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Brian M. Helminger

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COMMISSIONERS:

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Heart of the Valley

METROPOLITAN SEWERAGE DISTRICT

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January 24, 2019

James Fenlon Village of Little Chute 108 W. Main St. Little Chute, WI 54140

Re: Progress report HOVMSD Interceptor

James:

As you know, HOVMSD is in the process of vetting an action plan for the mainline interceptor sewer that connects all the member communities to the Heart of the Valley treatment facility in Kaukauna. Based on feedback from member communities, HOVMSD continues to refine our understanding of the condition and performance of the mainline interceptor sewer in order to action sound and cost-effective engineering solutions focused on preserving this critical asset.

Microbial induced corrosion (MIC) of the interceptor was identified during the last mainline cleaning and televising effort conducted in 2015. The HOVMSD Commission, along with staff and its consultant, continue to study origin and effects of MIC on the mainline interceptor sewer. The interceptor, as built, has the flow capacity to serve the member communities for the foreseeable future so maintaining the integrity of the interceptor and its structures is the end goal of our efforts. The most recent meetings and agenda items relate to hydrogen sulfides and their relationship with the bacteria that cause the MIC deterioration. MIC is not an issue that is limited to HOVMSD and is recognized as a wide spread problem for wastewater utilities so opportunities for controlling MIC are numerous. HOVMSD will continue to do its due diligence and will evaluate mitigation strategies that are effective and are adaptable to our situation and needs.

Since the August 2018 community meeting, the following actions have been taken or completed:

 HOVMSD added a second dedicated Commission meeting each month solely for discussion and to study interceptor condition and hydrogen sulfide mitigation opportunities. The dedicated meetings allow time for HOVMSD to thoroughly evaluate and discuss all the repair or replacement options and mitigation alternatives that may be part of our final interceptor action plan. As we continue the study and this discussion. member community leadership is encouraged to attend and participate as your schedules allow.

- HOVMSD identified and has made an operational change to the siphons that carry sewerage flow under the Fox River to the mainline interceptor. We determined that under low flow conditions there was insufficient flow velocity to carry debris and grit without deposition in the siphons. This change is expected to reduce the deposition and accumulation of debris in the siphons and reduce septicity of the sewage that exits in the siphons and enters the interceptor.
- HOVMSD has purchased additional air monitoring equipment that will allow us to collect air quality data from multiple metering stations and known interceptor manholes where H2S has been present in past monitoring efforts. We hope that with increased air monitoring efforts, we can pinpoint sources and locations that enable MIC.
- The District has been proactive in past cleaning and televising efforts with complete inspections on 5-year intervals. The most recent televising of the interceptor was conducted in 2015 and showed MIC deterioration in the interceptor that was not identified in the 2010 inspection. With three years having elapsed, and the knowledge that MIC damage was identified within the last five-year interval, it was decided that another televising would be crucial in determining the current condition and rate of interceptor decay. HOVMSD has obtained and approved a quotation for televising select segments of the interceptor in 2019. The televising, at the advice of our contractor, will take place once the weather warms up and the temperature differential between the ambient air and temperature inside the interceptor is reduced. This minimizes camera lens fogging and provides the best image quality for the final report.

As more information and data is collected, we will be sharing that with member community leadership. We will be having our regular community meeting in April for the annual update on the Clearwater Reduction Program and will be certain the agenda includes the interceptor action plan so we can provide new and timely updates.

Please contact me if you require any additional details or if you have any questions or concerns. Sincerely,

Brian Helminger District Director

Email: brian.helminger@hvmsd.org