to rebid the pumps with modified specifications. In January of 2012, a request for bids was issued to replace the remaining four pumps that included the interchangeability requirements necessary to ensure continuity of plant operations. The bid alternate requests that the manufacturer provide a premium efficiency motor for the pumps.

Raw water vertical turbine solids-handling pump

Base bid – High-efficiency Motor		Bid Alternate - NEMA Premium™ Motor	
<u>Bidder</u>	<u>Unit Cost, \$</u>	<u>Bidder</u>	<u>Unit Cost, \$</u>
Fairbanks Morse	No bid	Fairbanks Morse	118,220.00
Flowserve US Inc.	72,052.00	Flowserve US Inc.	No Bid

After reviewing the most recent bids, staff has concerns about both the equipment and performance history of the low bidder, Flowserve. The proposed pumps do not meet the interchangeability requirements of the specifications. The proposed pump shaft diameter does not match the specifications, the proposed motor does not match the required electrical connection height as specified, and the proposed pumps do not use the mechanical seals specified. Flowserve was awarded a previous contract for four first-stage trickling filter pumps. Delivery of the pumps took far longer than the promised delivery date in their bid. There were also issues with the installation requirements of the pumps that Flowserve did not disclose with their bid that resulted in unexpected additional expense to the City. Most significantly, two of the pumps have been installed, but the pumps are not meeting flow requirements outlined in the specifications.

Staff has been working with Flowserve to resolve the issues for several months but has been disappointed with the lack of response from Flowserve. To date, staff has not made any payments to Flowserve pending resolution of the flow problem. Unless the manufacturer can modify the pumps to achieve the required

flows, staff will not recommend acceptance of those pumps, putting their fate in question.

After taking these concerns into consideration, staff recommends award to Fairbanks Morse. Six pumps have already been purchased from Fairbanks Morse under previous contracts, and those pumps are performing as required.

The 2012/13 CIP includes \$418,000 for the final year of pump replacements. The purchase of four pumps will cost \$472,880, meaning that an additional \$78,000 would need to be allocated from the available Sewer Fund balance for this project. That total will cover the purchase price and provide a five percent allowance for miscellaneous installation expenses, bringing the project budget to \$496,000. Because these new pumps are similar to the existing pumps, WPC Plant staff will install the new equipment upon delivery.

ALTERNATIVES:

1. Award a contract to Fairbanks Morse, of Kansas City, Kansas to purchase four raw water vertical turbine solids-handling pumps with premium efficiency motors at a total cost of \$472,880.00, and authorize use of an additional \$78,000 for the project from the available Sewer Fund balance.
2. Do not award a contract at this time.

MANAGER'S RECOMMENDED ACTION:

The existing pumps are more than 22 years old and are in pressing need of replacement to keep the Water Pollution Control Plant functioning at full capacity. The lead time on manufacture and delivery of these pumps is eight months, and two of the existing pumps are already experiencing signs of advanced wear.

The need for an orderly replacement of these pumps was planned for in the Capital Improvements Plan. The low bid received offers equipment that does not meet the requirements of the specifications, and staff have been dissatisfied with the performance of this vendor on a previous pump replacement project.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving award of a contract to Fairbanks Morse of Kansas City, Kansas for four raw water vertical turbine solids-handling pumps, and authorizing use of an additional \$78,000 for the project from the available Sewer Fund balance.

Although it is highly unusual to approve capital projects so far above the planned cost, in this case it is imperative that we move forward with replacement of these vital plant components. As the year progresses, hopefully staff will be able to identify other savings within the Sewer Fund to help offset this cost increase.