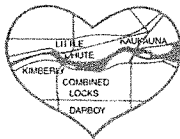


**DISTRICT DIRECTOR:**

Brian M. Helminger



**COMMISSIONERS:**

David J. Casper, President  
Bruce M. Siebers, Vice-Pres.  
Patrick E. Hennessey, Secretary  
Kevin P. Coffey  
John W. Sundelius

**SERVING:**

Combined Locks  
Kaukauna  
Kimberly  
Little Chute  
Darboy S.D.

**Heart of the Valley**

**METROPOLITAN SEWERAGE DISTRICT**

801 THILMANY ROAD  
KAUKAUNA, WISCONSIN 54130  
(920) 766-5731 FAX (920) 766-5733  
[www.hvmsd.org](http://www.hvmsd.org)

July 23, 2018

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

Dear Mr. Van Straten:

I am writing in regard to your recent inquiry related to leachate acceptance and treatment for an expansion referred to as the Northwest landfill. Your letter and this item was placed on the agenda and resulted in a lengthy discussion at the Heart of the Valley MSD Commission meeting held on July 10<sup>th</sup>.

The discussion centered on past issues with leachate and more specifically the ammonia loading and its effects on the wastewater process and effluent quality that is ultimately discharged to the Fox River from the HOVMSD treatment facility.

The HOVMSD staff and Commission share the concern that further expansion at the landfill will increase the ammonia loading to a biological process that has already experienced a process upset so serious that it resulted in a discharge permit violation earlier this year. The impact of slug discharges of ammonia contained in the existing landfill leachate to the biological process at HOVMSD is evident and cannot be understated.

The additional flow component, along with BOD, suspended solids and phosphorus are of lesser concern than the ammonia. After considerable discussion, HOVMSD staff and its Commissioners, were left with many questions and few answers. In order to fully consider the impacts of the proposed expansion, further information is needed from OCRSW.

The following are a few of the questions that came to light during the Commission's discussion.

What is the overall size of the proposed expansion and how does it compare to the other existing landfill cells?

How and at what flow rate will the leachate be delivered to the Little Chute sewerage system? Will provisions be incorporated to eliminate slug loads ultimately delivered to HOVMSD?

What ammonia management technology changes will OCRSW make in the event that the ammonia levels in the leachate discharge threaten an exceedance of HOVMSD's ammonia treatment design capacity?

Is OCRSW planning any sort of leachate treatment to reduce the ammonia concentration of its discharge?

Will ORCSW develop alternative disposal plans in the event future maintenance or equipment failures require HOVMSD to temporarily take a portion of its process train out of service for repairs?

The five HOV member communities are currently experiencing renewed levels of new construction activity in residential, commercial, and industrial projects. The importance of preserving the remaining flow and organic capacity at the treatment facility cannot be understated in light of member community growth. The long-term viability of the Heart of the Valley treatment facility (we are very much site constricted) and its current site location is a Commission objective and priority.

It is only with careful consideration and a full understanding of the project, and its implications, that HOVMSD could make a decades long commitment to accept the additional leachate discharge. For your review, I have included a few graphs based on data generated in the HOVMSD lab. I welcome further information and details on your project and look forward to your response.

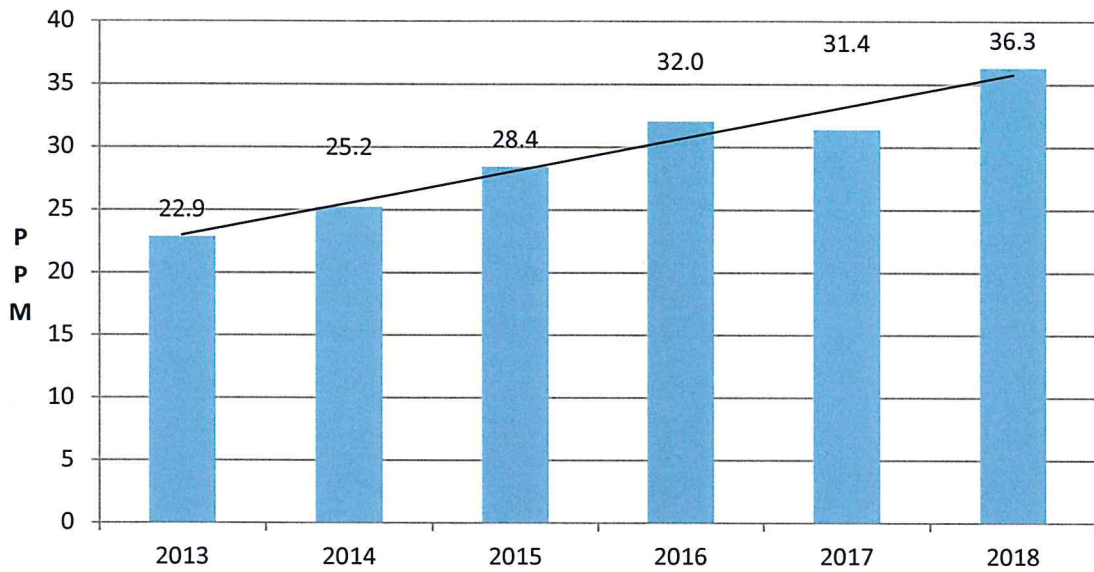
Sincerely,

A handwritten signature in blue ink that reads "Brian Helming". The signature is fluid and cursive, with the first name "Brian" being larger and more prominent than the last name "Helming".

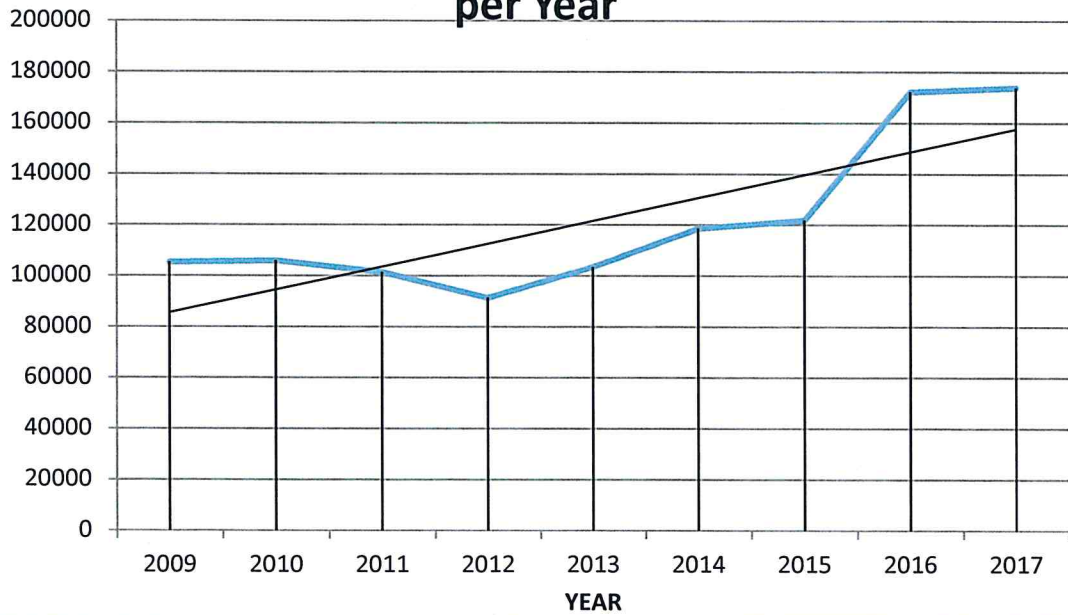
Brian Helming  
District Director

CC: James Fenlon – Village of Little Chute  
HOVMSD Commission

### Heart of the Valley MSD AVG PPM INFLUENT AMMONIA



### Little Chute Ammonia Pounds per Year



# Little Chute Meter Station #2 Ammonia Yearly Avg

