

**COMMISSION FILE NO:** 20-051-4 **DATE INTRODUCED:** April 15, 2020

**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, Purchase Order No. 9658, Material Capital Repair or Replacement No. 1038, South Shore Water Reclamation Facility Effluent Pump #3 Repairs

**SUMMARY:**

The Commission is requested to authorize the Executive Director to execute a change order to Purchase Order No. 9658, Material Capital Repair or Replacement (MCRR) No. 1038, South Shore Water Reclamation Facility (SSWRF) Effluent Pump #3 Repairs, with Veolia Water Milwaukee, LLC, (VWM) in an amount not to exceed \$63,277.

SSWRF has a nominal wet weather capacity of 300 million gallons per day (MGD). With high lake levels and during high flow conditions, it is necessary to operate up to four effluent pumps at SSWRF to discharge treated effluent to Lake Michigan. Five 75-MGD effluent pumps are normally available to meet the 300-MGD capacity, with one pump being redundant. If one pump is out of service, there is no redundancy in the effluent pumping system, and, if more than one pump is out of service, the capacity of SSWRF is reduced. Effluent Pump #3 is 35 years old, and component wear was causing excessive vibrations. The pump was operating at a reduced pumping capacity, and staff believes that the pump would have failed in the near future if it had continued to operate with the excessive vibrations.

The overall purpose of this project is to restore Effluent Pump #3 to its design capacity to ensure SSWRF has full effluent pumping capacity.

VWM competitively bid the original scope of work, which included:

- Sand blasting and repainting of the discharge column and base plate.
- Repairing, sand blasting, and repainting the impeller and suction bell.
- Rebuilding the gearbox and motor.
- Replacing bearings, seals, and lubrication lines.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒

**FISCAL NOTE** ☒ **S/W/MBE** ☐ **OTHER** ☐ \_\_\_\_\_

*OP\_Change\_Order\_MCRR1038\_EffluentPump3\_legislative\_file.docx*  
03-26-20

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## SUMMARY (Cont'd)

Change Order Request, Purchase Order No. 9658, Material Capital Repair or Replacement No. 1038, South Shore Water Reclamation Facility Effluent Pump #3 Repairs

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J.F. Ahern Co. (Ahern) was the lowest responsible and responsive bidder, with three bids received. The District issued the original purchase order to VWM, which is responsible for contracting, managing, and overseeing the construction contract with Ahern.

Ahern has removed and disassembled the pump to execute the original repairs. After disassembly, Ahern performed a complete inspection of the pump and provided recommendations for additional repairs outside the original scope of work. The District and VWM have reviewed the inspection report and recommend performing the following repairs that are beyond the original scope of work:

- Weld-repair corroded areas on the column/bowl assembly.
- Furnish and install a new line/head shaft.
- Furnish and install a new impeller shaft.
- Weld-repair corroded areas on the suction bell.
- Rebore the lower bearing housing.
- Replace the upper seal housing.
- Furnish and install a new shaft coupling.
- Furnish and install a new low speed shaft on the gearbox.

Ahern submitted a quote for the proposed additional scope of work. District and VWM staff reviewed this quote and found it fair and reasonable.

## PURCHASE ORDER COST CHANGES

<b>PURCHASE ORDER</b>	<b>AMOUNT</b>	<b>PERCENT INCREASE OVER ORIGINAL PURCHASE ORDER</b>	<b>AUTHORIZED BY</b>	<b>SWMBE</b>
Original	\$117,980		Executive Director	0.0%
Previous Change Order	\$13,876	11.8%	Executive Director	0.0%
Requested Change Order	\$63,277	53.6%	Request of Commission	0.0%
Total Change Orders	\$77,153	65.4%		0.0%
<b>TOTAL</b>	<b>\$195,133</b>			0.0%

## RESOLUTION

Change Order Request, Purchase Order No. 9658, Material Capital Repair or Replacement No. 1038, South Shore Water Reclamation Facility Effluent Pump #3 Repairs

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to execute a change order to Purchase Order No. 9658, Material Capital Repair or Replacement No. 1038, South Shore Water Reclamation Facility Effluent Pump #3 Repairs, with Veolia Water Milwaukee, LLC, in an amount not to exceed \$63,277.