

October 19, 2022

Brian Van Straten Outagamie County Recycling & Solid Waste 1419 Holland Road Appleton, WI 54911

Dear Mr. Van Straten,

A July 7, 2022 letter from the Heart of the Valley Metropolitan Sewerage District (HOVMSD) was sent to the Outagamie County Recycling and Solid Waste Department (OCRSWD) requesting a proposal to accomplish the three objectives listed below to the satisfaction of HOVMSD and Village of Little Chute.

- 1. Reduce ammonia and BOD loads to the HOVMSD by 70% and 50%, respectively.
- 2. Discharge to HOVMSD at a consistent rate over a 24-hour period.
- 3. Provide accurate and reliable flow metering and sampling at all discharge points to Little Chute and, ultimately, HOVMSD.

Foth Infrastructure & Environment, LLC (Foth), on behalf of the OCRSWD, submitted an August 29, 2022 proposal to HOVMSD and Little Chute (Proposal). The East Landfill (ELF) concepts are acceptable. The North East Landfill (NELF) concepts are not, particularly the proposed time to achieve a 70% ammonia load reduction. Specific concerns are outlined below.

Reduce ammonia and BOD loads to the HOVMSD by 70% and 50%, respectively

The Proposal outlines a strategy to achieve the required load reduction in Year 2029. This is not acceptable. HOVMSD understands OCRSWD needs time to implement NELF capital improvements. The schedule delineated below is fair and reasonable.

Prelimi	nary C	esign	Repo	rt													32			Sil.			
		Revie	wable	Plans	s and	Speci	ficatio	ons													Oper	ational	
		Construction																					
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
Nov Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct No	v Dec
2022	2023								2024														

Submit to HOVMSD a Preliminary Design Report (PDR) by November 30, 2022 and reviewable plans and specifications by January 10, 2023. Present and review the plans and specifications at the January 10, 2023 Commission Meeting. The PDR shall include (1) the basis of design, (2) standard operating procedures, (3) process schematics, and (4) preliminary system configuration drawings. The basis of design shall document design assumptions, performance requirements, equipment selections, and

instrument selections – e.g., maximum, average, and minimum influent flows and strengths; maximum, average, and minimum flows, strengths, and loads to HOVMSD; storage volumes; and equipment/instrument capacities, operating ranges, and styles. The reviewable plans and specifications shall define all Work associated with the load-reduction capital improvements. HOVMSD will review these submittals and, if warranted, provide written comments within two weeks. NELF discharges to HOVMSD shall be at or below 139 ppd-NH3 by August 31, 2024.

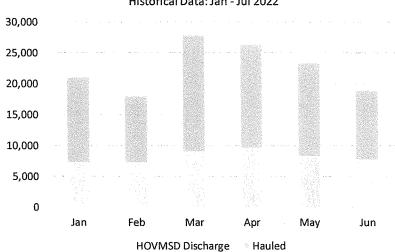
Discharge to HOVMSD at a consistent rate over a 24-hour period

The Proposal outlines a concept to deliver to HOVMSD a consistent, pre-defined volume and flow rate. HOVMSD agrees with the concept. The specifics require more attention. For instance, to satisfy the 139 ppd-NH3 limit in the near term, the consistent flow rate will be small. The graphic below shows how small.

North East Landfill Flow and Ammonia Situation

		Histori	cal Data: J	an	- Jul 2022		
	Histo	rical		HOVMSE) Allowed	Excess	
	Flow	Strength	Load		Load	Flow	Flow
Months	(gpd)	(mg/L)	(ppd)		(ppd)	(gpd)	(gpd)
Jan	21,073	2,300	404		139	7,245	13,828
Feb	18,067	2,320	350		139	7,184	10,883
Mar	27,960	1,852	432		139	8,998	18,962
Apr	26,519	1,742	385		139	9,566	16,953
May	23,413	2,026	396		139	8,226	15,187
Jun	18,989	2,155	341		139	7,736	11,253
Average						8,159	14,511

Example Discharge and Hauling Quantities Historical Data: Jan - Jul 2022



The average allowable leachate volume will be less than 10,000 gpd or, if delivered consistently over a 24-hour period, less than 7 gpm. The pumping, metering, and sampling equipment must perform well and reliably at flows in the vicinity of this value.

Ammonia concentrations vary considerably but are expected to gradually decline in subsequent years. The Proposal outlines a strategy to define allowable discharge volumes based on weekly sampling. Given the highly-variably, but downward trending concentrations, allowable daily discharge volumes will be calculated twice a year using weekly-sampling results from the previous six months.

<u>Provide accurate and reliable flow metering and sampling at all discharge points to Little Chute and,</u> ultimately, HOVMSD

HOVMSD agrees with automatic, flow-paced sampling concept in the Proposal. The specific method of metering and sampling these flows needs to be suitable to the (small) flow range. An open-channel flow meter and sampling strategy may not be suitable.

We look forward to discussing the Proposal, the concerns outlined above, and the requirements outlined above. OCRSWD leachate will no longer be accepted by Little Chute and HOVMSD after February 1, 2023 if (1) Little Chute is not paid in full and (2) HOVMSD and OCRSWD do not develop a mutually-agreed-to plan of action.

Sincerely,

Brian Helminger

District Director, Heart of the Valley MSD

Brion Hilming

Beau Bernhoft

Village Administrator, Village of Little Chute

CC: HOVMSD Commission

Attorney Bill Cole, Axley Brynelson Thomas Nelson, Outagamie County Jeff Nooyen, Outagamie County