

Annual Performance Report 2024

Napanee Wastewater Collection System
CLI-ECA Number: 157-W601

Town of Greater Napanee

Prepared: January 2025

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1. Introduction

Wastewater treatment and collection systems in Ontario are governed by the Ministry of the Environment, Conservation and Parks (MECP) and are also subject to federal legislation. The purpose of a wastewater treatment system is to remove solids and nutrients in order to minimize the impact of the effluent on the receiving waterbody. The wastewater collection system collects and conveys wastewater, thus protecting public health and the environment from contaminated water.

This report was prepared in accordance with the requirements of the Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) Number 157-W601, dated January 11th, 2023, for the Napanee Wastewater Collection System, Schedule E, Section 4.6. This assessment pertains to the reporting period from January 1, 2024, to December 31, 2024. This report must be forwarded to the MECP no later than March 31st for the preceding year.

1.1 Facility and Systems Overview

The Napanee Wastewater Collection System consists of works for the collection and transmission of sanitary sewage, consisting of trunk sewers, separate sewers, nominally separate sewers, sewage pumping stations, and forcemains, with discharge to the Napanee Water Pollution Control Plant. Following treatment, the effluent is discharged into the Napanee River.

The system includes seven sanitary sewage lift stations, including: Clarksville Sanitary Lift Station (SLS), County Road 2 SLS, County Road 41 SLS, Grange Crescent SLS, Jim Kimmett Boulevard SLS, Napier Street SLS, Victoria Street SLS. There is also one (1) leachate/sewage pumping station known as the Enviro Park Receiving Station located on Enviro Park Lane.

The Napanee Wastewater Collection System contains no known combined sewers.

The system is operated and maintained by the Town of Greater Napanee through the Growth and Infrastructure, Utilities team.

2. Monitoring Data and Environmental Trends

As per the CLI-ECA Schedule E, Section 4.6.3, a summary of all required monitoring data along with interpretation of the data and any conclusions drawn from the data about the need for

future modifications to the Authorized System or system operations, is required, if applicable. This section of the CLI-ECA reporting requirements does not apply.

3. Operating Problems Encountered and Corrective Actions Taken

Operating problems encountered and applicable corrective actions taken for 2024 are shown in Table 1.

Table 1: 2024 Operating Problems and Corrective Actions Taken

Location	Operating Problem	Corrective Action
Lift Stations	A few incidences of rags/debris impacting pumps at lift stations	A boom truck is readily available to lift pumps from dry/wet wells as needed, for access to remove the obstruction. Each sewage lift station has a duty and
		standby pump, and a spare is on hand for replacement as required.

4. Calibration, Maintenance, and Repairs

Monitoring and metering equipment is calibrated by a third party on a regular basis.

All sewage lift stations are monitored 24/7 by an alarm system which advises staff of any critical concerns including: pump failures, high levels, power failures, etc. All sewage pumping stations are also physically checked by Town of Greater Napanee Utilities staff at minimum, three days per week. All inspection data is kept in log sheets and is routinely uploaded to an electronic spreadsheet.

Preventative maintenance is scheduled for all equipment at the pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Maintenance activities are scheduled within the departments Work Order System, Antero.

Table 2 below outlines the maintenance and repairs that were completed in 2024.

Table 2: 2024 Calibration, Maintenance, and Repair Activities

Pump Station/Location	Maintenance, Calibration and Repair Activities
All Sewage Lift Stations	Scheduled inspections of sewage lift stations including
	amperage checks for pumps, run time, visual
	inspection of panel, alarm check on generators, test
	run of pumps, testing of level sensors/floats, visual
	inspection of wet well, grounds keeping, snow removal
	and other maintenance checks are completed at
	minimum, 3 days a week
Enviro Park Receiving Station	Scheduled inspection of leachate pumping station
	including amperage checks for pumps, run time, visual
	inspection of panel, alarm check on generator, test run
	of pumps, testing of level sensors/floats, visual
	inspection of wet well, grounds keeping, snow removal
	and other maintenance checks is completed a
All 0	minimum of once per week
All Sewage Lift Stations with a	Generators automatically run once per week for half
natural gas backup generator	an hour
All Sewage Lift Stations with a	Scheduled monthly internal generator testing
generator	
All Sewage Lift Stations with a	Scheduled annual third-party generator testing and
generator	generator maintenance
All Sewage Lift stations with a wet	Annual wet well pump/clean out
well	
Jim Kimmett Blvd SLS, Highway 41	Third-party Flow Meter Calibrations at sanitary
SLS, Napier St SLS, Victoria St SLS,	sewage lift stations, as applicable (Doppler Flow
and Enviro Park Receiving Station	Meters are unable to be calibrated)
County Road 8, Palace Rd,	Camera inspections
Yeomans St, Parks St, Catherine St,	·
Henry St, Blake St, Alkenbrack St	
County Road 8, Palace Rd,	Sanitary flushing
Yeomans St, Parks St, Catherine St,	
Henry St, Blake St, Alkenbrack St	
Isabella Street	Sanitary sewer breaks/blockages were identified and
Donald Street	repaired.
Union Street	
Hessford Street	

5. Complaints

A standard operating procedure (SOP) is in place for addressing complaints received from the community. Table 3. presents complaints received during 2024 that concerned the sanitary sewage collection system. There were four complaints related to odours from the sanitary sewer system, all of which were investigated.

Table 3: 2024 Collection System Complaints

Location	Nature of	Actions
	Complaint	
	Sewer back-up	On resident side
	Sewer back-up	On resident side
	Sewer odour	On resident side
	Sewer odour	Nothing identified, issue resolved
	Sewer odour	Staff investigated but found no back ups or
	Sewer odour	concerns
	Sewer backup	On resident side
	Sewer blockage	Staff investigated; a repair was necessary

6. Alterations to the Authorized System

There were no alterations to the Authorized System in 2024. The Town formally assumed West Bridge Estates Phase 7 (Cherrywood Parkway) in October 2024. This was already formally included in the CLI-ECA application. There were no alterations that pose a Significant Drinking Water Threat.

7. Collection System Overflows and Spills

The discharge of untreated sanitary sewage from the collection system can occur at any of the seven sewage lift stations and/or collection system manholes as the result of flooding events, power outages, pump failures, or sewer blockages. Measures are in place to prevent bypassing/spills which include: multiple (backup) pumps at all lift stations, spare pumps, high level alarms, backup power generation capability, and readily available vacuum truck service.

There were no collection system overflows or spill events that occurred during the reporting period.

8. Sanitary Sewage Collection System Improvement Efforts

The Town of Greater Napanee is undertaking initiatives to reduce sanitary collection system overflows, spills, and sewage treatment plant overflows and bypasses. These will ensure the sewage pump stations are operating as designed. The Town of Greater Napanee is expecting to receive significant funding by both the Provincial and Federal government, which will help fund the Napanee Water Pollution Control Plant Upgrades, which are expected to commence in 2025.

The key initiatives include:

- Continued scheduled sanitary sewer flushing and camera inspections. The specific areas are determined based on operational observations and annual operational budget.
- Continued routine inspections, maintenance/repairs/calibrations.
- Major WPCP Upgrade to commence in spring 2025, with a significant capacity increase.
- Sanitary sewer replacements as required and approved by Capital budgets.