Ontario

ENVIRONMENTAL COMPLIANCE APPROVAL
For a Municipal Sewage Collection System

ECA Number: 141-W601
Issue Number: 3

Pursuant to the *Environmental Protection Act*, R.S.O 1990, c. E. 19 (EPA*),* and the regulations made thereunder and subject to the limitations thereof, this environmental compliance approval is issued under section 20.3 of Part II.1 of the EPA to:

Kawartha Lakes, The Corporation of the City of

322 Kent St P.O. Box 9000
Lindsay, ON K9V 5R8

For the following Sewage Works:

City of Kawartha Lakes Wastewater Collection System

This Environmental Compliance Approval (ECA) includes the following:

Schedule	Description
Schedule A	System Information
Schedule B	Municipal Sewage Collection System Description
Schedule C	List of Notices of Amendment to this ECA: Additional Approved Works
Schedule D	General
Schedule E	Operating Conditions
Schedule F	Residue Management

All prior ECAs, or portions thereof, issued by the Director for Sewage Works described in section 1 of Schedule B are revoked and replaced by this Approval.

DATED at TORONTO this 2nd day of May, 2025

Signature

Aziz Ahmed, P.Eng.
Director, Part II.1, *Environmental Protection Act*

Schedule A: System Information

System Owner	**Kawartha Lakes, The Corporation of the City of**
ECA Number	**141-W601**
System Name	**City of Kawartha Lakes Wastewater Collection System**
ECA Issue Date	**May 2nd, 2025**

1.0 ECA Information and Mandatory Review Date

ECA Issue Date	May 2nd, 2025
Application for ECA Review Due Date	April 15, 2029

1.1 Pursuant to section 20.12 of the EPA, the Owner shall submit an application for review of the Approval no later than the Application for ECA Review Date indicated above.

2.0 Related Documents

2.1 STPs, Satellite Treatment Facilities, and Pumping Stations connected to the Authorized System that are not part of the Authorized System:

System/Facility Name	Wastewater System Number	Location	ECA Number	Issue Date
Bobcaygeon Water Pollution Control Plant	110002498	127 Boyd Street, Bobcaygeon, ON	3028-AEUKDQ	April 10, 2017
Coboconk Sewage Lagoons	120002353	6688 Highway 35, Coboconk, Kawartha Lakes, ON	9527-AHVRDY	March 17, 2017
Coboconk Sewage Pumping Station 4	120002353	6688 Highway 35, Coboconk, Kawartha Lakes, ON	9527-AHVRDY	March 17, 2017
Fenelon Falls Water Pollution Control Plant	110001612	216 Ellice Street S, Fenelon Falls, ON	3688-BW3RGB	Jan 15, 2021
King's Bay Environmental Centre	110003665	233 South crest Drive,	7037-A77JLP	Feb 16, 2016

		City of Kawartha Lakes, ON		
Lindsay Water Pollution Control Plant	110000383	48 Lagoon Road, Lindsay, ON	1696-BPLL4R	June 29, 2020
Lindsay Sewage Pumping Station - Lindsay St N Leachate	110000383	350 Lindsay St. N, Lindsay, ON	N/A	N/A
Lindsay Sewage Pumping Station - North Leachate	110000383	48 Lagoon St, Lindsay, ON	8668-92MTK7	December 19,2012
Lindsay Sewage Pumping Station - Middle Leachate	110000383	48 Lagoon St, Lindsay, ON	8668-92MTK7	December 19,2012
Lindsay Sewage Pumping Station - South Leachate	110000383	48 Lagoon St, Lindsay, ON	8668-92MTK7	December 19,2012
Omemee Sewage Lagoon	110001630	267 Beaver Rd, City of Kawartha Lakes, ON	2737-B4DH46	Sept 28, 2018

2.2 Other Documents

Document Title	Version
Design Criteria for Sanitary Sewers, Storm Sewers, and Forcemains for Alterations Authorized under Environmental Compliance Approval	v.2.0 (May 31, 2023)

3.0 Asset Management Plan

Document Title	Version
City of Kawartha Lakes Asset Management Plan	v.1 (May 2017)

4.0 Pollution Prevention and Control Plan (if applicable)

Document Title	Version
N/A	

5.0 Operating Authority

Wastewater Collection System or Operational Subsystems	Operating Authority
Linear/Horizontal Wastewater Infrastructure: Bobcaygeon Wastewater Collection System Coboconk Wastewater Collection System Fenelon Falls Wastewater Collection System King's Bay Wastewater Collection System Lindsay Wastewater Collection System Omemee Wastewater Collection System	City of Kawartha Lakes
Vertical Wastewater Infrastructure: Bobcaygeon Sewage Pumping Station 1 – Need St. Bobcaygeon Sewage Pumping Station 2 – Lance St. Bobcaygeon Sewage Pumping Station 3 – Bolton St. Bobcaygeon Sewage Pumping Station 4 – Main St. Bobcaygeon Sewage Pumping Station 5 – Front St. Bobcaygeon Sewage Pumping Station 6 – Anne St. Bobcaygeon Sewage Pumping Station 7 – 8 Navigators Trail Bobcaygeon Sewage Pumping Station 8 – 54 Navigators Trail Bobcaygeon Sewage Pumping Station 9 – Mill St. Bobcaygeon Sewage Pumping Station 10 – Little Bob Dr. Bobcaygeon Sewage Pumping Station 11 – Riverside Dr. Coboconk Sewage Pumping Station 1 – South Water St. Coboconk Sewage Pumping Station 2 – Water St. Coboconk Sewage Pumping Station 3 – Hwy 35 Fenelon Falls Sewage Pumping Station 1 – Ellice St. Fenelon Falls Sewage Pumping Station 2 – Colborne St. Fenelon Falls Sewage Pumping Station 3 – Francis St. E. Lindsay Sewage Pumping Station − Fairgrounds Lindsay Sewage Pumping Station – Wellington St. Lindsay Sewage Pumping Station – Rivera Park Lindsay Sewage Pumping Station − Jennings Creek Lindsay Sewage Pumping Station − Mary Street E. Lindsay Sewage Pumping Station – Logie St. Lindsay Sewage Pumping Station – Ridout St. Lindsay Sewage Pumping Station – Riverview Lindsay Sewage Pumping Station – Lindsay St. N. Lindsay Sewage Pumping Station – Hwy 7 Omemee Sewage Pumping Station 1 – Church St. Omemee Sewage Pumping Station 2 – Sturgeon Rd.	Ontario Clean Water Agency

Schedule B: Municipal Sewage Collection System Description

System Owner	**Kawartha Lakes, The Corporation of the City of**
ECA Number	**141-W601**
System Name	**City of Kawartha Lakes Wastewater System**
ECA Issue Date	**May 2nd, 2025**

1.0 System Description

1.1 The following is a summary description of the Sewage Works comprising the Municipal Sewage Collection System:

Overview

The City of Kawartha Lakes Wastewater Collection System consists of works for the collection and transmission of sewage for 6 subsystems located throughout the municipality. In total there is approximately 170 km of sanitary sewer piping and twenty-eight [28] sewage pumping stations. Wastewater collection flows will discharge to six [6] wastewater treatment facilities. Each wastewater subsystem description is included below

Wastewater Subsystems:

The Bobcaygeon Sewage Collection System consists of works for the collection and transmission of sewage, consisting of approximately 25 km in total linear length of gravity sewers discharging to one of eleven sewage pumping stations, eventually leading to Bobcaygeon Water Pollution Control Plant.

The Coboconk Sewage Collection System consists of works for the collection and transmission of sewage, consisting of 3.5 km of sanitary sewer piping, three sewage pumping stations that eventually discharges into the Coboconk Sewage Lagoons.

The Fenelon Falls Sewage Collection System consists of works for the collection and transmission of sewage, comprising of approximately 13.4 km in total linear length of gravity sewers discharging to three sewage pumping stations, eventually leading to the Fenelon Falls Water Pollution Control Plant.

The King's Bay Environmental Sewage Collection System consists of works for the collection and transmission of sewage, comprising of approximately 1.5 km of sanitary sewer piping that discharges to the King's Bay Environmental Centre.

The Lindsay Sewage Collection System consists of works for the collection and transmission of sanitary sewage, comprising of approximately 117 km in total linear length of gravity sewers and 9 sewage pumping stations that eventually discharge to the Lindsay Water Pollution Control Plant.

The Omemee Sewage Collection System consists of works for the collection and transmission of sewage, comprising approximately 8.2 km in total linear length of gravity sewers discharging to two sewage pumping stations, eventually leading to the Omemee Sewage Lagoon.

Sewage Collection System

1.2 The Authorized System comprises:

1.2.1 The Sewage Works described and depicted in each document or file identified in column 1 of Table B1.

Table B1: Infrastructure Map

Column 1 Document or File Name	Column 2 Date
Bobcaygenon_Sanitary_Sewer_System_Map_Sept_2021_1	September 2021
Coboconk_Sanitary_Sewer_Syetem_Map_Sept_2021_1	September 2021
Fenelon_Sanitary_Sewer_System_Map_Sept_2021_1	September 2021
KingsBay_Sanitary_Sewer_System_Map_Sept_2021_1	September 2021
Lindsay_Sanitary_Sewer_System_Map_Sept_2021_1	September 2021
Omemee_Sanitary_Sewer_System_TileMaps	September 29, 2021

1.2.2 Sewers, forcemains, pumping stations and other Sewage Works that have been added, modified, replaced, or extended through authorization provided in a Schedule C Notice respecting this Approval, where Completion occurs on or after the date identified in column 2 of Table B1 for each document or file identified in column 1.

1.2.3 Sewers, forcemains, pumping stations and other Sewage Works that have been added, modified, replaced, or extended through authorization provided in Schedule D of this Approval, where Completion occurs on or after the date identified in column 2 of Table B1 for each document or file identified in column 1.

1.2.4 Any Sewage Works described in conditions 1.3, through 1.7 below.

Sewage Pumping Stations

1.3 The following are Sewage pumping stations in the Authorized System:

Bobcaygeon Sewage Pumping Station 1

Asset ID and Name	Bobcaygeon Sewage Pumping Station 1 – Need St
Site Location	0 Need St, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.5387040, -78.541356
Coordinates (optional)	Not available
Description	Sewage pumping station with a 3.2 m x 3.4 m x 7.8 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with three (3) 20 hp submersible pumps (2 duty, 1 standby), each rated at 17.8 L/s. The station is connected to a 970 m long 200 mm diameter forcemain along Boyd Street complete with 3 check valves, 4 gate valves, 1 level sensor, and 1 level meter. Station discharges to the Bobcaygeon Water Pollution Control Plant Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	N/A
Standby Power	Standby power supplied by generator at Bobcaygeon WPCP.
Notes	N/A

Bobcaygeon Sewage Pumping Station 2

Asset ID and Name	Bobcaygeon Sewage Pumping Station 2 – Lance St
Site Location	0 Lance St, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.533150, -78.550940
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.4 m diameter 6.7 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 7.5 hp submersible pumps (one duty, one standby), each rated at 13.9 L/s. Station complete with 2 check valves, 3 gate valves, 1 level sensor, and 1 level meter. The station is connected to a 170 m 150 mm diameter forcemain along King Street, discharging to Manhole 135 to

	Bobcaygeon Sewage Pumping Station 1 – Need St and then to Bobcaygeon WPCP. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by a 45-kW diesel generator set with a 910L fuel tank.
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 3

Asset ID and Name	Bobcaygeon Sewage Pumping Station 3 – Bolton St
Site Location	11 Bolton St, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.53798, -78.54608
Coordinates (optional)	Not available
Description	Sewage pumping station with a 3.0 m diameter 6.6 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 10 hp submersible pumps (one duty, one standby), each rated at 6.7 L/s at 15.8 m TDH, 2 Check valves, 2 gate valves, and 1 level sensor. The station is connected to a 190 m long 100 mm diameter forcemain along Main Street, discharging to Manhole 187 and from there to Bobcaygeon Sewage Pumping Station 4 – Main St. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by generator at the Bobcaygeon Water Treatment Plant.
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 4

Asset ID and Name	Bobcaygeon Sewage Pumping Station 4 – Main St
Site Location	0 Main St, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.539842, -78.546735
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.1 m diameter 5.6 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 2.4 hp submersible pumps (one duty, one standby), each rated at 6.3 L/s, 2 check valves, 3 gate valves, 1 level sensor, and 1 level meter. Station connected to 100 mm diameter forcemain along Main Street that is 80 m long, discharging to Manhole 91 and from there to Bobcaygeon Sewage Pumping Station No. 6 and then to Bobcaygeon WPCP
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	200 mm diameter emergency overflow to the Big Bob River
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by generator at the Bobcaygeon Water Treatment Plant.
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 5

Asset ID and Name	Bobcaygeon Sewage Pumping Station 5 – Front St
Site Location	190 Front St W, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.536587, -78.555552
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.4 m diameter 7.5 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 3 hp submersible pumps (one standby, one standby), each rated at 13.9 L/s at 8.1 m TDH, 2 check valves, 2 gate valves, 1 level sensor, and 1 level meter. Station connected to 150 mm diameter forcemain that is 240 m in length, along Front Street, discharging to Manhole 100 and from there to Bobcaygeon Sewage Pumping Station 6 – Anne St and then to Bobcaygeon WPCP
Emergency Storage	Not applicable
Equipment: Associated	System controls and indicator alarms control by

controls and Appurtenances	communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	N/A
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Not applicable
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 6

Asset ID and Name	Bobcaygeon Sewage Pumping Station 6 – Anne St
Site Location	47 Anne St, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.542418, -78541170
Coordinates (optional)	Not available
Description	Sewage pumping station with a 4.0 m x 4.1 m x 7.5 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with three (3) 20 hp submersible pumps (two duty, one standby), each rated at 30.5 L/s, 3 check valves, 3 gate valves, 1 level sensor, and 1 level meter. Station connected to a 300 mm diameter forcemain along East Street 1160 m long, discharging to the Bobcaygeon WPCP. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by a 100-kW diesel generator with a 910L fuel tank
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 7

Asset ID and Name	Bobcaygeon Sewage Pumping Station 7 – 8 Navigators Trail
Site Location	8 Navigators Trail, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.539818, -78.535243
Coordinates (optional)	Not available

Description	Sewage pumping station with one 3.0 m diameter x 5.4 m SWD wet well style located across from #9 Navigators Trail (between #6 & #22)
Pumping Station Capacity	Not Available
Equipment	Equipped with three (3) 20 hp submersible pumps (two duty, one standby), each rated at 42.0 L/s, 2 check valves, 3 gate valves, 1 level sensor, and 1 level meter. Station connection to 250 mm diameter forcemain that is 140 m long along Navigators Trail, discharging to a 300 mm diameter forcemain on Boyd Street and there to the Bobcaygeon WPCP. Station also has a 100 mm diameter bypass connection to provide external pumping to forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by generator at Bobcaygeon WPCP
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 8

Asset ID and Name	Bobcaygeon Sewage Pumping Station 8 – 54 Navigators Trail
Site Location	54 Navigators Trail, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.540616, -78.530163
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.4 m diameter 4.0 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 5 hp submersible pumps (one duty, one standby), each rated at 18.9 L/s, 2 check valves, 3 gate valves, 1 level sensor, and 1 level meter. Station connected to 150 mm diameter forcemain that is 380 m long along Navigators Trail, discharging to a Manhole 35P1 to Bobcaygeon Sewage Pumping Station 7 – 8 Navigators Trail and then to Bobcaygeon WPCP. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station –	Not applicable

Collection System Overflow	
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by generator at Bobcaygeon WPCP
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 9

Asset ID and Name	Bobcaygeon Sewage Pumping Station 9 – Mill St
Site Location	0 Mill St, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.534405, -78.532662
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.4 m diameter 5.2 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 5 hp submersible pumps (one duty, one standby), each rated at 18.9 L/s, 2 check valves, 3 gate valves, 1 level sensor, and 1 level meter. Station connection to 150 mm diameter forcemain that is 360 m long along Mill Street, discharging to Manhole 42P2 and from there to Bobcaygeon Sewage Pumping Station 7 – 8 Navigator Trail. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by generator at Bobcaygeon WPCP
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 10

Asset ID and Name	Bobcaygeon Sewage Pumping Station 10 – Little Bob Dr
Site Location	39 Little Bob Drive, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.530977, -78.533202
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.0 m diameter 6.8 m SWD wet

	well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 5 hp submersible pumps (one duty, one standby) each rated at 15.0 L/s, 2 check valves, 2 plug valves, 3 gate valves, 1 level sensor, and 1 level meter. Station connected to 60 m long 150 mm diameter forcemain along Little Bob Drive, discharging to Manhole 441, to Bobcaygeon Sewage Pumping Station 1 – Need St and then to Bobcaygeon WPCP. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms control by communications system sent to Bobcaygeon WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by a 25 kW diesel generator set with a 910L fuel tank.
Notes	Not applicable

Bobcaygeon Sewage Pumping Station 11

Asset ID and Name	Bobcaygeon Sewage Pumping Station 11 – Riverside Dr
Site Location	179 Riverside Drive, Bobcaygeon, City of Kawartha Lakes, ON
Latitude and Longitude	44.546852, -78.534343
Coordinates (optional)	Not available
Description	Sewage pumping station with a 2.0 m diameter 7.2 m SWD wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) 5 hp submersible pumps (one standby), each rated at 14.1 L/s, 2 check valves, 2 plug valves, 2 gate valves, 1 level sensor, and 1 level meter. Station connected to 150 mm diameter forcemain that is 800 m long along Riverside Drive, discharging to Manhole 433 to Bobcaygeon Sewage Pumping Station 6 – Anne St and then to Bobcaygeon WPCP. Station also has a 100 mm diameter bypass connection to provide external pumping to the forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System relay controls and indicator alarms control by communications system sent to Bobcaygeon WPCP

Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supplied by the 100-kW diesel generator at Sewage Pumping Station No. 6
Notes	Not applicable

Coboconk Sewage Pumping Station 1

Asset ID and Name	Coboconk Sewage Pumping Station 1 – South Water St
Site Location	South Water Street, Coboconk, City of Kawartha Lakes, ON
Latitude and Longitude	44.656849, -78.797769
Coordinates (optional)	N/A
Description	Sewage Pumping Station 1 with 2.4 m diameter concrete wet well, located on S Water Street and approximately 80 m southwest of Queen St, beside 19 Water St.
Pumping Station Capacity	13.96 L/s (from design brief)
Equipment	2 Submersible pumps (1 duty, 1 standby), each rated at 8.19 L/s at a total dynamic head of 10.7 m. The station is connected to 260 m of 100 mm diameter forcemain complete with 2 gate valves, 2 check valves, level meter, level sensor, internal piping, and electrical system.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Coboconk Sewage Pumping Station 3 – Hwy 35
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supply provided by 125 kW diesel generator with 1135 L capacity fuel tank attached to SPS 3
Notes	Not applicable

Coboconk Sewage Pumping Station 2

Asset ID and Name	Coboconk Sewage Pumping Station 2 – Water St
Site Location	3 Water St., Coboconk, City of Kawartha Lakes, ON
Latitude and Longitude	44.658556, -78.797488
Coordinates (optional)	Not available
Description	Sewage pumping station 2 with 3 m diameter concrete wet

	well, located approximate 30 m southwest of Cameron Street.
Pumping Station Capacity	22.42L/s (from design brief)
Equipment	2 Submersible pumps (1 duty, 1 standby), each rated at 8.19 L/s at a total dynamic head of 10.7 m. The station is connected to 260 m of 100 mm diameter forcemain complete with 2 gate valves, 2 check valves, level meter, level sensor, internal piping, and electrical system.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Coboconk SPS 3
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supply provided by 125 kW diesel generator with 1135 L capacity fuel tank attached to Coboconk Sewage Pumping Station 3 – Hwy 35
Notes	Not applicable

Coboconk Sewage Pumping Station 3

Asset ID and Name	Coboconk Sewage Pumping Station 3 – Hwy 35
Site Location	Highway 35, Coboconk, City of Kawartha Lakes, ON
Latitude and Longitude	44.66058, -78.79922
Coordinates (optional)	Not available
Description	Sewage Pumping Station 3 with 3.6 m diameter concrete wet well, located on Main Street (Highway 35), approximately 75 m southeast of Grandy Road.
Pumping Station Capacity	Not Available
Equipment	2 Submersible pumps (1 duty, 1 standby), each rated at 19.5 L/s at a total dynamic head of 28.3 m. The station discharges to 1.1 km of 150 mm diameter forcemain complete with 2 gate valves, 2 check valves, 1 magnetic flow meter, 1 level meter, 1 level sensor, internal piping, and electrical system.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates to Coboconk Service Centre.
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Standby power supply provided by 125 kW diesel generator with 1135 L capacity fuel tank

Notes	Contains a continuous phosphorous removal system consisting of 2 metering pumps with a 22,600 L capacity chemical storage tank. Attached to the 150 mm diameter forcemain. Discharges to the lagoon.

Fenelon Falls Sewage Pumping Station 1

Asset ID and Name	Fenelon Falls Sewage Pumping Station 1 – Ellice St
Site Location	61 Ellice St, Fenelon Falls, City of Kawartha Lakes, ON
Latitude and Longitude	44.529968, -78.733943
Coordinates (optional)	Not available
Description	Sewage pumping station 1 with a 14.4 m3 wet well/drywell type located on the east side of Ellice Street between Juniper Street and Wychwood Crescent
Pumping Station Capacity	Not Available
Equipment	Contains three (3) variable speed pumps (two duty, one standby), each rated at 60 L/s at 21 m TDH; complete with 4 plug valves, 3 check valves, 1 level meter, level sensor, internal piping, and electrical system. The station is connected to 644 m long, 200 mm diameter forcemain along Ellice Street, eventually discharging to Fenelon Falls Water Pollution Control Plant.
Emergency Storage	Equipped with a 24 m x 6.25 m x 6.57 m depth wet weather flow detention tank with a 400 mm diameter inlet pipe connected to wet well and a 300 mm diameter outlet pipe connected to the existing pump suction.
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Fenelon Falls Water Pollution Control Plant
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	One (1) 75 kW diesel generator set with 935 L fuel tank
Notes	Not applicable

Fenelon Falls Sewage Pumping Station 2

Asset ID and Name	Fenelon Falls Sewage Pumping Station 2 – Colborne St
Site Location	1 Colborne St, Fenelon Falls, City of Kawartha Lakes, ON
Latitude and Longitude	44.535925, -78.736196
Coordinates (optional)	Not available
Description	Sewage pumping station with a 38.7 m3 wet well located on the extension of Oak Street, approximately 76 m east of

	Colborne St.
Pumping Station Capacity	Not Available
Equipment	Equipped with 2 Submersible pumps (1 duty, 1 standby), each rated at 50 L/s at a total dynamic head of 13 m, complete with 2 gate valves, 2 check valves, 1 magnetic flow meter, 1 level meter, 1 level sensor, internal piping, and electrical system. The station is connected to 278 m of 200 mm diameter forcemain along Colborne Street. Discharges to a sanitary manhole at the intersection of Lindsay Street and Helen Street.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Fenelon Falls Water Pollution Control Plant
Sewage Pumping Station – Collection System Overflow	200 mm diameter emergency overflow from the wet well to Fenelon River
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	One (1) 80 kW diesel generator set with fuel tank
Notes	Not applicable

Fenelon Falls Sewage Pumping Station 3

Asset ID and Name	Fenelon Falls Sewage Pumping Station 3 – Francis St E
Site Location	170 Francis St E, Fenelon Falls, City of Kawartha Lakes, ON
Latitude and Longitude	44.531371, -78.727577
Coordinates (optional)	Not available
Description	Sewage pumping station with an 18m^3 wet well on the south side of Francis Street, approximately 120 m west of Concession Street
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) submersible pumps (one duty, one standby), each rated at 6.2 L/s at 15.2 TDH, complete with 2 gate valves, 2 check valves, level meter, level sensor, internal piping, and electrical system. The station is connected to 566 m long 100 mm diameter forcemain along Francis Street and discharges to a manhole 40 m east of Clifton Street
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Fenelon Falls Water Pollution Control Plant
Sewage Pumping Station – Collection System Overflow	200 mm diameter emergency overflow from the wet well to Fenelon River
Receiving Stations (if applicable)	Not applicable

Odour Control Units	Not applicable
Standby Power	Provided by portable generator
Notes	Not applicable

Lindsay Sewage Pumping Station - Fairgrounds

Asset ID and Name	Lindsay Sewage Pumping Station - Fairgrounds
Site Location	The Lindsay Fairgrounds - 354 Angeline Street South, City of Kawartha Lakes, ON (located at northeast of the intersection of Highway No. 7 and Angeline Street)
Latitude and Longitude	44.32929, -78.73751
Coordinates (optional)	Not available
Description	Sewage pumping station with a 4.0 m square precast concrete wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) submersible pumps, each rated at 18 L/sec at 22 m TDH, 2 gate valves, 2 check valves, 1 flow meter, and connected to a 150 mm diameter sanitary forcemain on Angeline St S to MH1584 to MH 1512 then to gravity sewer.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	One (1) 60 kW diesel generator set with 488L fuel tank
Notes	Not applicable

Lindsay Sewage Pumping Station – Wellington St

Asset ID and Name	Lindsay Sewage Pumping Station – Wellington St
Site Location	0 Wellington St, Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.35785, -78.73705
Coordinates (optional)	Not available
Description	Sewage pumping station with wet well
Pumping Station Capacity	Not Available
Equipment	Equipped with two 2.4 Hp submersible pumps (1 duty and 1 standby), complete with 2 gate valves, 2 check valves, 1 level indicator and all necessary piping and electrical for operations.

	The SPS pumps into the forcemain on Wellington St, to the gravity sewer on Lindsay St N.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	Alarm level indicator sent to Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Not applicable
Notes	Not applicable

Lindsay Sewage Pumping Station – Rivera Park

Asset ID and Name	Lindsay Sewage Pumping Station – Rivera Park
Site Location	95 Lindsay St N., Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.36074, -78.73691
Coordinates (optional)	Not available
Description	Sewage pumping station with a 11 m x 1.65 m x 12 m deep wet well
Pumping Station Capacity	Firm rated pumping capacity is 637 l/s
Equipment	Concrete inlet manhole (2.4 m diameter, 11.5 m deep). Concrete wet well consisting of one (1) inlet/splitter chamber (11 m x 1.65 m x 12 m deep) and two (2) wet well pumping cells (5.2 m x 6.0 m x 14.5 m deep) with two (2) submersible pumps installed in each cell (3 duty & 1 standby) rated at a total pumping capacity of 701 L/s with associated process piping and valves. Control building (12 m x 12 m - single story) housing station control. The common discharge header splits the flow between two (2) forcemains through which sewage is pumped to the St. David Street sanitary trunksewer at Needham Street.
Emergency Storage	
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	375 mm pipe overflows to Scugog River
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Odour control system located in Control building
Standby Power	One (1) 600 kW diesel generator set with 2,270 L fuel tank
Notes	Not applicable

Lindsay Sewage Pumping Station – Jennings Creek

Asset ID and Name	Lindsay Sewage Pumping Station - Jennings Creek
Site Location	Part 7, Lot 22, Concession 4, City of Kawartha Lakes, ON (3124 Hwy 35, Lindsay, City of Kawartha Lakes, ON)
Latitude and Longitude	44.35962, -78.76754
Coordinates (optional)	Not available
Description	Sewage pumping station with a 3.9 m x 3.9 m wet well
Pumping Station Capacity	Designed for a peak flow of 275 L/s
Equipment	Equipped with three (3) submersible pumps, two for duty and one for standby, each pump pair has a rated capacity of 275 L/s at a total dynamic head of 46 m, complete with electrical and electronic control systems, ultrasonic level transmitters with back-up float switches, all connected to the control panel, discharge piping, ventilation system, valves, 450mm by-pass piping to the forcemain, a standby generator set, and all other appurtenances. The SPS pumps directly to the WPCP through the 450mm Northwest Trunk Forcemain
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	Not applicable
Sewage Pumping Station – Collection System Overflow	525 mm overflow pipe to drainage ditch then flows in Jennings Creek
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	One (1) 400 kW diesel generator set with 935L fuel tank
Notes	Not applicable

Lindsay Sewage Pumping Station – Mary St E

Asset ID and Name	Lindsay Sewage Pumping Station - Mary Street E
Site Location	33 Mary Street East, Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.34773, -78.72764
Coordinates (optional)	Not available
Description	Sewage pumping station located at 33 Mary Street East
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) submersible pumps (one duty, one standby), one rated at 28 L/s and one at 30 L/s, complete with 2 gate valves, 2 check valves, level meter, level sensor, 2 flow meters (one attached to each pumps effluent line) and internal piping. SPS pumps wastewater to 6” forcemain on George St.
Emergency Storage	Not applicable

Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Lindsay Water Treatment Plant.
Sewage Pumping Station – Collection System Overflow	250 mm pipe overflows to Scugog River
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	Provided by 650 kW diesel generator across the street at Lindsay Water Treatment Plant.
Notes	Not applicable

Lindsay Sewage Pumping Station – Logie St

Asset ID and Name	Lindsay Sewage Pumping Station – Logie St
Site Location	Lot 18, Concession 6, City of Kawartha Lakes, ON (0 George St. West, Lindsay, City of Kawartha Lakes, ON)
Latitude and Longitude	44.35070, -78.72361
Coordinates (optional)	Not available
Description	Sewage pumping station with inground concrete wet well, approximately 30 m west from Logie Street. SPS discharges through 525mm forcemain to MH2639 then gravity fed to MH 2638 and 200mm forcemain.
Pumping Station Capacity	Not Available
Equipment	Equipped with two (2) submersible pumps each rated with capacity of 30 L/s at a TDH of 6.7 m (one duty and one standby), liquid level float control system with 2 check valves, 2 gate valves, lockable access hatchway, two (2) goosenecked vents with bird screens, and benching
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	80 kW diesel generator on site with 417 L fuel tank
Notes	Not applicable

Lindsay Sewage Pumping Station – Ridout St

Asset ID and Name	Lindsay Sewage Pumping Station – Ridout St
Site Location	74 Ridout St., Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.35719, -78.72730

Coordinates (optional)	Not available
Description	Sewage pumping station with wet well
Pumping Station Capacity	Not Available
Equipment	Station equipped with 3 submersible pumps (two duty, 1 standby) with a rated capacity of 180 L/s at 29 m TDH, complete with 3 check valves, 6 gate valves, 1 flow meter and all necessary piping and electrical for operations. SPS discharges through 500mm forcemain to the St David St forcemain.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	One (1) 275 kW diesel generator set with 935L fuel tank
Notes	Not applicable

Lindsay Sewage Pumping Station - Riverview

Asset ID and Name	Lindsay Sewage Pumping Station – Riverview
Site Location	0 Barron Blvd. Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.37782, -78.73905
Coordinates (optional)	N/A
Description	Sewage pumping station with wet well
Pumping Station Capacity	Not Available
Equipment	Two (2) submersible pumps (one duty, 1 standby) with a rated capacity of 8.4 L/s at 13.6 TDH, complete with 2 check valves, 2 gate valves, and all necessary piping and electrical for operations. SPS discharges to forcemain until MH 1076 then gravity fed to WPCP.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	Level indicator alarm sent to Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	35 kW diesel generator on site with 448L fuel tank.
Notes	Not applicable

Lindsay Sewage Pumping Station – Lindsay St N

Asset ID and Name	Lindsay Sewage Pumping Station – Lindsay St N
Site Location	350 Lindsay St. N, Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.37582, -78.74449
Coordinates (optional)	Not available
Description	Sewage pumping station with wet well. Receives leachate from leachate collection system attached to Lindsay SPS 10 (Lindsay Street North – Leachate) from Lindsay Street North Landfill (closed).
Pumping Station Capacity	Not Available
Equipment	Equipped with three submersible pumps (2 duty and 1 standby) each rated for 345 L/s at 35 m TDH, complete with 3 check valves, 6 gate valves, and all necessary piping and electrical for operations. Discharges to existing forcemain with 400 mm forcemain. Connected through a 900 mm sanitary sewer connection from existing sewer on Lindsay Street.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarm relayed by communications system sent to Lindsay WPCP
Sewage Pumping Station – Collection System Overflow	600 mm overflow pipe to Scugog River
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	600 kW diesel generator on site with 2,270L fuel tank.
Notes	Not applicable

Lindsay Sewage Pumping Station – Hwy 7

Asset ID and Name	Lindsay Sewage Pumping Station – Hwy 7
Site Location	Highway 7, Lindsay, City of Kawartha Lakes, ON
Latitude and Longitude	44.332579, -78.723073
Coordinates (optional)	Not available
Description	Sewage pumping station with wet well
Pumping Station Capacity	Capacity of 43 L/s with two pumps in operation
Equipment	Equipped with two (2) submersible pumps (duty-standby configuration), each pump flow is 43 L/s, 2 check valves, 2 isolation plug valves, pressure transducer level sensor, backup float switches, and access platform to access the valves, level sensor, and flow meter. A 200 mm diameter force main with a minimum 1.8 m depth, will connect from this station to maintenance hole MH 331A.
Emergency Storage	Not applicable

Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Using gravity, the sewage flows from MH 331A to Logie St. SPS.
Odour Control Units	Not applicable
Standby Power	60kW generator on-site fueled by natural gas
Notes	Not applicable

Omemee Sewage Pumping Station 1

Asset ID and Name	Omemee Sewage Pumping Station 1 – Church St
Site Location	Sturgeon Rd and Church St, Lot 7, Concession 3 and Part 2, Village of Omemee, City of Kawartha Lakes, ON
Latitude and Longitude	44.300280, -78.556219
Coordinates (optional)	Not available
Description	Precast concrete wet well sewage pumping station
Pumping Station Capacity	Rated capacity of 64 L/s with two pumps running
Equipment	Equipped with two (2) submersible pumps (with the provision of future third pump), each pump rated at 45 l/s at 12.2 m TDH, complete with a safety platform, ultrasonic liquid level indicator, float controls, plug valves, check valves and a 75 mm diameter combination vacuum/air release valve, dual 200 mm diameter stainless steel vent pipes with gooseneck and insect screen, a valved flowmeter by-pass chamber located within the wet well. Station is connected to approximately 160 m of 250 mm diameter forcemain along Church Street.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC which communicates with Sturgeon Road SPS.
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	a 50-kW diesel engine generator on-site
Notes	Not applicable

Omemee Sewage Pumping Station 2

Asset ID and Name	Omemee Sewage Pumping Station 2 – Sturgeon Rd
Site Location	Sturgeon Rd and Church St, Lot 7, Concession 3 and Part 2 Village of Omemee, City of Kawartha Lakes, ON
Latitude and Longitude	44.297953, -78.559520
Coordinates (optional)	Not available

Description	Precast concrete wet well sewage pumping station
Pumping Station Capacity	Capacity of 122 L/s with two pumps in operation
Equipment	Equipped with two (2) submersible pumps (with the provision of future third pump), each pump rated at 88 L/s at 46 m TDH, complete with a safety platform, aluminum sulfate coagulation system, ultrasonic liquid level indicator, float controls, plug valves, check valves and a 75 mm diameter combination vacuum/air release valve, dual 200 mm diameter stainless steel vent pipes with gooseneck and insect screen and, a valved flowmeter by-pass chamber (located adjacent to the wet well). Station is connected to approximately 1955 m of 300 mm diameter forcemain along Sturgeon Road to the Omemee Sewage Lagoon.
Emergency Storage	Not applicable
Equipment: Associated controls and Appurtenances	System controls and indicator alarms controlled by local PLC.
Sewage Pumping Station – Collection System Overflow	Not applicable
Receiving Stations (if applicable)	Not applicable
Odour Control Units	Not applicable
Standby Power	350 kW diesel generator on site
Notes	Alum dosing system doses alum on sewage pump station effluent line through the use of 2 dosage pumps and chemical storage tank

[Combined Sewage Pumping Stations]

Asset ID and Name	N/A
Site Location	
Latitude and Longitude	
Coordinates (optional)	
Description	
Pumping Station Capacity	
Equipment	
Emergency Storage	
Equipment: Associated controls and Appurtenances	
Sewage Pumping Station – Collection System Overflow	
Receiving Stations (if applicable)	
Odor Control Units	

Standby Power	
Notes	

Real-Time Control

1.4 The following are identified Real-Time Control Systems in the Authorized System:

	Description
Process Equipment/System Elements	In-line instrumentation, process control systems and other analytical equipment
Flow Measurement Locations	Bobcaygeon Sewage Collection System: No flow measuring devices in Bobcaygeon Sanitary Sewer Collection system. Coboconk Sewage Collection System: Magnetic flow meter located on influent line at Coboconk Sewage Pumping Station 3 – Hwy 35 Fenelon Falls Sewage Collection System: Magnetic flow meter located at Fenelon Falls Sewage Pumping Station 1 - Ellice St wet well discharge line. Additional metering occurs at Fenelon Falls Water Pollution Control Plant. King's Bay Sewage Collection System: No flow measuring devices in the King's Bay Wastewater system. All flows in system recorded at King's Bay Environmental Centre. Lindsay Sewage Collection System: One (1) Magnetic flow meter located on discharge header at Lindsay Sewage Pumping Station – Fairgrounds One (1) Magnetic flow meter located on discharge header at Lindsay Sewage Pumping Station – Jennings Creek Two (2) Magnetic flow meters located on each pump discharge line at Lindsay Sewage Pumping Station – Mary St E One (1) Magnetic flow meter located on discharge header at Lindsay Sewage Pumping Station – Ridout

	One (1) Magnetic flow meter located on discharge header at Lindsay Sewage Pumping Station – Lindsay St N Additional metering occurs at Lindsay WPCP. Omemee Sewage Collection System: One (1) flow meter located at the Omemee Sewage Pumping Station 1 - Church St on wet well effluent line One (1) flow meter located at the Omemee Sewage Pumping Station 2 - Sturgeon Rd on wet well effluent line Additional metering locations at Omemee Sewage Lagoon.
Level Measurement Locations	One (1) level meter device and one (1) level sensor device inserted at every pumping stations wet well listed in Section 1.3
Other Instrumentation and Controls	System controls, associated valves and communications systems relaying information to centralized hubs within each wastewater subsystem.

Combined Sewage Structures

1.5 The following are regulators and combined Sewage storage structures in the Authorized System:

Table B2: Identified Combined Sewer Overflow Regulators			
Column 1 Asset ID/Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Regulator Capacity (m^3/s)	Column 4 Overflow Location (Latitude & Longitude)
N/A			

Table B3: Identified Combined Sewage Storage Tanks and Storage Structures			
Column 1 Asset ID/Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Regulator Capacity (m^3/s)	Column 4 Overflow Location (Latitude & Longitude)
N/A			

Collection System Overflow Points

1.6 The following are Collection System Overflow points in the Authorized System:

Table B4: Identified Combined Sewer Overflow Points including Pumping Stations			
Column 1 Asset ID / Name	Column 2 Regulator or Combined Sewer Storage Asset ID	Column 3 Overflow Location (Latitude & Longitude)	Column 4 Point of Entry to Receiver (Latitude and Longitude)
N/A			

Table B5: Identified Sanitary Sewer Overflow Points including Pumping Stations			
Column 1 Asset ID	Column 2 Asset Name	Column 3 Overflow Location (Latitude & Longitude)	Column 4 Point of Entry to Receiver (Latitude and Longitude)
N/A	Bobcaygeon Sewage Pumping Station 4 – Main St Overflow	44.53980, 78.54665	Big Bob River 44.53980, 78.54665
N/A	Fenelon Falls Sewage Pumping Station 2 – Colborne St Overflow	44.535925, -78.736196	Fenelon River 44.535925, -78.736196
N/A	Fenelon Falls Sewage Pumping Station 3- Francis St Overflow	44.32929, -78.73751	Fenelon River 44.531035 – 78.727748
N/A	Lindsay Sewage Pumping Station - Rivera Park Overflow	X44.36115, -78.73782	Scugog River N/A
N/A	Lindsay Sewage Pumping Station - Jennings Creek Overflow	44.35965, -78.76738	Jennings Creek 44.35965, -78.76738
N/A	Lindsay Sewage Pumping Station - Mary St E Overflow	44.34772, -78.72684	Scugog River N/A
N/A	Lindsay Sewage Pumping Station – Lindsay St N Overflow	44.37584, -78.74448	Scugog River 44.37584, -78.74448

Other Works:

1.7 The following works are part of Authorized System:

Table B6: Other Works			
Column 1 Asset ID / Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Component	Column 4 Description
N/A			

Schedule C: List of Notices of Amendment to this ECA: Additional Approved Sewage Works

System Owner	**Kawartha Lakes, The Corporation of the City of**
ECA Number	**141-W601**
System Name	**City of Kawartha Lakes Wastewater System**
ECA Issue Date	**May 2nd, 2025**

1.0 General

1.1 Table C1 provides a list of all notices of amendment to this Approval that have been issued pursuant to clause 20.3(1) of the EPA that impose terms and conditions in respect of the Authorized System after consideration of an application by the Director (Schedule C Notices).

Table C1: Schedule C Notices

Column 1 Issue #	Column 2 Issue Date	Column 3 Description	Column 4 Status	Column 5 DN#
N/A	N/A	N/A	N/A	N/A

Schedule D: General

System Owner	**Kawartha Lakes, The Corporation of the City of**
ECA Number	**141-W601**
System Name	**City of Kawartha Lakes Wastewater System**
ECA Issue Date	**May 2nd, 2025**

1.0 Definitions

1.1 For the purpose of this Approval, the following definitions apply:

"Adverse Effect(s)" has the same meaning as defined in section 1 of the EPA.

"Alteration(s)" includes the following, in respect of the Authorized System, but does not include repairs to the system:

a) An extension of the system,

b) A replacement or retirement of part of the system, or

c) A modification of, addition to, or enlargement of the system.

"Approval" means this Environmental Compliance Approval including any Schedules attached to it.

"Appurtenance(s)" has the same meaning as defined in O. Reg. 525/98 (Approval Exemptions) made under the OWRA.

"Authorized System" means the Sewage Works comprising the Municipal Sewage Collection System authorized under this Approval".

"Average Year" means the long term average of flow based on:

a) Simulation of at least twenty years of rainfall data;

b) A year in which the rainfall pattern (e.g., intensity, volume, and frequency) is consistent with the long-term mean of the area;

c) A year in which the runoff pattern resulting from the rainfall (e.g., rate, volume, and frequency) is consistent with the long-term mean of the area; or

d) Any combination of a), b) and c).

“Collection System Overflow(s)” means a discharge (SSO or CSO) to the environment at designed location(s) from the Authorized System.

“Combined Sewer(s)” means pipes that collect and transmit both sanitary Sewage and other Sewage from residential, commercial, institutional and industrial buildings, and facilities and Stormwater through a single-pipe system, but does not include Nominally Separate Sewers.

“Completion” means substantial performance as described in s.2 (1) of the *Construction Act*, R.S.O. 1990, c. C.30.

“Compound of Concern” means a Contaminant that is discharged from the Facility in an amount that is not negligible.

“Contaminant” has the same meaning as defined in section 1 of the EPA.

“CSO” means a combined sewer overflow which is a discharge to the environment at designated location(s) from a Combined Sewer or Partially Separated Sewer as per Table B4 that usually occurs as a result of precipitation when the capacity of the Sewer is exceeded. An intervening time of twelve hours or greater separating a CSO from the last prior CSO at the same location is considered to separate one overflow Event from another.

"CWA" means the *Clean Water Act*, R.S.O. 2006, c.22.

“Design Criteria” means the design criteria set out in the Ministry’s publication “Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains for Alterations Authorized under Environmental Compliance Approval”, (as amended from time to time).

“Design Guidelines for Sewage Works” means the Ministry document titled “Design Guidelines for Sewage Works”, 2008 (as amended from time to time).

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of EPA (Environmental Compliance Approvals).

“Director Notification Form” means the most recent version of the Ministry form titled Director Notification – Alterations to a Municipal Sewage Collection System, as obtained directly from the Ministry or from the Ministry’s website.

"District Manager" means the district manager or a designated representative of the Local Ministry Office.

“Dry Weather Flow(s)” means Sewage flow resulting from both sanitary Sewage, and infiltration and inflows from foundation drains or other drains occurring during periods with an absence of rainfall or snowmelt.

"EAA" means the *Environmental Assessment Act*, R.S.O. 1990, c. E.18.

"EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19.

"Emergency Situation" means a structural, mechanical, electrical failure, or operational health and safety incident, that causes a temporary reduction in the capacity, function, or performance of any part of the Authorized System or an unforeseen flow condition that may result in:

a) Danger to the health or safety of any person;

b) Injury or damage to any property, or serious risk of injury or damage to any property;

c) Adverse Effect to the Natural Environment; or

d) Spill.

“Equipment” means equipment or processes described in this Approval and any other equipment or process that supports the operation or maintenance of the Authorized System.

“ESC” means erosion and sediment control.

"Event(s)" means an action or occurrence, at any given location within the Authorized System that causes a Collection System Overflow. An Event ends when there is no recurrence of a CSO or SSO in the collection system at the same location in the 12-hour period following the last Collection System Overflow.

“Facility” means the entire operation located on the property where the Sewage Works or Equipment is located.

“Form A1” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Equipment Discharging a Contaminant of Concern to the Atmosphere from a Municipal Sewage Collection System, as obtained directly from the Ministry or from the Ministry’s website.

“Form CS1” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Combined Sewers/Partially Separated Sewers/Combined Sewage Storage Tanks and Storage Structures as obtained directly from the Ministry or from the Ministry’s website.

“Form SS1” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Separate Sewers/Nominally Separate Sewers/Forcemains, as obtained directly from the Ministry or from the Ministry’s website.

“Form SS2” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Components of the Municipal Sewage Collection System, as obtained directly from the Ministry or from the Ministry’s website.

“Hauled Sewage” has the same meaning as defined in section 1 of Regulation 347 (General – Waste Management) made under the EPA.

"Licensed Engineering Practitioner” means a person who holds a licence, limited licence, or temporary licence under the *Ontario Professional Engineers Act* R.S.O. 1990, c. P.28.

“Local Ministry Office” means the local office of the Ministry responsible for the geographic area where the Authorized System is located.

"Minister" means the Minister of the Ministry, or such other member of the Executive Council as may be assigned the administration of the EPA and OWRA under the *Executive Council Act*, R.S.O. 1990, c. E.25.

"Ministry" means the Ministry of the Minister and includes all employees or other persons acting on its behalf.

“Municipal Sewage Collection System” means all Sewage Works, located in the geographical area of a municipality that collect and transmit Sewage and are owned, or may be owned pursuant to an agreement with a municipality entered into under the *Planning Act* or *Development Charges Act*, 1997, by:

a) A municipality, a municipal service board established under the *Municipal Act*, 2001 or a city board established under the *City of Toronto Act*, 2006; or

b) A corporation established under sections 9, 10, and 11 of the *Municipal Act*, 2001 in accordance with section 203 of that Act or under sections 7 and 8 of the *City of Toronto Act*, 2006 in accordance with sections 148 and 154 of that Act.

“Natural Environment” has the same meaning as defined in section 1 of the EPA.

"Nominally Separate Sewer(s)" mean Separate Sewers that also have connections from roof leaders and foundation drains, and are not considered to be Combined Sewers.

“Operating Authority” means, in respect of the Authorized System, the person, entity, or assignee that is given responsibility by the Owner for the operation, management, maintenance or Alteration of the Authorized System or a portion of the Authorized System.

"Owner" for the purposes of this Approval means the [Municipality XYZ or Municipal Services Board XYZ], and includes its successors and assigns.

"OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40.

“O&M Manual” means the operation and maintenance manual prepared and maintained by the Owner under condition 3.2 in Schedule E of this Approval.

"Partially Separated Sewer(s)" means Combined Sewers that have been retrofitted to transmit sanitary Sewage but in which roof leaders or foundation drains still contribute Stormwater inflow to the Partially Separated Sewer.

“Peak Hourly Flow” means the largest volume of flow to be received during a one-hour period expressed as a volume per unit time. This is also referred to as maximum hourly flow or maximum hour flow.

“Point of Entry” has same meaning as in the Wastewater Systems Effluent Regulations (SOR/2012-139) under the *Fisheries Act*, R.S.C 1985, c. F-14.

“Pollution Prevention and Control Plan” or “PPCP” means a plan developed for Combined Sewers in the Authorized System to meet the goals of Procedure F-5-5.

"Prescribed Person” means a person prescribed in O. Reg. 208/19 (Environmental Compliance Approval in Respect of Sewage Works) for the purpose of ss. 20.6 (1) of the EPA, and where the alteration, extension, enlargement, or replacement is carried out under an agreement with the Owner.

"Procedure F-5-1" means the Ministry document titled “F-5-1 Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works” (as amended from time to time).

"Procedure F-5-5" means the Ministry document titled “F-5-5 Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer System” (as amended from time to time).

"Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983,

supplementing the Model Municipal Noise Control By-Law, Final Report, August 1978, (as amended from time to time).

"Publication NPC-300" means the Ministry publication NPC-300, "Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning" August 2013, (as amended from time to time).

"Pumping Station Capacity" means the design Peak Hourly Flow of Sewage which the Sewage pumping station is designed to handle.

"Real-time Control System" means the dynamic operation of the collection system, including Real-Time Physical Control Structures, by responding to continuous field monitoring to maintain and achieve performance and operational objectives, during dry and wet weather conditions.

"Real-time Physical Control Structure" means a structure (e.g., pumps, gates, and weirs) that reacts in real-time based on direction from the Real-Time Control System.

"Regulator Capacity" means the flowrate (m^3/s) at which Collection System Overflow begins.

"SAC" means the Ministry's Spills Action Centre.

"SCADA" means a supervisory control and data acquisition system used for process monitoring, control, automation, recording, and/or reporting within the Sewage system.

"Schedule C Notice(s)" means a notice(s) of amendment to this Approval issued pursuant to clause 20.3(1) of the EPA that imposes terms and conditions in respect of the Authorized System after consideration of an application by the Director.

"Separate Sewer(s)" means pipes that collect and transmit sanitary Sewage and other Sewage from residential, commercial, institutional, and industrial buildings.

"Sewage" has the same meaning as defined in section 1 of the OWRA.

"Sewage Works" has the same meaning as defined in section 1 of the OWRA.

"Sewer" has the same meaning as defined in section 1 of O. Reg. 525/98 under the OWRA.

"Significant Drinking Water Threat" has the same meaning as defined in section 2 of the CWA.

“Significant Snowmelt Event(s)” means the melting of snow at a rate which adversely affects the performance and function of the Authorized System and/or the STP(s) identified in Schedule A of this Approval.

“Significant Storm Event(s)” means a minimum of 25 mm of rain in any 24 hours period.

“Source Protection Authority” has the same meaning as defined in section 2 of the CWA.

"Source Protection Plan" means a drinking water source protection plan prepared under the CWA.

“Spill(s)” has the same meaning as defined in subsection 91(1) of the EPA.

“SSO” means a sanitary sewer overflow which is a discharge of Sewage from a Separate Sewer or Nominally Separate Sewer to the environment from designated location(s) in the Authorized System as per Table B5.

“Standard Operating Policy for Sewage Works” means the standard operating policy developed by the Ministry to assist in the implementation of Source Protection Plan policies related to Sewage Works and providing minimum design and operational standards and considerations to mitigate risks to sources of drinking water, as amended from time to time.

“Storm Sewer” means Sewers that collect and transmit, but not exfiltrate or lose by design, Stormwater resulting from precipitation and snowmelt.

“Stormwater” means rainwater runoff, water runoff from roofs, snowmelt, and surface runoff.

“Stormwater Management Facility(ies)” means a Facility for the treatment, retention, infiltration, or control of Stormwater.

“STP” means sewage treatment plant.

“STP Bypass(es)” means diversion of Sewage around one or more treatment processes, excluding preliminary treatment system, within the STP with the diverted Sewage flows being returned to the STP treatment train upstream of the final effluent sampling point(s) and discharged via the approved effluent disposal facilities.

“STP Overflow(s)” means a discharge to the environment from the STP at designed location(s) other than the approved effluent disposal facilities or via the effluent disposal facilities downstream of the final effluent sampling point.

“Uncommitted Reserve Hydraulic Capacity” means uncommitted reserve capacity as described in the Ministry document titled “D-5-1 Calculating and Reporting Uncommitted Reserve Capacity at Sewage and Water Treatment Plants” (as amended from time to time).

"Undertaking" has the same meaning as in the EAA.

“Vulnerable Area(s)” has the same meaning as in the CWA.

“Wet Weather Flow(s)” means the flow resulting from the combination of sanitary Sewage and extraneous flows resulting from the inflow and infiltration of groundwater, rainfall or snowmelt, and snow or ice melt that enters the Authorized System.

2.0 General Conditions

2.1 The works comprising the Authorized System shall be constructed, installed, used, operated, maintained, replaced, or retired in accordance with the conditions of this Approval, which includes the following Schedules:

Schedule A – System Information

Schedule B – Municipal Sewage Collection System Description

Schedule C – List of Notices of Amendment to this ECA

Schedule D – General

Schedule E – Operating Conditions

Schedule F – Residue Management

2.2 The issuance of this Approval does not negate the requirements of other regulatory bodies, which includes but is not limited to, the Ministry of Northern Development, Mines, Natural Resources and Forestry and the local Conservation Authority.

2.3 Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence. Where there is a conflict between the information in a Schedule C Notice and another section of this Approval, the document bearing the most recent date shall prevail.

2.4 The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Authorized System is provided with a print or electronic copy of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

2.5 The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such

condition to other circumstances and the remainder of this Approval shall not be affected thereby.

3.0 Alterations to the Municipal Sewage Collection System

3.1 Any Schedule C Notice shall provide authority to alter the Authorized System in accordance with the conditions of this Approval.

3.2 All Schedule C Notices issued by the Director for the Municipal Sewage Collection System shall form part of this Approval.

3.3 The Owner and a Prescribed Person shall ensure that the documentation required through conditions in this Approval and the documentation required in the Design Criteria are prepared for any Alteration of the Authorized System.

3.4 The Owner shall notify the Director within thirty (30) calendar days of the placing into service or Completion of any Alteration of the Authorized System which had been authorized:

3.4.1 Under Schedule D to this Approval where the Alteration results in a change to Sewage Works or Equipment specifically described in Schedule B of this Approval;

3.4.2 Through a Schedule C Notice respecting Sewage Works other than Sewers or forcemains; or

3.4.3 Through another approval that was issued under the EPA prior to the issue date of this Approval.

3.5 The notification requirements set out in condition 3.4 do not apply to any Alteration in respect of the Authorized System which:

3.5.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98;

3.5.2 Constitutes maintenance or repair of the Authorized System; or

3.5.3 Is a Sewer or forcemain authorized by condition 4.1 of Schedule D of this Approval.

3.6 The Owner shall notify the Director within ninety (90) calendar days of:

3.6.1 The discovery of existing Sewage Works not described or depicted in Schedule B, or

3.6.2 Additional or revised information becoming available for any Sewage Works or Equipment described in Schedule B of this Approval.

3.7 The notifications required in condition 3.4 and 3.6 shall be submitted to the Director using the Director Notification Form.

3.8 The Owner shall ensure that an ESC plan is prepared, and temporary ESC measures are installed in advance of and maintained during any construction activity on the Authorized System, subject to the following conditions:

3.8.1 Inspections of ESC measures are to be conducted at a frequency specified per the ESC plan, for dry weather periods (active and inactive construction phases), after Significant Storm Events and Significant Snowmelt Events, and after any extreme weather events.

3.8.2 Any deficiencies shall be addressed, and any required maintenance actions(s) shall be undertaken as soon as practicable once they have been identified.

3.8.3 Inspections and maintenance of the temporary ESC measures shall continue until they are no longer required.

3.8.4 The ESC plan, ESC measures and its installation, inspections and maintenance shall have regard to at least one of the following:

a) CSA W202 Erosion and Sediment Control Inspection and Monitoring Standard, as amended from time to time;

b) Erosion and Sediment Control Guideline for Urban Construction (2019), as amended from time to time, prepared by the Toronto Region Conservation Authority; or

c) CSA W208 Erosion and Sediment Control Installation and Maintenance, as amended from time to time.

3.9 The Owner shall ensure that records of inspections required by this Approval during any construction activity, including those required under condition 3.8:

3.9.1 Include the name of the inspector, date of inspection, visual observations, and the remedial measures, if any, undertaken to maintain the temporary ESC measures.

3.9.2 Be retained with records relating to the Alteration that the construction relates to, such as the form required in conditions 4.3.1, 5.4.1, 6.9.1, or 7.6.1 of Schedule D, or the Schedule C Notice.

3.9.3 Be retrievable and made available to the Ministry upon request.

3.10 The document(s) or file(s) referenced in Table B1 of Schedule B of this Approval shall:

3.10.1 Be retained by the Owner;

3.10.2 Include at a minimum:

a) Identification of the type of Sewers in the Municipal Sewage Collection System (e.g., Separate Sewer; Combined Sewer; Partially Separated Sewer; Nominally Separate Sewer) including:

i Location of Sewers relative to street names or easements;

ii Sewer and/or forcemain diameters;

iii Identification of pumping stations and storage structures, including asset IDs;

iv Identification of SSO and/or CSO locations, including asset IDs;

v Identification of small-bore systems, if any; and

vi Identification of any source protection Vulnerable Areas.

3.10.3 Be updated to include:

a) Alterations authorized under Schedule D of this Approval or through a Schedule C Notice within twelve (12) months of the Alteration being placed into service.

b) Updates to information contained in the document(s) or files(s) not associated with an Alteration within twelve (12) months of becoming aware of the updated information.

3.11 An Alteration is not authorized under Schedule D of this ECA for projects that impact Indigenous treaty rights or asserted rights where:

3.11.1 The project is on Crown land or would alter access to Crown land;

3.11.2 The project is in an open or forested area where hunting, trapping or plant gathering occur;

3.11.3 The project involves the clearing of forested land unless the clearing has been authorized by relevant municipal, provincial, or federal authorities, where applicable;

3.11.4 The project alters access to a water body;

3.11.5 The proponent is aware of any concerns from Indigenous communities about the proposed project and these concerns have not been resolved; or

3.11.6 Conditions respecting Indigenous consultation in relation to the project were placed in another permit or approval and have not been met.

3.12 No less than 60 days prior to construction associated with an Alteration the Director may notify the Owner in writing that a project is not authorized through Schedule D of this ECA where:

3.12.1 Concerns regarding treaty rights or asserted rights have been raised by one or more Indigenous communities that may be impacted by the Alteration; or

3.12.2 The Director believes that it is in the public interest due to site specific, system specific, or project specific considerations.

3.13 Where an Alteration is not authorized under condition 3.11 or 3.12 above:

3.13.1 An application respecting the Alteration shall be submitted to the Ministry; and,

3.13.2 The Alteration shall not proceed unless:

a) Approval for the Alteration is granted by the Ministry (i.e., a Schedule C Notice); or,

b) The Director provides written notice that the Alteration may proceed in accordance with conditions in Schedule D of this ECA.

4.0 Authorizations of Future Alterations for Separate Sewers, Nominally Separate Sewers and Forcemains - Additions, Modifications, Replacements and Extensions

4.1 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, replacing, or extending a Separate Sewer, Nominally Separate Sewer or forcemain within the Authorized System subject to the following conditions and condition 4.2 below:

4.1.1 The design of the addition, modification, replacement, or extension:

a) Has been prepared by a Licensed Engineering Practitioner;

b) Has been designed only to collect and transmit Sewage and has not been designed to treat Sewage;

c) Satisfies the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria;

d) Is consistent with or otherwise addresses the design objectives contained within the Design Guidelines for Sewage Works; and

e) Includes design considerations to protect sources of drinking water, including those set out in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies.

4.1.2 The addition, modification, replacement, or extension shall be designed so that it will:

a) Not cause overflows or backups nor increase surcharging at any maintenance holes or privately owned infrastructure (e.g., service connections to basements) connected to the Authorized System or any Municipal Sewage Collection System connected to it;

b) Provide smooth flow transition to existing gravity Sewers; and

c) Not increase the generation of sulfides and other odourous compounds in the Municipal Sewage Collection System.

4.1.3 The maximum discharge/generation of Sewage by users who will be served by the addition, modification, replacement, or extension will not result in:

a) An exceedance of the Authorized System hydraulic capacity, STP Uncommitted Reserve Hydraulic Capacity, or the downstream Pumping Station Capacity as specified in this Approval;

b) Adverse Effects;

c) Any increase in Collection System Overflows that is not offset by measures; or

d) Any increase in the frequency or volume of STP Bypasses or STP Overflows that is not offset by measures.

4.1.4 The addition, modification, replacement, or extension is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.

4.1.5 The Owner consents in writing to the addition, modification, replacement, or extension.

4.1.6 A Licensed Engineering Practitioner has verified in writing that the addition, modification, replacement, or extension meets the requirements of conditions 4.1.1 a) to d).

4.1.7 The Owner has verified in writing that the addition, modification, replacement, or extension has complied with inspection and testing requirements in the Design Criteria.

4.1.8 The Owner has verified in writing that the addition, modification, replacement, or extension meets the requirements of conditions 4.1.1 e) and 4.1.2 to 4.1.6.

4.2 The Owner or a Prescribed Person is not authorized to undertake an Alteration described above in condition 4.1 where the Alteration relates to the addition, modification, replacement or extension of a Separate Sewer, Nominally Separate Sewer, or forcemain that:

4.2.1 Passes under or through a body of surface water unless trenchless construction methods are used, or the local Conservation Authority has authorized an alternative construction method.

4.2.2 Has a nominal diameter greater than 750 mm for a Separate Sewer or Nominally Separate Sewer.

4.2.3 Has a nominal diameter greater than 350 mm for a forcemain.

4.2.4 Is a Combined Sewer or Partially Separated Sewer.

4.2.5 Connects to another Municipal Sewage Collection System, unless:

a) Prior to construction, the Owner of the Authorized System obtains written consent from the Owner or Owner’s delegate of the Municipal Sewage Collection System being connected to; and

b) The Owner of the Authorized System retains a copy of the written consent from the Owner or Owner’s delegate of the

Municipal Sewage Collection System being connected to as part of the record that is recorded and retained under condition 4.3.

4.2.6 Creates a new discharge point to the Natural Environment.

4.2.7 Is part of an Undertaking in respect of which:

a) A request under s.16(6) of the EAA has been made, namely a request that the Minister make an order under s.16;

b) The Minister has made an order under s.16; or

c) The Director under that EAA has given notice under s.16.1 (2) that the Minister is considering making an order under s.16.

4.3 The consents and verifications required in conditions 4.1 and 4.2, if applicable, shall be:

4.3.1 Recorded on Form SS1 prior to the Separate Sewer, Nominally Separate Sewer or forcemain addition, modification, replacement, or extension being placed into service; and

4.3.2 Retained for a period of at least ten (10) years by the Owner.

4.4 For greater certainty, the verification requirements set out in condition 4.3 do not apply to any Alteration in respect of the Authorized System which:

4.4.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or

4.4.2 Constitutes maintenance or repair of the Authorized System.

5.0 Authorizations of Future Alterations for Combined Sewers, Partially Separated Sewers and Combined Sewage Storage Tanks and Storage Structures

5.1 Subject to conditions 5.2 and 5.3, the Owner or a Prescribed Person may alter the Combined Sewers, Partially Separated Sewers and combined Sewage storage tanks and storage structures in the Authorized System by:

5.1.1 Modifying or replacing Combined Sewers, Partially Separated Sewers, overflow Regulators and/or outfalls if the purpose of the project is to restore the Sewage Works to good condition.

5.1.2 Replacing Combined Sewers with Separate Sewers for Stormwater and sanitary Sewage.

5.1.3 Modifying or replacing Combined Sewers, Partially Separated Sewers, overflow regulators, outfalls, or combined Sewage storage tanks, provided that:

a) The Alteration is designed in such a manner that will contribute to the ultimate attainment of the capture and treatment for an Average Year of all the Dry Weather Flow plus a minimum of 90% of the volume resulting from Wet Weather Flow that is above Dry Weather Flow;

b) The volume control criterion described in 5.1.3 a) is applied:

i For a consecutive seven (7) month period commencing within fifteen (15) calendar days of April 1; and

ii To the flows collected by the Authorized System immediately above each Collection System Overflow location unless it can be shown through modelling that the criterion is being achieved on a system-wide basis.

c) The Alteration is designed in a manner that will not increase CSO volumes above existing levels at each outfall except where the increase is due to the elimination of upstream CSO outfalls as part of the Alteration; and

d) During the remainder of the year following the seven (7) month period described in condition 5.1.3 b) above, at least the same storage and treatment capacity are maintained for treating Wet Weather Flow.

5.1.4 Adding oversized pipes provided they are designed to alleviate local / neighbourhood basement flooding and the Alteration satisfies condition 5.1.3 a), b), c), and d).

5.2 Any Alteration to the Authorized System authorized under condition 5.1 is subject to the following conditions:

5.2.1 The design of the Alteration shall:

a) Be prepared by a Licensed Engineering Practitioner;

b) Be designed only to collect and transmit Sewage and shall not be designed to treat Sewage;

c) Satisfy the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria;

d) Be consistent with or otherwise address the design objectives contained within the Design Guidelines for Sewage Works; and

e) Include design considerations to protect sources of drinking water, including those set out in the Standard Operating Policy for Sewage Works and any applicable local Source Protection Plan policies.

5.2.2 The design of the Alteration shall be:

a) Undertaken in accordance with a Pollution Prevention and Control Plan; or

b) If no Pollution Prevention and Control Plan is available, undertaken in accordance with an interim detailed plan for the local sewershed that:

i Describes the location, frequency, and volume of the CSOs, as well as the concentrations and mass pollutant loadings resulting from CSOs from the study area.

ii Includes the following minimum information:

1. Location and physical description of CSO outfalls in the Authorized System, Collection System Overflows at pumping stations in Emergency Situations, STP Bypass and STP overflows locations;
2. Location and identification of receiving water bodies, including sensitive receivers, for all Combined Sewer outfalls;
3. Authorized System flow and STP treatment component capacities, present and future expected peak flow rates during dry weather and wet weather;
4. Capacity of all regulators; and
5. Location of cross connections between Sewage and Stormwater infrastructure.

iii Is intended to reduce the overall CSO volume, frequency, duration, or by-pass of treatment in the Authorized and/or municipal STP; and

iv If there is a temporary Storm Sewer connection to a combined system as part of a Combined Sewer separation project, the construction plan includes a timeline to disconnect the Storm Sewer to a separated storm outlet.

5.2.3 The Alteration shall not result in:

a) An exceedance of hydraulic capacity of the Authorized System, STP Uncommitted Reserve Hydraulic Capacity, or the Pumping Station Capacity as specified in this Approval;

b) Adverse Effects;

c) Any increase in Collection System Overflows that is not offset by measures elsewhere in the Authorized System; or

d) Any increase in the frequency and/or volume of STP Bypasses or STP Overflows that is not offset by measures.

5.2.4 Where replacement of pipes to achieve Combined Sewer separation has been authorized under conditions 5.1.2 or 5.1.3, the following conditions apply:

a) Stormwater quantity, quality and water balance control shall be provided such that Combined Sewer separation shall not result in an overall increase in pollutants discharged to the Natural Environment;

b) Any new Storm Sewers that result from the Combined Sewer separation can be constructed but not operated until the proposed Stormwater Management Facilities designed to satisfy condition 5.2.4 a) are in operation; and

c) Where any temporary structures have been installed to facilitate Combined Sewer separation, the Owner shall ensure that immediately upon Completion of the Combined Sewer separation, the temporary structure connection shall be disconnected and decommissioned.

5.2.5 The Alteration shall:

a) Not cause overflows or backups nor increase surcharging at any maintenance holes or privately owned infrastructure (e.g., service connections to basements) connected to the Authorized System or any Municipal Sewage Collection System connected to it;

b) Provide smooth flow transition to existing gravity sewers; and

c) Not increase the generation of sulfides and other odourous compounds in the Authorized System.

5.2.6 The Alteration is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.

5.2.7 The Owner consents in writing to the Alteration authorized under condition 5.1.

5.2.8 A Licensed Engineering Practitioner has verified in writing that the Alteration authorized under condition 5.1 meets the design requirements of conditions 5.2.1 a) to d) and to 5.2.2.

5.2.9 The Owner has verified in writing that the Alteration authorized under condition 5.1 has complied with inspection and testing requirements in the Design Criteria.

5.2.10 The Owner has verified in writing that the Alteration authorized under condition 5.1 meets the requirements of conditions 5.2.1 e) and 5.2.3 to 5.2.8.

5.3 The authorization in condition 5.1 does not apply:

5.3.1 To the modification or replacement of a Combined Sewer or Partially Separated Sewer that has a nominal diameter greater than 750 mm.

5.3.2 To the modification or replacement of a Combined Sewer or Partially Separated Sewer that connects to another Municipal Sewage Collection System, unless:

a) Prior to construction, the Owner of the Authorized System seeking the connection obtains written consent from the Owner or Owner's delegate of the Municipal Sewage Collection System being connected to; and

b) The Owner of the Authorized System retains a copy of the written consent from the Owner or Owner's delegate of the Municipal Sewage Collection System being connected to as part of the record that is recorded and retained under condition 5.4.

5.3.3 Where the Alteration would create a new discharge point to the Natural Environment.

5.3.4 Where the Alteration would result in the addition of a new combined Sewage storage tank in the Authorized System.

5.4 The consents and verifications required in conditions 5.2.7 to 5.2.10, and 5.3.2 if applicable, shall be:

5.4.1 Recorded on Form CS1, prior to the Combined Sewer or Partially Separated Sewer modification or replacement being placed into service; and

5.4.2 Retained for a period of at least ten (10) years by the Owner.

5.5 For greater certainty, the verification requirements set out in condition 5.4 do not apply to any Alteration in respect of the Authorized System which:

5.5.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or,

5.5.2 Constitutes maintenance or repair of the Authorized System.

6.0 Authorizations of Future Alterations to Components of the Municipal Sewage Collection System

6.1 The Owner or a Prescribed Person may make the following Alterations to the Authorized System subject to conditions 6.4 through 6.7:

6.1.1 Adding, modifying, or replacing the following components of Sewage pumping stations, Separate Sewers, or Nominally Separate Sewers:

a) In-line and/or off-line storage to manage peak flow / inflow and infiltration that does not require pumping;

b) Off-line storage to manage peak flow / inflow and infiltration that only requires electricity to empty the structure;

c) Any associated Equipment for cleaning; and

d) All Appurtenances associated with in-line or off-line storage facilities, including odour, and corrosion control.

6.1.2 Modifying existing Sewage pumping stations and odour control units / Facilities, including adding, replacing, or modifying the following components:

a) Pumps, including replacement parts, in an existing pumping system;

b) Grinders and screens;

c) Aeration and/or mixing Equipment;

d) Chemicals and associated Equipment and tanks (including secondary containment);

e) Odour and corrosion control structures;

f) Instrumentation and controls;

g) Discharge and process piping;

h) Valves;

i) Wet-wells; and

j) Fat, oil, and grease separators (FOGs).

6.1.3 Adding new Sewage pumping stations, where they:

a) Are designed to transmit a Peak Hourly Flow of no greater than 30 L/s;

b) Include emergency stand-by power, Spill containment, and emergency alarms (SCADA, if applicable);

c) Include emergency storage designed to provide at minimum two (2) hours of response time at peak design flow;

d) Include odour and corrosion control, as applicable;

e) Would serve a new residential development (or new phased residential development), which may include existing residential development that has no Combined or Partially Separated Sewers;

f) Are designed to only collect sanitary Sewage and not Stormwater; and

g) Do not include an emergency sanitary overflow or piping to a municipal Stormwater management system or a natural receiver to prevent the discharge to the Natural Environment.

6.1.4 Adding, modifying, or replacing Equipment associated with Real-time Control Systems, where:

a) The Equipment is designed and implemented as part of the Owner's CSO reduction strategy or to optimize use of Sewage Works comprising the Authorized System;

b) The Real-Time Control System is designed and integrated with fail-safe procedures such that they are automatically activated when the requirements of the current mode of operation cannot be met;

c) Risk management procedures are in place or will be in place prior to use of the Real-time Control System; and

d) Station alarms to control center are in place or will be in place prior to use of the Real-time Control System.

6.1.5 Adding, modifying, replacing, or removing chemical storage tanks (including fuel storage tanks) with Spill containment and associated Equipment.

6.1.6 Adding, modifying, replacing, or removing Motor Control Centre (MCC) and/or associated electrical.

6.2 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, replacing, or removing the following components subject to conditions 6.4 through 6.7:

6.2.1 Valves and their associated controls installed for maintenance purposes;

6.2.2 Instrumentation for monitoring and controls, including SCADA systems, and hardware associated with these monitoring devices;

6.2.3 Spill containment works for chemicals used within the Authorized System;

6.2.4 Chemical metering pumps and chemical handling pumps;

6.2.5 Measuring and monitoring devices that are not required by regulation, by a condition in this Approval, or by a condition otherwise imposed by the Ministry;

6.2.6 Process piping within a Sewage pumping station, storage tank, or other structures; and

6.2.7 Valve chambers or maintenance holes.

6.3 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, or replacing the following components subject to conditions 6.4 through 6.7:

6.3.1 Measuring and monitoring devices that are required by regulation, by a condition in this Approval, or by a condition otherwise imposed by the Ministry.

6.4 The design of the Alteration shall:

6.4.1 Be prepared by a Licensed Engineering Practitioner, where the Alteration falls within the practice of professional engineering as defined in the *Professional Engineers Act*, R.S.O. 1990;

6.4.2 Be consistent with or otherwise address the design objectives contained within the Design Guidelines for Sewage Works; and

6.4.3 Include design considerations to protect sources of drinking water, such as those included in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies.

6.5 The Alteration shall:

6.5.1 Not cause overflows or backups nor increase surcharging at any maintenance holes or privately owned infrastructure (e.g., service connections to basements) connected to the Authorized System or any Municipal Sewage Collection System connected to it;

6.5.2 Provide smooth flow transition to existing gravity Sewers;

6.5.3 Not increase the generation of sulfides and other odourous compounds in the Authorized System; and

6.5.4 Be wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.

6.6 Any Alteration of the Authorized System made under conditions 6.1, 6.2, or 6.3 shall not result in:

6.6.1 Exceedance of hydraulic capacity (including Uncommitted Reserve Hydraulic Capacity, as applicable) of the downstream:

a) Municipal Sewage Collection System; or

b) Receiving STPs.

6.6.2 Exceedance of any downstream Pumping Station Capacity as specified in Schedule B of this Approval.

6.6.3 An increase in the capacity of an existing Pumping Station Capacity of greater than 30%.

6.6.4 Any increase in Collection System Overflows that is not offset by measures taken elsewhere in the Authorized System.

6.6.5 Any increase in the frequency and/or volume of STP Bypasses or STP Overflows that is not offset by measures.

6.6.6 Deterioration of the normal operation of municipal STPs and/or the Authorized System.

6.6.7 A negative impact on the ability to undertake monitoring necessary for the operation of the Authorized System.

6.6.8 Adverse Effects.

6.7 The Alteration is subject to the following conditions:

6.7.1 The Owner consents in writing to the Alteration.

6.7.2 The person responsible for the design has verified in writing that the Alteration meets the requirements of conditions 6.4.1 and 6.4.2, as applicable.

6.7.3 The Owner has verified in writing that the Alteration meets the requirements of conditions 6.4.3, 6.7.1, and 6.7.2.

6.8 The Owner shall verify in writing that any Alteration of the Authorized System in accordance with conditions 6.1 or 6.2 has met the requirements of the conditions listed in conditions 6.5 and 6.6.

6.9 The consents, verifications and documentation required in conditions 6.7 and 6.8 shall be:

6.9.1 Recorded on Form SS2 prior to undertaking the Alteration; and

6.9.2 Retained for a period of at least ten (10) years by the Owner.

6.10 For greater certainty, the verification requirements set out in condition 6.9 do not apply to any Alteration in respect of the Authorized System which:

6.10.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or

6.10.2 Constitutes maintenance or repair of the Authorized System, including changes to software for an existing SCADA system resulting from Alterations authorized in condition 6.2.

6.11 The Owner shall update, within twelve (12) months of the Alteration of the Sewage Works being placed into service, any drawings maintained for the Municipal Sewage Collection System to reflect the Alterations of the Sewage Works, where applicable.

7.0 Authorizations of Future Alterations to Equipment with Emissions to the Air

7.1 The Owner and a Prescribed Person may alter the Authorized System by adding, modifying, or replacing the following Equipment in the Municipal Sewage Collection System:

7.1.1 Venting for odour control using solid scavenging or carbon adsorption units;

7.1.2 Venting for odour control by replacing existing biolfiltration or wet air scrubbing systems, including any components, with Equipment of the same or better performance characteristics; and

7.1.3 Emergency generators that fire No. 2 fuel oil (diesel fuel) with a sulphur content of 0.5 per cent or less measured by weight, natural gas, propane, gasoline, or biofuel, and that are used for emergency duty only with periodic testing.

7.2 Any Alteration of the Municipal Sewage Collection System made under condition 7.1 that may discharge or alter the rate or manner of a discharge of a Compound of Concern to the atmosphere is subject to the following conditions:

7.2.1 The Owner shall, at all times, take all reasonable measures to minimize odorous emissions and odour impacts from all potential sources at the Facility.

7.2.2 The Owner shall ensure that the noise emissions from the Facility comply with the limits set out in Publication NPC-300.

7.2.3 The Owner shall ensure that the vibration emissions from the Facility comply with the limits set out in Publication NPC-207.

7.3 The Owner shall not add, modify, or replace Equipment in the Municipal Sewage Collection System as set out in condition 7.1 unless the Equipment performs an activity that is directly related to municipal Sewage collection and transmission.

7.4 The emergency generators identified in condition 7.1.3 shall not be used for non-emergency purposes (excluding generator testing) including the generation of electricity for sale or for peak shaving purposes.

7.5 The Owner shall verify in writing that any addition, modification, or replacement of Equipment in accordance with condition 7.1 has met the requirements of the conditions listed in conditions 7.2, 7.3, and 7.4.

7.6 The verifications and documentation required in condition 7.5 shall be:

7.6.1 Recorded on Form A1 prior to the additional, modified or replacement Equipment being placed into service; and

7.6.2 Retained for a period of at least ten (10) years by the Owner.

7.7 For greater certainty, the verification and documentation requirements set out in condition 7.5 and 7.6 do not apply to any addition, modification, or replacement in respect of the Authorized System which:

7.7.1 Is exempt from the requirements of the EPA, or for Equipment that is exempt from s.9 of the EPA under O. Reg. 524/98; or

7.7.2 Constitutes maintenance or repair of the Authorized System.

8.0 Previously Approved Sewage Works

8.1 If approval for an Alteration to the Authorized System was issued under the EPA and is revoked by this Approval, the Owner may make the Alteration in accordance with:

8.1.1 The terms of this Approval; or

8.1.2 The terms and conditions of the revoked approval that were applicable as of the date this approval was issued, provided that the Alteration is commenced within five (5) years of the date that the revoked approval was issued.

9.0 Transition

9.1 An Alteration of the Authorized System is exempt from the requirements in clause (c) of condition 4.1.1 and clause (c) of condition 5.2.1 where:

9.1.1 Effort to undertake the Alteration, such as tendering or commencement of construction of the Sewage Works associated with the Alteration, begins on or before April 15, 2026.

9.1.2 The design of the Alteration conforms to the Design Guidelines for Sewage Works;

9.1.3 The design of the Alteration was completed on or before the issue date of this Approval or a Class Environmental Assessment was

completed for the Alteration and changes to the design result in significant cost increase or significant project delays; and

9.1.4 The Alteration would be otherwise authorized under this Approval.

Schedule E: Operating Conditions

System Owner	**Kawartha Lakes, The Corporation of the City of**
ECA Number	**141-W601**
System Name	**City of Kawartha Lakes Wastewater System**
ECA Issue Date	**May 2nd, 2025**

1.0 General Operations

1.1 The Owner shall ensure that, at all times, the Sewage Works comprising the Authorized System and the related Equipment and Appurtenances used to achieve compliance with this Approval are properly operated and maintained.

1.2 Prescribed Persons and Operating Authorities shall ensure that, at all times, the Sewage Works under their care and control and the related Equipment and Appurtenances used to achieve compliance with this Approval are properly operated and maintained.

1.3 In conditions 1.1 and 1.2 “properly operated and maintained” includes effective performance, adequate funding, adequate operator staffing and training, including training in applicable procedures and other requirements of this Approval and the EPA, OWRA, CWA, and regulations, adequate laboratory services, process controls and alarms and the use of process chemicals and other substances used in the Authorized System.

2.0 Duties of Owners and Operating Authorities

2.1 The Owner, Prescribed Persons and any Operating Authority shall ensure the following:

2.1.1 At all times that the Sewage Works within the Authorized System are in service the Sewage Works are:

a) Operated in accordance with the requirements under the EPA and OWRA, and

b) Maintained in a state of good repair.

2.1.2 The Authorized System is operated by persons having the training or expertise for their operating functions that is required by O. Reg. 129/04 (Licensing of Sewage Works Operators) under the OWRA and this Approval.

2.1.3 All sampling, testing, monitoring, and reporting requirements under the EPA and this Approval that relate to the Authorized System are complied with.

2.1.4 Any person who is operating the Sewage Works within the Authorized System is supervised by an operator-in-charge as described in O. Reg. 129/04 under the OWRA.

2.2 For clarity, the requirements outlined in the above conditions 2.1.1 through 2.1.4 for Prescribed Persons and any Operating Authority only apply to Sewage Works within the Authorized System where they are responsible for the operation.

2.3 The Owner, Prescribed Persons and Operating Authority shall take all reasonable steps to minimize and ameliorate any Adverse Effect on the Natural Environment or impairment of the quality of water of any waters resulting from the operation of the Authorized System, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

3.0 Operations and Maintenance

3.1 Inspection

3.1.1 The Owner shall ensure that all Sewage Works within the Authorized System are inspected at the frequency and in accordance with procedures set out in their O&M Manual.

3.1.2 The Owner shall ensure that:

a) Any pumping stations, combined Sewage storage tanks, and any Collection System Overflow within the Authorized System as of the date of issuance of this Approval are inspected at least once per calendar year starting the year after the O&M Manual is required to be prepared and implemented as per condition 3.2.1 in Schedule E of this Approval, and more frequently if required by the O&M Manual; and

b) Any pumping stations, combined Sewage storage tanks, and any Collection System Overflow established or replaced within the Authorized System after the date of issuance of this Approval are inspected within one year of being placed into service and thereafter once per calendar year and more frequently if required by the O&M Manual.

3.1.3 The inspection of the combined Sewage storage tanks required in condition 3.1.2 shall include physical inspection at the Point of

Entry, including looking for signs of unplanned discharges from Wet Weather Flow and Dry Weather Flow.

3.1.4 The Owner shall clean and maintain Sewage Works within the Authorized System to ensure the Sewage Works perform as designed.

3.1.5 The Owner shall maintain records of the results of the inspections required in condition 3.1.1, 3.1.2, and 3.1.3, monitoring (if applicable) and any cleaning and maintenance operations undertaken, and shall make available the records for inspection by the Ministry upon request. The records shall include the following:

a) Asset ID and name of the Sewage Works;

b) Date and results of each inspection, maintenance, or cleaning; and

c) Name of person who conducted the inspection, maintenance, or the name of the inspecting official, where applicable.

3.2 Operations & Maintenance (O&M) Manual

3.2.1 The Owner shall prepare and implement an operations and maintenance manual for Sewage Works within the Authorized System on or before April 15, 2026, that includes or references, but is not necessarily limited to, the following information:

a) Procedures for the routine operation of the Sewage Works;

b) Inspection programs, including the frequency of inspection, and the methods or tests employed to detect when maintenance is necessary;

c) Maintenance and repair programs, including:

i The frequency of maintenance and repair for the Sewage Works.

ii Clean out requirements for any storage or overflow tanks, if applicable.

d) Operational and maintenance requirements to protect sources of drinking water, such as those included in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies;

e) Procedures for routine physical inspection and checks of controlling systems (e.g., SCADA) to ensure the mechanical integrity of Equipment and its accuracy on the controlling system.

f) Procedures for preventing odours and odour impacts;

g) Procedures for calibration of monitoring Equipment (e.g., flow, level, pressure);

h) Emergency Response, Spill Reporting and Contingency Plans and Procedures for dealing with Equipment breakdowns, potential Spills and any other abnormal situations, including notification to the SAC, the Medical Officer of Health, and the District Manager, as applicable;

i) Procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken; and

j) As-built drawings or record drawings of the Sewage Works.

3.2.2 The Owner shall review and update the O&M Manual and ensure that operating staff have access, as per O. Reg 129/04 (Licensing of Sewage Works Operators) under the OWRA. Upon request, the Owner shall make the O&M Manual available to Ministry staff.

3.2.3 The Owner shall revise the O&M Manual to include procedures necessary for the operation and maintenance of any Sewage Works within the Authorized System that are established, altered, extended, replaced, or enlarged after the date of issuance of this approval prior to placing into service those Sewage Works.

3.2.4 For greater certainty, the O&M Manual may be a single document or a collection of documents that, when considered together, apply to all parts of the Authorized System.

3.3 Collection System Overflows

3.3.1 Any CSO at a point listed in Table B4 of Schedule B is considered a Class 1 approved discharge type Spill under O.Reg.675/98:

a) Where the CSO is as a result of wet weather events when the designed capacity of the Authorized System is exceeded;

b) Where the CSO is a direct and unavoidable result of a planned repair and/or maintenance procedure, the Owner has notified the Local Ministry Office fifteen at least (15) calendar days

prior to the CSO and the Local Ministry Office has provided written consent of the CSO; or

c) Where the CSO is planned for research or training purposes, the Owner has notified the Local Ministry Office fifteen at least (15) calendar days prior to the CSO and the Local Ministry Office has provided written consent of the CSO.

3.3.2 Any SSO at a point listed in Table B5 of Schedule B is considered a Class 1 approved discharge type Spill under O.Reg. 675/98:

a) Where the SSO is a direct and unavoidable result of a planned repair or maintenance procedure and the Owner has notified the Local Ministry Office at least fifteen (15) calendar days prior to the SSO and the Director for the purposes of s.4 of O. Reg. 675/98 under the EPA has provided written consent of the SSO; or

b) Where the SSO is planned for research or training purposes, the Owner has notified the Local Ministry Office at least fifteen (15) calendar days prior to the SSO and the Director for the purposes of s.4 of O. Reg. 675/98 under the EPA has provided written consent of the SSO.

3.3.3 On or before April 15, 2028, the Owner shall establish signage to notify the public, at the nearest publicly accessible point(s) downstream of any CSO outfall location identified in Schedule B, Table B4, and any SSO when the overflow is piped to a specified outlet point. If the nearest publicly accessible point is more than 100m away, then signage shall be established at the CSO or SSO outfall location. The signage shall include the following minimum information:

a) Type of Collection System Overflow;

b) Identification of potential hazards and limitations of water use, as applicable;

c) ECA number and/or asset ID; and

d) The Owner’s contact information.

3.4 Monitoring

3.4.1 For a Collection System Overflow that occurs at a designated location, the following conditions apply:

a) For CSO storage tanks/facilities listed in Table B3, the Owner shall:

i On or before October 15, 2025 or within six (6) months of the date of the publication of the Ministry's monitoring guidance, whichever is later, collect a composite sample of the combined Sewage from the CSO tank whenever the tank(s) is(are) in operation. If there is more than one tank, the tank nearest to the discharge point shall be sampled. The composite sample shall consist, at a minimum, of one sample at the beginning of the Event, and one sample at approximately every 8-hours until the end of the Event. The composite sample shall be analyzed, at a minimum, for Biochemical Oxygen Demand (BOD) (or Chemical Oxygen Demand (COD) if agreed upon by the District Manager), total suspended solids, total phosphorus and total Kjeldahl nitrogen. If the CSO continues for more than one day, multiple composite samples are allowed.

ii If 3.4.1 a) ii) cannot be achieved, then surrogate sampling may be used to determine the contamination concentrations of the discharge CSO tank overflow, at a minimum, for BOD (or COD), total suspended solids, total phosphorus and total Kjeldahl nitrogen. The methodology in determining, applying, and analyzing surrogate sampling shall be proposed by the Owner and subject to the written approval of the District Manager.

b) For CSO regulator structures listed in Table B2, and for any CSO or SSO locations listed under Table B4 or Table B5, the Owner shall:

i On or before October 15, 2025, take at least one (1) grab sample, for BOD (or COD, if agreed upon by the District Manager), total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. Coli, or

ii On or before October 15, 2025 or within six (6) months of the date of publication of the Ministry's monitoring guidance, whichever is later, use surrogate sampling to determine the Contaminant concentrations of the discharged Collection System Overflow, at a minimum, for BOD (or COD), total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. Coli. The methodology in determining, applying, and analyzing

surrogate sampling shall be proposed by the Owner and subject to the written approval of the District Manager.

c) The Owner shall use the Event discharged volume and the concentrations as determined in condition 3.4.1 to calculate the loading to the Natural Environment for each parameter.

3.4.2 For any Spill of Sewage that does not meet 3.4.1 a) or b):

a) Where practicable, take at least one (1) grab sample, and analyzed for BOD (or COD, if agreed upon by the District Manager), total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. Coli

b) The Owner shall use the discharged volume, where possible, and the concentrations as determined in condition 3.4.2 a) to calculate the loading to the Natural Environment for each parameter.

3.4.3 If COD sampling was completed, the equivalent BOD values are required to be included with the data reported to the Ministry.

3.4.4 The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:

a) Procedure F-10-1, “Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)”, as amended from time to time.

b) The Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), as amended from time to time.

c) The publication "Standard Methods for the Examination of Water and Wastewater", as amended from time to time.

4.0 Reporting

4.1 The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

4.2 Collection System Overflows

4.2.1 If the Collection System Overflow meets the criteria listed in condition 3.3.1 or 3.3.2:

a) The Owner shall report the Event as a Class 1 approved discharge type Spill as soon as practicable to the Ministry either by a verbal to SAC or in an electronic format if the Ministry makes a system available;

b) The Owner shall report the Event to the local Medical Officer of Health in a manner agreed upon with the local Medical Officer of Health;

c) The manner of notification to the Ministry shall be in two (2) stages and include, at a minimum, the following information:

i The Asset ID, infrastructure description as detailed in Table B5 in Schedule B, the outfall location, and the Point of Entry (as applicable), and the reason(s) for the Event.

ii First stage of reporting:

a. The date and time (start) of the Event.

iii Second stage of reporting (as soon as practicable and may be reported at same time as first stage):

a. The date, duration, and time (start and end) of the Event;

b. The estimated or measured volume of the Event, accurate to at least +/- 20% of the volume;

i. If the volume of the Event is not readily available at the time of the second stage of reporting, the estimated volume can be provided to the Ministry within seven (7) calendar days of the second stage of reporting;

c. If any, summary of complaints, observed adverse impacts, any additional sampling obtained, disinfection, and any corrective measures taken;

d) Upon request of the local office, the Owner shall within fifteen (15) calendar days of the occurrence of any Collection System Overflow, the Owner shall submit a full written report of the occurrence to the District Manager describing the

cause and discovery of the Collection System Overflow, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation, or an alternate report as agreed to in writing by the District Manager.

4.3 Spills

4.3.1 If the Collection System Overflow does not meet the criteria listed in condition 3.3.1 or 3.3.2, or is otherwise considered a Spill of Sewage:

a) The Owner shall report the Spill to SAC pursuant to O.Reg.675/98 and Part X of the EPA;

b) The Owner shall report the Event to the local Medical Officer of Health in a manner agreed upon with the local Medical Officer of Health;

c) In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within fifteen (15) calendar days of the occurrence of any reportable Spill, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, actual/estimated volume of the Spill, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

4.4 If the Owner is unable to determine the volume of a Collection System Overflow for the purpose of reporting, the Owner shall develop procedures that enable estimated or measured volumes to be included in the required reporting for any Collection System Overflow occurring on or after April 15, 2026.

4.5 The Owner shall follow the direction of the Ministry and the local Medical Officer of Health regarding any Collection System Overflows.

4.6 The Owner shall prepare an annual performance report for the Authorized System that:

4.6.1 Is submitted to the Director on or before March 31st of each year and covers the period from January 1st to December 31st of the preceding calendar year.

a) For clarity, the first report shall cover the period of January 1st, 2023 to December 31st, 2023 and be submitted to the Director on or before March 31st, 2024.

b) For the transitional period of January 1, 2022 to December 31, 2022, annual reporting requirements from previous ECAs pertaining to Spills only, where these occurred in the reporting period, and that have been revoked through issuance of this ECA shall apply.

i For the transitional period, condition 4.7.2 does not apply.

4.6.2 Is also submitted to the District Manager where a Collection System Overflow or Spill of Sewage has occurred in the reporting period.

4.6.3 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.

4.6.4 Includes a summary of any operating problems encountered and corrective actions taken.

4.6.5 Includes 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.

4.6.6 Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.

4.6.7 Includes 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.

4.6.8 Includes a summary of all Collection System Overflow(s) and Spill(s) of Sewage, including:

a) Dates;

b) Volumes and durations;

c) If applicable, loadings for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E.coli;

d) Disinfection, if any; and

e) Any adverse impact(s) and any corrective actions, if applicable.

4.6.9 Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable:

a) 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.

b) Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timelines.

c) An assessment of the effectiveness of each action taken.

d) 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.

e) Public reporting approach including proactive efforts.

4.7 The report described in condition 4.6 shall be:

4.7.1 Made available, on request and without charge, to members of the public who are served by the Authorized System; and

4.7.2 Made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

5.0 Record Keeping

5.1 The Owner shall retain for a minimum of ten (10) years from the date of their creation:

5.1.1 All records, reports and information required by this Approval and related to or resulting Alterations to the Authorized System, and

5.1.2 All records, report and information related to the operation, maintenance and monitoring activities required by this Approval.

5.2 The Owner shall update, within twelve (12) months of any Alteration to the Authorized System being placed into service, any drawings maintained for

the Municipal Sewage Collection System to reflect the Alteration of the Sewage Works, where applicable.

6.0 Review of this Approval

6.1 No later than the date specified in Condition 1 of Schedule A of this Approval, the Owner shall submit to the Director an application to have the Approval reviewed. The application shall, at minimum:

6.1.1 Include an updated description of the Sewage Works within the Authorized System, including any Alterations to the Sewage Works that were made since the Approval was last issued; and

6.1.2 Be submitted in the manner specified by Director and include any other information requested by the Director.

7.0 Source Water Protection

7.1 The Owner shall ensure that any Alteration in the Authorized System is designed, constructed, and operated in such a way as to be protective of sources of drinking water in Vulnerable Areas as identified in the Source Protection Plan, if available.

7.2 The Owner shall prepare a “Significant Drinking Water Threat Assessment Report for Proposed Alterations” for the Authorized System on or before April 15, 2026 that includes, but is not necessarily limited to:

7.2.1 An outline of the circumstances under which the proposed Alterations could pose a Significant Drinking Water Threat based on the Director’s Technical Rules established under the CWA.

7.2.2 An outline of how the Owner assesses the proposed Alterations to identify drinking water threats under the CWA.

7.2.3 For any proposed Alteration a list of components, Equipment, or Sewage Works that are being altered and have been identified as a Significant Drinking Water Threat.

7.2.4 A summary of design considerations and other measures that have been put into place to mitigate risks resulting from construction or operation of the components, Equipment or Sewage Works identified in condition 7.2.3, such as those included in the Standard Operating Policy for Sewage Works.

7.3 The Owner shall make any necessary updates to the report required in condition 7.2 at least once every twelve (12) months.

7.4 Any components, Equipment or Sewage Works added to the report required in condition 7.2 shall be included in the report for the operational life of the Sewage Works.

7.5 Upon request, the Owner shall make a copy of the report required in condition 7.2 available to the Ministry or Source Protection Authority staff.

8.0 Additional Studies

Assessment of Wet Weather Flows Compared to Dry Weather Flows

8.1 This condition and the following requirements apply where:

a) The Authorized System has no Combined Sewers or Partially Separated Sewers; and

b) There has been one or more of: an STP Overflow, STP Bypass, or Collection System Overflow within the ten (10) year period starting January 1, 2012 and ending December 31, 2021.

The following requirements do not apply if:

a) The Collection System Overflow is a result of emergency overflows at pumping stations during power outage or Equipment failure; and

b) There has been no STP Overflow or STP Bypass.

8.1.1 The Owner shall conduct an assessment of Wet Weather Flows compared to the Dry Weather Flows in the Authorized System and/or to the STP(s) described in Schedule A, as per the following conditions:

a) The assessment shall evaluate available data from the ten (10) year period starting January 1, 2012 and ending December 31, 2021.

b) The assessment shall be completed and submitted to the Director by October 15, 2026.

c) In the event that Wet Weather Flows in the ten (10) year period described above have created STP Bypasses or STP Overflows at the STP(s) specified in Schedule A or Collection System Overflows in an Average Year, then the study shall include:

i Actions and timelines to meeting the Procedure F-5-1 objectives;

ii Review of causes of STP Overflow, STP Bypass and/or Collection System Overflow Events, including inflow and infiltration, sewer use, and characteristics of rainfall events, as applicable;

iii Inspection of the Sewers and bypass structures; and

iv Identification of any near and/or long-term corrective actions with anticipated timelines.

Assessment of Conformance to Procedure F-5-1 and F-5-5

8.2 This condition and the following requirements apply where:

a) The Authorized System includes Combined Sewers or Partially Separated Sewers, and

b) The Authorized System experienced a Collection System Overflow, an STP Bypass, or STP Overflow within the ten (10) year period starting January 1, 2012 and ending December 31, 2021.

8.2.1 The Owner shall conduct an assessment to demonstrate conformance of the Authorized System to Procedure F-5-1 or Procedure F-5-5, as applicable, in accordance with the following conditions:

a) The assessment shall:

i Be prepared by a Licensed Engineering Practitioner and be submitted to the Director by October 15, 2026;

ii Be performed for each of the years 2012 through to 2021;

iii Include the number of Collection System Overflows as a result of storms that are not Significant Storm Events for each year;

iv Include the estimated length of Combined Sewers and Separate Sewers within the collection system;

v Include the date of the most recent PPCP;

vi Include the status of each action items specified in the PPCP, as applicable;

vii Include a summary of additional action items not specified in a PPCP which have been taken to prevent

Collection System Overflows in the ten (10) year period starting January 1, 2012 and ending December 31, 2021; and

viii Identify timelines for achieving conformance to Procedure F-5-1 or Procedure F-5-5 objectives, as applicable.

8.2.2 The Owner shall submit a new or updated PPCP to the Director, no later than April 15, 2030, if:

a) No PPCP exists for the Authorized System, or

b) The PPCP for the Authorized System is older than ten (10) years as of May 2nd, 2025.

8.2.3 The PPCP shall include, at minimum:

a) Characterization of the Combined Sewer System (CSS) – Monitoring, modeling and other appropriate means shall be used to characterize the CSS and the response of the CSS to precipitation events. The characterization shall be based on the ten (10) year period starting January 1, 2012 and ending December 31, 2021 and include the determination of the location, frequency and volume of the CSOs, concentrations and mass pollutants resulting from CSOs, and identification and severity of suspected CSS deficiencies. Records shall be kept for CCS including the following:

i Location and physical description of CSO and SSO outfalls in the collection systems, emergency overflows at pumping stations, and bypass locations at STPs;

ii Location and identification of receiving water bodies, including sensitive receivers, for all Combined Sewer outfalls;

iii Combined Sewer system flow and STP treatment capacities, present and future (20-year timeframe) expected peak flow rates during dry weather and wet weather;

iv Capacity of all regulators;

v Location of cross connections between sanitary Sewage and Stormwater infrastructure; and

vi Location and identification of infrastructure in the CSS where monitoring Equipment is installed.

b) Operational procedures shall be developed including the following:

i Combined Sewer maintenance program; and

ii Regulator inspection and maintenance programs.

c) An examination of non-structural and structural CSO control alternatives that may include:

i Source control;

ii Inflow/Infiltration reduction;

iii Operation and maintenance improvements;

iv Control structure improvements;

v Collection system improvements;

vi Storage technologies;

vii Treatment technologies; and

viii Sewer separation.

d) An implementation plan with a schedule of all practical measures to eliminate dry weather overflows and minimize wet weather overflows, as well as an overflow percent reduction target.

i The implementation plan shall show how the minimum CSO prevention and control requirements and other criteria in Procedure F-5-5 are being achieved.

8.2.4 The Owner shall ensure that an updated PPCP for the Authorized System is prepared within ten (10) years of the date that the previous PPCP was finalized.

Sewer Model

8.3 The Owner shall prepare a new/updated Sewer model, within three (3) years of May 2nd, 2025, if any of the following pertain to the Authorized System:

8.3.1 It includes Combined Sewers;

8.3.2 It services a population greater than 10,000; or

8.3.3 The Sewer model for the Authorized System was last updated prior to 2012 and 8.3.1 or 8.3.2 apply.

Schedule F: Residue Management

System Owner	**Kawartha Lakes, The Corporation of the City of**
ECA Number	**141-W601**
System Name	**City of Kawartha Lakes Wastewater System**
ECA Issue Date	**May 2nd, 2025**

1.0 Residue Management System

1.1 Not Applicable: