



Municipality of Mississippi Mills

Sewage Collection System Annual Performance Report

ECA # 178-W601

Roads and Public Works
Issued: March 31, 2026
Revision 0

Revision History

Revision Number	Date Issued	Description
0	March 31, 2026	Issued to MECP

Table of Contents

1. Compliance Overview	4
2. System Process/Description	4
2.1 System Alterations.....	4
3. System Maintenance & QA/QC.....	6
3.1 Routine Operations and System Maintenance.....	6
3.1.1 Collection System.....	6
3.1.2 Sewage Pumping Stations.....	6
3.2 Operating Issues	7
4. Complaint Management.....	9
5. Compliance Events.....	9
5.1 Collection System Spills	9
5.2 Collection System Overflows and Bypasses.....	9
5.3 Efforts to Reduce Collection System Spills	9
Appendix A – Spill Notices.....	12

1. Compliance Overview

This annual performance report covers the period of January 1st, 2025 to December 31, 2025.

Table 1-1: Compliance Summary

Compliance Event	# of Events	Details
Ministry of the Environment Inspections	0	
Ministry of Labour Inspections	0	
Bypass/Overflows	0	
Customer Complaints	13	Summary provided in Section 4
Spills	2	See Section 5.1
Operating Issues	3	See Section 3.2

2. System Process/Description

The Municipality of Mississippi Mills Sewage Collection System is a separate sewer system located in the Ward of Almonte and consists of works for the collection and transmission of sewage; consisting trunk sewers, separate sewers, sewage pumping stations, and forcemains with discharge into the Mississippi Mills Wastewater Treatment Plant (WWTP). The WWTP is operated by Ontario Clean Water Agency (OCWA) under ECA # 1637-AC8NT7. The sewage collection system is operated by the Mississippi Mills Roads and Public Works Department (linear pipe infrastructure), and the sewage pumping stations are operated by Ontario Clean Water Agency (OCWA).

2.1 System Alterations

Table 2-1 below summarizes the system alterations which occurred during 2025.

In June of 2025 the Mississippi Mills Drinking Water Threats Assessment document was reviewed and updated as required.

Municipality of Mississippi Mills
Sewage Collection System Annual Performance Report – 2025

Table 2-1: Summary of System Alterations

Alteration Type ²	Project	Project Status	Part V Verification Completed ¹	Significant Drinking Water Threat
SS1 – Alteration for Separate Sewer	Extension of services for Dunn/Colina development (developer initiated) - originally authorized June 20, 2023 design revised and new SS1 authorized on November 11, 2024	Alteration Completed in 2024	Completed	No
SS1 – Alteration for Separate Sewer	Extension of gravity sewer on Mitcheson Street to the Carss Street and Mitcheson Street intersection (municipal project)	Alteration completed in 2025	In Progress	No
SS1 – Alteration for Separate Sewer	Weavers Way Subdivision (developer initiated) – sanitary sewer network servicing new development and forcemains servicing new pump station.	Alteration completed in 2025	In Progress	No
SS1 – Alteration for Separate Sewer	Extension of sanitary sewer and installation of maintenance structure on Main St E (municipal project)	Alteration completed in 2025	In Progress	No
SS2 - Alteration for Component of Sewage Collection System	Installation of new sewage pumping station to service the Weavers Way Subdivision. (developer initiated)	Alteration completed in 2026	In Progress	No
SS1 – Alteration for Separate Sewer	Argyle Street sanitary sewer extension to service new lots (developer initiated)	Alteration not completed	N/A	No

¹ Should Part V verification not be completed in the year in which it was authorized, it will be provided in the annual report in which it is completed.

² All alterations are screened using the *Mississippi Mills Significant Drinking Water Threat Assessment (2025)* document.

3. System Maintenance & QA/QC

3.1 Routine Operations and System Maintenance

3.1.1 Collection System

In 2025 the Roads and Public Works department undertook the following tasks as part of routine operations and system maintenance:

- Sewer inspections (weekly)
- Sewer cleaning and CCTV inspection
- Manhole adjustments
- Repair of sanitary sewers with structural failures (dig/replace)
- Sewer CIPP lining (Cured-In-Place-Pipe) to remediate structural and I&I issues

A sanitary sewer flow monitoring program was completed in 2025 which consisted of seventeen flow monitors and one rain gauge installed throughout the sanitary sewer system and two flow monitors installed along a municipal drain over a three month period. The program was structured to assess the base flow for the sewers as well as assess the impact of inflow and infiltration into the system. Data from the program is being used to assess areas for improvement relating to inflow and infiltration.

In 2025 the municipal capital projects included sanitary sewer extension on Carss Street (future servicing) and an extension of the sanitary sewer was completed on Main Street East (maintenance) .

The annual sanitary sewer lining program continued with 11 sections of sanitary sewer lined using CIPP methods. The sections were selected based on structural and operational assessments.

3.1.2 Sewage Pumping Stations

In 2025 OCWA completed routine maintenance on the sewage pumping stations including:

- Routine inspections of pumping stations for operation, condition and for operational trends
- Routine pumping station pumping/cleaning
- Servicing and testing of backup diesel generators
- Float and sensor inspection/maintenance
- Other preventative maintenance as required by manufacturers
- Flow meter calibration at White Tail Ridge SPS

The table below lists the corrective and capital maintenance completed on the sewage pumping stations:

<u>WO#</u>	<u>Title</u>	<u>Work Type</u>
4552812	Gemmills Bay Vibration Check Pump 221	CORR

Municipality of Mississippi Mills
Sewage Collection System Annual Performance Report – 2025

4550604	Riverfront Back Generator Coolant Leak Repair	CORR
4333700	Riverfront Generator Issue Investigation - See CAP 4333888	CORR
4334692	Gemmills Bay Check Valve 231 Derag	CORR
4486641	Trouble Shoot Gemmills Bay Pump 221	CORR
4487953	Spring St. Low level Float Replacement	CORR
4817952	Replace Pump Guide Rails Whitetail Ridge SPS	CORR
4759466	Replaced Pump Guide Rails Robert SPS 1558	CORR
4818309	Riverfront Pump #1 Derag and Reseat	CORR
4813694	Gemmills Bay Wet Well Hatch Repair	CORR
4862647	Riverfront Generator Fuel Filter and Line Repair	CORR
4862646	Replace Generator Thermostat Gasket Riverfront SPS	CORR
4709482	Gemmills Bay Exhaust Fan Troubleshooting	CORR
4762437	Robert SPS Pump #1 Derag	CORR
4762441	Hope & Glass Pump #1 Shaft Adjustment	CORR
4382199	Cellular upgrades 3G to 4G Pumping Stations	CAP
4487856	Spring St Float Control Issue Investigation	CAP
4339172	Whitetail Generator Block Heater Replacement	CAP
4333888	Riverfront Generator Fuel System Repair	CAP
4334162	Riverfront Power Outage Kingfish Pump Truck	CAP
4554922	Backflow Preventer Annual Service	CAP
4553632	Sewage Pumping Station Cleanouts	CAP
4555144	Gemmills Bay Pump 221 Repair	CAP
4818462	Gemmills Wetwell Clean Out	CAP
4707866	Hope and Glass Power Fail Pumper Truck	CAP
4605901	Gemmills Bay Lock Repair	CAP
4710105	Replacement Pump Rails Whitetail and Robert SPS	CAP
4764717	Hope and Glass Breaker Replacement/Upgrade	CAP
CORR= Corrective Maintenance CAP=Capital, replacement part purchase or external repair service, may have a corrective paired with it.		

3.2 Operating Issues

A summary of operating issues is included as Table 3-1.

Municipality of Mississippi Mills
Sewage Collection System Annual Performance Report – 2025

Table 3-1: Summary of Operating Issues

Date	Operating Authority	Location	Issue	Corrective Action
N/A	OCWA	Hope/Glass SPS	During high flows when both pumps would run the hydro breaker would trip due to being undersized.	The breaker was replaced and upsized to be appropriate for operation of both pumps.
N/A	OCWA	Gemmill Bay SPS	Pump 221 out of service due to a required rebuild and recurring sensor issues once re-installed.	Pumps to be serviced exclusively by Xlyem/Flygt moving forward to ensure proper testing can occur for repairs.
N/A	OCWA	Gemmill Bay SPS	Rags plugging check valves	PM frequency increased for pump station cleanout (by hydrovac) and screens.

4. Complaint Management

The Roads and Public Works department has a Standard Operating Procedure for managing customer complaints and calls. Each inquiry is tracked using a Service Request Form. The Service Request Forms completed in 2025 are summarized in Table 4-1. Each service request form is reviewed to ensure a corrective action and/or follow-up has been completed to complete the form. All service requests were managed by the Roads and Public Works department unless otherwise noted for OCWA-managed complaints.

In November 2025 the Roads and Public Works department began implementation of the computerized Work Management System (WMS) using PSDCitywide software. The WMS allows for the creation and tracking of service requests and work orders. Transitioning to a computerized WMS increases traceability and consistency for record management.

Table 4-1: Summary of Service Requests

Type	Quantity	Resolution
Sewer gas odor	4	– Determined to be an internal plumbing issue – Sewer lining nearby – refilled traps
Sewer backup into private property	6	– Internal plumbing issue - blockage or roots – Municipal lateral blocked – replaced – Sewer main blocked – main cleared
General concerns	3	– Frozen lateral – thawed with hot water – Capital replacement schedule question

5. Compliance Events

5.1 Collection System Spills

During the 2025 reporting period there were two reported spills from the collection system, as summarized below in Table 5-1. Written reports for the two spills are included as Appendix A – Spill Notices.

5.2 Collection System Overflows and Bypasses

During 2025 there were no incidents which were classified as an overflow as per the ECA.

5.3 Efforts to Reduce Collection System Spills

A requirement for the annual report for this CLI-ECA is to include a summary of efforts made to reduce collection system spills. The efforts taken include the following:

- In 2025 a sanitary sewer flow monitoring program was completed to identify areas of the collection system that are affected by inflow and infiltration. The data from the report is used to inform future infiltration management capital projects.
- In 2025 the sanitary sewer CIPP lining program rehabilitated 870m of sanitary sewers that were identified to have structural and operational deficiencies.

- o It was observed that immediately following lining activities there was a reduction in pump cycles at the Hope/Glass SPS.
- Environmental Assessment for upgrades to the Gemmill's Bay SPS (underway). The goals of the process are to address the operational issues with the pumping station that result in CSO events and to provide capacity for future growth.
- Continued transitioning of the methodology of reviewing sanitary sewer inspection ratings (from CCTV inspections) from solely manual review to a hybrid of manual review and assessment of the data using the Municipality's GIS system to aid in maintenance planning with considerations for reducing I&I.

Municipality of Mississippi Mills
Sewage Collection System Annual Performance Report – 2025

Table 5-1: Summary of Sewage Pumping Station Spills

Start of Incident	End of Incident	SAC Reference Number	Incident Description	Estimated Volume
March 16, 2025 15:35	March 17, 2025 04:05	1-J2IQPT	A rain event along with warmer temperatures and a significant snow melt, caused a substantial increase of flow entering the pumping station. This caused a spill of Raw Sewage through the overflow pipe, into the Mississippi River. Disinfection provided via chlorine pucks in bypass channel. Evidence of a secondary spill was observed by operators the following day from the wet-well hatch due to presence of debris on the pavement and grass immediately around the hatch. Samples were collected.	7,485 m ³
April 3, 2025 11:33	April 3, 2025 19:12	1-N7YTUZ	A rain event along with warmer temperatures and a snow melt, caused a increase of flow entering the pumping station. Both duty pumps were operating at 100%. Pump duty rotated at 11:00 which changed from pump 231 to pump 221. As a result of the pump cycle (delay in ramp up) and decreased performance of pump 221, a spill of Raw Sewage occurred through the overflow pipe, into the Mississippi River. Disinfection provided via chlorine pucks in bypass channel. Samples were collected.	2,448 m ³

Appendix A – Spill Notices

Tracy Hart
Ottawa District Office Manager
Ministry of the Environment, Conservation and Parks
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Wastewater Program
Environment Canada
Ec.FA-LP-On.ec@canada.ca

March 25th, 2025

Re: Notification of Raw Sewage Spill – Mississippi Mills WWTF – Gemmill's Bay SPS

This is a written notification of overflow submitted in accordance with terms and conditions the Ontario Water Resources Act, Environmental Protection Act, Fisheries Act and the current CLI-ECA Number 178-W601. This written notice confirms the verbal notifications provided to Spills Action Center– Reference # **1-J2IQPT**.

Details:

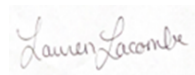
A rain event, along with warmer temperatures and significant snow melt, caused an increase in the flow entering the pumping station. This resulted in a spill of sewage and a secondary spill from Gemmill's Bay Pumping Station. The spill of sewage flowed into the Mississippi River. The secondary spill resulted in a small amount of debris on the pavement and grass immediately around the hatch.

Location	Volume (m³)	Start Date and Time	End Date and Time	Total Duration (h)	Discharge Receiver	Disinfection Provided
Gemmill's Bay SPS	595	2025-03-16 @ 15:35	2025-03-16 @ 16:32	57 Min	Mississippi River	Chlorine pucks in channel
Gemmill's Bay SPS	6890	2025-03-16 @ 16:37	2025-03-17 @ 4:05	11 Hrs 28 Min	Mississippi River	Chlorine Pucks in Channel
Gemmill's Bay SPS	Unknown	Unknown	Unknown	Unknown	Ground surrounding hatches	No

Operators ensured there was no erosion on site and collected samples. The secondary spill was assumed to have occurred due to a small amount of debris on the pavement and grass immediately around the hatch. This was cleaned up the following day.

If you have any questions or concerns, do not hesitate to contact me

Sincerely,



Lauren Lacombe
Process & Compliance Technician - Ontario Clean Water Agency - Mississippi Cluster

cc: Brenda Beaudoin, Provincial Officer, MECP
Austin Mitchell, Senior Operations Manager, OCWA
Vanessa Greatrix, SPC Manager, OCWA

Andrew Trader, Regional Manager, OCWA

Cory Smith, Director of Roads and Public Works, Municipality of Mississippi Mills

Zachary Moshonas, Environmental Compliance Coordinator, Municipality of Mississippi Mills

Tracy Hart
Ottawa District Office Manager
Ministry of the Environment, Conservation and Parks
tracy.hart@ontario.ca

Wastewater Program
Environment Canada
Ec.FA-LP-On.ec@canada.ca

April 11th, 2025

Re: Notification of Raw Sewage Spill – Mississippi Mills WWTF – Gemmill's Bay SPS

This is a written notification of overflow submitted in accordance with terms and conditions the Ontario Water Resources Act, Environmental Protection Act, Fisheries Act and the current CLI-ECA Number 178-W601. This written notice confirms the verbal notifications provided to Spills Action Center– Reference # **1-N7YTUZ**.

Details:

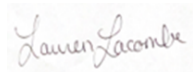
A rain event, along with warmer temperatures and significant snow melt, caused an increase in the flow entering the pumping station. Both duty pumps were operating at 100%. Pump duty rotated at 11am, and changed from pump 231 to pump 221. Pump 221 was not keeping up with the incoming flow, which resulted in a spill of raw sewage from Gemmill's Bay Pumping Station into the Mississippi River. Increased flows continued throughout the day, and the pumps running at 100% were overwhelmed by flow entering the station, resulting in a continuation of the spill. Samples were collected from the overflow weir of the wet well from the initial spill.

Location	Volume (m³)	Start Date and Time	End Date and Time	Total Duration (h)	Discharge Receiver	Disinfection Provided
Gemmill's Bay SPS	30.6	2025-04-03 @ 11:33	2025-04-03 @ 11:36	3 Min	Mississippi River	Chlorine pucks in channel
Gemmill's Bay SPS	2417.4	2025-04-03 @ 15:15	2025-04-03 @ 19:12	3 Hrs 57 Min	Mississippi River	Chlorine Pucks in Channel

An operator was on site to set duty back to pump 231, remove pump 221 from service and stopped the auto rotate program to keep the remaining pumps running without interruption. Mechanics have cleaned the check valve for this pump, and influent pipe flushed, as it was found to be partially blocked by rags. Pump 221 remains out of service for further investigation into pump condition.

If you have any questions or concerns, do not hesitate to contact me.

Sincerely,



Lauren Lacombe
Process & Compliance Technician
Ontario Clean Water Agency - Mississippi Cluster

cc: Brenda Beaudoin, Provincial Officer, MECP
Austin Mitchell, Senior Operations Manager, OCWA

Vanessa Greatrix, SPC Manager, OCWA
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