



# **Wastewater Collection System 2023 Annual Performance Report**

Period Covering: January 1 to December 31, 2023



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# INTRODUCTION

This report has been prepared by the Township of Clearview to satisfy the requirements of Schedule E, Section 4.6 of the Environmental Compliance Approval for a Municipal Sewage Collection System that has been issued to the Township of Clearview by the Ontario Ministry of Environment, Conservation and Parks (MECP).

The report covers the period from January 1 to December 31, 2023, for the following municipally owned and operated wastewater collection system:

# **Wastewater Collection System Information**

Consolidated Linear Infrastructure – Environmental Compliance Approval (CLI-ECA):

ECA Number: 099-W601

Issue Number: 2

Issue Date: January 22, 2024

### **Report Content**

Under Schedule E, Section 4.6 CLI-ECA 099-W601, the Owner of the municipal sewage collection system is required to prepare an annual performance report covering the period of January 1 to December 31 by March 31<sup>st</sup> of the following year. The report is to be submitted to the MECP Director and if a collection system overflow or spill of sewage occurred during the reporting period it will also be submitted to the District Manager. The annual performance report must contain the following information:

- If applicable, includes a summary of all required monitoring data along with an interpretation
  of the data and any conclusion drawn from the data evaluation about the need for future
  modifications to the Authorized System or system operations.
- A summary of any operating problems encountered, and corrective actions taken.
- A summary of all calibration, maintenance, and repairs carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.
- A summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.
- A summary of all Alterations to the Authorized System within the reporting period that are authorized by this approval including a list of Alterations that pose a Significant Drinking Water Threat.



- A summary of all Collection System Overflow(s) and Spill(s) of Sewage including:
  - Dates;
  - Volumes and durations;
  - If applicable, loadings for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E.coli;
  - Disinfeciton, if any; and
  - Any adverse impact(s) and any corrective actions, if applicable.
- A summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable:
  - A description of projects undertaken and completed in the Authorized System that
    result in overall overflow reduction or elimination including expenditures and proposed
    projects to eliminate overflows with estimated budget forecast for the year following
    that for which the report is submitted.
  - Details of the establishment and maintenance of a PPCP including a summary of project progresses compared to the PPCP's timelines.
  - An assessment of the effectiveness of each action taken.
  - An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives.
  - Public reporting approach including proactive efforts.

# **Report Format**

This report provides details on measures taken by staff to ensure compliance with Terms and Conditions of the control documents, Act, Regulations, or any orders the system may have been under during the reporting period.

# **Report Availability**

In accordance with Schedule E, Section 4.7 of CLI-ECA 099-W601, a copy of the report is available to the public, free of charge, at the following locations by June 1st:

- Township of Clearview's website www.clearview.ca
- By request at the Township Administration Building, located at 217 Gideon St., Stayner.
- By request at the Township Public Works Building, located at 5833 County Road 96, Stayner.



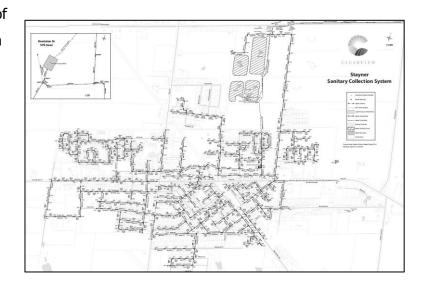
# **CLEARVIEW WASTEWATER COLLECTION SYSTEM**

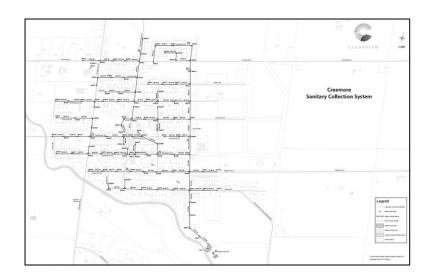
# **System Description**

The Township of Clearview owns the wastewater collection system which provides services to residents in the Stayner and Creemore settlement areas. The works consist of infrastructure which collects and conveys wastewater from homes and businesses to the Stayner Sewage Treatment Plant, the Creemore Sewage Treatment Plant, and has the capability to direct sewage to the Town of Wasaga Beach wastewater collection system when deemed necessary in the future.

The system consists of approx. 45.5 km of gravity sewer and trunk mains and 16 km of forcemains, with two pumping stations servicing a population of approximately 6,200 people.

The Township of Clearview is the operating authority for the linear infrastructure and the Town of Collingwood is contracted to act as the operating authority for the pumping stations.

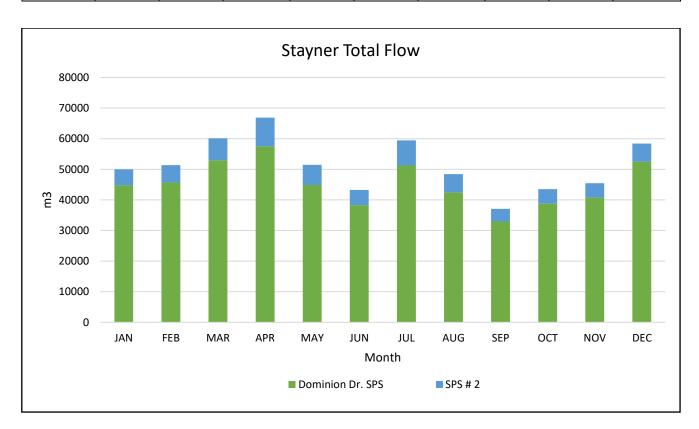




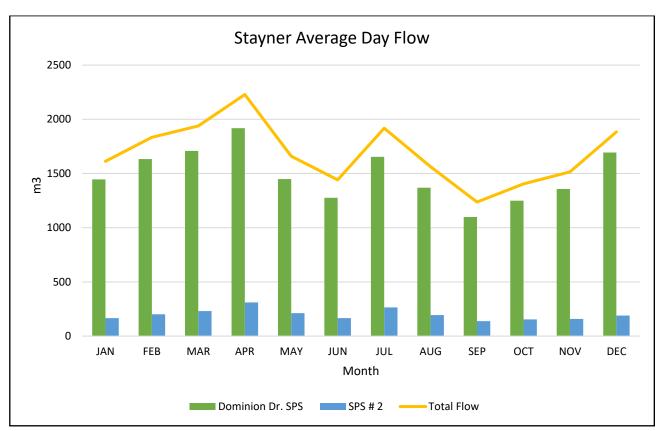


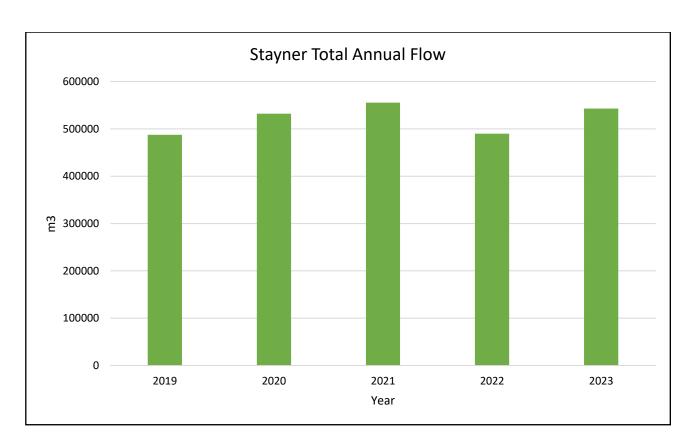
# **Monitoring Data**

	Dominion Dr. SPS			SPS # 2			Stayner Total Flow		
STAYNER	Total Flow m <sup>3</sup>	Average Day	Maximum Day Flow	Total Flow m <sup>3</sup>	Average Day	Maximum Day Flow	Total Flow m <sup>3</sup>	Average Day	Maximum Day Flow
		Flow m <sup>3</sup>	m <sup>3</sup>		Flow m <sup>3</sup>	m <sup>3</sup>		Flow m <sup>3</sup>	m <sup>3</sup>
JAN	<del>44</del> 832	1446	1959	5143	166	194	49975	1612	2146
FEB	45714	1633	2281	5631	201	279	51345	1834	2516
MAR	52954	1708	2456	7162	231	355	60116	1939	2811
APR	57533	1918	3037	9326	311	454	66859	2229	3443
MAY	44894	1448	1888	6569	212	307	51463	1660	2195
JUN	38286	1276	1890	4966	166	263	43252	1442	2136
JUL	51273	1654	3492	8186	264	567	59459	1918	4059
AUG	42445	1369	1712	6006	194	260	48451	1563	1971
SEP	32966	1099	1258	4138	138	163	37104	1237	1387
OCT	38732	1249	2213	4797	155	226	43529	1404	2423
NOV	40724	1357	1600	4735	158	191	45459	1515	1756
DEC	52526	1694	2391	5871	189	280	58397	1884	2668
Total/Yr.	542879	1488	3492	72530	199	567	615409	1686	4059



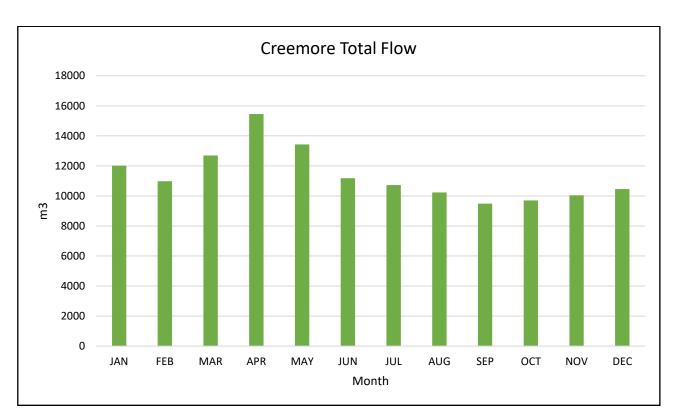




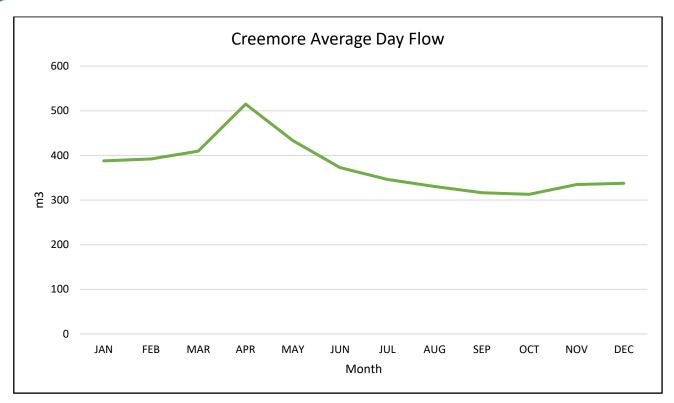


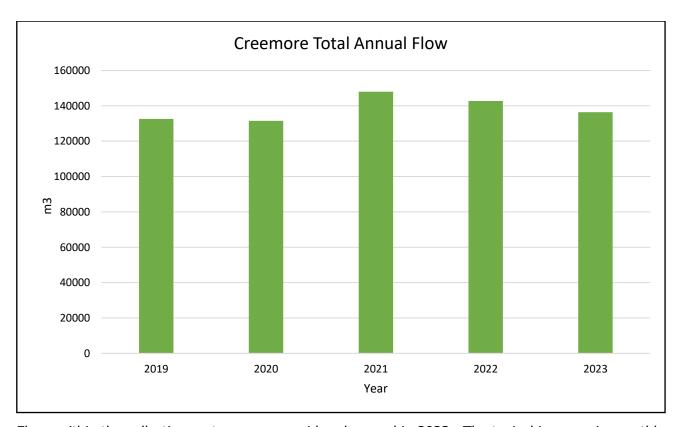


	Creemor	ore WWTP Influent			
CREEMORE	Total	Average	Maximum		
CREEMORE	Flow m <sup>3</sup>	Day	Day Flow		
	I low III	Flow m <sup>3</sup>	m <sup>3</sup>		
JAN	12016	388	487		
FEB	10979	392	456		
MAR	12698	410	611		
APR	15447	515	619		
MAY	13429	433	499		
JUN	11175	373	486		
JUL	10725	346	442		
AUG	10237	330	420		
SEP	9486	316	368		
OCT	9695	313	365		
NOV	10042	335	387		
DEC	10459	337	513		
Total/Yr.	136388	374	619		









Flows within the collection system were considered normal in 2023. The typical increase in monthly flows during the spring thaw and months with higher precipitation is noted in the flow monitoring data. Annual flows for both the Stayner and Creemore collection areas were in line with the 5-year



average annual flow totals. The collection system appears to be well equipped to handle the currently flow volumes. As more development occurs in Stayner, there will be an increase in the volume of flow directed to SPS # 2. At some point in the future, it will be necessary to begin utilizing the forcemains from this station to the Town of Wasaga Beach and sending them some of the collected wastewater for treatment.

# **Operating Problems Encountered and Corrective Actions**

In the spring of 2023, an inspection of the Creemore collection system was completed. The inspection revealed two significant sources of infiltration in manholes. Both manholes were repaired as soon as possible by an outside contractor.

Routine inspection of the standby generator at the Dominion Dr. pumping station revealed a problem with the control board, resulting in the generator not starting when called for. A temporary generator was hooked up to the pumping station from November 22, 2023 to February 7, 2024 while parts were being obtained to repair the permanent unit.

Also at the Dominion Dr. pumping station, the variable frequency drive (VFD) for Pump 2 stopped working and required replacement. The station operated on one pump from December 30, 2023 to January 4, 2024 until such time as the VFD could be replaced.

At SPS # 2, a problem with the standby generator ECM, meant that the unit would fault and not be able to be turned on without being manually reset due to a delayed alarm signal. The generator ECM was replaced, and the unit is now operating normally.

# **Calibration, Maintenance and Repairs**

#### **Collection System**

- All manholes (564) were inspected and flushed/cleaned.
- 9,840 m of sewer main was flushed.
- 9,840 m of sewer main was inspected with CCTV.
- MH-CR-0093 was repaired for infiltration at the connection point to the sewer main.
- MH-CR-0115 was repaired for infiltration between the joints of the manhole riser sections.
- Air Relief Valve, AR-ST-0009, on the forcemain between the Dominion Dr. SPS and Stayner WWTP was inspected and serviced.

#### **Dominion Dr. SPS**

- Weekly station inspections were completed.
- Monthly high-level alarm and standby generator testing were completed.



- Flow meter was calibrated.
- Level sensors were calibrated.
- Gas monitoring system inspected.
- Lifting equipment inspected.
- Wet well was cleaned.
- UPS was replaced.
- HMI screen was replaced.
- Standby generator control board required replacing (completed in 2024).
- Pump 2 VFD required replacing (completed in 2024).

#### **Sewage Pumping Station #2**

- Weekly station inspections were completed.
- Monthly high-level alarm and standby generator testing were completed.
- Flow meters were calibrated.
- Level sensors were calibrated.
- Gas monitoring system inspected.
- Lifting equipment inspected.
- Wet well inspected, cleaning was not required.
- Standby generator charger replaced.
- Standby generator ECM replaced.
- Unit heater exhaust pipes were brought to code and replaced.

# **Complaints**

Eight complaints were received from customers in 2023.

- Four were due to blockages in the lateral servicing the property and were promptly cleared by local plumbers.
- Two sewer laterals were broken/damaged during new watermain construction and caused backups into their respective homes. The laterals were repaired by the construction company.
- One complaint was received due to plumbing issues while sewer flushing was being conducted in the area.
- One complaint was for a sewage smell coming from drains within a home and determined to be an internal plumbing issue.



#### **Pre-Authorized Alterations**

#### Mary St., Creemore – Completed in 2023

An additional manhole was added to SM-CR-0077 to facilitate the servicing of 121 Mary St.

#### Phillips St., Stayner – Completed in 2023

Replacement of the gravity sewer between Sunnidale St. and Hwy 26.

#### Sunnidale St., Stayner – Authorized but not started in 2023

- Replacement and new construction of gravity sewers on Sunnidale St. between Phillips St. and Centreline Rd.
- New 200 mm forcemain from South East Stayner SPS to outlet manhole near 235 Sunnidale St.
- New 26.2 L/s South East Stayner SPS just off Sunnidale St. for the servicing of existing properties on Sunnidale St. and the Manortown Homes subdivision.

#### Manortown Homes Subdivision, Stayner – Authorized but not started in 2023

New gravity sewers to service the Manortown Homes subdivision.

#### **Alterations That Pose a Significant Drinking Water Threat**

Forcemain and gravity sewer on Sunnidale St. passes through WHPA-A for Stayner Wells 1 &
 3.

# Collection System Overflow(s) and Spill(s) of Sewage

There were no collection system overflows or spills of sewage in 2023.

# Efforts to Reduce Collection System Overflows, Spills, STP Overflows and STP Bypasses

As previously discussed in the Calibration, Maintenance and Repairs section, two areas of infiltration were identified and repaired. These repairs were effective in reducing the volume of water being directed to the Creemore WWTP.

The Clearview collection system is entirely made up of separate sewers dedicated to sanitary sewage collection. There are no combined sewers or partially separated sewers. Due to the type of system, its performance history, and the service population, no additional studies or assessments of the collection system are required to be performed under the ECA.