



Department of Utilities Wastewater Treatment Plant 2006 East Newberry Street Appleton, WI 54915 p: 920-832-5945 f: 920-832-5949 www.appleton.org/government/utilities

# MEMORANDUM

Date:	October 17, 2024
То:	Chairperson Brad Firkus and Members of the Finance Committee
CC:	Chris Stempa, Director of Utilities Colin Stoffel, Wastewater Operations Supervisor Kelli Rindt, Enterprise Accounting Fund Manager
From:	Ryan Rice, Deputy Director of Utilities
Subject:	Finance Committee Action: Award sole source purchase of Plunger pump to Wastecorp Pumps in the amount of \$35,000, along with the following budget amendment. Primary Clarifier Rebuild CIP -\$35,000 and Plunger Pump Replacement CIP +\$35,000

## BACKGROUND:

The Appleton Wastewater Treatment Plant (AWWTP) utilizes four plunger pumps (primary sludge pumps) to remove settled sludge from six primary clarifiers and pump the material to the sludge blending process prior to anaerobic digestion. These pumps operate many times a day and occasionally run continuously during high flow events, when the sewers are scoured, and heavy material is conveyed to the preliminary and primary treatment processes. Standard wastewater treatment plant design based on Wisconsin Administrative Code requires redundant equipment to sustain uninterrupted operation. That means having multiple critical devices to perform the same function so that a system or process can be operated even if the other were to fail. If multiple plunger pumps were to become inoperative, settled sludge would not be removed from the primary clarifiers, which would lead to cascading failure of the primary clarification process.

Two original 1970s and one 1990s vintage pump have been replaced with new plunger pumps since 2021 due to the cost to rebuild nearly as much as the cost of a new pump. The failed pump is a 1992 vintage pump which has reached the end of its useful life and like the other three pumps, the cost to rebuild to a reliable condition is almost the cost of a new pump.

### QUOTATION

Wastecorp provided a quote to purchase a new plunger pump for \$35,000.

### JUSTIFICATION

Purchasing from Wastecorp maintains continuity with the three other pumps for maintenance and operational consistency, redundancy, and returns reliability to the primary clarification process.

### **RECOMMENDATION:**

I recommend the sole source purchase of a plunger pump from Wastecorp Pumps in the amount of \$35,000

The following budget amendment will be required to fund the project:

Primary Clarifier Rebuild -\$35,000

Plunger Pump Replacement +\$35,000

The Primary Clarifier Rebuild project was put on hold earlier this year due to pricing received to complete the project.

If you have any questions regarding this request, please contact Ryan Rice at 920-832-5945.

**Encl:** Finance Department Sole Source Request Form