



Rochelle Municipal Utilities Water/Water Reclamation

To: David Plyman

From: Kathy Cooper

Date: May 2, 2014

Re: Centrifuge Project Recommendation

In October 2012, Staff began the process of evaluating alternatives for replacement or repair and upgrade of the centrifuges that process the sludge at the Water Reclamation Plant. Trotter and Associates was chosen to perform the evaluation, based upon their broad level of experience in engineering sludge dewatering processes. The engineering agreement for the project was signed in May 2013. Mr. Trotter and his associates evaluated the Rochelle processes and determined that, based upon life cycle costs, the best way to proceed is to replace the three existing centrifuges with two larger centrifuges.

Trotter designed the project and prepared the bid packages for replacing the centrifuges. Subsequent to the required public notice, bids were opened on April 15, 2014, and two bids were received. Based upon the engineer's cost estimate of almost \$1,992,584, a Base Bid and an Alternate Deduct were specified so that the project would be delivered within budgetary guidelines. The Alternate Deduct eliminates one centrifuge and one polymer blending unit. The bids received were:

	<u>BASE BID</u>	<u>ALTERNATE DEDUCT</u>
DJ Sickley, Peru	\$1,799,383	\$383,504
Boller Construction, Waukegan	\$1,794,000	\$350,000
Engineer's Estimate	\$1,992,584	\$533,786

The major equipment to be replaced for this project are:

Liquid Polymer Feed System (2)	\$ 87,300
Centrifuge Feed Pumps (2)	\$ 55,000
Centrifuges (2)	\$785,000
Control System	\$ 80,000
Screw Conveyor	\$224,800

No local contractors bid on the project. Neither of the contractors has performed work for the City. Boller Construction has been the contractor on two of Trotter's projects, and they have significant experience performing upgrades and rehabilitation projects at wastewater facilities. Nick Menninga of Downers Grove Sanitary District states that Boller is the contractor for a plant upgrade in Downers Grove, and he has been satisfied with their work. I also contacted John Pullia of Bartlett Public Works, and he was very complimentary on the job Boller did on the upgrade to their main lift station.

It is Staff's recommendation to move forward with Base Bid and purchase and install two centrifuges. The 2014-15 FY Budget has a line item for this project of \$1,800,000. The funds for this project come from the equipment replacement account that is funded from user rates. The last payment for the treatment plant bond was paid May 1, 2014, and the required reserve amount of \$694,000 was put into the equipment replacement account, resulting in a fund balance of \$2,874,648.

If the alternate deduct is chosen, then two of the three 20-year old machines must be kept and maintained. They both need to be rebuilt, and the cost for a rebuild is at least \$25,000, and it could be significantly more. The City has also received a number of inquiries to purchase the three centrifuges that are now in use. We expect to get \$70,000 each for the centrifuges and the control panels, and the screw conveyor will also be sold as used equipment. This will help offset the additional cost.

Please put this on the May 12, City Council Agenda.