



TO: John Paul Castro, Utilities Director, City of Key West

COPIES: John Bartelmo, CH2M. / OMI, Inc.

FROM: Ricky Collins, CH2M. / OMI, Inc.

DATE: December 4, 2015

SUBJECT: Scum Pump Replacement

Action statement:

To purchase replacement pumps for clarifier scum system

Background:

The plant uses two (2) disc-pac laminar flow pumps to pump the floating debris (scum) from the clarifiers back to the head of the plant for re-processing. If these pumps were to fail it would back up the clarifiers and cause water quality issues resulting in a possible permit violation.

Purpose and Justification:

The pumps have been in service for 15 years and have been rebuilt three times each at a cost of > 5K each time, the disc-pac (impeller) is a high cost item and the chlorides in the wastewater stream corrode the metal rapidly, The new pumps to be purchased will be made entirely of a high grade CD4MU metal similar to stainless steel, this will greatly improve the reliability of the pumps and clarifier skimming system.

Options:

Purchase the pumps to maintain a reliable system to support the clarifiers.

Do not purchase and continue to rebuild / replace impellers and casings at a high cost.

Purchase other manufactured pumps, this option will increase cost because of retrofitting a different pump w/ base, motor and piping. The Disc-Flo pumps will drop right in place on their current base and piping.

Financial Impact:

Impact to the general sewer fund will be \$ 57,200.00

Recommendation:

Staff recommends the purchase of two (2) pumps from Gerber Pumps