



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
LANSING



LIESL EICHLER CLARK  
DIRECTOR

## **SECOND VIOLATION NOTICE AND ENFORCEMENT NOTICE**

**CERTIFIED MAIL** 7021 0350 0000 6194 5887

Mr. Robert Hilty, Chairman  
Lake Mitchell Sewer Authority Board  
3161 South Lake Mitchell Drive  
Cadillac, Michigan 49601

Dear Mr. Hilty:

THE DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), WATER RESOURCES DIVISION (WRD), Cadillac District Office, has referred the matter of the Lake Mitchell Sewer Authority (Authority) sanitary sewer collection system, located in Cherry Grove Township, Selma and Clam Lake Townships, Wexford County, Michigan, to the Enforcement Unit requesting escalated enforcement actions for violations of law as set forth herein.

PLEASE BE ADVISED that the Authority has failed to comply with Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.3101 *et seq.* (Part 31); Part 41, Sewage Systems, of the NREPA, MCL 324.4101 *et seq.* (Part 41); the Sewerage System Rules promulgated pursuant to Part 41, Mich Admin Code, R 299.2901 *et seq.* (Sewerage System Rules); and the Part 22, Groundwater Quality, administrative rules promulgated pursuant to Part 31, Mich Admin Code, R 323.2201 *et seq.* (Part 22 Rules). The Authority was notified of these violations by the WRD, in writing, in the following enclosed letters:

- Violation Notice (VN) No.VN-007294, dated August 11, 2017
- Follow-up letter to VN-007294, dated July 12, 2018
- Compliance Communication (CC) No. CC-002514, dated March 10, 2020
- VN-011933, dated August 3, 2021

YOU ARE FURTHER ADVISED that since VN-011933 was issued, additional violations have been identified, including the following sanitary sewer overflows (SSOs):

Date	SSO Location or EGLE Response	SSO Cause	Volume (gals) - Impact
August 11, 2021	Pump Station 1A	Surge of flow after power outage ended combined with inflow	200 - Land
August 11, 2021	Grinder Station 44A	Power outage combined with continued water use/wastewater flow from homes with generators combined with inflow	400 - Land
August 11, 2021	Pump Station 2B	Surge of flow after power outage ended	500 - Land
August 11, 2021	Pump Station 1B	Surge of flow after power outage ended	2,500 – Land and wetland

The discharge of raw or partially treated sewage onto land or into waters of the state is a violation of Rule 2205 of the Part 22 Rules, Mich Admin Code R 323.2205; and Section 324.3109 of Part 31, respectively.

BE FURTHER ADVISED THAT the ages of many of the physical components comprising the Authority's sewer system exceed their useful service lives and many of the system components are obsolete. Most electrical and mechanical equipment and components of the Authority's system are in need of replacement and upgrades. Significant system-wide replacement and upgrade work needs to be completed. This includes related system-wide deficiencies regarding reliability and redundancy that need to be corrected. Additionally, there is excessive inflow into the system. The WRD considers several of the recent (2017 to 2021) SSOs to be related to the old and obsolete equipment. Additionally, the Authority notified the WRD after the December 2020 SSO from Pump Station 2A that this station normally operates with only one pump as the piping for the second pump is in deteriorated and fragile condition. A pump station, serving multiple homes, with only one regularly operable pump does not meet the standards and requirements of Part 41 for redundancy and reliability. The Authority discussed measures to address Pump Station 2A in its September 20, 2021, response to VN-011933. However, these implemented measures are temporary and Pump Station 2A and many other aging sewer system components including, but not limited to, most of the grinder and pump stations need to be addressed with permanent corrective actions, system upgrades, and equipment replacement sufficient to meet applicable standards and eliminate SSOs. Likewise, identification and elimination of remaining inflow sources needs to be addressed. Failing to maintain sanitary sewer system equipment is a violation of Rule 55, Sewerage System Rules, Mich Admin Code, R 299.2955(1), promulgated pursuant to Part 41.

The Authority IS HEREBY NOTIFIED that the violations identified in this Second Violation Notice (SVN) and Enforcement Notice (EN) are violations of Part 31 and Part 41. The Authority is requested to immediately undertake all actions necessary to resolve all violations identified in the above-mentioned letters and this SVN and EN.

THE VIOLATIONS identified herein, as well as any additional violations discovered hereafter, must be formally resolved through entry of a legally enforceable document, such as an Administrative Consent Order, that would include an agreed-upon compliance program to resolve the aforementioned violations and payment of a civil fine, among other requirements.

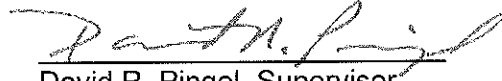
The WRD reserves its right to take all necessary and appropriate enforcement actions for all violations of Part 31 and Part 41 that have occurred to date and any violations of Part 31 and Part 41 that may occur in the future. These actions may include, but are not limited to, seeking civil fines, injunctive relief, natural resources damages, and all costs associated with this enforcement action, including attorney costs and any other relief available to the WRD.

The Authority's continuing failure to comply with the terms of Part 31 and Part 41 or other requirements set forth in this SVN and EN may result in additional fines, penalties, or other actions.

Pursuant to Section 324.1511 of the NREPA, the Authority MAY request a preliminary meeting with the Enforcement Unit to discuss the issues detailed in this SVN and EN. If you would like to request such a meeting, please contact Ms. Kailey Schoen, Enforcement Analyst, WRD, at 517-331-6571 or SchoenK@Michigan.gov; not later than **20 days** from your receipt of this SVN and EN. This meeting may be a conference call or via videoconference.

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
WATER RESOURCES DIVISION**

Date Issued: December 21, 2021

  
David R. Pingel, Supervisor  
Enforcement Unit  
Water Resources Division

**ADDRESS FOR FURTHER CORRESPONDENCE:**

Kailey Schoen, Enforcement Analyst  
Enforcement Unit  
Water Resources Division  
P.O. Box 30458  
Lansing, Michigan 48909-7948

**Enclosures**

cc: Ms. Sheila Hill, Lake Mitchell Sewer Authority  
Mr. Richard Wilson, Mika Meyers PLC  
Ms. Amy Lounds, EGLE  
Mr. Luis Saldivia, EGLE  
Mr. Brian Jankowski, EGLE  
Mr. Donal Brady, EGLE  
Ms. Kailey Schoen, EGLE



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
CADILLAC



C. HEIDI GRETHNER  
DIRECTOR

August 11, 2017

VN-007294

CERTIFIED MAIL

Mr. Robert Hilty, Chairman  
Lake Mitchell Sewer Authority Board  
3161 South Lake Mitchell Drive  
Cadillac, Michigan 49601

Dear Mr. Hilty:

SUBJECT: Violation Notice

The Department of Environmental Quality (DEQ), Water Resources Division (WRD) has determined that the Lake Mitchell Sewer Authority (LMSA) is in violation of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.3101 et seq., and the administrative rules promulgated thereunder being 2006 AACRS R 323.2101 et seq., as amended, and Part 41, Sewerage Systems, of the NREPA, and the administrative rules promulgated thereunder being 2012 AACRS R 299.2901 et seq., as amended.

On May 23, 2017, and July 13, 2017, the LMSA discharged untreated sewage from sewage pump station 1B (SPS 1B) directly to the land, surface water, and groundwater of the State in violation of Part 31 of NREPA. SPS 1B is located at or very near to 1754 East Lake Mitchell Drive in Cadillac, Michigan. The May 23, 2017, and July 13, 2017, discharges were reported to the DEQ, WRD verbally and on Report of Discharge forms by the LMSA's representative, as required by Part 31, Section 3112a. The May 23, 2017, discharge of approximately 5,000 gallons of sewage was attributed to a power outage at SPS 1B and heavy rainfall. The July 13, 2017, discharge of approximately 8,000 gallons was attributed to heavy rainfall. These discharges are considered Sanitary Sewer Overflows (SSO) and are in violation of Part 31 and Part 41 of NREPA. Several past SSO discharges from SPS 1B, occurring between 2003 and 2014, were also related to power outages and/or heavy rainfall. These earlier events were also reported to the DEQ on Report of Discharge forms by representatives of the LMSA or its predecessor.

The 2017 SSO events, in conjunction with the pattern established by past SSO events, demonstrate that SPS 1B is not sufficient in design, capacity, and operation to properly convey wet weather sewage volumes and does not have adequate power loss management features and/or operation. SPS 1B's wet weather capacity is not adequate

to meet the remedial design standard of the 25-year/24-hour rain storm. In addition, the current infrastructure, resources, and/or procedures currently in place are not adequate to satisfy the emergency power requirements of Part 41 for SPS 1B.

The DEQ, WRD's Cadillac District Office was notified on May 24, 2017, of the May 23, 2017, discharge of untreated sewage from SPS 1B and notified of the July 13, 2017, discharge of untreated sewage from SPS 1B on the same day that overflow occurred. Discharges of untreated sewage from a sewer system onto land or into waters of the state are a violation of Part 31 of NREPA. While the latest discharges of untreated sewage from SPS 1B respectively began and ceased on May 23, 2017, and on July 13, 2017, the issue with adequate sewer system infrastructure, resources, and/or procedures is ongoing. Inadequate sanitary sewer system infrastructure, resources, and/or procedures constitute a violation of the operation and maintenance requirements of the Part 41 of NREPA and/or its administrative rules.

Please submit a written response to this Violation Notice, addressing items 1, 2 and 3 below, to the DEQ, WRD Cadillac District office by close of business October 16, 2017.

Please submit a written response to this Violation Notice, addressing item 4 below, to the DEQ, WRD Cadillac District office by close of business on April 16, 2018. At a minimum, the responses shall include the following:

1. A corrective action plan, with fixed date schedules, for activities to be identified, performed and implemented to prevent future SSO from SPS 1B. This plan shall include, at minimum: activities to identify and eliminate or reduce infiltration and inflow of rainfall and groundwater into the sanitary system contributing flow to SPS 1B; an evaluation of compliance with prohibited discharge provisions for storm water and/or groundwater into the sanitary sewer system under local ordinances; and proposed sanitary system upgrades, improvements, and SSO control measures, including implementation of those measures and upgrades/improvements. The intent of the corrective action plan shall be to identify and implement corrections to the system such that SSO from wet weather sources at SPS 1B are eliminated. The corrective action plan shall include phases, progress reports, decision points, milestones, and time frames. This plan will be subject to DEQ review and approval. The DEQ will require the LMSA to come into compliance on this matter by a fixed date schedule, to be established upon the LMSA's response to this violation notice, this item, and after further discussions with the LMSA.
2. A plan to design and install a permanent generator for SPS 1B providing more timely emergency power in the event of power loss. The design/installation must meet the requirements of the Recommended Standards for Wastewater Facilities (Chapter 40, Section 47.43). These requirements include, but are not limited to, provisions for automatic load transfer in the event of a power outage.

The plan must include submission of a Part 41 application for the generator installation to the DEQ, WRD. The plan must include fixed date schedules. It is the intent of this item to result in installation of a permanent on-site backup generator for this station that is properly permitted and meets all applicable requirements.

3. A plan to document SPS 1B pump performance. This plan must also include fixed date schedules. SPS 1B pumps were replaced in 2014 with pumps intended to provide the same firm capacity provided by the pre-2014 pumps. The LMSA needs to confirm the current SPS 1B pumps are performing at or above that intended design pumping rate (firm capacity). If the station is found to not be performing at the intended design duty point, the LMSA shall then provide an improvement plan to obtain the required design pumping rate. If pump station improvements are required to obtain the design rate, the improvement plan must include submission of a Part 41 application to the DEQ, WRD.
4. A power reliability study for the entire LMSA system. The power reliability study shall identify the equipment within the LMSA system that is currently in its inventory, critical to maintain an acceptable level of service, and critical to prevent sanitary sewer overflows due to power loss. The study shall evaluate: emergency backup power protocols; the number and sizes of portable and permanent generators required; staffing needs; and acceptable response times. The study shall recommend improvements in equipment, resources, and/or procedures to prevent overflows due to power loss throughout the LMSA system. This assessment shall also detail how operation of critical system components will be maintained during complete and partial loss of power to the LMSA system. Equipment used to restore and maintain operation during each scenario and the time required to restore operation to critical components shall be specified. Likewise any strain on any of the emergency power backup resources due to their being used to support other infrastructure shall be considered.

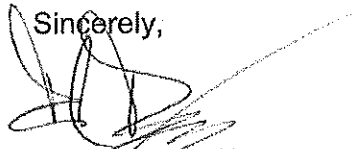
The DEQ, WRD will review the information submitted to address the numbered items above. The above corrective actions (number 1 to 4) will be subject to DEQ, WRD review and approval. The DEQ, WRD reserves the right to require additional corrective actions, or take additional or escalated enforcement actions, based upon the responses to this notice or for any continued or additional unauthorized discharges. The DEQ, WRD may also require any of the plans above, upon final approval, to be implemented in a legally enforceable document, to be developed in conjunction with the LMSA. The LMSA is fully responsible for any adverse impacts resulting from any deficiencies in its sewer system and from any overflows that result.

You are hereby reminded that Part 41 construction permits must be obtained prior to any construction on the sanitary systems, and any plans or activities noted above must include applying for and obtaining those permits from DEQ, WRD if they involve new construction on, or alteration of, the existing system.

Mr. Robert Hilty  
Page 4  
August 11, 2017

If you have any factual information you would like us to consider regarding the violation identified in this Violation Notice, please provide them with your written response.

We anticipate and appreciate your cooperation in resolving this matter. Should you require further information regarding this Violation Notice or if you would like to arrange a meeting to discuss it, please contact me directly by email at [BradyD6@michigan.gov](mailto:BradyD6@michigan.gov) or by phone at 231- 876-4478.

Sincerely,  
  
Don Brady, P.E.  
Environmental Engineer  
Cadillac District Office  
Water Resources Division

DB:sh

cc: Brian Jankowski, DEQ-WRD, Cadillac District Office  
Jerrold Sanders, DEQ-WRD, Lansing  
Barry Seldon, DEQ-WRD, Lansing  
Ken Schaut, LMSA, Wade-Trim  
Sheila Hill, LMSA, Wade-Trim



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
CADILLAC DISTRICT OFFICE



C. HEIDI GREETHER  
DIRECTOR

July 12, 2018

VIA EMAIL

Mr. Robert Hilty, Chairman  
Lake Mitchell Sewer Authority  
3161 South Lake Mitchell Drive  
Cadillac, MI 49601

SUBJECT: August 11, 2017 Violation Notice VN-007294  
LMSA's October 16, 2017 Response  
LMSA's April 27, 2018 Response

Dear Mr. Hilty:

The Department of Environmental Quality (DEQ), Water Resources Division (WRD) reviewed the Lake Mitchell Sewer Authority's (LMSA) October 16, 2017 and April 27, 2018 responses to Violation Notice VN-007294. The violation notice was related to sanitary sewer overflows (SSOs) from the LMSA sanitary sewer system that occurred in May and July 2017. The violation notice required the LMSA to submit the following information to the DEQ, WRD.

- (1) A corrective action plan to identify and eliminate infiltration and inflow of groundwater and rainfall into the sanitary sewer
- (2) A plan to design and install a permanent generator for sanitary sewer pump station SPS 1B
- (3) A plan to document station SPS 1B pump performance
- (4) A power reliability study for the entire LMSA sanitary sewer system

The DEQ, WRD recognizes significant field investigation and corrective action work was completed with respect to violation notice items (1) and (3). However, additional work is still required related to infiltration/inflow and station SPS 1B pump performance. The DEQ, WRD requires the LMSA to commit to completion schedules for work tasks addressing infiltration/inflow and pump performance, as discussed in the August 11, 2017 violation notice. The DEQ, WRD is also willing to reconsider the permanent generator requirement for station SPS 1B, which was discussed in violation notice item (2). However, the DEQ, WRD requires additional information related to power reliability, as discussed in item (4) of the violation notice, in order to make a final decision on the generator requirement.

After the DEQ, WRD's sent the August 11, 2017 violation notice, two additional SSO events occurred from the LMSA sanitary sewer system in September and October 2017. The September event was caused by a broken service line from a grinder station and the October 2017 event was caused by heavy rain and inflow. The DEQ, WRD believes significant maintenance, improvement, repair, and aging component replacement will be required to prevent future SSOs from the LMSA system. The DEQ, WRD is concerned that the LMSA's rate structure will not be sufficient to fund: A) regular operation and maintenance; B) groundwater/rainfall inflow investigation and elimination; C) as needed repairs; and D) replacement of aging system components.

120 WEST CHAPIN STREET • CADILLAC, MICHIGAN 49601  
www.michigan.gov • (231) 775-3960



Mr. Robert Hilty  
July 12, 2018  
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The DEQ, WRD recognizes that the LMSA was formed relatively recently (in 2015) and the LMSA is attempting to fund and complete sanitary sewer system maintenance and improvement work that should have been completed prior to the LMSA's existence. The DEQ, WRD also recognizes the LMSA is adjusting rates that should have been adjusted prior to the LMSA's existence. The DEQ, WRD attended the June 19, 2018 LMSA Board Meeting and was encouraged to hear that the LMSA is pursuing an Asset Management Program. The DEQ, WRD was also encouraged by the rate increase the LMSA Board approved on June 19, 2018. Ultimately, the LMSA's rates should be based on the capital improvement, operation, and maintenance expenditures determined to be necessary during the development of a comprehensive Asset Management Program.

This letter reiterates information requested by the DEQ, WRD in the August 11, 2017 violation notice and includes additional requests for information related to an Asset Management Program.

#### **Additional Schedule Information Required**

The DEQ, WRD understands that LMSA completed significant investigation of inflow sources (including smoke testing, exterior home inspections, and grinder station inspections). The DEQ, WRD also understands that the LMSA notified customers served by the system that sources of inflow need to be eliminated and that the LMSA is strengthening its ordinance with respect to preventing/eliminating inflow. The DEQ, WRD also understands that additional work completion will be dependent on several factors not entirely within the LMSA's control (funding approval, home owner schedules, etc.). However, the DEQ, WRD requires the LMSA to provide estimated completion dates for the following tasks.

- i. Riser installation on high priority grinder stations identified in Appendix A.4 of the LMSA's April 27, 2018 response to the notice of violation
- ii. Inspection of the high priority residences for illegal (sump pump) connections to the sanitary sewer identified in Appendix A.6 of the LMSA's April 27, 2018 response to the notice of violation
- iii. Evaluation of the remaining LMSA system for sources of infiltration and inflow (via smoke testing, home inspection, or other means)
- iv. Elimination of additional sources of infiltration and inflow, including sources identified in task iii
- v. Investigation and correction of pump station SPS 1B pump performance, which was shown to be less than manufacturer specified flow in an April 2018 test (per Appendix C.4 of the LMSA's April 27, 2018 response to the notice of violation)
- vi. Adoption of new regulations or an amended ordinance addressing sources of inflow

#### **Additional Power Reliability Information Required**

The LMSA's response to the notice of violation indicated that the May 2017 overflow from pump station SPS 1B was related to poor employee response/notification versus a lack of a permanent generator for the station. The LMSA described corrective actions taken to improve response/notification in the future. The DEQ, WRD understands the LMSA owns and operates one portable generator capable of powering/running both station SPS 1B pumps simultaneously and another generator capable of powering/running one station SPS 1B pump.

Mr. Robert Hilty  
July 12, 2018  
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The DEQ, WRD also understands other capital improvements to the LMSA system may be a higher priority and more of a need than a permanent generator at station SPS 1B. The DEQ, WRD is willing to reconsider the permanent generator requirement for station SPS 1B. However, the DEQ, WRD requires the following information before a final decision will be made on the permanent generator requirement.

- vii. Description of power outages experienced by the LMSA (since 2015)
- viii. Likelihood that most or all nine pump stations would lose power at once (considering the electrical power distribution to the stations)
- ix. Description of how the LMSA would operate vital system components during a loss of power to most and all of the system. This description should discuss the following.
  - Flows into the system during a power outage (considering reduced flow due to customers not being able to operate water supply wells)
  - Actions taken during a power outage to minimize flows into the system
  - Use of portable pumps and tanks to prevent overflows from grinder stations and smaller pump stations
  - Storage within grinder stations and pump stations
  - How available portable generators will be placed and/or moved from station to station

#### **Asset Management Program (AMP) Requirements**

The DEQ, WRD understands the LMSA will complete an asset management plan in 2018 and this plan will describe how the LMSA will implement an asset management program or AMP. The DEQ, WRD believes an AMP is necessary to ensure the LMSA system is operated, maintained, and improved/upgraded properly. Ultimately, the DEQ, WRD believes an AMP is necessary to prevent future SSOs and prevent future violations of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The DEQ, WRD requires that the asset management plan and program address the following items.

- x. Evaluation of Staff Needs  
The frequency of operation, maintenance, repair and testing tasks required for the sanitary system; level of staffing required to complete the tasks; and the current level of staffing shall be quantified. Differences between future staffing needs and current staffing shall be addressed.
- xi. Collection System Map  
A collection system map shall be developed. The map shall include the following.
  - All pump/lift stations and force mains
  - All surface waters
  - All other major appurtenances (air release valves, etc.)
  - A numbering system which clearly identifies stations and mains
  - Map scale and north arrow
  - Main pipe diameters, dates of installation, types of material and directions of flow
  - Descriptions of flows into each lift/pump station, including the number of grinder pumps flowing to each station and description of service areas for each pump/lift station

xii. Inventory and Assessment of Fixed Assets

The following information shall be determined and compiled for each LMSA system fixed asset.

- A brief description, its design capacity and level of redundancy
- Location
- Year installed
- Present condition (excellent, fair, good, poor)
- Depreciation value for the year specified
- Current replacement cost
- Business risk factor, the business risk factor is the product of the asset probability of failure (on a scale of 1 to 5, with 1 being low probability of failure) multiplied by the criticality of the asset based on the consequence of failure (on a scale of 1 to 5 with 1 being low criticality)

xiii. Operation, Maintenance and Replacement Budget and Rate Sufficiency Analysis

An assessment of the LMSA user rates and replacement fund shall be completed and shall including the following.

- Beginning and end of fiscal year dates
- Value of the LMSA's replacement fund for the year specified
- Replacement fund value for all assets with a useful life (moving forward from present year) of 20 years or less.
- Fiscal year expenditures for maintenance, corrective action and capital improvement
- Fiscal year operation, maintenance and replacement (OM&R) budget
- Rate calculation demonstrating sufficient revenues to cover OM&R expenses

Items x. to xiii. above shall be fully addressed by July 1, 2023. Each year (starting in 2019 and ending in 2023) an annual report documenting the development and implementation of items x. to xiii. shall be submitted to the DEQ, WRD by July 1. The annual reports shall each include the following.

- a. A description of staffing levels maintained during the previous year
- b. A description of the inspections, maintenance activities, and corrective action completed during the previous year
- c. Expenditures during the previous year
- d. Assets identified for inspection/action (including capital improvement) in the upcoming year based on the business risk factors and other considerations
- e. Maintenance and capital improvement budget for the upcoming year
- f. An updated collection system map
- g. An updated asset inventory
- h. An updated operation, maintenance and replacement budget with an updated rate schedule that includes the amount of insufficient revenue, if any

The additional schedule and power reliability information requested above shall be submitted to the DEQ, WRD by Jan 31, 2019.

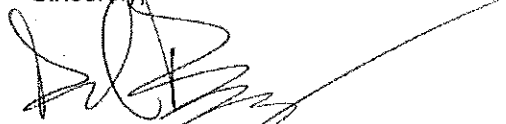
Mr. Robert Hilty  
July 12, 2018  
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The DEQ, WRD will review the information submitted to address the numbered items above (i. to xiii.). The provided information will be subject to DEQ, WRD review and approval. The DEQ, WRD reserves the right to require additional corrective actions or take additional/escalated enforcement actions based upon the responses. The DEQ, WRD reserves the right to require additional corrective actions or take additional/escalated enforcement actions or for any continued or additional unauthorized discharges. The DEQ, WRD may also require actions associated with items i. to xiii. above to be implemented in a legally enforceable document developed in conjunction with the LMSA.

The LMSA is fully responsible for any adverse impacts resulting from any deficiencies in its sewer system and from any overflows that result. The LMSA is hereby reminded that Part 41 construction permits must be obtained prior to any construction on the sanitary systems, and any plans or activities noted above must include applying for and obtaining those permits from DEQ-WRD, if the plans and activities involve new construction on, or alteration of, the existing system.

If the LMSA has any factual information it would like the DEQ, WRD to consider regarding violation notice VN-007294 or this letter, please provide this information to the DEQ, WRD. The DEQ, WRD anticipates and appreciates LMSA cooperation in resolving this matter. Should the LMSA require further information regarding this letter or if the LMSA would like to arrange a meeting to discuss it, please contact me at BradyD6@michigan.gov or (231) 876-4478.

Sincerely,



Donal Brady, P.E.  
Cadillac District Office  
Water Resources Division

cc: Brian Jankowski, P.E., DEQ, WRD, Cadillac District Office  
Jerrod Sanders, DEQ, WRD, Lansing  
Dave Pingel, DEQ, WRD, Lansing  
Ken Schaut, LMSA, Wade Trim  
Sheila Hill, LMSA, Wade Trim



GRETCHEN WHITMER  
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STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
CADILLAC



LIESL EICHLER CLARK  
DIRECTOR

March 10, 2020

CC No. CC-002514

VIA E-MAIL

Mr. Robert Hilty, Chairman  
Lake Mitchell Sewer Authority  
3161 South Lake Mitchell Drive  
Cadillac, MI 49601

Dear Mr. Hilty:

SUBJECT: Sanitary Sewer Overflow, February 22, 2020  
Designated Name: Lake Mitchell Sewer Authority (former Wexford Co DPW) CM

On February 23, 2020 staff of the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), received a Sanitary Sewer Overflow (SSO) report from the Lake Mitchell Sewer Authority (LMSA). The SSO report indicated that on February 22, 2020, 600 gallons of sewage leaked from a broken pipe at Grinder Pump Station 53A. Station 53A is located on the northwest side of Lake Mitchell and the leak from the buried station pipe impacted the ground around the station.

The LMSA sanitary sewer system has experienced other SSOs, including SSOs in 2017 and 2019. The Department issued a violation notice in response to the 2017 SSOs (VN-007294, dated August 11, 2017). As stated in the 2017 violation notice, the SSOs were violations of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and of Part 41, Sewerage Systems, of the NREPA. Likewise, the February 22, 2020 SSO is a violation of Part 31 and Part 41 of the NREPA.

The LMSA sanitary sewer system is approximately 40 years old. EGLE considers the equipment and components of the LMSA system to be past their useful lives and in need of replacement. EGLE also considers the 2017 and 2019 SSOs, and the recent 2020 SSO, to be symptoms of deteriorated and obsolete equipment and components. The SSOs show significant sewer system upgrades are needed and overdue.

EGLE acknowledges the LMSA and its contractors have progressed significantly in responding to the 2017 violation notice. EGLE also knows the LMSA plans to complete significant additional work to address the condition of the sewer system. The purpose of this letter is to: 1) communicate EGLE's understanding of the work completed and planned by the LMSA; 2) encourage the LMSA to complete the system upgrades, including the planned grinder and pump station project; and 3) reiterate concerns regarding the condition of the system.

Table 1 below summarizes EGLE's understanding of the work completed and planned by the LMSA (work to address the violation notice, SSOs, and the condition of the sewer system). The Department required some of this work in the 2017 violation notice and some of the work in a July 2018 follow-up letter. Please note, in the future, EGLE will require additional written updates and reports regarding the work included in Table 1. Also, Table 1 does not include all of the regulatory approval or permitting tasks required for the work (e.g. Part 41 construction permitting).

**Table 1 Work Completed and Planned by LMSA**

Goal	Task	Status
Prevent future SSOs from Station 1B	Smoke tested homes and grinder stations contributing to Station 1B (approximately 200+ homes and 50 grinder stations) Monitored run times (flow) of select stations Identified 91 priority homes that may be sources of inflow	Completed 2017
	Notice sent to homeowners regarding illegal connections (sump pumps, foundation drains, other sources of clean water)	Completed 2017
	Station alarms reprogrammed and emergency procedures modified to improve response times	Completed 2017
	Evaluated and improved Station 1B performance (pump impeller adjustment)	Completed 2018
Identify and Eliminate Inflow	Inspected station rim elevations Identified 22 high-priority stations subject to inflow from surface flooding Extended/raised the rim elevations of the 22 high priority stations	Completed October 2019
	Modify township sewer ordinances to allow for enforcement related to illegal connections and to allow for inspections	To complete in 2020
	Inspect 91 high priority homes identified as potential sources of inflow during 2017 testing and monitoring	Expected to occur in 2020
	Smoke test additional grinder stations (total of 205 grinder stations in system, approximately 50 tested in 2017)	To complete testing of approximately 50 stations per year from 2021 through 2024 or complete during grinder station replacement project (2021-2022)
	Extend/raise the rim elevations of other grinder stations (as required)	Complete during grinder station replacement project (2021-2022)
	Inspect remaining homes (approximately 887-91 = 796 homes)	To complete a % each year starting in 2021 through 2024
	Eliminate illegal connections and/or verify illegal connections eliminated	To complete a % each year starting in 2021 through 2025
	Estimate and track inflow volumes over time Track inflow reduction work completed and costs	Include with asset management reports

**Table 1 Work Completed and Planned by LMSA (continued)**

Goal	Task	Status
Address Old Infrastructure and Future Operation and Maintenance	User rate increase to approximately \$211 per quarter	Completed in 2018
	Apply for EGLE Part 41 application for pump station 1A and 2A upgrades	Application sent to EGLE August 2019 and permit approved in January 2020
	Apply for Rural Development funding for grinder station replacement project (project to include permanent generators for pump stations)	To complete 1 <sup>st</sup> quarter 2020
	Develop Asset Management Plan including an evaluation of power reliability (i.e. backup power and bypass pumping capabilities)	To complete after Rural Development project closing or by the end of 2021
	Prepare Annual Asset Management Program Reports	Complete first report in 2022 and submit to EGLE each year for 5 years

EGLE realizes historic (Wexford County) sewer rate structures did not provide funding for replacement of LMSA sewer system equipment. EGLE also recognizes the LMSA was formed relatively recently (in 2015/2016) and that the LMSA is attempting to fund and complete sanitary sewer system upgrades that should have been completed many years ago (or prior to the LMSA's existence). Sanitary sewer systems usually require significant equipment replacement long before they reach the age of the LMSA system (i.e. 40 years). The LMSA and its contractors should be commended for pursuing funding for replacement of the grinder and pump station equipment. EGLE is encouraged by the proposed grinder and pump station project and the proposed United States Department of Agriculture, Rural Development (USDA-RD) loan. Presently, funding for infrastructure projects can be secured at relatively low interest rates. Proactive communities are aggressively pursuing infrastructure improvements in order to take advantage of relatively low financing costs. EGLE encourages the LMSA to aggressively pursue funding for significant sewer system improvements and to aggressively complete those improvements.

EGLE understands some residents are opposed to the proposed grinder and pump station project and USDA-RD loan. EGLE also understands the proposed rate increases are significant and could create hardship for some residents. Unfortunately, proactive investment in LMSA system equipment was not made during the last 40 years. Consequently, system improvements, including the proposed grinder and pump station project, are now overdue and unavoidable. EGLE considers the LMSA sewer system equipment, including most of the grinder and pump stations, to be too old, obsolete, beyond the end of their useful lives, and in need of replacement. If significant system improvements (including the proposed grinder and pump station project) are not completed soon, EGLE is concerned it will be very difficult (if not impossible) for the LMSA to: prevent future SSOs; meet regulatory obligations; provide reliable sewer service; and protect public health and the environment.

Mr. Robert Hilty  
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March 10, 2020

EGLE will continue to hold the LMSA and the Townships responsible for the LMSA sanitary sewer system. Additional SSOs, especially those with large volumes, those impacting surface water, or those resulting in public exposure, may result in additional enforcement action. Delays completing the work summarized in Table 1 above, including the proposed grinder and pump station project, will likely not be acceptable to EGLE and may also result in additional enforcement action.

Thank you for your cooperation in these matters. Should you require further information, please contact me at 231-876-4478; BradyD6@michigan.gov; or EGLE, Cadillac District Office, 120 West Chapin Street, Cadillac, Michigan 49601-2158.

Sincerely,

Donal Brady, P.E.  
Cadillac District Office  
Water Resources Division

cc: Mr. Brian Jankowski, P.E., EGLE, WRD  
Ms. Sheila Hill, Operations Services  
Mr. Brian Sousa, P.E., Wade Trim





GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
CADILLAC



LIESL EICHLER CLARK  
DIRECTOR

August 3, 2021

VN No. VN-011933

VIA E-MAIL

Mr. Robert Hilty, Chairman  
Lake Mitchell Sewer Authority Board  
3161 South Lake Mitchell Drive  
Cadillac, Michigan 49601

Dear Mr. Hilty:

SUBJECT: Violation Notice

The Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), determined the Lake Mitchell Sewer Authority (LMSA) is in violation of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.3101 et seq., and the administrative rules promulgated thereunder being 2006 AACRS R 323.2101 et seq., as amended, and Part 41, Sewerage Systems, of the NREPA, and the administrative rules promulgated thereunder being 2012 AACRS R 299.2901 et seq., as amended.

The WRD's Cadillac District Office was notified on several occasions in 2020 and 2021 of discharges of raw or partially treated sewage from the LMSA sanitary sewer system. The discharges were reported to WRD, as required by Part 31, Section 3112a. Discharge of raw or partially treated sewage from a sewer system onto land or into the waters of the state is a violation of Part 31 of the NREPA. The discharge of raw or partially treated sewage is considered a sanitary sewer overflow (SSO) and is also in violation of Part 41 of NREPA.

The WRD previously issued a violation notice to the LMSA in response to SSOs from sewage pump station 1B during wet weather (VN-007294, dated August 11, 2017). The 2017 violation notice required the LMSA to address: wet weather flow into the sewer system; backup power and power reliability; and station 1B pump performance. Two additional SSOs occurred later in 2017 (one from pump station 1B related to wet weather and one from grinder station 16B from a broken discharge line). In response, the WRD required the LMSA to develop an asset management program in a July 2018 letter. No SSOs occurred from the LMSA system in 2018. Four SSOs occurred from the LMSA system in 2019 and an SSO occurred in February 2020. In response, the WRD sent the LMSA a compliance communication (CC-002514, dated March 10, 2020). The 2020 compliance communication presented: WRD's understanding of activities completed and proposed to address SSOs; WRD's concerns with the age and condition of the LMSA system; and WRD's support for the proposed grinder and pump station project funded through a loan from the United States Department of Agriculture (USDA). WRD issued a Part 41 (or construction) permit for pump station 1A and 2A upgrades on January 10, 2020 and WRD received a Part 41 permit application for the proposed USDA grinder and pump station project on May 19, 2021.

The LMSA system was installed over 40 years ago. The WRD considers many of the recent (2017 to 2021) SSOs to be related to old and obsolete sewer system equipment. The WRD also considers the recent SSOs to be signs that a significant sewer system upgrade is necessary and overdue. Additionally, the LMSA notified WRD after the December 2020 SSO from Pump Station 2A that this station normally operates with only one pump as the piping for the second pump is in deteriorated and fragile condition. A pump station, serving multiple homes, with only one regularly operable pump does not meet the standards and requirements of NREPA Part 41 for redundancy and reliability, and is a significant concern. The WRD is concerned that a system upgrade be completed in time to prevent future SSOs and/or backups.

The following Table 1 and Table 2 summarize the 2017 to 2021 SSOs and WRD's understanding of the work completed and proposed to address the SSOs.

**Table 1 - LMSA SSOs and EGLE response since 2017**

<b>Date</b>	<b>SSO Location or <i>EGLE</i> Response</b>	<b>SSO Cause</b>
May 2017	Pump Station 1B	Heavy rains, wet weather flow, and power outage
July 2017	Pump Station 1B	Heavy rains, wet weather flow
August 2017	<i>EGLE Violation Notice VN-007294</i>	
September 2017	Grinder Station 16B	Broken discharge line
October 2017	Pump Station 1B	Heavy rains, wet weather flow
July 2018	<i>EGLE letter requiring additional action &amp; asset management</i>	
July 2019	Pump Station 1A	Electrical problem
September 2019	Grinder Station 4A	Pump malfunction due to wipes and grease
October 2019	Grinder Station 10A	Electrical problem
October 2019	Grinder Station 57B	Cracked discharge line
February 2020	Grinder Station 53A	Broken discharge line
March 2020	<i>EGLE Compliance Communication CC-002514</i>	
May 2020	Pump Station 1B	Heavy rains, wet weather flow
June 2020	Grinder Station 27A	Electrical problem
July 2020	Grinder Station 44A	Wipes binding pump
July 2020	Grinder Station 32A	Wipes binding pump
December 2020	Pump Station 2A	Electrical problem, only one pump operational due to piping deterioration
April 2021	Grinder Station 9A	Electrical problem
May 2021	Grinder Station 15C	Leak during valve and line repair

**Table 2 – Activities Completed and Proposed by LMSA**

Goal	Task	Status
Prevent future SSOs from Station 1B	Smoke tested homes and grinder stations contributing to Station 1B (approximately 200+ homes and 50 grinder stations) Monitored run times (flow) of select stations	Completed 2017
	Identified 91 priority homes that may be sources of inflow	
	Notice sent to homeowners regarding illegal connections (sump pumps, foundation drains, other sources of clean water)	Completed 2017
	Station alarms reprogramed and emergency procedures modified to improve response times	Completed 2017
	Evaluated and improved Station 1B performance (pump impeller adjustment)	Completed 2018
Identify and Eliminate Inflow	Inspected station rim elevations	
	Identified 22 high-priority stations subject to inflow from surface flooding	Completed 2019
	Extended/raised the rim elevations of the 22 high priority stations	
	Modify township sewer ordinances to allow for enforcement related to illegal connections and to allow for inspections	Scheduled to be completed in 2020 (update needed)
	Inspect 91 high priority homes identified as potential sources of inflow during 2017 testing and monitoring	Scheduled to be completed in 2020 (update needed)
	Smoke test additional grinder stations (total of 205 grinder stations in system, approximately 50 tested in 2017)	To complete testing of approximately 50 stations per year from 2021 through 2024 or complete during grinder station replacement project (2021-2022)
	Extend/raise the rim elevations of other grinder stations (as required)	Complete during grinder station replacement project (2021-2022)
	Inspect remaining homes (approximately 887-91 = 796 homes)	To complete a % each year starting in 2021 through 2024

**Table 2 (continued) – Activities Completed and Proposed by LMSA**

Goal	Task	Status
Identify and Eliminate Inflow (continued)	Eliminate illegal connections and/or verify illegal connections eliminated	To complete a % each year starting in 2021 through 2025
	Estimate and track inflow volumes over time	Include with asset management reports
	Track inflow reduction work completed and costs	
Address Aging Infrastructure and Future Operation and Maintenance	User rate increase to approximately \$211 per quarter	Completed in 2018
	Apply for EGLE Part 41 application for pump station 1A and 2A upgrades	Application sent to EGLE August 2019 and permit approved in January 2020
	Apply for Rural Development funding for grinder station replacement project (project to include permanent generators for pump stations)	Completed 2020
	Develop Asset Management Plan including an evaluation of power reliability (i.e. backup power and bypass pumping capabilities)	To complete after Rural Development project closing or by the end of 2021
	Prepare Annual Asset Management Program Reports	Complete first report in 2022 and submit to EGLE each year for 5 years

The WRD recognizes the LMSA made significant progress in response to the 2017 VN and significant additional work is planned (as summarized in Table 2 above). The WRD strongly supports the planned pump station and grinder station projects (and the other planned work). The WRD considers the pump station and grinder station upgrades/replacements to be necessary in order to prevent future SSOs. The WRD encourages the LMSA to aggressively complete system upgrades. Delays in funding or delays in completion of system upgrades/replacements may result in future SSOs which will result in escalated enforcement action.

SSOs identified in this Violation Notice have ceased. The LMSA should take immediate action to prevent future SSOs and maintain compliance with Part 31 and Part 41 of NREPA. Please provide the following information to the WRD at [BradyD6@michigan.gov](mailto:BradyD6@michigan.gov) by September 20, 2021.

1. An update of the progress and schedule for proposed work shown in Table 2 and any additional work proposed to address SSOs, infiltration and inflow, and aging infrastructure.
2. Identification of any pump or grinder stations serving multiple homes (other than Pump Station 2A) that are only normally operating with only one pump.

Mr. Robert Hilty  
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3. A plan for additional monitoring (e.g. more frequent visits and/or remote monitoring) of Pump Station 2A to ensure that failure of the one normally operating pump does not cause an SSO or backup.
4. A contingency plan for maintaining service and preventing backups and SSOs if the one normally operating pump in Pump Station 2A fails.

If the LMSA has any factual information it would like the WRD to consider regarding the violations identified in this Violation Notice, please provide the information with the written response or update.

The WRD anticipates and appreciates the LMSA's cooperation in resolving this matter. Should the LMSA require further information regarding this Violation Notice or like to arrange a meeting to discuss it, please contact me at [BradyD6@michigan.gov](mailto:BradyD6@michigan.gov) or 231-429-5686.

Sincerely,

A handwritten signature in black ink, appearing to read 'Don Brady', with a long horizontal flourish extending to the right.

Don Brady, P.E.  
Environmental Engineer  
Cadillac District Office  
Water Resources Division

cc: Mr. Brian Jankowski, EGLE, WRD  
Mr. Luis Saldivia, EGLE, WRD  
Mr. Phil Argiroff, EGLE, WRD  
Mr. Dave Pingel, EGLE, WRD  
Ms. Sheila Hill, LMSA  
Mr. Brian Sousa, Wade-Trim  
Mr. Richard Wilson, Mika Meyers PLC