



Municipality of Mississippi Mills

# Sewage Collection System Annual Performance Report

ECA # 178-W601

Roads and Public Works  
March 28, 2024  
Revision 0

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# 1. Compliance Overview

This annual performance report covers the period of January 1<sup>st</sup>, 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 <sup>1</sup>	Significant Drinking Water Threat <sup>2</sup>
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

<sup>1</sup> 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.

<sup>2</sup> 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"> <li>– Root/debris infiltration on lateral cause blockage</li> <li>– Backwater valve faulty (internal plumbing)</li> <li>– Construction debris clogged mainline</li> <li>– Water splashing from basement toilet due to sewer main jetting/cleaning</li> <li>– Determined to be an internal plumbing issue</li> </ul>
Water St. sewer spill	1	– See Section 5.1
General concerns	3	<ul style="list-style-type: none"> <li>– Sewer in basement making noise, likely due to nearby watermain break</li> <li>– Manhole cover missing</li> <li>– Suspected spill into sewage collection system reported by OCWA</li> </ul>

## 5. Compliance Events

### 5.1 Spills

In the 2023 reporting period there were two spills recorded (i.e., not classified as a system overflow in Schedule E of the CLI ECA). Reports for each incident are attached as . The incidents are documented in Table 5-1.

Staff have reviewed the two incidents and have proposed corrective actions. The Municipality's collection system spill incident report forms are attached as Appendix A.

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Table 5-1: Summary of Spills

Date of Incident	Incident Description	Date Reported	Follow on Actions Requested / SAC Reference
May 1, 2023	During infrastructure reconstruction 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 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.	May 1, 2023	OCWA reported the spill on behalf of the Municipality. No follow-up actions were requested.  SAC Reference Number: 1-3FRLC7.
September 1, 2023	During infrastructure reconstruction 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.	September 14, 2023	N/A – Contractor reported spill to SAC.  SAC Reference Number: 1-3U84M5

## **5.2 System Overflows and Bypasses**

During the 2023 reporting period there were 5 collection system overflows (CSO). As the Operating Authority for the sanitary sewage pumping stations, OCWA completed the required notifications to the SAC and MECP for the CSO events.

The CSO incidents each occurred at the Gemmill's Bay Sewage Pumping Station which is the primary pumping station prior to the Wastewater Treatment Plant. This Pumping Station is directly connected by force main to the Plant. Table 5-2 below summarizes the overflows.

## **5.3 Efforts to Reduce System Overflows/Bypasses**

A requirement for the annual report for this CLI-ECA is to include a summary of efforts made to reduce collection system overflows. 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 5-2: Summary of Collection System Overflows/Bypasses

	<b>End of Incident</b>	<b>SAC Reference Number</b>	<b>Incident Description</b>	<b>Estimated Volume (m³)</b>
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 an overflow 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 pumping station. Disinfection provided via chlorine pucks in bypass channel.	8,528
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 an overflow at the Gemmill's Bay Pumping Station. Disinfection provided via chlorine pucks in bypass channel.	2,644
July 19 2023 @ 15:32	July 19 2023 @ 16:27	1-3NHE6I	The Wet well low level float was defective and prevented the pumping station pumps from starting. Disinfection provided via chlorine pucks in bypass channel.	208
September 18 2023 @ 17:27	September 18 2023 @ 21:11	1-3ULH53	An extreme rain event caused an increase in the flow entering the pumping station. Disinfection provided via chlorine pucks in bypass channel.	1,693

## **Appendix A – Collection System Spill Incident Reports**

May 8<sup>th</sup> 2023**Water Supervisor**Ministry of Environment, Conservation and Parks  
Ottawa District Office  
2430 Don Reid Drive  
Ottawa, Ontario  
K1H 1E1| Wastewater Program  
| **Environment Canada**  
| Ec.FA-LP-On.ec@canada.ca**Re: Notification of a Spill in the Collection System in Mississippi Mills**

This is a notification of a spill out of several manholes and backed up into approximately 20 homes along Water Street in the collection system in the Municipality of Mississippi Mills. The notification is submitted in accordance with terms and conditions of the Certificate of Approval and provisions of the Ontario Water Resources Act and Environmental Protection Act. This written notice confirms the verbal notifications provided to Spills Action Centre Reference # **1-3FRLC7**.

Start Date	Start Time	Stop Date	Stop Time	Estimated Spill Volume (m <sup>3</sup> )
May 1 2023	7:00	May 1 2023	16:22	Unknown

**Comments/Actions Taken:**

The high level alarms on the 8" bypass pump failed to activate during a heavy rainfall event. The pump was functioning at 1200 RPM and should have increased based on the level controllers. After response from Atlas Pumping, the pump speed was manually increased to 1800 RPM and levels started dropping. An additional 3" pump to help move additional volume. This action was followed by adding an additional 6" pump for the same purposes. Once that was completed, water levels began dropping significantly. Approximately 20 homeowner's basements were compromised and the Municipality provided written notification regarding the incident. Dumpsters were made available to homeowners for items to be disposed of if required. After 16:45, the additional 6" pump was pulled and staff were on site overnight to monitor the pump and flows. The Municipality is awaiting a report from Atlas Pumping as to why the high flow alarms were not activated during high flows.

OCWA was contacted to provide verbal notification to SAC and MECP Inspector. OCWA staff collected a sample of the spill on May 1, 2023 @ 12:06.

Sincerely,

Alison O'Connor  
Process Compliance Technician - Mississippi Cluster  
Ontario Clean Water Agencycc: Cory Smith, Municipality of Mississippi Mills  
Cindy Hartwick, Municipality of Mississippi Mills  
Zack Moshonas, Municipality of Mississippi Mills  
Austin Mitchell, OCWA  
Vanessa Greatrix, OCWA  
Andy Trader, OCWA

Incident Report Number: \_\_\_\_\_

## ENVIRONMENTAL INCIDENT REPORT



Mississippi  
Mills

**Date of Report:**

**Date and Time of  
Incident:**

**Incident Type:**

**MECP or SAC  
Notified?**

**SAC Notified at:  
Reference #:**

**Incident Caused By:**

**Contact Information:**

**Person Reporting  
Incident:**

**Location of  
Incident:**

**Corrective Actions  
Taken:**

Incident Report Number: \_\_\_\_\_

# ENVIRONMENTAL INCIDENT REPORT

## Incident Details

## Preventative Actions