Annual Report Ignace Drinking Water System



Prepared by Northern Waterworks Inc. on behalf of the Township of Ignace





Contents

1	Introdu	ction3
	1.1	Annual Reporting Requirements
	1.2	Report Availability 3
2	System	Overview & Expenses
	2.1	System Description 4
	2.2	Water Treatment Chemicals
	2.3	System Expenses
3 Wate	r Quality	7
	3.1	Overview7
	3.2	Microbiological Parameters
	3.3	Operational Parameters
	3.4	Membrane Ultrafiltration Performance
	3.5	Nitrate & Nitrite
	3.6	Trihalomethanes & Haloacetic Acids10
	3.7	Lead Sampling
	3.8	Inorganic & Organic Parameters 12
	3.9	Harmful Algal Bloom Monitoring14
4	Water F	Production
	4.1	Overview
	4.2	Flow Monitoring Results
	4.3	Recent Historical Flows
5	Compli	ance
	5.1	Overview
	5.2	Regulatory Compliance
	5.3	Adverse Water Quality Incidents

1 Introduction

1.1 Annual Reporting Requirements

This consolidated Annual Report (the Report) has been prepared in accordance with both section 11 (Annual Reports) and Schedule 22 (Summary Reports for Municipalities) of Ontario Regulation 170/03 (Drinking Water Systems Regulation). This Report is intended to inform both the public and Municipal Council about the operation of the system over the previous calendar year (January 1 to December 31, 2024).

Section 11 of O. Reg. 170/03 requires the development and distribution to the public of an annual report summarizing water quality monitoring results, adverse water quality incidents, system expenses and chemicals used in the water treatment process.

Schedule 22 of O. Reg. 170/03 requires the development and distribution to Council of an annual report summarizing incidents of regulatory non-compliance and associated corrective actions, in addition to providing flow monitoring results for the purpose of enabling the Owner to assess the capability of the system to meet existing and planned demand.

1.2 Report Availability

In accordance with section 11 of O. Reg. 170/03, this Report must be given, without charge, to every person who requests a copy. Effective steps must also be taken to advise users of water from the system that copies of the report are available, without charge, and of how a copy may be obtained. This Annual Report shall be made available for inspection by the public at the Ignace Municipal Office and on the Township's website.

In accordance with Schedule 22 of O. Reg. 170/03, this Annual Report must be given to the members of Municipal Council. Section 19 (Standard of care, municipal drinking-water system) of Ontario's *Safe Drinking Water Act* (SDWA) also places certain responsibilities upon those municipal officials who oversee an accredited operating authority or exercise decision-making authority over a system. The examination of this Report is one of the methods by which municipal officials may fulfil the obligations required by section 19 of the SDWA.

System users and members of Council should contact a representative of NWI for assistance in interpreting this Report. Questions and comments may be directed to the local NWI Operations Manager or by email to compliance@nwi.ca.

2 System Overview & Expenses

2.1 System Description

The Ignace Drinking Water System must meet extensive treatment and testing requirements to ensure that human health is protected. The operation and maintenance of the system is governed by Ontario's *Safe Drinking Water Act* and the regulations therein, in addition to requirements within system-specific environmental approvals. Important system information is summarized in Table 1.

Table 1: System information	
Drinking-Water System Name:	Ignace Drinking Water System
DWS Number:	260091338
DWS Category:	Large Municipal Residential
DWS Owner:	The Corporation of the Township of Ignace
DWS Operating Authority:	Northern Waterworks Inc.
DWS Components:	 Raw water pumping station and transmission line Ignace Water Treatment Plant Ignace water distribution system
Treatment Processes:	 Chemical coagulation and flocculation Membrane ultrafiltration Free chlorine disinfection pH adjustment

Water production begins as raw water flows by gravity from the intake structure located in Kekwanzik (Michel) Lake and into two intake reservoirs located at the raw water pumping station. Pumps then transfer water from the intake wells to the Ignace Water Treatment Plant through a 3.1 km transmission line.

Upon transfer to the treatment facility, polyaluminum chloride (coagulant) is injected into the raw water upstream from two coagulation tanks. Coagulant is mixed with the raw water in the tanks in order to create a suitable floc that will facilitate the subsequent membrane ultrafiltration process.

From the coagulation tanks water is directed to the membrane ultrafiltration treatment units. The membrane ultrafilters are submerged in the coagulated water and permeate (filtered water) is drawn through the filters using a vacuum generated by pumps, effectively filtering impurities from the water. Sodium hypochlorite (disinfectant) is then applied to permeate as it is directed to the treated water storage reservoir. Additional chemical feed systems are used for periodic membrane filter cleaning and neutralization, including sodium hypochlorite, citric acid, sodium bisulphite and sodium hydroxide. Wastewater from the membrane filtration process is directed to a waste equalization tank at the treatment facility, from where it is pumped to the sanitary sewer system.

Primary disinfection is achieved as sodium hypochlorite mixes with the permeate in the reservoir. Treated water is then delivered to the water distribution system using dedicated high lift pumps. Secondary disinfection requirements in the distribution system are achieved by maintaining a free chlorine residual at all locations. Sodium hydroxide is also added for pH control as water is transferred to the distribution system.

2.2 Water Treatment Chemicals

In accordance with section 11 of O. Reg. 170/03, this Report must include a list of all water treatment chemicals used by the system during the period covered by the report (summarized in Table 2). All chemicals used in the treatment process are NSF/ANSI 60 certified for use in potable water, as required by system approvals.

Table 2: Water treatment chemicals used in 2024					
Treatment Chemical	Application				
polyaluminum chloride	coagulant				
sodium hypochlorite ¹	disinfectant, membrane filter cleaning agent				
sodium hydroxide ¹	pH/alkalinity adjustment, neutralizing agent				
citric acid ¹	membrane filter cleaning agent				
sodium bisulphite ¹	neutralizing agent (dechlorination)				

1. Membrane filter cleaning and neutralizing agents are used in smaller amounts. These chemicals are not injected into the process water stream.

2.3 System Expenses

In accordance with section 11 of O. Reg. 170/03, this Report must describe any major expenses incurred during the reporting period to install, repair or replace required equipment. This Report also summarizes those expenses related to strengthening equipment inventories and to maintenance activities undertaken by subcontracted service providers. Major expenses incurred in 2024 are summarized in Table 3.

Table 3: Major expenses incurred in 2024					
Category	Description	Expense			
Repair	Membrane cassette replacement (24 for Train #1)	\$106,807			
Replace	Raw water pumping station PLC replacement	\$98,255			
Replacement	Membrane cassette replacement (24 for Train #2) ¹	\$105,708			
Upgrade	VTScada reactivation and version upgrade	\$26,061			
Maintenance	Natural gas boiler inspection and service	\$3,500			
Maintenance	Fire extinguisher inspection	\$1215			
Maintenance	Flow meter calibration verifications	\$3,226			
Maintenance	Sling-choker crane inspection	\$2106			
Maintenance	Air compressor motor rebuild at water plant	\$1477			
Maintenance	Backflow prevention device inspection and testing	\$1,977			
Maintenance	Digital Engineering parts and service for 2024	\$22,092			
1 – Ordered membranes in 2023 and were received 2024.					



3 Water Quality

3.1 Overview

Water quality monitoring is conducted to determine and confirm that drinking water delivered to the consumer is safe and aesthetically pleasing. Monitoring is also required to assess compliance with legislation and to control the treatment process. In accordance with section 11 of O. Reg. 170/03, this Report must summarize the results of water quality tests required by regulations, approvals, and orders. The following sections summarize the results of all required water quality tests and compare the results to applicable water quality standards.

3.2 Microbiological Parameters

Microbiological sampling and testing requirements are provided in Schedule 10 (Microbiological sampling and testing) of O. Reg. 170/03. In 2024, a total of 232 routine source, treated and distribution water samples were collected for microbiological analysis by an accredited laboratory. Samples were collected on a weekly basis and included tests for E. coli (EC), total coliforms (TC) and heterotrophic plate counts (HPC). Results from microbiological analyses are summarized in Table 4.

Table 4: Results summary for microbiological parameters						
Sample Type	# of Samples	EC Results Range ¹ (MPN/ 100mL)	TC Results Range ¹ (MPN/ 100mL)	# of HPC Samples	HPC Results Range (CFU/mL)	
Raw Water	53	0-2	0 to 2420			
Treated Water	53	absent	absent	52	0 – 7	
Distribution	126	absent	absent	64	0 to 5	

1. The Ontario Drinking Water Quality Standard for E. Coli and Total Coliforms in a treated or distribution sample is 'not detectable'. The presence of either parameter in a treated or distribution sample is considered an exceedance.

3.3 Operational Parameters

In accordance with Schedule 7 (Operational checks) of O. Reg. 170/03, regulated operational parameters that must be monitored include raw water turbidity, filtrate turbidity and the free chlorine residuals associated with primary and secondary disinfection. Table 5 summarizes water quality results for regulated and selected unregulated operational parameters. In accordance with Schedule 6 (Operational checks, sampling and testing – general) of O. Reg. 170/03, certain operational parameters are continuously monitored. No Adverse Water Quality Incidents (AWQIs) pertaining to operational parameters occurred during the reporting period.

Table 5: Results summary for operational parameters						
Parameter (Sample Type)	Number of Samples	Units	Min. Result	Max. Result	Annual Avg.	Adverse Result
Turbidity (Raw Water)	127	NTU	0.387	8.00	1.315	n/a
Turbidity (Filter 1)	Continuous	NTU	0.018	0.760	0.055	>1.0
Turbidity (Filter 2)	Continuous	NTU	0.018	0.780	0.070	>1.0
Turbidity (Filter 3)	Continuous	NTU	0.013	0.824	0.057	>1.0
Turbidity (Filter 4)	Continuous	NTU	0.016	0.735	0.047	>1.0
Turbidity (Treated)	366	NTU	0.031	0.850	0.092	n/a
pH (Treated)	Continuous		6.53	7.53	7.13	n/a
Aluminum Residual (Treated)	115	mg/L	0.000	0.240	0.043	n/a
FCR ¹ (Treated) ²	Continuous	mg/L	1.10	2.36	1.49	n/a
FCR ¹ (Distribution) ³	500+	mg/L	0.22	2.03	n/a	<0.05

1. FCR = free chlorine residual.

- 2. There is no adverse result corresponding to the treated water free chlorine residual. However, an observation of adverse water quality occurs if the residual is low enough such that water has not been disinfected in accordance with the system's *Municipal Drinking Water Licence*.
- 3. Free chlorine residuals are tested at various locations in the distribution system. The free chlorine residual varies with water age and distribution system location, and the values in the table pertain to the minimum and maximum results collected across all locations in the calendar year.

3.4 Membrane Ultrafiltration Performance

In accordance with the system's *Municipal Drinking Water Licence*, membrane filters must meet certain performance criteria in order to claim removal credits for Cryptosporidium oocysts and Giardia cysts. In addition to continuously monitoring filtrate turbidity, membrane filter integrity must be monitored and turbidity must be less than or equal to 0.1 NTU in at least 99% of the measurements each month. Table 6 summarizes filtrate turbidity compliance against the <0.1 NTU/99% performance criterion. Minimum and maximum values in the table correspond to the proportion of time that filtered water turbidity was less than or equal to 0.1 NTU in a calendar month in 2024. No AWQIs pertaining to membrane filtration performance occurred during the reporting period.

Table 6: Filtration performance summary						
Filter	Minimum Result	Maximum Result	Adverse Result			
Filter 1	99.92%	100%	<99%			
Filter 2	99.83%	100%	<99%			
Filter 3	99.91%	100%	<99%			
Filter 4	99.93%	100%	<99%			

3.5 Nitrate & Nitrite

Treated water is tested for nitrate and nitrite concentrations on a quarterly basis in accordance with Schedule 13 (Chemical sampling and testing) of O. Reg. 170/03. Nitrate and nitrite results are provided in Table 7. All results were below the Ontario Drinking Water Quality Standards.

Table 7: Nitrate and nitrite results						
	Nitrate		Nitrite			
Sample Date	Result (mg/L)	ODWQS (mg/L)	Result (mg/L)	ODWQS (mg/L)		
12-Feb-2024	0.024		< 0.010			
13-May-2024	< 0.020	10	< 0.010	1		
19-Aug-2024	0.022	10	< 0.010	I		
13-Nov-2024	0.079		<0.010			

3.6 Trihalomethanes & Haloacetic Acids

Trihalomethanes (THMs) and haloacetic acids (HAAs) are sampled on a quarterly basis from a distribution system location that is likely to have an elevated potential for their formation, in accordance with Schedule 13 (Chemical sampling and testing) of O. Reg. 170/03. Total THM and HAA results are provided in Table 8 and Table 9, respectively. Compliance with the provincial standards for trihalomethane and haloacetic acid concentrations is determined by calculating a running annual average (RAA). The 2024 running annual averages for THMs and HAAs were below the respective Ontario Drinking Water Quality Standards.

Table 8: Total THM results					
Sample Date	Result (µg/L)	Quarterly Average (µg/L)			
12-Feb-24	42.2	42.2			
Q1 Re	egulatory Average (RAA)	61.4			
13-May-24	43.0	43.0			
Q2 Re	egulatory Average (RAA)	57.5			
13-Aug-24	65.6	65.6			
Q3 Re	egulatory Average (RAA)	52.7			
13-Nov-24	54.0	54.0			
Q4 Re	egulatory Average (RAA)	51.2			
	ODWQS Limit (RAA)	100			

Table 9: Total HAA results					
Sample Date	Result (µg/L)	Quarterly Average (µg/L)			
12-Feb-24	43.6	43.6			
Q1 Re	egulatory Average (RAA)	67.6			
13-May-24	44.7	44.7			
Q2 Re	egulatory Average (RAA)	46.5			
13-Aug-24	69.1	69.1			
Q3 Re	egulatory Average (RAA)	55.0			
20-Nov-24	68.0	68.0			
Q4 Re	egulatory Average (RAA)	56.4			
	ODWQS Limit (RAA)	80			

3.7 Lead Sampling

Based upon favourable sampling results in the community, the Ignace DWS previously qualified for reduced lead sampling and ultimately became exempt from sampling at plumbing locations in accordance with Schedule 15.1 (Lead) of O. Reg. 170/03. Four (4) distribution system samples must now be collected every year and analyzed for pH and alkalinity. Additionally, these distribution system samples must be analyzed for lead in every third 12-month period after the plumbing sample exemption was activated. Table 10 summarizes the recent historical results of community lead sampling and related required tests.

Table 10: Distribution pH, alkalinity and lead sampling results						
Sample Date	Hydrant ID Number	Lead¹ (µg/L)	рН	Alkalinity (mg/L)		
13-Oct-2020	103		7.47	20		
13-Oct-2020	61		7.45	20		
15-Apr-2021	11		7.42	20		
15-Apr-2021	123	lead analyses	7.53	20		
15-Sep-2021	133	not required ²	7.31	20		
15-Sep-2021	81		7.24	20		
4-Apr-2022	29		7.42	25		
4-Apr-2022	63		7.48	25		
20-Sep-2022	10	<1.0	7.35	20		
20-Sep-2022	84	<1.0	7.44	20		
6-Feb-2023	89	<1.0	7.38	35		
6-Feb-2023	136	<1.0	7.56	25		
26-Sep-2023	1		6.90	12		
11-Oct-2023	120		6.96	7.5		
9-Apr-2024	3	lead analyses	7.07	35		
9-Apr-2024	105	not required ²	7.14	25		
30-Sep-2024	98		7.40	30		
1-Oct-2024	26		7.38	25		

1. The Ontario Drinking Water Quality Standard for lead in drinking-water is 10 µg/L.

2. Distribution samples were last collected and tested for lead during Winter 2022-23 sampling period and will begin again in Summer 2025 sampling period.

3.8 Inorganic & Organic Parameters

Most inorganic parameters are sampled on an annual basis in treated water in accordance with Schedules 13 (Chemical sampling and testing) and 23 (Inorganic parameters) of O. Reg. 170/03. The inorganic parameters sodium and fluoride are sampled every five (5) years in treated water in accordance with Schedules 13 and 23 of O. Reg. 170/03. The most recent inorganic parameter sampling results are provided in Table 11. All results were below the associated Ontario Drinking Water Quality Standards.

Table 11: Inorganic parameter sampling results						
Parameter	Most Recent Sample Date	Units	Result	ODWQS		
Antimony	19-Aug-2024	µg/L	<0.60	6		
Arsenic	19-Aug-2024	µg/L	<1.0	10		
Barium	19-Aug-2024	µg/L	<10	1000		
Boron	19-Aug-2024	µg/L	<50	5000		
Cadmium	19-Aug-2024	µg/L	<0.10	5		
Chromium	19-Aug-2024	µg/L	<1.0	50		
Fluoride	10-Feb-2020	mg/L	<0.020	1.5		
Mercury	19-Aug-2024	µg/L	<0.100	1		
Selenium	19-Aug-2024	µg/L	<1.0	50		
Sodium	10-Feb-2020	mg/L	6.67	20		
Uranium	19-Aug-2024	µg/L	<2.0	20		



Organic parameters are sampled on an annual basis in treated water in accordance with Schedules 13 (Chemical sampling and testing) and 24 (Organic parameters) of O. Reg. 170/03. These parameters include various organic acids, pesticides, herbicides, PCBs, volatile organics and other chemicals. Sampling for all organic parameters was conducted on August 19, 2024, and results are provided in Table 12. All results were below the associated Ontario Drinking Water Quality Standards.

Table 12: Organic parameter sampling results					
Parameter	Result (µg/L)	ODWQS (µg/L)	Parameter	Result (µg/L)	ODWQS (µg/L)
Alachlor	<0.050	5	Diuron	<0.050	150
Atrazine & Metabolites	<0.14	5	Glyphosate	<0.20	280
Azinphos-methyl	<0.100	20	Malathion	<0.025	190
Benzene	<0.50	1	МСРА	<0.0000	100
Benzo(a)pyrene	<0.005	0.01	Metolachlor	<0.025	50
Bromoxynil	<0.250	5	Metribuzin	<0.100	80
Carbaryl	<0.050	90	Monochlorobenzene	<0.50	80
Carbofuran	<0.025	90	Paraquat	<1.0	10
Carbon Tetrachloride	<0.20	2	Pentachlorophenol	<0.50	60
Chlorpyrifos	<0.10	90	Phorate	<0.10	2
Diazinon	<0.025	20	Picloram	<0.50	190
Dicamba	<0.10	120	Total PCBs	<0.030	3
1,2-Dichlorobenzene	<0.50	200	Prometryne	<0.025	1
1,4-Dichlorobenzene	<0.50	5	Simazine	<0.100	10
1,2-Dichloroethane	<0.50	5	Terbufos	<0.50	1
1,1-Dichloroethylene	<0.50	14	Tetrachloroethylene	<0.50	10
Dichloromethane	<1.0	50	2,3,4,6-Tetrachlorophenol	<0.50	100
2,4-Dichlorophenol	<0.20	900	Triallate	<0.100	230
2,4-D	<0.050	100	Trichloroethylene	<0.50	5
Diclofop-methyl	<0.100	9	2,4,6-Trichlorophenol	<0.50	5
Dimethoate	<0.050	20	Trifluralin	<0.10	45
Diquat	<1.0	70	Vinyl Chloride	<0.50	1

3.9 Harmful Algal Bloom Monitoring

Starting in 2022 a requirement was added to the Municipal Drinking Water License to monitor for Harmful Algal Blooms (HAB). If a bloom is identified or suspected, then microcystin testing must be undertaken. According to the HAB plan sampling must continue for three (3) weeks of no microcystin identified. There were zero (0) suspected blooms in 2024. No mycrocystin sampling was required.

There were no Suspected or Occurring HABs outside the standard period of June 1 to October 31. Historic sample results have consistently identified no microcystin in raw or treated water when algal blooms are observed. Table 16 provides a summary of Suspected or Occurring HABs in Ignace since monitoring began.

Table 14: Recent historical algal bloom summary					
	Suspected	Harmful Algal Blooms			
Year					
2022	1	0			
2023	0	0			
2024	0	0			



4 Water Production

4.1 Overview

In accordance with Schedule 22 (Summary Reports for Municipalities) of O. Reg. 170/03, this Annual Report must include certain information for the purpose of enabling the Owner to assess the capability of the system to meet existing and planned uses. Specifically, this Report must include a summary of the quantities and flow rates of the water supplied during the reporting period, including monthly average and maximum daily flows. The Report must also include a comparison of flow monitoring results to the rated capacity and flow rates approved in the system's *Municipal Drinking Water Licence*.

4.2 Flow Monitoring Results

Throughout the reporting period the Ignace Drinking Water System operated within its rated capacity and supplied a total of 280,357m³ of treated water. On an average day in 2024, 657 m³ of treated water was supplied to the community, which represents 24% of the rated capacity of the Ignace WTP (2,730 m³/day). The maximum daily flow in 2024 was 1281 m³/day, which represents 47% of the rated capacity of the facility. Flow monitoring results are summarized in Figure 1 and Table 15.

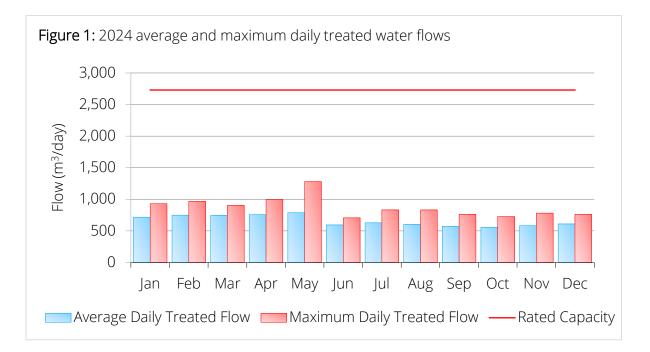


Table 15: 2024 water production summary						
Month	Total Volumes (m ³)		Daily Flows (m ³ /day)		Capacity Assessments ¹	
	Raw Water	Treated Water	Average - Treated	Maximum - Treated	Average - Treated	Maximum - Treated
Jan	25,228	22,219	717	930	26%	34%
Feb	23,963	21,715	749	967	27%	35%
Mar	27,063	23,056	744	904	27%	33%
Apr	25,700	22,732	758	996	28%	36%
May	28,709	24,418	788	1281	29%	47%
Jun	20,481	17,813	594	706	22%	26%
Jul	22,707	19,445	627	832	23%	30%
Aug	22,725	18,683	603	831	22%	30%
Sep	21,369	16,014	572	763	21%	28%
Oct	20,340	17,257	557	727	20%	27%
Nov	20,181	17,471	582	781	21%	29%
Dec	21,892	18,887	609	762	22%	28%
Total	280,357	239,710		MAX:		MAX:
Average	23,363	19,976	657	1,281	24%	47%

1. Capacity assessments compare the average and maximum daily treated water flows to the rated capacity of the treatment facility.

4.3 Recent Historical Flows

Table 16 summarizes recent historical flow monitoring results for the Ignace Drinking Water System. There were decreases in the volumes of source water withdrawn and treated water supplied in 2024 when compared to 2023, but average daily treated water flows in 2024 were comparable to previous years.

Table 16: Recent historical water production summary						
Year	Total Volumes (m ³)		Daily Flows (m ³ /day)		Annual % Change	
	Raw Water	Treated Water	Average – Treated Water	Maximum – Treated Water	Raw Water	Treated Water
2013	434,332	350,617	961	1,441	+2.9%	-3.5%
2014	528,264	465,760	1,276	2,205	+21.6%	+32.8%
2015	548,154	475,844	1,304	2,344	+3.8%	+2.2%
2016	433,726	380,345	1,039	1,559	-20.9%	-20.1%
2017	366,981	312,558	856	1,371	-15.4%	-17.8%
2018	374,025	316,758	868	1,478	+1.9%	+1.3%
2019	350,787	304,161	833	1,489	-6.2%	-4.0%
2020	322,124	272,104	743	1,037	-8.2%	-10.5%
2021	297,106	262,229	718	1,112	-7.8%	-3.6%
2022	281,169	245,718	673	1,144	-5.4%	-6.3%
2023	337,994	292,667	802	1,219	20.2%	19.1%
2024	280,357	239,710	657	1,281	-17.1%	-18.1%



5 Compliance

5.1 Overview

Northern Waterworks Inc. and the Township of Ignace employ an operational strategy that is committed to achieving the following goals:

- Providing a safe and reliable supply of drinking water to the community of Ignace;
- Meeting or exceeding all applicable legislative and regulatory requirements; and,
- Maintaining and continually improving the operation and maintenance of the system.

The following sections will summarize incidents of adverse water quality and regulatory noncompliance that occurred during the reporting period. NWI is committed to employing timely and effective corrective actions to prevent the recurrence of identified incidents of noncompliance and adverse water quality.

5.2 Regulatory Compliance

In accordance with Schedule 22 (Summary Reports for Municipalities) of O. Reg. 170/03, this Report must list any requirements of the *Act*, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report (i.e., an incident of regulatory noncompliance). Additionally, this Report must specify the duration of the failure and the measures that were taken to correct the failure.

The most recent inspection by Ontario's Ministry of the Environment, Conservation and Parks was initiated on April 10-11,2024and was delivered on May 7, 2024. The final inspection rating was 100% and zero (0) incidents of regulatory noncompliance were identified.

5.3 Adverse Water Quality Incidents

In accordance with section 11 (Annual Reports) of O. Reg. 170/03, this Report must summarize any reports made to the Ministry under subsection 18(1) (Duty to report adverse test results) of *the Act* or section 16-4 (Duty to report other observations) of Schedule 16 of O. Reg. 170/03. Additionally, this Report must describe any corrective actions taken under Schedule 17 of O. Reg. 170/03 during the period covered by the report. Zero (0) adverse water quality incidents that occurred during the reporting period.