

Sanitary Collection System Annual Performance Report

CLI- ECA 225-W601 Issued January 21, 2025

January 1, 2023 – December 31, 2024

Prepared by the Ontario Clean Water Agency For the Municipality of Greenstone Patti O'Handley, Senior Operations Manager David Hoffman, Process & Compliance Technician





SECTION 1: INTRODUCTION

The Ontario Clean Water Agency (OCWA) acts as the operating authority for the wastewater treatment systems within the Municipality of Greenstone. This document is prepared by OCWA in accordance with Environmental Compliance Approval (ECA) 225-W601. The report is required to include the following information:

- A summary of all required monitoring data including 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;
- (ii) A summary of any operating problems encountered and corrective actions taken;
- (iii) 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;
- (iv) A summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints;
- Include a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alternations that pose a Significant Drinking Water Threat;
- (vi) A summary of all Collection System Overflow(s) and Spill(s) of sewage, including dates; volume and durations; if applicable, loading for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E>coli; disinfection, if any; and Any adverse impact(s) and any corrective actions, if applicable.
- (vii) A summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable: Description of projects undertaken and completed that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted; Details of the establishment and maintenance of a PPCP, including a summary of the project progresses compared to the PPCP's timelines; an assessment of the effectiveness of each action taken; An assessment of the ability to meet Procedure F-5-1 to Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives; Public reporting approach including proactive efforts;



SECTION 2: System Description

The Greenstone sewage collection system is comprised of five settlement areas, or wards, within the Municipality of Greenstone: Beardmore, Caramat, Geraldton, Longlac and Nakina. The collection system services residential lands, open space, commercial, light industrial and institutional properties. Wastewater is collected and conveyed by gravity sewers to sewage

pumping stations which convey wastewater via forcemains to the wastewater treatment facility in each ward.

Collection system details for each ward are provided in Table 3.1.

Table 3.1:Greenstone Sewage Collection System Characteristics – By Ward

Storm Common on to		System				
Storm Components	Beardmore	Caramat	Geraldton	Longlac	Nakina	Total
Sanitary sewers (km): size unknown			0.43	0.13		0.56
Sanitary sewers (km): <250mm	4.84	2.10	14.60	10.62	6.64	38.80
Sanitary sewers (km): >250- 500mm	0.07		3.18	2.71	0.65	6.60
Sanitary sewers (km): >500- 1050mm				0.32		0.32
Total system length (km):	4.90	2.10	18.20	13.79	7.29	46.29
Maintenance holes (#):	61	24	277	197	92	651
Pumping Stations (#):	1	3	2	8	3	17
Sanitary sewer overflow points (#):	1	1	1	5	1	9

SECTION 3: Monitoring Data

The Municipality was not required to collect monitoring data during the reporting period.



SECTION 4: Operations

- a) The only operational issues during the reporting period were bypasses, which are reported in Section 7.
- b) Calibrations, Inspections, Maintenance and Repairs

The Operating Authority (OCWA) follows a maintenance plan as set out by their Workplace Management System (WMS) for all pumping stations. CCTV work is completed as needed, along with visual inspections. Manholes are inspected by the Public Works and OCWA as needed.

Please refer to **Appendix A** for the **Inspection Activities** completed during the reporting period. Only 1 lift station has a flow meter; calibration reports for the reporting period are also attached in **Appendix A**.

SECTION 5: Complaints

In **2023** there were 3 community complaints received for the Greenstone Sewage collection system.

In **2024** there were 4 community complaints received in respect to the sanitary sewage system.

All complaints received by the Municipality or OCWA are investigated as soon as possible and actions are taken to mitigate the issue. All complaints within the reporting period were addressed with no further follow-up required.

Please refer to Appendix B for the summary of Community Complaints.

SECTION 6: System Alterations

There were no alterations completed during the reporting period.

Greenstone Sanitary Collection System Annual Report



SECTION 7: Overflows and Spills

The facility operator collects one grab sample of raw sewage and sends it to an accredited laboratory for analysis. Raw flows are calculated using pump run times and flow rates. The sampling plan, below, shows required sampling in a bypass or spill event:

Overflow			
Sample	Frequency	equency Parameters	
Grab	One	BOD, TSS, Total Phosphorus, TKN,	One sample
		Ecoli	

During the reporting period of January 1 2023 – December 31, 2023 there were 4 bypass events at 2 lift stations in Longlac.

Bypass/ Spill Sampling 2023							
Location	Sample Date	BOD Result mg/L	TSS Result	T	P result	TKN result	E.Coli result
Bayview	May 1, 2023	7.5	22.0				176,000
Bayview	May 4, 2023	7.9	13.3				51,000
Bayview	May 8, 2023	6.5	8.0				330,000
Riverview	May 11,	1.9	2.70				0

The bypass/spill sample parameters specified in the above table are analyzed by ALS Canada Ltd Research, an accredited laboratory located in Thunder Bay, Ontario. Chain of custodies have been updated to include all sample parameters that are now required under the Municipal Sewage Collection System ECA.

During the reporting period of January 1 2024 – December 31, 2024 there were no bypass events in the Municipality.



Bypass/ Spill Sampling 2024						
Sample	BOD result	TSS Result	tP result	Tŀ	KN result	E.Coli

The bypass/spill sample parameters specified in the above table are analyzed by ALS Canada Ltd Research, an accredited laboratory located in Thunder Bay, Ontario.

The bypass events in 2023 were due to heavy rains and snow melt in the spring.

Please see **Appendix C** for **Bypass and/or Spill Reports** that were submitted during the reporting period.

Summary of efforts made to reduce collection system overflows, spills, sewage treatment plant overflows and/or bypasses, as applicable:

The Municipality completed upgrades years ago to help reduce sanitary collection system overflows and bypasses, including purchasing generators for the lift stations, completion of an assessment for I&I (including smoke testing), offering a grant program for residents to install a backwater flow valve and disconnection of sump pump discharge lines or drains and providing educational materials to their residents. The grant program and public awareness program are ongoing. In 2025 a CCTV and flushing program will be implemented by the Municipality and OCWA to do one fifth of the Greenstone Sewage system annually to complete the entire system over 5 years. The Municipality will also be completing an assessment for inflow and infiltration to help reduce flows in the collection system. Both the CCTV work and this study will help to identify any areas that require improvement.



SECTION 7: Additional Notes/Comments

A copy of this annual report is available on the Municipality's website at

Greenstone.ca

Residents may also visit any ward office and request a copy.



Appendix A

Inspection Activities SPS Calibration Reports

			on System Annual Ins ivities Completed Dur			
			tary Pumping Statio	ons		
GREENSTONE		January 1-Decer				
Asset	Required Frequency	% Completed	Comments	Action Plan		
INSPECTIONS						
Pumping Stations -Overflows	Annual	100	No overflows			
Pumping Stations – Routine Inspections	Daily/Weekly/ Monthly	100	Weekly Mon & Fri			
Pumping Stations – Annual Inspections	Annual	100	Service pumps check clearances			
Pumping Stations – Standby Generators	Monthly	100	Lift station fed from WTP generator			
Maintenance Holes	Annual	90	Few are buried deep and/or on private property			
Mainline Sewers (CCTV)			None in last year			
MAINTAINENCE						
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	No bar screens			
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	80	Annual / as needed			
Pumping Stations – Alarm/level control tests	Monthly	100	Monthly high level test			
Pumping Stations – Pump Servicing	Annual	100	Oil changes or clearance checks			
Pumping Stations – Bypass Valve Exercising	Annual	100	Checked annually			
Maintenance Holes – Lid resetting, parging etc.	As needed	100	As needed			

Mainline Sewers –	Acreaded	100	Annual flush with	
Flushing	As needed	100	2.5" hose	

Asset and/or Location	Issue	Repairs Completed	Planned Repairs
Lift station conversion	Went to new brand of pump as old were obsolete	November 2023	
New lift station pump	New Flygt pump installed	November 2023	

)		on System Annual Ins ivities Completed Du	
		Caramat Sanita	ry Pumping Stations	
GREENSTONE		January 1-Decer	nber 31, 2023	
Asset	Required Frequency	% Completed	Comments	Action Plan
INSPECTIONS				
Pumping Stations -Overflows	Annual	N/A	No overflows at both lift stations	
Pumping Stations – Routine Inspections	Daily/Weekly/ Monthly	100%	Routine inspections completed 2 times per week	
Pumping Stations – Annual Inspections	Annual	100%	Annual Inspection/clean out completed as per PM	
Pumping Stations – Standby Generators	Monthly	N/A	No stand by generators	
Maintenance Holes	Annual		Completed by Municipality	
Mainline Sewers (CCTV)		N/A	No CCTV completed during reporting period	
MAINTAINENCE				
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	No bar screen at both lift stations	
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	100%	Completed annual as per PM	
Pumping Stations – Alarm/level control tests	Monthly	100%	Wet well level alarms and controls completed monthly	
Pumping Stations – Pump Servicing	Annual	100%	Completed annual as per PM	
Pumping Stations Bypass Valve Exercising	Annual	N/A	No bypass valves on location	
Maintenance Holes – Lid	As needed		Completed by Municipality	

resetting, parging etc.			
Mainline Sewers – Flushing	As needed	Completed by Municipality	

Asset and/or Location	Issue	Repairs Completed	Planned Repairs

GREENSTONE		Sanitary Collection System Annual Inspections and Maintenance Activities Completed During the Reporting Period Geraldton Sanitary Pumping Stations January 1-December 31, 2023			
Asset	Required Frequency	% Completed	Comments	Action Plan	
INSPECTIONS					
Pumping Stations -Overflows	Annual	100%	Annually completed before spring thaw		
Pumping Stations – Routine Inspections	Weekly	100%	Routine Inspections completed 3 times weekly and daily review of pump cycles and level trends		
Pumping Stations – Annual Inspections	Annual	100%	Annual Inspection/clean out completed as per PM		
Pumping Stations – Standby Generators	Monthly	N/A	Standby generators tested under load monthly		
Maintenance Holes	Annual		Completed by Municipality		
Mainline Sewers (CCTV)		N/A	No CCTV completed during reporting period		
MAINTAINENCE					
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	Bar screens cleaned weekly		
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	100%	Completed annual as per PM or as needed		
Pumping Stations – Alarm/level control tests	Monthly	100%	Wet well level alarms and controls completed monthly		
Pumping Stations – Pump Servicing	Annual	100%	Oil changes, service and clearance checks completed annual as per PM		
Pumping Stations Bypass Valve Exercising	Annual	100%	Automated valve at McKenzie SPS		

Maintenance Holes – Lid resetting, parging etc.	As needed		Completed by Municipality	3 manholes were reset in 2023
Mainline Sewers – Flushing	As needed	10%	Completed by Municipality	

Asset and/or Location	Issue	Repairs Completed	Planned Repairs
3 manholes, #356, 230 and 202	infiltration	Dug down and reset structure	6 sections of main flushed and cleaned

Table: Municipal Summary of Collection Work Completed

DATE	MANHOLE	MANHOLE		WORK		
DATE	NUMBER	NUMBER	WORK COMPLETED	LOCATION	ISSUES	
6-MAR-2023	MH468	MH474	CLEANED PLUGGED PIPE BETWEEN			
0-IVIAR-2023	IVIП400	WIN474	MANHOLES			
7-MAR-2023	MH468	HH470	CLEANED PIPE BETWEEN MANHOLES			
			TRIED TO CLEAN PIPE BETWEEN			
2-JUNE-2023	MH116	MH117	MANHOLES BUT PIPE IS BLOCKED			
2-JUNE-2023	MH437	MH300	CLEANED PIPE BETWEEN MANHOLES			
2-JUNE-2023	MH219	MH135	CLEANED PIPE BETWEEN MANHOLES			
22-JUNE-2023	TOMBILL	MAGNET	CLEANED PLUGGED PIPE BETWEEN			
22-JUINE-2023		WAGINE I	TOMBILL TO MAGNET			
2-JULY-2023	MH356		DUG DOWN AND RESET STRUCTURE			

7-SEP-2023	MH230	DUG DOWN AND RESET STRUCTURE	
10-Aug-2023	MH202	DUG DOWN AND RESET STRUCTURE	

)	Maintenance Act Period	on System Annual Insp ivities Completed Duri	
	TONE		y Pumping Stations	
GREENS	IUNE	January 1-Decer	nber 31, 2023	
		% Completed Comments Action Plan		
Asset	Required Frequency	% Completed	Comments	Action Plan
INSPECTIONS				
Pumping Stations -Overflows	Annual	100%	Annually completed before spring thaw	
Pumping Stations – Routine Inspections	Weekly	100%	Routine Inspections completed weekly and daily review of pump cycles and level trends	
Pumping Stations – Annual Inspections	Annual	100%	Pumping station annual inspection as per PM	
Pumping Stations – Standby Generators	Monthly	100%	Standby generators tested under load monthly	
Maintenance Holes	Annual (as needed)		1 manhole required cleaning	
Mainline Sewers (CCTV)			Louisa and Riverview streets completed Nov. 20&21, 2024	
MAINTAINENCE				
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	100%	Bar screens cleaned out weekly	
Pumping Stations — Wetwell Clean Out	Annual (or as- needed)	100%	Pumping stations wet well clean out annually/as needed	
Pumping Stations – Alarm/level control tests	Monthly	100%	Pumping station wet well level alarms tested monthly. Level control monitored daily on Scada.	
Pumping Stations – Pump Servicing	Annual	100%	Pumping station service completed as per PM	
Pumping Stations	Annual	100%	Pumping station bypass valves	

Bypass Valve		exercised before
Exercising		spring thaw
Maintenance		No lid
Holes – Lid	As needed	resetting/parging
resetting, parging	As needed	completed during
etc.		report period
		2 sections flushed
		between manholes.
Mainline Sewers –		Riverview, Louisa
Flushing	As needed	& Queen streets
Flushing		completed.
		Sept. 18, 2024 for
		CCTV work

Asset and/or Location	Issue	Repairs Completed	Planned Repairs

Table: Municipal Summary of Collection Work Completed

DATE	MANHOLE	MANHOLE	WORK	WORK	ISSUES
DAIL	NUMBER	NUMBER	COMPLETED	LOCATION	100020
			FLUSHING OF PIPE		
27-JAN-2023	L208	L209	BETWEEN		
			MANHOLES		
07 14 14 0000	1040		CLEAN OUT		
27-JAN-2023	L316		MANHOLE		
			THAW OUT LIFT		
3-FEB-2023	SNLF-2		STATION		FROZEN PIPE

15-MAR-2023	L231	CHECK FLOW	NO ISSUE
15-MAR-2023	L235	CHECK FLOW	NO ISSUE
15 -MAR-2023	L237	CHECK FLOW	NO ISSUE
15 -MAR-2023	L234	CHECK FLOW	NO ISSUE
15-MAR-2023	L232	CHECK FLOW	NO ISSUE
15-MAR-2023	L233	CHECK FLOW	NO ISSUE

Calibration Certificate 2807

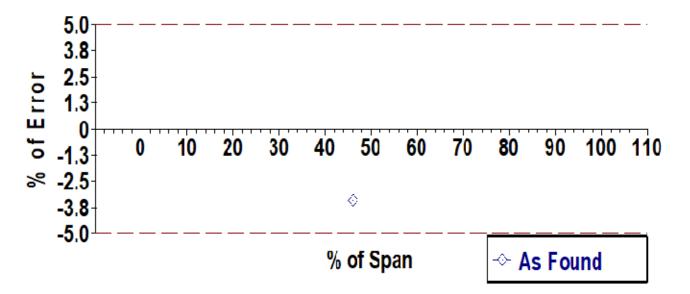
AMS Tag: G McKenzie Lift Flow

Calibrated at: 2023-08-30 11:17:51 AM

Calibration Result: PASSED

Device Identification				
AMS Tag:	G McKenzie Lift Flow			
Device Tag:	G McKenzie Lift Flow			
Manufacturer:	Endress+Hauser			
Model Name:	50W2F-UL0B1RK1BAAW			
Device Identifier:	89000516000			

	Device Calibration Data					
Date/Time Calibrated:	2023-08-30 11:17:51 AM	Max Error Limit:	5.00 % of Span			
Technician:	DESKTOP-79S6M3S \Lakeside	Notification Limit:	5.00 % of Span			
User:	DESKTOP-79S6M3S \Lakeside	Adjustment Limit:	5.00 % of Span			
Ambient Temperature:	20.00 deg C	Calibration Interval:	12 Months			
Temperature Standard:	ITS-90	Critical Service:	Yes			
Work Order Number:		Input Range:	0.00 - 15.00 MilL/day			
Service Reason:	Not Given	Output Range:	0.00 - 15.00 MilL/day			
Service Notes:						
Relationship: Linear	Relationship: Linear					



Calibration Certificate 2807

AMS Tag: G McKenzie Lift Flow

Test Equipment					
AMS Tag	Manufacturer	Model	Serial Number	Last Calibration	Calibration Interval:
TBay PT 900 Flowmeter	Panametrics	TransPort PT900	M12220016		12 Months

Errors (%)						
Error	Limit Actual: As Found Actual: As Left					
Maximum	5.0000	-3.4000 (Pass)	(N/A)			
Zero	(N/A)	(N/A)	(N/A)			
Span	(N/A)	(N/A)	(N/A)			
Linearity	(N/A)	(N/A)	(N/A)			
Hysteresis	(N/A)	(N/A)	(N/A)			

Calibration Results: As Found					
Test Point	Test Point Input Output Output Error Output Error (%)				
1	6.9000	6.3900	-0.5100	-3.4000	

Calibration Results: As Left					
Test Point	Input	Output	Output Error	Output Error (%)	

	Authorization
Title	Lakeside Process Controls reliability services
Signature	Igor Riaboshapkin O8/30/2023
Title	
Signature	Date

)	•	on System Annual Ins ivities Completed Du	-
GREENSTONE		-	Pumping Stations	
GREENS	IUNE	January 1-Decer	nber 31, 2023	
Asset	Required Frequency	% Completed	Comments	Action Plan
INSPECTIONS				
Pumping Stations -Overflows	Annual	100%	Annually completed before spring thaw	
Pumping Stations – Routine Inspections	Daily/Weekly/ Monthly	100%	Daily pump cycle and level trend reviews	
Pumping Stations – Annual Inspections	Annual	100%	Pumping station annual inspection as per PM	
Pumping Stations – Standby Generators	Monthly	100%	Standby generators tested monthly under load monthly	
Maintenance Holes	N/A			
Mainline Sewers (CCTV)	As needed			
MAINTAINENCE			Cumuntly no hon	
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	Currently no bar screens operational in pumping stations	
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	100%	Pumping stations wet well clean out as needed	
Pumping Stations – Alarm/level control tests	Monthly	100%	Pumping station wet well level alarms tested monthly. Level control monitored daily on SCADA	
Pumping Stations – Pump Servicing	Annual	100%		
Pumping Stations – Bypass Valve Exercising	Annual			

Maintenance Holes – Lid resetting, parging etc.	As needed	No lid resetting/parging completed during report period
Mainline Sewers – Flushing	As needed	

Asset and/or Location	Issue	Repairs Completed	Planned Repairs
KC Lift Station Assessment	Pumps are bolted in place, looking at updating lift station	Assessment Completed	

	}		on System Annual Ins ivities Completed Dur	
		Beardmore Sani	tary Pumping Statio	ons
GREENS	IUNE	January 1-Decer	nber 31, 2024	
Asset	Required Frequency	% Completed	Comments	Action Plan
INSPECTIONS				
Pumping Stations -Overflows	Annual	100	No overflows	
Pumping Stations – Routine Inspections	Daily/Weekly/ Monthly	100	Weekly Mon & Fri	
Pumping Stations – Annual Inspections	Annual	100	Service pumps check clearances	
Pumping Stations – Standby Generators	Monthly	100	Lift station fed from WTP generator	
Maintenance Holes	Annual	90	Few are buried deep and/or on private property	
Mainline Sewers (CCTV)			None in last year	
MAINTAINENCE				
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	No bar screens	
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	80	Annual / as needed	
Pumping Stations – Alarm/level control tests	Monthly	100	Monthly high level test	
Pumping Stations – Pump Servicing	Annual	100	Oil changes or clearance checks	
Pumping Stations – Bypass Valve Exercising	Annual	100	Checked annually	
Maintenance Holes – Lid resetting, parging etc.	As needed	100	As needed	

Mainline Sewers –	Acroaded	100	Annual flush with	
Flushing	As needed	100	2.5" hose	

Asset and/or Location	Issue	Repairs Completed	Planned Repairs

GREENSTONE		Sanitary Collection System Annual Inspections and Maintenance Activities Completed During the Reporting PeriodCaramat Sanitary Pumping Stations			
UKEENJ	IUNE	January 1-Decer	mber 31, 2024		
Asset	Required Frequency	% Completed	Comments	Action Plan	
INSPECTIONS Pumping Stations - Routine	Daily/Weekly/ Monthly	100%	Routine inspections completed 2 times		
Inspections Pumping Stations – Annual Inspections	Annual	100%	per week Annual Inspection/clean out completed as		
Maintenance Holes	Annual		per PM Completed by Municipality		
Mainline Sewers (CCTV)		N/A	No CCTV completed during reporting period		
MAINTAINENCE					
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	100%	Completed annual as per PM		
Pumping Stations – Alarm/level control tests	Monthly	100%	Wet well level alarms and controls completed monthly		
Pumping Stations – Pump Servicing	Annual	100%	Completed annual as per PM		
Maintenance Holes – Lid resetting, parging etc.	As needed		Completed by Municipality		
Mainline Sewers – Flushing	As needed		Completed by Municipality		

Asset and/or Location	Issue	Repairs Completed	Planned Repairs

GREENSTONE		Sanitary Collection System Annual Inspections and Maintenance Activities Completed During the Reporting Period Geraldton Sanitary Pumping Stations January 1-December 31, 2024		
Asset	Required Frequency	% Completed	Comments	Action Plan
INSPECTIONS				
Pumping Stations -Overflows	Annual	100%	Annually completed before spring thaw	
Pumping Stations – Routine Inspections	Weekly	100%	Routine Inspections completed 3 times weekly and daily review of pump cycles and level trends	
Pumping Stations – Annual Inspections	Annual	100%	Annual Inspection/clean out completed as per PM	
Pumping Stations – Standby Generators	Monthly	N/A	Standby generators tested under load monthly	
Maintenance Holes	Annual		Completed by Municipality	
Mainline Sewers (CCTV)		N/A	No CCTV completed during reporting period	
MAINTAINENCE				
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	Bar screens cleaned weekly	
Pumping Stations — Wetwell Clean Out	Annual (or as- needed)	100%	Completed annual as per PM or as needed	
Pumping Stations – Alarm/level control tests	Monthly	100%	Wet well level alarms and controls completed monthly	
Pumping Stations – Pump Servicing	Annual	100%	Oil changes, service and clearance checks completed annual as per PM	
Pumping Stations – Bypass Valve Exercising	Annual	100%	Automated valve at McKenzie SPS	

Maintenance Holes – Lid resetting, parging etc.	As needed	Completed by Municipality
Mainline Sewers – Flushing	As needed	Completed by Municipality

Asset and/or Location	Issue	Repairs Completed	Planned Repairs

Table: Municipal Summary of Collection Work Completed

DATE	MANHOLE NUMBER	MANHOLE NUMBER	PIPE WORK LOCATION	WORK COMPLETED	DITCH WORK	ISSUES
22-0CT- 2024	M344	M345	PIPE BETWEEN MANHOLES	FLUSH SEWER LINE		

GREENSTONE		Sanitary Collection System Annual Inspections and Maintenance Activities Completed During the Reporting Period Longlac Sanitary Pumping Stations January 1-December 31, 2024		
Asset	Required Frequency	% Completed	Comments	Action Plan
INSPECTIONS				
Pumping Stations -Overflows	Annual	100%	Annually completed before spring thaw	
Pumping Stations – Routine Inspections	Weekly	100%	Routine Inspections completed weekly and daily review of pump cycles and level trends	
Pumping Stations – Annual Inspections	Annual	100%	Pumping station annual inspection as per PM	
Pumping Stations – Standby Generators	Monthly	100%	Standby generators tested under load monthly	
Maintenance Holes	Annual		No inspections completed	
Mainline Sewers (CCTV)			Louisa and Riverview streets completed Nov. 20&21, 2024	
MAINTENANCE				
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	100%	Bar screens cleaned out weekly	
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	100%	Pumping stations wet well clean out annually/as needed	
Pumping Stations – Alarm/level control tests	Monthly	100%	Pumping station wet well level alarms tested monthly. Level control monitored daily on Scada.	
Pumping Stations – Pump Servicing	Annual	100%	Pumping station service completed as per PM	
Pumping Stations –	Annual	100%	Pumping station bypass valves	

Bypass Valve Exercising		exercised before spring thaw
Maintenance Holes – Lid resetting, parging etc.	As needed	1 manhole lid lowered
Mainline Sewers – Flushing	As needed	Riverview, Louisa & Queen streets completed. Sept. 18, 2024.

Asset and/or Location	Issue	Repairs Completed	Planned Repairs
Frando Lift station Pump #1 replaced with spare	Electrical motor issue	May 23, 2024.	Replaced pump w/spare
Frando #1 Check valve repair	Stopper on valve worn causing it to stick open	July 17, 2024.	Repaired check valve
Riverview Pump #2 replaced with spare	Electrical motor issue	August 12, 2024	Replaced pump w/spare

Table: Municipal Summary of Collection Work Completed

DATE	MANHOLE NUMBER	MANHOLE NUMBER	WORK COMPLETED	DITCH WORK	ISSUES
11-JUN-2024	L337		CHECK FLOW		NO ISSUE
11-JUN-2024	L336		CHECK FLOW		NO ISSUE
11-JUN-2024	L335		CHECK FLOW		NO ISSUE
11-JUN-2024	L324		CHECK FLOW		NO ISSUE
11-JUN -2024	L222		CHECK FLOW		NO ISSUE
11-JUN-2024	L223		CHECK FLOW		NO ISSUE
17-JUN-2024	L231		CHECK FLOW		NO ISSUE
17-JUN-2024	L235		CHECK FLOW		NO ISSUE
17-JUN-2024	L237		CHECK FLOW		NO ISSUE
17-JUN-2024	L234		CHECK FLOW		NO ISSUE

17-JUN-2024	L233		CHECK FLOW	NO ISSUE
17-JUN-2024	L232		CHECK FLOW	NO ISSUE
23-0CT-2024	L231		CHECK FLOW	NO ISSUE
23-0CT-2024	L235		CHECK FLOW	NO ISSUE
23-0CT-2024	L237		CHECK FLOW	NO ISSUE
23-0CT-2024	L234		CHECK FLOW	NO ISSUE
23-0CT-2024	L233		CHECK FLOW	NO ISSUE
23-0CT-2024	L232		CHECK FLOW	NO ISSUE
25-0CT-2024	L231	L235	FLUSH BETWEEN MANHOLES	NO ISSUE
25-0CT-2024	L208	L209	FLUSH BETWEEN MANHOLES	NO ISSUE
29-0CT-2024	L238		LOWERED LID ON MANHOLE	

Calibration Certificate 3082

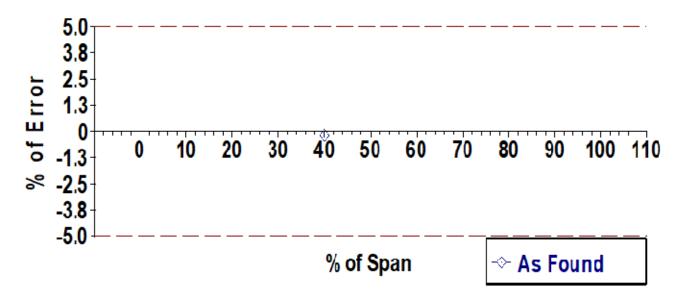
AMS Tag: G McKenzie Lift Flow

Calibrated at: 2024-08-16 10:46:43 AM

Calibration Result: PASSED

Device Identification				
AMS Tag:	G McKenzie Lift Flow			
Device Tag:	G McKenzie Lift Flow			
Manufacturer:	Endress+Hauser			
Model Name:	50W2F-UL0B1RK1BAAW			
Device Identifier:	89000516000			

	Device Calibration Data						
Date/Time Calibrated:	2024-08-16 10:46:43 AM	Max Error Limit:	5.00 % of Span				
Technician:	LPC_MISS\ixriab	Notification Limit:	5.00 % of Span				
User:	LPC_MISS\ixriab	Adjustment Limit:	5.00 % of Span				
Ambient Temperature:	20.00 deg C	Calibration Interval:	12 Months				
Temperature Standard:	ITS-90	Critical Service:	Yes				
Work Order Number:		Input Range:	0.00 - 15.00 MilL/day				
Service Reason:	Not Given	Output Range:	0.00 - 15.00 MilL/day				
Service Notes:							
Relationship: Linear	Relationship: Linear						



Calibration Certificate 3082

AMS Tag: G McKenzie Lift Flow

Test Equipment					
AMS Tag	Manufacturer	Model	Serial Number	Last Calibration	Calibration Interval:
TBay PT 900 Flowmeter	Panametrics	TransPort PT900	M12220016		12 Months

Errors (%)						
Error	Limit Actual: As Found Actual: As Left					
Maximum	5.0000	-0.2000 (Pass)	(N/A)			
Zero	(N/A)	(N/A)	(N/A)			
Span	(N/A)	(N/A)	(N/A)			
Linearity	(N/A)	(N/A)	(N/A)			
Hysteresis	(N/A)	(N/A)	(N/A)			

Calibration Results: As Found				
Test Point	Input	Output	Output Error	Output Error (%)
1	6.0000	5.9700	-0.0300	-0.2000

Calibration Results: As Left				
Test Point	Input	Output	Output Error	Output Error (%)

Authorization				
Title	LPC Asset Reliability Services			
Signature	Igor Riaboshapkin	Date	08/16/2024	
Title				
Signature		Date		

GREENSTONE		Sanitary Collection System Annual Inspections and Maintenance Activities Completed During the Reporting Period Nakina Sanitary Pumping Stations			
Asset	Required Frequency	% Completed	Comments	Action Plan	
INSPECTIONS					
Pumping Stations -Overflows	Annual	100%	Annually completed before spring thaw		
Pumping Stations – Routine Inspections	Daily/Weekly/ Monthly	100%	Daily pump cycle and level trend reviews		
Pumping Stations – Annual Inspections	Annual	100%	Pumping station annual inspection as per PM		
Pumping Stations – Standby Generators	Monthly	100%	Standby generators tested monthly under load monthly		
Maintenance Holes	N/A				
Mainline Sewers (CCTV)	As needed				
MAINTAINENCE			Cumontly no hon		
Pumping Stations – Bar Screen Clean	Weekly (or as- needed)	N/A	Currently no bar screens operational in pumping stations		
Pumping Stations – Wetwell Clean Out	Annual (or as- needed)	100%	Pumping stations wet well clean out as needed		
Pumping Stations – Alarm/level control tests	Monthly	100%	Pumping station wet well level alarms tested monthly. Level control monitored daily on SCADA		
Pumping Stations – Pump Servicing	Annual	100%			
Pumping Stations – Bypass Valve Exercising	Annual				

Maintenance Holes – Lid resetting, parging etc.	As needed	No lid resetting/parging completed during report period
Mainline Sewers – Flushing	As needed	

Asset and/or Location	Issue	Repairs Completed	Planned Repairs



Appendix B Community Complaints

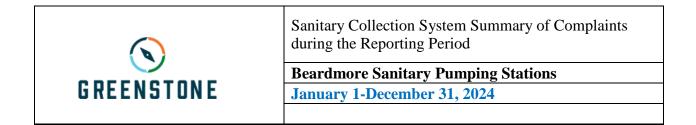
Greenstone Sanitary Collection System Annual Report



Beardmore Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



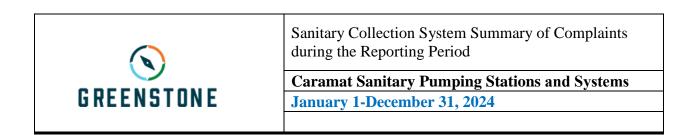
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Caramat Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



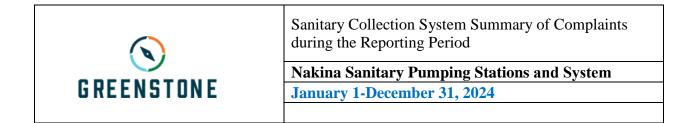
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Longlac Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer Main	1	Frozen pipe was thawed
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



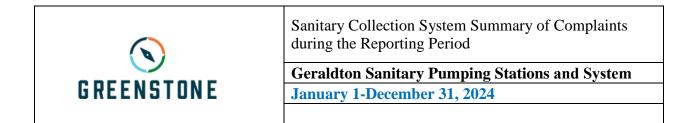
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer Main	1	Flushed between manholes with no issues found
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Geraldton Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	2	Cleaned pipes between manholes
Odour Concern	0	
Pump/Lift Station Concern	0	



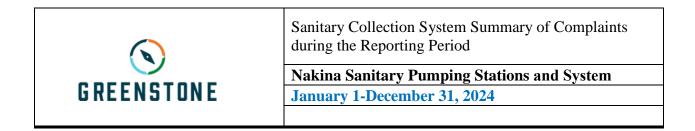
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	3	Due to sewage offload from campsite. Working with them to reduce ability of sewage in holding tanks from going septic
Pump/Lift Station Concern	0	



Nakina Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



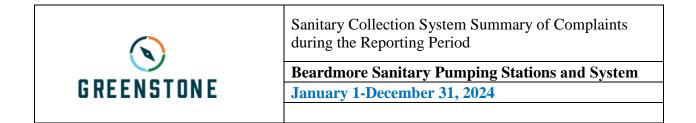
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Beardmore Sanitary Pumping Stations January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



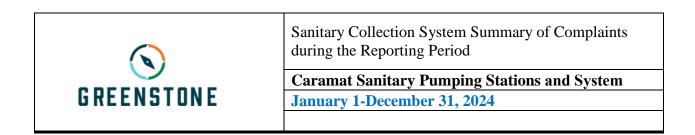
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Caramat Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



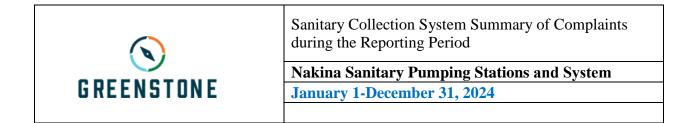
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Longlac Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer Main	1	Frozen pipe was thawed
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



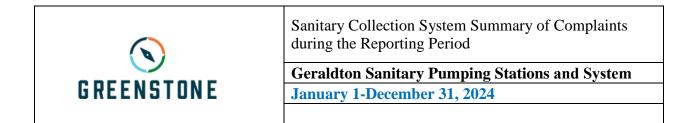
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer Main	1	Flushed between manholes with no issues found
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Geraldton Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	2	Cleaned pipes between manholes
Odour Concern	0	
Pump/Lift Station Concern	0	



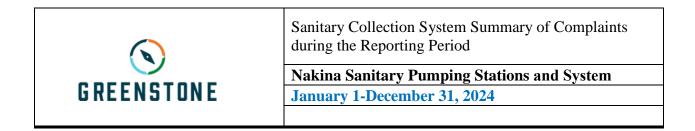
Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	3	Due to sewage offload from campsite. Working with them to reduce ability of sewage in holding tanks from going septic
Pump/Lift Station Concern	0	



Nakina Sanitary Pumping Stations and System January 1-December 31, 2023

Table: Summary of Complaints Received during the Reporting Period

Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



Complaint Type	Number Received	Actions Taken
Blocked Sewer Lateral	0	
Blocked Sewer	0	
Maintenance Hole Concern	0	
Odour Concern	0	
Pump/Lift Station Concern	0	



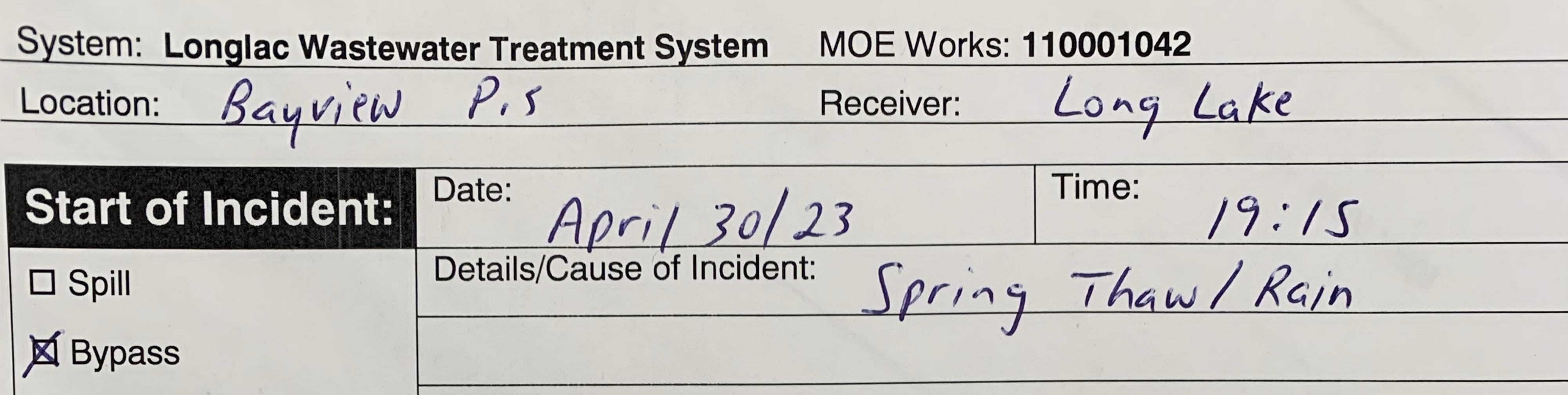
Appendix C Bypass and Spill Reports

Greenstone Sanitary Collection System Annual Report

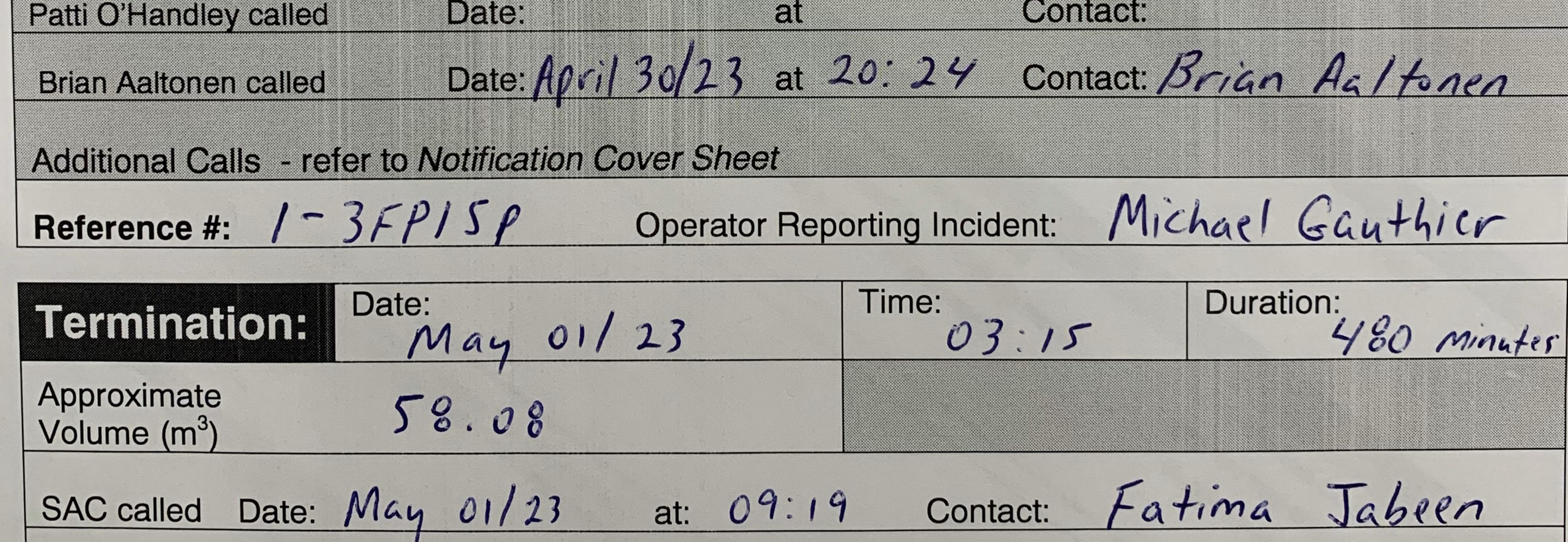
Environmental Incident Report



Ontario Clean Water Agency Agence Ontarienne Des Eaux



D Other	
Downstream Users	Possible effects on receiver, environment or downstream users: High B.O.D., T.S.S., E-Coli
Chlorination	Yes D No
Corrective Actions:	
MOECC SAC called	Date: April 30/23 at 19:55 Contact: 1/Kowba
MOH (TBDHU) called	Date: April 30/23 at 20:15 Contact: Robyn Land
Pat Albert called	Date: April 30/23 at 20:20 Contact: Patrick Albert



Further Actions Required:

Operator Reporting Termina	ation: Michael Ga	authier
MOECC SAC	Tel: 800 268-6060 Fax: 800 268-6061	Comments
(after hours)	Tel: 807-625-5933 Tel: 807-625-5900 Fax: 807-625-4822	Comments
	Fax: 819-420-7382 Attn: Wastewater Program	

Verbal notifications: MOECC SAC MOH Operations Manager Client/Owner, VP Operations Regional Manager

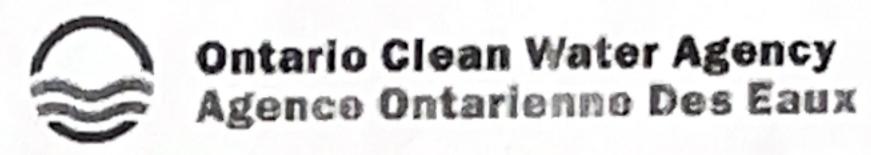
Environmental Incident Report



System: Longlac Wastew	ater Treatment System	MOE Works:	110001042
Location: Bayview	P.S	Receiver:	Long Lake
1			,
Start of Incident:	Date: May 04/2	3	Time: 17:20 Thaw / Snow Melt
□ Spill	Details/Cause of Incident:	Spring	Thaw / Snow Melt
🖾 Bypass			
□ Other			
Downstream Users □ Yes ⊠ No	Possible effects on receive		
Chlorination	Yes I No	/ /////	
Corrective Actions:			
MOECC SAC called	Date: May 04/23 at	18:32	Contact: Grace Sut cliffe
MOH (TBDHU) called			Contact: Robyn Land
Pat Albert called	Date: May 04/23 at	18:50	Contact: Patrick Albert
Patti O'Handley called	Date: at		Contact:
Brian Aaltonen called	Date: May 04/23 at	19:05	Contact: Brian Aaltonen
Additional Calls - refer to	Notification Cover Sheet	and the same	
Reference #: /- 36 0	I YO Operator Re	porting Incide	nt: Michael Gauthier
Dete		T :	
Termination:	May 08/23	Time: 10	30 Duration: 5290 min
Approximate Volume (m ³)	to m ³		
SAC called Date: Mar	18 73 at: 13:	20 Contac	ot: NEILADENNIS
Further Actions Required:			
Operator Reporting Termin	nation: DARREN	NCC	DAN.
MOECC SAC	Tel: 800 268-6060	Comments	nam .
	Fax: 800 268-6061	Comments	
MOH – TBDHU (after hours)	Tel: 807-625-5933 Tel: 807-625-5900 Fax: 807-625-4822	Comments	
Environment Canada	Fax: 819-420-7382 Attn: Wastewater Program		

Verbal notifications: MOECC SAC, MOH, Operations Manager, Client/Owner, VP Operations, Regional Manager Fax completed report: MOECC SAC, MOH, Environment Canada, VP Operations/Corporate Office, Regional Manager, Longlac Hub Office Group, Client/Owner, Health Canada, Ginoogaming FN (#77), Long Lake FN (#58)

Environmental Incident Report



System: Longlac Wastew	ater Treatment System MOE Works: 110001042
Location: Bayurw	P.S. Receiver: Longlake
Start of Incident:	Date: May 8/23 Time: 16:30
□ Spill	Details/Cause of Incident: Spring Thaw Snow McH
☑ Bypass	find for the second
□ Other	
Downstream Users	Possible effects on receiver, environment or downstream users:

□ Yes 🖾 No	Hich	B.O.D.	T.S.S.	E-CN	
Chlorination	Ves DN	0))	
Corrective Actions:					
MOECC SAC called	Date: Ma	1823 at	17:25	Contact:	Jonathen Tse
MOH (TBDHU) called	Date: Ma	8 23 at	17:35	Contact:	Nursis Registry
Pat Albert called	Date: Ma	- 8123 at	17:45	Contact:	Pat Albert
Patti O'Handley called	Date:	at		Contact:	
Brian Aaltonen called	Date: Ma	in 8/23 at	17:45	Contact:	Bria Aattonen
Additional Calls - refer t	o Notification Co	ver Sheet			
Reference #: \-3C	924M	Operator Re	porting Incid	ent: Ne	ill Morris
Termination ^{Da}	te:		Time:		Duration:

May 09/23 Termination? 03:30 660 Approximate Volume (m³) m at: 22.25 Contact: Lori Anne 0 23 SAC called Date: Further Actions Required: **Operator Reporting Termination:** 1001.5 800 268-6060 Tel: MOECC SAC Comments Fax: 800 268-6061 Contacted nurses registry to notify MOH, guarous to notify MOH, guarous to no call back from 807-625-5933 Tel: MOH – TBDHU Comments Tel: 807-625-5900 (after hours) Ploy cal Fax: 807-625-4822 office Fax: 819-420-7382 **Environment Canada** Attn: Wastewater Program

Verbal notifications: MOECC SAC, MOH, Operations Manager, Client/Owner, VP Operations, Regional Manager Fax completed report: MOECC SAC, MOH, Environment Canada, VP Operations/Corporate Office, Regional Manager, Longlac Hub Office Group, Client/Owner, Health Canada, Ginoogaming FN (#77), Long Lake FN (#58)

April 26, 2022