



# office memorandum

DATE: September 11, 2017

TO: Steve Lewis; City Manager

THOUGH: Ken Komiske; Director of Utilities

FROM: Steven D. Hardeman; Water Reclamation Plant Manager *SH*

RE: **Emergency Repair to Dewatering Centrifuge.**

## **Background**

In 2009, the Water Reclamation Facility installed two dewatering/thickening centrifuges as part of the Sludge Improvement Project. One centrifuge was dedicated to dewatering bio-solids for land application and the other was dedicated to thickening waste activated sludge for removal from the activated sludge system. During the recent Phase 2 Project, two additional thickening centrifuges were added for more flexibility in operation. All units are a critical part of the ongoing bio-solid reduction at the facility. The new centrifuges operate 10 to 16 hours per day, seven days per week. The original centrifuges operate as backup and are used during routine maintenance.

## **Discussion**

After many years of continuous operation, one of the original dewatering centrifuges is in need of major repair. The unit was taken out of service in late June due to operating issues. Hiller Separation & Process LLC (Sole Source Manufacture) was brought in to access the problem. Their assessment indicated significant repairs are necessary. In their evaluation the main drive unit (a planetary gear) will need replacing along with other associated equipment. The total repair cost estimate will be \$31,674.15 which includes installation and shipping. Repairs would take about three to four weeks to complete. Funds are being requested from Water Reclamation Fund Balance (032-0000-253.00-00) and will be transferred to accounts (032-5545-432-32-04) Machinery, Equipment & Parts and (032-5545-432-42-11) Plant & Operating Equipment Services and (032-5545-432-4702) Freight & Shipping).

Machinery, Equipment & Parts (032-5545-432-32-04) ()	\$ 9,647.16
Plant & Operating Equipment Services (032-5545-432-42-11) ()	18,000.00
Freight & Shipping (032-5545-432-4702) ()	<u>4,000.00</u>
<b>Total Estimate:</b>	<b>\$31,674.15</b>

The emergency repair request is because of the essential need for this equipment. As mentioned, the centrifuges are used 10-16 hours a day, seven days a week to help remove solids from the treatment stream. Without the use of this equipment, the solids inventory in the treatment stream may build up and eventually exit through the effluent stream and possibly exceed the permitted allowance. This is a sole source purchase because the replacement parts are internal to this specific centrifuge and are not generic items that can be purchased from other manufactures.

**Recommendation**

This is an emergency repair and request your approval to proceed with repairs.

Ken Komiske, Director of Utilities

Approved: 

Disapproved: \_\_\_\_\_

Steve Lewis: City Manager

Approved:  9/13/17

Disapproved: \_\_\_\_\_

Cc: Ryan Bart, WWTP Supervisor  
File