

**2023 Annual Performance Report for the
Orangeville Sewage Collection System
Environmental Compliance Approval 108-W601**

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Orangeville Sewage Collection System
Environmental Compliance Approval 108-W601**

Owned and Operated by the Town of Orangeville for the year 2023.

SECTION 1 – Introduction

The Town of Orangeville Municipal Sewage Collection System is owned and operated by The Corporation of the Town of Orangeville in accordance with Environmental Compliance Approval (ECA) No. 108-W601, issued February 28, 2023.

SECTION 2 – System Description

The Town of Orangeville Municipal Sewage Collection System consists of works for the collection and transmission of sewage. The system consists of trunk sewers, separate sewers, sewage pumping stations, and force mains, with discharge into Orangeville Water Pollution Control Plant.

Sewage Pumping Stations:

- Buena Vista SPS
 - 5 Buena Vista Dr., Orangeville, ON
- First Street SPS
 - 202 First St., Orangeville, ON
- Young Court SPS
 - 7 Young Court, Orangeville, ON
- Sandringham SPS
 - Across from 80 Sandringham Circle, Orangeville, ON

Sewer System:

Approximately 100km.

The following are certified operators who operated in this system during 2023 with current certified classification, certificate numbers, and certificate expiry dates:

Operator	Level	Certificate #	Expiry Date
Jeff Hardy	WWC 2	#14017	May 31/24
Dean Soilleux	WWC 1	#11357	Nov 30/24
Evan Kieffer	WWC 2	#117356	Mar 31/25
Brad Thompson	WWC 2	#118558	Jul 31/25
John den Hoed	WWC 4	#52560	Oct 31/25

SECTION 3 – Monitoring Data

The Town of Orangeville Sewage Pumping Stations are constantly monitored by SCADA. Twice a week or more, operators physically inspect the sewage pumping stations and record flow along with pump hours. This information can be found in Appendix A.

The Town of Orangeville retained GM BluePlan Engineering Ltd., in partnership with AMG Environmental, to conduct a one year Sanitary Flow Monitoring Program in 2023 to support the Town Inflow and Infiltration Study. This Program will also support the development and calibration of the Town’s sanitary hydraulic model, identify catchments with extraneous flows and provide the Town with a better understanding of their sanitary system.

Through this study, the Town conducted a twelve (12) month short-term flow monitoring program for ten (10) flow monitoring locations and four (4) rain gauge locations. The primary aim of the sanitary flow monitoring program was to collect data to build a foundation for ongoing Town initiatives and support the Town in creating a sanitary hydraulic model. To achieve this aim, the program had the following objectives:

- Site selection, inspection, and installation of ten (10) flow monitor locations and four (4) rain gauge locations at accessible and suitable locations.
- Development and implementation of a program and analysis methodology.
- Quarterly Quality Assurance and Quality Control (QA/QC), analysis and reporting of the flow monitoring and rain gauge data.
- Identification of critical rainfall events and associated levels of inflow and infiltration (I/I) and interpretation of the results.
- Use of dry and wet weather data and analysis results to support the sanitary hydraulic model calibration.
- Development of recommendations for appropriate remedial measures and/or next steps.

At this point the Town has not yet received the final report of the Inflow and Infiltration Study from GM BluePlan.

SECTION 4 – Operational Issues

There were no operational issues reported in 2023.

SECTION 5 – Maintenance and Calibrations

In 2023 the Buena Vista Sewage Pumping Station had a few upgrades that involved replacing like for like equipment. This equipment included an air release valve and a 4” ABB Watermaster flowmeter. Both pieces of equipment were on the 6” discharge forcemain. The flowmeter being replaced had ceased to function, and the air release valve was severely corroded. The replacement of the equipment was done by a third-party contractor, with the air release valve being replaced on January 30th, and the flowmeter on September 28th. Normal operations were able to continue during the replacement by discharging all flow from the Buena Vista Sewage Pumping Station through the 12” forcemain.

A variable frequency drive was also installed for the third raw sewage pump at the Buena Vista Pumping Station. Pump 3 was previously a constant speed standby pump. Now the pump operates on a rotating duty cycle with the other two raw sewage VFD pumps. The VFD was installed over the dates of August 1st-August 2nd by third-party contractors.

The Young Court Sewage Pumping Station had one repair for the year 2023. The discharge piping from one of the raw sewage pumps in the wet well had broken off. The PVC pipe was temporarily sealed, and normal operations were able to continue by using the second raw sewage pump to pump out the wet well. The discharge piping was replaced with a new section of PVC pipe and repaired by the Town of Orangeville operators on September 6th.

The Town of Orangeville contracts Foster Services for the clean-outs and inspections of its sewage pumping stations and collection system. The Sandringham Sewage Pumping Station and Young Court Sewage Pumping Station were both cleaned and inspected on February 21st. The Buena Vista Sewage Pumping Station was cleaned and inspected on August 24th. The First Street Sewage Pumping Station was not cleaned out in 2023. Based on weekly inspections, the pump station was observed to not accumulate many fats, oils, greases, or debris. Foster Services also flushed several sections of Town sewers and laterals on August 16th and August 21st.

SECTION 6 – Complaints

There were no complaints reported in 2023.

SECTION 7 – Alterations

In 2023, the Town of Orangeville began and completed reconstruction of Church Street. This included sanitary sewers, maintenance holes, and services.

SECTION 8 – Overflows and Spills

There were no overflows or spills reported in 2023.