



Staff Report

File #: 22-0849

**REQUEST FOR CITY COUNCIL AND
CORONA UTILITY AUTHORITY ACTION**

DATE: 11/02/2022

TO: Honorable Mayor and City Council Members
Honorable President and Board Members

FROM: Utilities Department

SUBJECT:

Purchase Order with Suez Water Technologies and Solutions for the preparation, packaging, and transportation of used membranes acquired from the City of Henderson, Nevada and the purchase of membrane cassette frames for Water Reclamation Facility No. 3.

EXECUTIVE SUMMARY:

This staff report asks Council to approve a purchase order in the amount of \$421,945 with Suez Water Technologies and Solutions (Suez) for the purchase of Suez ZeeWeed 500D LEAP cassette frames and the preparation, packaging, and transportation of used Suez ZeeWeed LEAPmbr 500D membranes from the City of Henderson, Nevada for Water Reclamation Facility No. 3 (WRF-3). Suez ZeeWeed 500C membranes are utilized in the sewer treatment process at WRF-3. The current membranes have reached the end of their useful life and require immediate replacement to ensure continued compliance with the City's National Pollutant Discharge and Elimination System (NPDES) permit and other applicable laws and regulations.

RECOMMENDED ACTION:

That the:

- a. City Council authorize a total appropriation of \$464,140 from the Sewer Utility Fund (572) to the Utilities Department operating budget for a purchase order and contingencies.
- b. City Council determine that competitive bidding has been satisfied pursuant to Corona Municipal Code [Section 3.08.140\(B\)](#) No Competitive Market for a purchase order in the amount of \$421,945 with Suez Water Technologies and Solutions for the purchase, packaging, and transportation of used Suez ZeeWeed LEAPmbr 500D membranes from the City of Henderson, Nevada and the purchase of Suez ZeeWeed 500D LEAP cassette frames.

- c. City Council authorize the Purchasing Manager to issue a Purchase Order to Suez Water Technologies and Solutions in the amount of \$421,945.
- d. City Council authorize the City Manager, or his designee, to negotiate and issue change orders up to 10% or \$42,194 as authorized in Corona Municipal Code [Section 3.08.080\(I\)](#).
- e. Corona Utility Authority review, ratify, and to the extent necessary, direct that the City Council take the above actions.

BACKGROUND & HISTORY:

The Utilities Department’s (UD) Water Reclamation Facility No. 3 (WRF-3) is a membrane bioreactor (MBR) sewer treatment plant. This method of treatment combines the conventional biological process (activated sludge) with membrane filtration technology manufactured by Suez. Membranes are semi-permeable and submerged in aerated biological reactors. The function of the membranes is to filter out solids from wastewater.

ANALYSIS:

The ZeeWeed 500C membranes and 500C cassette frames manufactured by Suez, a sole source vendor of this product, are currently being utilized in the sewer treatment process at WRF-3. The membranes have reached the end of their useful life and require immediate replacement to maintain compliance with the City’s NPDES permit. The 500C membranes and cassettes are no longer being produced; however, the 500D membranes and cassette frames are compatible with our treatment system.

A permit condition that is directly impacted by the performance of the membranes is the Nephelometric Turbidity Units (NTU) limit of the WRF-3 effluent. NTU is the unit used to measure the turbidity or the presence of suspended particles in water. The WRF-3 NPDES permit states the effluent must not exceed 0.2 NTU more than 5 percent of the time within a 24-hour period (72 minutes) and it must not exceed 0.5 NTU at any time. The WRF-3 NTU data indicates an upward trend and a high potential for violating the NPDES permit, indicating a need to replace the membranes.

Elevated NTUs are an indication of decreased membrane performance. It is crucial to replace the membranes as soon as possible to avoid potential violations, fines, and penalties from the State Water Resources Control Board (SWRCB) and the United States Environmental Protection Agency (EPA).The potential fines and penalties for violating the conditions of the NPDES permit are up to \$25,000 per day and \$25 per gallon of wastewater discharged.

Membrane Replacement Options:

Options:	Timeline:	Cost:
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#1 - New 500D Membranes and 500D Cassette Frames	November 2023	\$798,000
#2 - Used 500D Membranes and 500D Cassette Frames	March 2023	\$421,945

Due to the swift timeline and lower cost, Option #2 - used 500D membranes and 500D cassette frames is the most viable and cost-effective option to install replacement membranes and remain in compliance with the NPDES permit and other applicable laws and regulations.

Option#2 includes (240) two hundred forty used 500D membranes, (15) fifteen 500D cassette frames, membrane packing and preparation, and transportation. The cost of this option is \$421,945. The used 500D membranes are being acquired from a wastewater treatment plant in Henderson, Nevada. The membranes are being removed from service and replaced with new membranes on October 31, 2022. Water Reclamation Staff visited the Henderson Wastewater Treatment Plant on October 19, 2022 to visually inspect the membranes and verified their integrity and functionality. Suez will begin the packing and transportation of the 500D membranes to WRF-3 the week of November 7, 2022. The 500C cassette frames being utilized at WRF-3 are not compatible with the 500D membranes. ZeeWeed 500D cassette frames are required and must be purchased to utilize the 500D membranes from Henderson. The lead time for 500D cassette frames is approximately March of 2023. While UD awaits the delivery of the 500D cassette frames, the 500D membranes will be stored and maintained at WRF-1.

Basis for Determination of Competitive Bidding

Staff believes that Competitive Bidding has been accomplished for these purchases pursuant to Corona Municipal Code (CMC) [Section 3.08.140\(B\)](#), which states as follows:

"No competitive market." When the purchasing agent and the authorized contracting party, with the approval of the City Manager, determines, in accordance with applicable law, that a competitive market does not exist and that no competitive advantage will be gained by the public bidding process. The most cost effective manner to purchase this item is on the resale market, which only has one possible seller. As a result, there is no competitive market for a resold product.

Staff requests approval of a purchase order in the amount of \$421,945 with Suez Water Technologies and Solutions for the purchase, packaging, and transportation of used Suez ZeeWeed LEAPmbr 500D membranes from the City of Henderson, Nevada, and the purchase of Suez ZeeWeed 500D LEAP cassette frames based on this exception.

FINANCIAL IMPACT:

Approval of the recommended actions will result in a total appropriation of \$464,140 from the Sewer Utility Fund (572) to the Utilities Department operating budget. There is sufficient working capital in the Sewer Utility Fund (572) for the recommended actions.

ENVIRONMENTAL ANALYSIS:

This action is exempt pursuant to Section 15061(b)(3) of the Guidelines for the California

Environmental Quality Act (CEQA), which states that a project is exempt from CEQA if the activity is covered by the commonsense exemption that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. This action involves the purchase of membranes for the sewer treatment process, and there is no possibility that the recommended actions will have a significant effect on the environment. Therefore, no environmental analysis is required.

PREPARED BY: KRISTIAN ALFELOR, OPERATIONS MANAGER

REVIEWED BY: TOM MOODY, DIRECTOR OF UTILITIES