



## CITY COMMISSION STAFF REPORT

**DEPARTMENT:** Utilities

**DATE:** July 23, 2024

**SUBJECT:** Motion to approve Contract with Alfa Laval, Manufacturer of Dewatering Centrifuges at the City's Wastewater Treatment Plant - **Utilities**

### **CITY MANAGER RECOMMENDATION:**

The City Manager recommends approval of a turn-key Contract for replacement of the two existing decanter centrifuges, polymer storage and conveyance system and associated controls at the City's Wastewater Treatment Plant by Alfa Laval, Manufacturer.

### **BACKGROUND OF ITEM:**

On July 29, 2023 the prior Utilities Director submitted an emergency purchase authorization pursuant to Section 2-258(c) of the Procurement Code, which authorizes the City Manager to make emergency purchases exceeding his approval threshold (\$20,000) for an amount of \$150,000 for wastewater sludge dewatering services which was contracted to Synagro, the City's current sludge solids waste hauler. The Cooper City wastewater treatment plant utilizes two existing decanter centrifuges for dewatering settled sludge from the three secondary activated sludge wastewater treatment units at the City's wastewater treatment plant. These centrifuges were installed in two separate projects, one which was installed in the mid-1990s and the other which was installed in the mid-2000s (near 2005), of which only the latter is still functional. From communications with the manufacturer parts for these units are obsolete, and the same units are not available for full replacement of these centrifuges with a moderately different model with approximately the same capacity is the only viable alternative presently.

Since these units have exceeded their expected lifecycle, the Utilities Department Contracted with Hazen and Sawyer, P.C., the City's Wastewater Detailed Design Consultant in August 2022 to assist the City with the replacement project as part of the 5-year Capital Improvement Plan, and the Consultant provided recommendations and a quality assurance review of a turn-key replacement proposal provided by the original Manufacturer at substantial savings over redesigning a complete replacement for these units.

### **ANALYSIS:**

In accordance with Section 2-258(i) it is now recommended the City Commission provide a waiver of procurement procedures since it is in the City's best interests to forgo the standard bidding procedures in the interest of time and cost savings that are justified for this project. The reasons

for this are that any alternative technology, process, or equipment would require a complete re-design of the facility to reconstruct the process and would necessarily require building electrical and control improvements that are substantially different than the original manufacturer’s turn-key proposal. These services would require professional design, permitting, bidding, construction and certification by Hazen and Sawyer, P.C. and require approximately a year or more to complete. Meanwhile the existing process is down to operating with a single unit while the other is apparently not repairable. The alternate truck-mounted process that was requested previously by the former Utilities Director may be necessary, but it is likely the manufacturer and selected Contractor may be able to replace these units (one at a time) and not require a separate bypassed operation while the turn-key solution is installed for the replacements.

Alfa Laval representative has indicated this work would require approximately (3) to four (4) months to complete following approximately 6 to 8 months for equipment manufacturing and delivery.

**STRATEGIC PLAN:**

This project and plan for delivery fulfills the goals of the strategic plan in that it engages a turn-key, rapid, and more affordable completion of a Capital Improvement Project and assists staff in accomplishing performance measures related to treatment and production, which further improves the efficiency of dewatering operations over the aged unit currently operating at the wastewater treatment plant.

**FISCAL IMPACT:**

<u>General Ledger Acct. Number</u>	<u>Budgeted Amount</u>	<u>Requested Amount</u>	<u>Remaining Amount</u>
453-931-563610-535-24013	\$1,475,044.00	\$1,450,000.00	\$25,044

**ALTERNATIVES:**

The alternative to this request for replacement of these two decanter centrifuges would be to purchase trailer-mounted centrifuge dewatering services by our Contracted wastewater biosolids hauler, and while the costs for these services were at approximately \$50,000 per month at this time last year, staff would need to confirm what their current pricing for these services would be currently.

**ATTACHMENTS:**

1. Proposal from Alfa Laval, Manufacturer of decanter centrifuges replacing current two units.
2. July 19, 2023 Memorandum from former Utilities Director requesting emergency authorized services by the City’s Contracted Waste Hauler

## Workflow History



User	Task	Action	Date/Time
Welch, Tim	NEW ITEM: Not Yet Routed	Route to Budget	07/05/24 04:11 PM
Montoya, Jenna	Assigned to Budget	Return to Original Submitter	07/05/24 04:16 PM
Welch, Tim	Returned to Original Submitter by Budget	Return to Budget	07/05/24 04:18 PM
Nadeau, Mike	Assigned to Budget	COMPLETE: Forward to City Clerk	07/05/24 05:39 PM
	<i>The fiscal impact section of this staff report is correct. Although they're using their unencumbered balance as the budgeted number. Still OK. It shows they have enough funding.</i>		
Allen, Tedra	Assigned to City Clerk	Route to Attorney	07/08/24 09:08 AM
Horowitz, Jacob	Assigned to Attorney	COMPLETE: Forward to City Manager	07/08/24 09:43 AM
Rey, Alex	Assigned to City Manager	COMPLETE: Forward to City Clerk	07/08/24 12:55 PM
Allen, Tedra	Assigned to City Clerk	APPROVE ITEM: End Workflow	07/09/24 11:10 AM
Allen, Tedra	END WORKFLOW - APPROVED		07/09/24 05:28 PM