



Municipality of Mississippi Mills

Sewage Collection System Annual Performance Report

ECA # 178-W601

Roads and Public Works
Issued: March 28, 2024
Revised: May 30, 2024
Revision 1

Revision History

Revision Number	Date Issued	Description
0	March 28, 2024	Initial issue
1	May 30, 2024	Updated references to Gemmill's Bay SPS "overflow" incidents to designation as a "spill".

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1. Compliance Overview

This annual performance report covers the period of January 1st, 2023 to December 31, 2023.

Table 1-1: Compliance Summary

Compliance Event	# of Events	Details
Ministry of the Environment Inspections	0	
Ministry of Labour Inspections	0	
Bypass/Overflows	5	See Section 5.2
Customer Complaints	18	Summary provided in Section 4
Spills	2	See Section 5.1
Operating Issues	0	

2. System Process/Description

The Municipality of Mississippi Mills Sewage Collection System is 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.

2.1 System Alterations

Table 2-1 below summarizes the system alterations which occurred during 2023. Two alterations were approved during 2023 relating to extension of the collection system and reconstruction of existing infrastructure. There were no alterations to system components, nor did any alterations require directors notification.

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Table 2-1: Summary of System Alterations

Alteration Type	Project	Date Authorized	Project Status	Part V Verification Completed ¹	Significant Drinking Water Threat ²
SS1 – Alteration for Separate Sewer	Extension of services for Dunn/Colina development (developer initiated)	June 20, 2023	Construction not started	n/a	No
SS1 – Alteration for Separate Sewer	Reconstruction of Princess Street infrastructure (Municipally initiated)	July 7, 2023	Complete	Yes	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 (2023)* document.

3. System Maintenance & QA/QC

3.1 Routine Operations and System Maintenance

In 2023 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
- Sewer CIPP lining (Cured-In-Place-Place) to remediate structural and I&I issues

In 2023 OCWA completed routine maintenance on the sewage pumping stations including the following:

- Routine inspections of pumping stations for operation and for operational trends
- Routine pumping station pumping/cleaning
- Servicing of backup diesel generators
- Replacement of end of life pump (Hope/Glass SPS)
- Float level maintenance
- Other preventative maintenance as required by manufacturers

3.2 Reconstruction Projects

In 2023, the Municipality initiated a capital project to replace the water distribution and sanitary sewer infrastructure on Princess Street – the project also included road reconstruction. The sanitary sewer was replaced with piping of similar diameter. The Municipality initiated two design projects in 2023 for the reconstruction of Union Street North (entire length) and Mercer and Marshall Streets (entire length).

3.3 Operating Issues

In 2023 there were no operational issues to report.

4. Compliant Management

The Roads and Public Works department has a Standard Operating Procedure for managing customer complaints and calls. Each customer inquiry is tracked using a Service Request Form. The Service Request Forms completed in 2024 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.

Table 4-1: Summary of Service Requests

Type	Quantity	Resolution
Sewer gas odor	2	Determined to be an internal plumbing issue

Sewer backup into residence	12	<ul style="list-style-type: none"> - Root/debris infiltration on lateral cause blockage - Backwater valve faulty (internal plumbing) - Construction debris clogged mainline - Water splashing from basement toilet due to sewer main jetting/cleaning - Determined to be an internal plumbing issue
Water St. sewer spill	1	<ul style="list-style-type: none"> - See Section 5.1
General concerns	3	<ul style="list-style-type: none"> - Sewer in basement making noise, likely due to nearby watermain break - Manhole cover missing - Suspected spill into sewage collection system reported by OCWA

5. Compliance Events

5.1 Collection System Spills

During the 2023 reporting period there were eight spills recorded within the collection system. Two spills were from the linear infrastructure (i.e., pipes) within the collection system resulted from construction activities, and the remaining six spills were from the Gemmill’s Bay Sewage Pumping Station.

5.2 Collection System Overflows and Bypasses

During 2023 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:

- Initiating an Environmental Assessment for upgrades to the Gemmill’s Bay Sewage Pumping Station. 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.
- Transitioning 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.
- Infiltration management through the use of CIPP lining of sanitary sewers to prevent infiltration.

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Table 5-1: Summary of Sewage Pumping Station Spills

Start of Incident	End of Incident	SAC Reference Number	Incident Description	Estimated Volume (m3)
December 31, 2022 @ 14:00	January 6, 2023 @14:40	1-2FRYOU	An extreme rain event and snow melt caused an increase in the flow entering the pumping station. This resulted in a spill at the Gemmill's Bay Pumping Station. Disinfection provided via chlorine pucks in bypass channel.	43,111
April 5 2023 @ 15:00	April 6 2023 @ 22:00	1-34MT6A	An extreme rain event and snow melt caused an increase in the flow entering the pumping station. This resulted in a spill at the Gemmill's Bay Pumping Station. Disinfection provided via chlorine pucks in bypass channel.	7,031
April 30 2023 @ 22:33	May 1 2023 @ 21:22	1-3FQ3R8	An extreme rain event caused an increase in the flow entering the Gemmill's Bay pumping station and a spill occurred. Disinfection provided via chlorine pucks in bypass channel.	8,528
May 1, 2023	May 1, 2023	1-3FRLC7	During infrastructure reconstruction near Water Street, Almonte; the Contractor (Thomas Cavanagh Construction Limited) had an 8" sanitary bypass pump fail to activate during a heavy rain event. As a result of this event, sewage spilled out of several manholes and approximately 20 homes (along Water Street) had sewage backup into their basement. Immediately additional pumps were installed to pump down the volume and the area was cleaned up by the Contractor. The subcontractor who operates the bypass pumps corrected the fault.	Unknown
June 28 2023 @ 1:39	June 28 2023 @ 10:30	1-3L0EF4	An extreme rain event caused an increase in the flow entering the pumping station. This resulted in a spill at the Gemmill's Bay Pumping Station. Disinfection provided via chlorine pucks in bypass channel.	2,644

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July 19 2023 @ 15:32	July 19 2023 @ 16:27	1-3NHE6I	The Wet well low level float was defective and prevented the Gemmill's Bay pumping station pumps from starting and a spill occurred. Disinfection provided via chlorine pucks in bypass channel.	208
September 1, 2023 @ 20:30	September 1, 2023 @ 22:00	1-3U84M5 (reported by contractor)	During infrastructure reconstruction on Princess Street, Almonte; the Contractor (Thomas Cavanagh Construction Limited) capped a single household sewer lateral overnight. The cap failed and resulted in sewage leaking into the open cut. The Contractor immediately completed corrective actions and remediated the area.	20 L
September 18 2023 @ 17:27	September 18 2023 @ 21:11	1-3ULH53	An extreme rain event caused an increase in the flow entering the Gemmill's Bay pumping station and a spill occurred. Disinfection provided via chlorine pucks in bypass channel.	1,693