

**Indian River County, Florida
Solid Waste Disposal District
Board Memorandum**

Date: February 4, 2022

To: Jason E. Brown, County Administrator

From: Cindy Corrente, Director of Utility Services

Prepared By: Himanshu H. Mehta, PE, Managing Director, Solid Waste Disposal District

Subject: Mixer Installation for the Above Ground Storage Tank at the IRC Landfill

Descriptions and Conditions:

On May 18, 2021, the Indian River County (IRC) Solid Waste Disposal District (SWDD) Board authorized Work Order No. 42 to Kimley-Horn and Associates (KHA) for engineering and permitting services for the centrate to leachate tank conversion project. The purpose of this project is to utilize and repurpose the existing half-million-gallon above ground storage tank (AGST) for the future leachate treatment project.

On June 22, 2021, the SWDD Board approved staff recommendation to waive the requirement for bids for the rehabilitation of the existing above ground storage tank at the IRC Landfill in a not-to-exceed amount of \$252,700 to Crom Corporation (Crom), the original manufacturer of the tank. Crom was authorized to coat the interior tank walls and bottom as well as to core the tank for the future installation of an external mixing system to keep the leachate mixed during storage. The coating is needed due to the corrosive nature of leachate, and the mixing is needed to keep the suspended solids in suspension rather than settling down at the bottom.

KHA has evaluated various mixing options for the Crom tank and has provided the attached recommendation to purchase the FJ Nugent/Vaughn Rotamix System.

The purpose of this agenda item is for the SWDD Board to waive the requirements for bids and authorize staff to utilize FJ Nugent for the purchase and installation of the mixing system based upon the recommendation from the engineer of record for the project.

Analysis:

KHA put together the mixer specifications and then obtained responses from vendors in terms of the mixing equipment and installation. Two out of the five vendors did not meet the mixer specifications and were not considered further. Out of the remaining three, FJ Nujent using the Vaughn Rotamix System met the mixer specification and also at the lowest total costs. The KHA evaluation memo is attached and the evaluation summary is provided below.

SWDD Item

<i>Capital Cost Comparison</i>							
Vendor	Manufacturer - Make	Met Mixer Specification Requirements	Suitable for Operations	Equipment Capital Cost	Quoted Construction Contractor	Installation Cost	Total Capital Cost
TSC Jacobs	Fluidyne - Jet Mixing System	Yes	Yes	\$110,000	Lawrence-Lee Construction	\$281,800	\$391,800
Moss-Kelly	Heward Gordon - Hydromix System	Yes	Yes	\$78,620	MKI Services	\$296,380	\$375,000
FJ Nugent	Vaughn - Rotamix System	Yes	Yes	\$126,580	FJ Nugent	\$84,386	\$210,966
USGI	PAX Water Technologies Tank Shark Mixing System	No	No, imposed the smallest average fluid velocity to the bulk fluid of the tank out of all mixing alternatives.	\$24,700	N/A	N/A	N/A
RC Beach	UET - XCEL-22 Mixer	No	No, tank-top installation deemed not suitable for application and long term operation	\$85,000	N/A	N/A	N/A

Per KHA, the not-to-exceed authorization to FJ Nugent is per the attached quote and as follows:

Task	SCOPE	AMOUNT
1.	Furnish and Install FJ Nugent/Vaughn Rotamix System	\$210,966
TOTAL FEE =		\$210,966

Funding:

Funding of \$210,966 for the SWDD Leachate Pre-Treatment System was not budgeted in Fiscal Year 2021/22 and is therefore coming from SWDD Cash balance. A special account to track these improvements was setup as SWDD/Leachate Pre-Treatment System account, No. 411-169000-19507, which is funded from SWDD assessments and user fees.

Description	Account Number	Amount
SWDD/Leachate Pre-Treatment System	411-169000-19507	\$210,966

Recommendation:

Solid Waste Disposal District staff recommends that its Board approve the following:

- a) Waive the requirement for bids for the purchase and installation of a mixer for the existing above ground storage tank at the Indian River County Landfill in a not-to-exceed amount of \$210,966 to FJ Nugent.

- b) Authorize the Purchasing Manager to issue a purchase order to FJ Nugent for this project, after receipt and approval of the required vendor insurance, and after final terms and conditions have been approved by the County Attorney.

Attachment (s):

Memorandum from Kimley-Horn
Proposal from FJ Nugent