

Indian River County, Florida  
Solid Waste Disposal District  
Board Memorandum

**Date:** May 7, 2021

**To:** Jason E. Brown, County Administrator

**From:** Vincent Burke, PE, Director of Utility Services

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

**Subject:** CCNA-2018 Work Order No. 42 to Kimley-Horn and Associates – Centrate to Leachate Tank Conversion

**Descriptions and Conditions:**

The Indian River County (IRC) Solid Waste Disposal District (SWDD) is in the process of evaluating treatment options for leachate collected from the Class I municipal solid waste landfill, in an effort to cease disposal to the County's West Regional Wastewater Treatment Facility (WWTF). A potential treatment project will not likely begin implementation for several months. In the meantime, gas production from the landfill gas collection wells is being severely hampered by infiltration of leachate into the wells. The County installed pumps to remove the leachate from these gas wells, but the resulting concentrated leachate is causing treatment and disposal issues at the WWTF.

The County also operates a biosolids dewatering facility located on the SWDD landfill property. The biosolids facility design originally included a 0.5-million-gallon ground storage tank (GST) for storage of dewatering centrate prior to pumping off site. The GST, however, has not been utilized for centrate storage for the past 8+ years.

SWDD is considering converting the unused GST to store the concentrated leachate as a volume buffer for the leachate treatment project. Repurposing the tank would require recoating of the interior with a material suitable for leachate storage, installation of a mixer to prevent stagnation/solids settling, a potential modification to the vent on the tank for off-gassing and piping modifications to get the leachate (and potentially reclaimed water for dilution) into/out of the GST.

The purpose of this agenda item is for the approval of engineering and permitting services to Kimley-Horn and Associates (Kimley-Horn) for the centrate to leachate tank conversion project.

**Analysis:**

Kimley-Horn has prepared CCNA-2018 Work Order No. 42, provided in Attachment 1, for engineering and permitting services detailing the scope of work, budget, and schedule for each of the phases. The fees to be paid by SWDD for the execution of this work authorization are in accordance with the engineer's continuing consulting services master agreement. The tasks are listed below, showing the expected completion dates and their estimated fees.

<i>Task</i>	<i>DESCRIPTION</i>	<i>DUE DATE</i>	<i>AMOUNT</i>
Task 1	Mixing Evaluation	4 weeks from Notice to Proceed (NTP)	\$ 14,522
Task 2	Tank Modifications	8 weeks from NTP	\$ 7,293
Task 3	Piping Modifications	8 weeks from NTP	\$ 6,668
Task 4	Permitting	1 week from completion of Task 3	\$ 1,491
<b><i>SUBTOTAL (Lump Sum) =</i></b>			<b><i>\$ 29,974</i></b>
Task 5	Construction Phase Services	Approximately 3 months	\$ 20,969
<b><i>SUBTOTAL (Not-to-Exceed) =</i></b>			<b><i>\$ 29,969</i></b>
<b>TOTAL FEE =</b>			<b>\$ 50,943</b>

Based on preliminary estimates from Kimley-Horn, the original tank manufacturer has estimated that the tank modifications range from \$140,000 to \$200,000. It is also estimated that another \$50,000 would be needed for the installation of a force main to divert concentrated leachate to the GST.

Note that this work would only occur if the SWDD Board enters into a contract with the Indian River Eco District, LLC, for the leachate treatment process.

**Funding:**

Funding for the SWDD Leachate Treatment services is budgeted and available in a special project account, which is funded from SWDD assessments and user fees.

<b>Description</b>	<b>Account Number</b>	<b>Amount</b>
Leachate Pre-Treatment System	411-169000-19507	\$50,943

**Recommendation:**

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

- a) Conditionally approve CCNA-2018, amended and extended in 2021, Work Order No. 42 with Kimley-Horn for \$50,943 to provide engineering and permitting services related to the Centrate to Leachate Tank Conversion Project. But direct staff to hold off on issuing a notice to proceed until the Board authorizes a contract with the Indian River Eco District, LLC, for the leachate treatment process.
- b) Authorize the Chairman to execute the same, as presented.

**Attachment (s):**

CCNA-2018 Work Order No. 42 – Kimley-Horn