



INDIAN RIVER COUNTY, FLORIDA DEPARTMENT OF UTILITY SERVICES

Date: May 10, 2019

To: Jason E. Brown, County Administrator

From: Vincent Burke, P.E., Director of Utility Services

Through: Jennifer Hyde, Purchasing Manager

Prepared By: Terry Southard, Operations Manager, Utility Services
Rich Meckes, Wastewater Superintendent

Subject: West Regional Wastewater Treatment Facility Hydro Cleanse Installation and Upgrades

BACKGROUND/ ANALYSIS:

Two Hydro International SlurryCup/Grit Snail units were installed at the West Regional Wastewater Facility (WWTF) during a Facility Upgrade and rehab in 2010. The SlurryCup units received normal maintenance and repair for the following eight years. When SlurryCup #2 failed in January of 2018, staff reached out to Moss Kelly International (MKI Services), the local maintenance provider designated by manufacturer Hydro International, for assistance and a repair estimate. SlurryCup #2 was inspected and determined to require extensive repairs. MKI Services and Hydro International proposed an alternative to the rehab of SlurryCup #2, in the installation of a new technology GritClenze unit at their cost as well as further evaluation of the original SlurryCup unit #2.

On April 17, 2018, the County Administrator executed an agreement (MOU) for the purpose of temporarily installing, running and testing a new Hydro International GritClenze washing and dewatering system and a thorough evaluation of SlurryCup unit #2. During the week of May 21, 2018, the new GritClenze unit was installed by Hydro International, and side by side testing of the SlurryCup #1 and the GritClenze unit began in June of 2018. The SlurryCup and the GritClenze were operated separately during the testing of the units. The test results revealed that the GritClenze unit produced a markedly cleaner and dryer grit, resulting in an 80% less dumpster storage requirement. The significantly lower organic and water content in the final product has saved money on the hauling of debris from the grit removal process. Previously, dumpsters were emptied twice a month with the SlurryCup Unit #1 in operation and now once every 3-4 months when using the GritClenze unit. Other advantages realized are a significant decrease in odors due to the reduced level of organic material in the final product, reduced maintenance requirements and greater ease of operation due to the simplified design of the GritClenze.

The final evaluation of the SlurryCup Unit #2 revealed that it would require a total rebuild, and the repair cost would not be financially responsible, as the equipment cost of a new SlurryCup is \$165,000.00, excluding installation.

MKI Services has proposed to permanently install the Hydro GritClenze Unit and upgrade the process. MKI Services will remove the temporary unit, remove the existing concrete pads, install suitable pads for the

GritCleanse unit, then reinstall the GritCleanse unit. MKI Services will replace the existing PVC manifold and replace with Stainless Steel, remove and replace the control panel, and provide and install a new control panel for the Fats Oil and Grease (FOG) systems for Headcell #1 and #2. The total cost for the project as described is \$119,325.00.

FUNDING:

Funds for this project are derived from the capital accounts in the Operating fund. Operating funds are generated from water and sewer sales.

Description	Account Number	Amount
W WWTF Grit Removal System	471-169000-19517	\$119,325.00

RECOMMENDATION:

The staff of Indian River County Department of Utility Services recommends that the Board of County Commissioners (BCC) waive the requirement for bids and approve the MKI Services proposal to permanently install the GritCleanse Unit with upgrades as outlined in the proposal received. Staff also recommends the BCC authorize the Purchasing Division to issue a purchase order to MKI Services in the amount of \$119,325.

ATTACHMENTS:

1. MKI Services Proposal