



City of Petoskey

Office of City Manager

101 East Lake Street, Petoskey, Michigan 49770 • 231 347-2500 • Fax 231 348-0350

December 14, 2009

William Creal
Chief, Water Bureau
Michigan Department of Environmental Quality
P.O. Box 30273
Lansing, MI 48909

RE: National Pollutant Discharge Elimination System (NPDES) Permit No. MI0023787
Petoskey Wastewater Treatment Plant (WWTP)
Status of Leachate Disposal Issue

Dear Mr. Creal:

As you are aware, the City of Petoskey and CMS Energy have been involved in ongoing discussions about the proper disposal of leachate from the Bay Harbor development and the East Park location. The parties have been specifically discussing the treatment of leachate at Petoskey's Waste Water Treatment Plant (WWTP). The challenge is that the leachate is extremely disruptive to the WWTP's operations and could cause significant damage to sewer lines, lift stations and other infrastructure.

The City understands its legal responsibilities with respect to its NPDES Permit, Sewer Use Ordinance, Land Application Biosolids Program, and Michigan Industrial Pretreatment Program (MIPP). The City also understands that it may be legally responsible to prevent any discharge which, alone or in combination with other discharges, causes interference to its collection/treatment systems or pass-through to Little Traverse Bay.

Mindful of the need to maintain its WWTP, the supporting infrastructure and its legal responsibilities, the City and its consultants have developed a set of conditions under which these waste streams may be acceptable for disposal at the Petoskey WWTP. In addition, this letter is intended to convey only what Petoskey can do to treat the Bay Harbor leachate based on the knowledge it currently has about conditions at Bay Harbor, the nature of the leachate being created there, and how it may interact with the Petoskey WWTP and supporting infrastructure. If Petoskey's understanding of these parameters is incorrect in any material respect or if actual conditions are inconsistent with what the City understands to be true, what the Michigan Department of Environmental Quality (MDEQ) or CMS Energy (or its representatives) have indicated about the nature of the leachate or if known conditions change, Petoskey reserves the right to review this proposal and make any necessary changes based on new or additional facts that become known later. Also, Petoskey understands that any future Industrial Pretreatment Program permit or any additional permitting required by either MDEQ or the Environmental Protection Agency (EPA) may be subject to public notice and comment and may need to be adjusted based on agency requirements or information disclosed during the public comment period. The following proposal represents Petoskey's best effort at identifying a proposed resolution to the problems posed by the Bay Harbor leachate and represents a feasible alternative to other potential types of leachate treatment and disposal:

- The waste stream(s) shall be discharged to a dedicated sewer line.
 - Isolation of these waste streams from the City owned sewers will prevent the real potential for solids formation when the leachate is mixed with sewage, which could significantly increase the chance of sewer back-ups into homes and businesses.
 - There is real potential for sulfide odor generation when the leachate is mixed with sewage. A dedicated line will prevent these odors from adversely affecting homes and businesses along highway US-31.
 - A dedicated line will protect the collection system against damage from dissolved constituents in the leachate and chemicals used in the pH adjustments
 - A dedicated line will remove any negative public perception of “hazardous leachate” in the sewers.
 - A dedicated line will secure capacity for CMS leachate discharges.
 - The City has offered an under-utilized water main to assist/expedite the installation process. While this water main distance is small in comparison to the overall length of the dedicated line, its location is of benefit in a crowded section of the utility corridor.
 - At no point will any other users be allowed to use this dedicated sewer line for any reason.
- The dedicated sewer line shall discharge to a dedicated flow equalization/mixing tank.
 - One purpose of this tank will be to provide volume for equalizing of leachate flow and quality. This is in addition to equalization at the CMS site in order to provide an additional safety factor.
 - Another purpose of the tank will be to provide multi-compartments to allow the WWTP staff to use raw wastewater, sludge digester supernatant, auxiliary chemical feed, etc. for load balancing in order to maintain biological activity and ensure compliance of the NPDES discharge permit. This will require pumps as part of the headworks revisions to enable transfer of influent wastewater to the tank.
 - This tank will be underground to allow the site to be returned to a park setting. The current ball field will have to be relocated from the site adjacent to the wastewater treatment plan to another baseball field location.
- Treatment plan operation/control improvements shall be implemented to accommodate the additional flow, and to maintain a safe and effective WWTP operation.
 - The headworks of the plant will need to be reconfigured to handle the combination of sewage and leachate entering the facility. This includes screening and grit systems, both of which protect downstream equipment from damage. In addition, converting to an aerated grit system will reduce the likelihood of incoming wastewater being septic and generating odorous sulfides.

- With the additional volume of leachate, another primary tank will be needed to maintain the facility's hydraulic capacity.
- Variable frequency drives or new blowers will be needed for aeration control in the secondary process.
- Odor control will be needed due to the real potential for sulfides generation when the leachate is mixed with sewage.
- Increasing the facility solids handling capability will be needed due to the real potential for solids generation when the leachate is mixed with sewage.
- The administration building will need a laboratory expansion to handle additional testing to monitor leachate treatment (by CMS) and for control of the WWTP blending process.
- Leachate flow shall be maintained safely below the critical threshold for acute toxicity in the WWTP effluent.
 - Initial studies by the City suggested that the critical toxicity threshold of a Bay Harbor/East Park blend was 8.5% of wastewater flow.
 - Recent tests conducted by CMS suggest that the City may be able to accept a higher relative volume. To the City's knowledge, however, CMS has not yet conducted additional tests that were requested to further define where the critical threshold occurs.
- The leachate discharge shall be regulated by a permit issued under the City's MIPP.
 - The permit will include local limits from the latest Sewer Use Ordinance. However, the City will have to re-visit its recently completed local limits evaluation because it did not include this leachate flow.
 - Certain other conditions of the permit will be developed by the City on a case-specific basis. For example, monitoring/reporting frequencies will be the minimum considered necessary to protect the WWTP and the environment.
 - Remaining permit conditions, including full access to the site by City staff for inspections and surveillance, will be in accordance with general requirements of the Sewer Use Ordinance.
- The leachate discharge shall be subject to an appropriate commodity (i.e., volume-based) charge, as well as any applicable extra-strength surcharges.

We believe that this summarizes the City's position relative to the conditional acceptance of the leachate at its WWTP. The City's willingness to accept the leachate is subject to not only the conditions set forth herein, but is also expressly subject to the approval of these and other conditions imposed by the City of Petoskey City Council. For example, a group of Bay Harbor residents commenced a civil action against the City in Emmet County Circuit Court, under Case No. 09-1681-CZ. In this case, the Plaintiffs are seeking to void the intergovernmental agreement between the City and Resort Township that was entered into under Act 425 of 1984. The outcome of this claim may have an impact on the City's ability to provide municipal services to Bay Harbor. If you have any questions or desire to further discuss this matter, please contact us at you convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Ralley". The signature is stylized with a large, sweeping initial "D" and a cursive "Ralley".

Dan Ralley
City Manager

cc: Mr. Daniel Dell – Chief, Permit Sections Water Bureau/MDEQ
Mr. Mike Stifler – District Supervisor, Water Bureau/MDEQ
Mr. Michael Robbins, Director of Public Works
Mr. Lee Arman, Public Works Supervisor
Ms. Sherrie Elliott, Public Works Supervisor
Mr. Dennis J. Benoit, P.E. – Hubbell, Roth & Clark, Inc.
Mr. Jerald O. Thaler, P.E. – Fishbeck, Thompson, Carr & Huber, Inc.

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