



Legislation Text

File #: 2023-135, Version: 1

Contract No. 2204214
Ferric Chloride
O&M

Agenda of: April 26, 2023
Item No.: **2023-135**
Amount: \$5,084,700.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Chief Executive Officer
Great Lakes Water Authority

DATE: March 30, 2023

RE: **Contract No. 2204214**
Ferric Chloride
Vendor: Kemira Water Solutions

MOTION

Upon recommendation of Navid Mehram, Chief Operating Officer - Wastewater Operating Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. 2204214, "Ferric Chloride" with Kemira Water Solutions, at a cost not to exceed \$5,084,700.00 for a duration of one (1) year;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Water Resource Recovery Facility (WRRF) at the Great Lakes Water Authority is required to remove phosphorus (P) to meet effluent limits required in the plant's National Pollutant Discharge Elimination System (NPDES) permit. The primary method for removing P at the WRRF is by adding iron salts (ferric chloride) to the wastewater stream which reacts with the phosphorus and precipitates out of the flow stream in the primary clarifiers.

Phosphorus removal is desired to reduce the impact of higher nutrient loadings (eutrophication) on

the receiving water. Eutrophication is a cause of the seasonal cyanobacteria blooms (harmful algae blooms, HABs) in the receiving water body.

JUSTIFICATION

The WRRF is required to remove phosphorus (P) to meet effluent limits required in the plant's NPDES permit. Ferric Chloride is an essential chemical necessary for treatment of Phosphorus at the WRRF to ensure compliance with its permit. The exact usage of the chemical is difficult to predict since the usage is weather dependent.

FINANCIAL PLAN IMPACT

Summary: The use of Ferric Chloride is anticipated as an on-going component of the wastewater financial plan. The maximum value of the contract exceeds the current financial plan for this chemical. Should this contract be exercised to the maximum quantity, a budget amendment may be needed. First, offsetting other disposal costs that may be reduced, then from other areas, and finally from the unallocated reserve.

The pricing for chemicals continues to be very volatile. The demand and availability of this and other chemicals may create additional pressure on the wastewater system, which will affect the budget evaluation.

Funding Source: Operations and Maintenance (O&M) Budget (5960 - Sewer)

Cost Center: Wastewater Primary Processing (Cost Center 892223)

Expense Type: Operating Supplies - Chemicals (621600)

Estimated Cost by Year and Related Forecast Variance: See table below.

<u>Fiscal Year</u>	<u>Amount</u>
FY 2023 Amended Budget (Prorated)	\$ 675,833.00
FY 2024 Budget (Prorated)	<u>3,548,333.00</u>
Total Financial Plan	\$4,224,166.00
Maximum Proposed Contract	<u>\$5,084,700.00</u>
Variance (positive/(negative))	<u>(\$860,534.00)</u>

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on April 12, 2023. The Operations and Resources Committee unanimously recommended that the GLWA Board

adopt the resolution as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.