

COMMISSION FILE NO: 23-150-12 **DATE INTRODUCED:** December 4, 2023

INTRODUCED BY: Executive Director (Signature on File in the Office of the Commission)

REFERRED BY COMMISSION CHAIRPERSON TO: Operations Committee

RELATING TO: Change Order Request to Purchase Order No. 12738, Material Capital Repair or Replacement No. 1219, South Shore Water Reclamation Facility Return Activated Sludge Pump Repairs, and Restore the Executive Director's Original Delegated Authority

SUMMARY:

The Commission is requested to authorize the Executive Director to execute a change order for Purchase Order (PO) No. 12738, Material Capital Repair or Replacement No. 1219, South Shore Water Reclamation Facility (SSWRF) Return Activated Sludge Pump Repairs, with Veolia Water Milwaukee, LLC, (VWM) in an amount not to exceed \$52,748 and to restore the Executive Director's original delegated authority.

The main biological treatment process used at SSWRF takes place in 28 large aeration basins that contain living microorganisms. The aeration basins are supplied with air as an oxygen source, allowing the microorganisms to metabolize and remove pollutants from wastewater. The population of microorganisms in the aeration basins is commonly referred to as activated sludge. After the microorganisms have consumed the wastewater pollutants, the activated sludge must be separated from the treated water. The separation takes place by gravity in 24 secondary clarifiers. Most microorganisms that settle to the bottom of the clarifiers are returned to the beginning of the biological treatment process as return activated sludge (RAS).

A system of RAS piping, control valves, wet wells, and pumps convey RAS from the secondary clarifiers to the aeration basins for biological treatment. The 28 aeration basins are split into four batteries, with each battery served by either two or three 150-horsepower RAS pumps, with a total of 10 RAS pumps.

The RAS pumping system is critical to achieve proper biological treatment. Failure of one or more RAS pumps may affect treatment capacity, effluent quality, and the ability to meet the District's Wisconsin Pollutant Discharge Elimination System effluent permit limits.

ATTACHMENTS: **BACKGROUND** ☒ **KEY ISSUES** ☐ **RESOLUTION** ☒
FISCAL NOTE ☒ **S/W/MBE** ☐ **OTHER** ☐ _____

OP_CO_PO12738_MCRR_1219_legislative_file.docx
11-13-23

COMMITTEE ACTION: _____ **DATE:** _____

COMMISSION ACTION: _____ **DATE:** _____

BACKGROUND

Change Order Request to Purchase Order No. 12738, Material Capital Repair or Replacement No. 1219, South Shore Water Reclamation Facility Return Activated Sludge Pump Repairs, and Restore the Executive Director's Original Delegated Authority

The 10 RAS pumps vary in age from four to 39 years. Four of the five oldest RAS pumps were experiencing various mechanical failures and were difficult to keep in service; therefore, staff recommended making repairs to these four RAS pumps.

The Commission authorized issuance of PO 12738 to VWM to perform repairs to the four RAS pumps. The repair work authorized included replacement of impellers, bearings, mechanical seals, wear rings, and gaskets on the four pumps. VWM had developed the scope of work and bid documents, publicly bid, and entered into a contract with Lee Mechanical, Inc., (Lee) to perform the work. VWM is responsible for managing this construction contract.

After Lee disassembled three of the pumps to perform repairs, additional necessary repairs were identified. The District and VWM recommend that the additional repairs proceed on the three pumps. This includes replacing the stuffing box covers, frames, thrust housings, shafts, shaft sleeves, and impeller nuts. District staff has authorized a change order using the Executive Director's authority to place the order for those additional parts with long lead times for two of the pumps. The change order requested of the Commission would include purchase of the remaining parts and installation of the parts on all three pumps. The fourth pump has not been disassembled by the contractor yet, so possible additional repairs to that pump are unknown at this time.

CONTRACT COST CHANGES

	AMOUNT	PERCENTAGE INCREASE OVER ORIGINAL CONTRACT	AUTHORIZED BY	SWMBE
Original Contract	\$405,695		Commission	54.4%
Previous Change Orders	\$48,231	11.9%	ED Authority	90.9%
Requested Change Order	\$52,748	13.0%	Request of Commission	90.9%
Total Change Orders	\$100,979	24.9%		90.9%
TOTAL	\$506,674			61.7%

BACKGROUND (Cont'd)

Change Order Request to Purchase Order No. 12738, Material Capital Repair or Replacement No. 1219, South Shore Water Reclamation Facility Return Activated Sludge Pump Repairs, and Restore the Executive Director's Original Delegated Authority

The Commission has delegated the Executive Director the authority to make changes to construction contracts up to a cumulative amount of \$50,000 for contracts that were originally less than \$500,000. To date, the Executive Director has utilized \$48,231 of this authority, leaving a balance of \$1,769. The request to restore the Executive Director's original delegated authority is in case any additional construction changes beyond the remaining Executive Director's authority are necessary. Without this restored authority, work may need to stop while staff obtains necessary change order authority from the Commission.

RESOLUTION

Change Order Request to Purchase Order No. 12738, Material Capital Repair or Replacement No. 1219, South Shore Water Reclamation Facility Return Activated Sludge Pump Repairs, and Restore the Executive Director's Original Delegated Authority

RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to execute a change order to Purchase Order No. 12738, Material Capital Repair or Replacement No. 1219, South Shore Water Reclamation Facility Return Activated Sludge Pump Repairs, with Veolia Water Milwaukee, LLC, in an amount not to exceed \$52,748, and that the Executive Director's original delegated authority is restored.