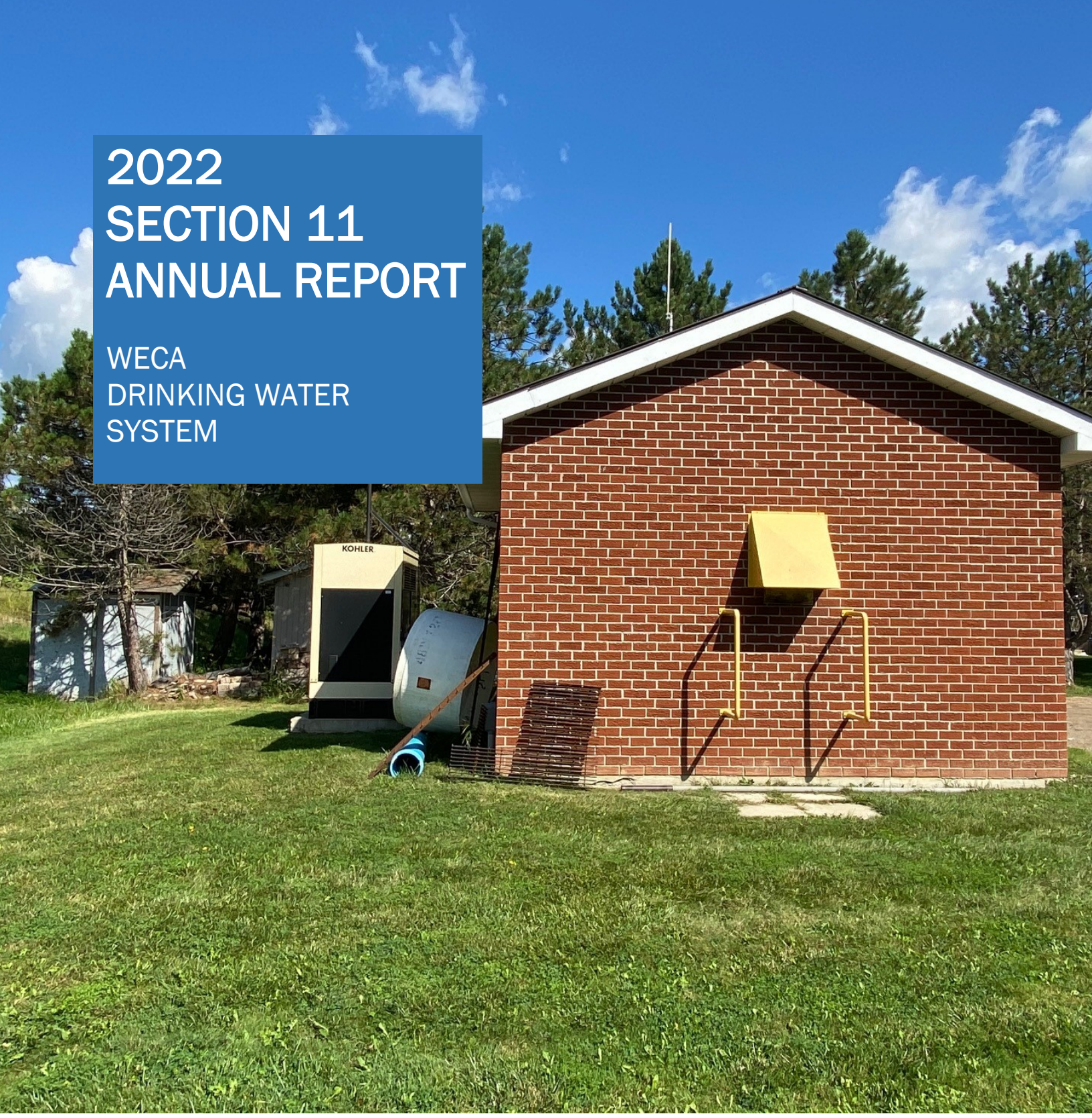
2022 SECTION 11 ANNUAL REPORT

WECA DRINKING WATER SYSTEM



For the period of
January 1st, 2022 to December 31st, 2022

Prepared for the Corporation of the Township of Adjala-Tosorontio
by the Ontario Clean Water Agency

Township of Adjala-Tosorontio

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

This report was prepared in accordance with the requirements of *O.Reg 170/03, Section 11, Annual reports* for the following system and reporting period:

Drinking Water System Number:	220010048
Drinking Water System Name:	Weca Drinking Water System
Drinking Water System Owner:	The Corporation of the Township of Adjala-Tosorontio
Drinking Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2022 to December 31, 2022

Does the Drinking Water System serve more than 10,000 people?

No

Is the Annual Report available to the public at no charge on a website on the Internet?

Yes

Note: If a large municipal residential system serves more than 10,000 people, the owner of the system shall ensure that a copy of every report prepared under this section is available to the public at no charge on a website on the Internet. O. Reg. 170/03, Section 11. (10)

Location where Summary Report required under O. Reg 170/03, Schedule 22 will be available for inspection. *(O. Reg 170/03, Section 11.(6)(f)):*

- Township of Adjala-Tosorontio Municipal Office, 7855 Side Road 30, Alliston, ON
- http://www.adjtos.ca

Note: This is required for large municipal residential systems or small municipal residential systems.

List all Drinking Water Systems (if any), which receive all of their drinking water from the system:

Drinking Water System Name	Drinking Water System Number
N/A	N/A

Is a copy of the annual report provided to all Drinking Water System owners that are connected to this system and to whom this system provides all of its drinking water?

N/A

How system users are notified that the annual report is available, and is free of charge. *(O.Reg 170/03, Section 11.(7))*

X	Public access/notice via the web
X	Public access/notice via Government Office
	Public access/notice via a newspaper
X	Public access/notice via Public Request
	Public access/notice via a Public Library

☐ Public access/notice via other method: _____

Note: The owner of a drinking water system shall ensure that a copy of an annual report for the system is given, without charge, to every person who requests a copy. ((O.Reg 170/03, Section 11.(7)):

Description of Drinking Water System *(O.Reg 170/03, Section 11.(6)(a)):*

The Weca Drinking Water System is classified as a Large Municipal Residential, Class 1 Water Distribution and Supply Subsystem, servicing an approximate population of 417 persons through 143 service connections, in the Village of Loretto, Township of Adjala-Tosorontio. Source water is ground water drawn from three (3) municipal wells at three (3) separate pumphouses drilled into a confined aquifer. The former Loretto Heights Drinking Water System was a separate and independent system until it was connected to the Weca DWS on December 14, 2018. Combined they were hereafter referred to as the Weca Drinking Water System.

Weca Well No. 1 Pumphouse
Services well water drawn from one well (PW1) and treatment consists of chlorination with contact time, provided by a dedicated chlorine contact main at the pumphouse, for both primary and secondary disinfection.

Weca Well No. 2 Pumphouse
Services well water drawn from one well (PW2) and treatment consists of chlorination with contact time, provided by a dedicated chlorine contact main at the pumphouse, for both primary and secondary disinfection. A stand-by diesel generator is situated outside the pumping station to supply the works with power during power failures.

Weca Well No. 3 Pumphouse-Loretto Heights
Services well water drawn from one well (PW1-Loretto Heights) and treatment consists of chlorination with contact time, provided by a dedicated chlorine contact main at the pumphouse, for both primary and secondary disinfection. A stand-by diesel generator is situated outside the pumping station to supply the works with power during power failures.

List of water treatment chemicals used by the system during the reporting period *(O.Reg 170/03, Section 11.(6)(a)):*

- Sodium Hypochlorite 12% Solution

Significant expenses were incurred to:

- [X] Install required equipment
- [X] Repair required equipment
- [X] Replace required equipment
- [ ] No significant expenses were incurred

Description of major expenses during the reporting period to install, repair or replace required equipment *(O.Reg 170/03, Section 11.(6)(e)):*

- Distribution System Swabbing

- Weca Pumphouse 1 Check Valve Installations
- Weca Pumphouse 1 Roof Repair
- Weca 2 Well Probe Repair and Maintenance
- Weca Well 1 Well Motor Replacement

Summary of any reports/notices submitted to the Ministry and/or Spills Action Centre in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg 170/03 during the reporting period, including a description of any corrective actions taken under Schedule 17 or 18 *(O. Reg 170/03, Section 11.(6)(b),(d):*

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Reporting Summary, Corrective Actions & Resolution
2022/01/25	Sodium	47.4 mg/L	• AWQI #157705 – Treated water sodium concentration exceeded the aesthetic objective (AO) for sodium (200 mg/L). The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L • Reportable as an adverse quality incident under O.Reg 170/03, Schedule 16(8) when a result indicating that the concentration of sodium exceeds 20 milligrams per litre in a sample of drinking water, if a report under subsection 18 (1) of the Act has not be made in the respect of sodium in the preceding 57 months. • Laboratory reported Weca TW1 exceedance to OCWA on January 25, 2022. OCWA notified MECP, local Health Unit and SAC on January 25, 2022. • As per O.Reg 170/03, Schedule 17-13(1)(2) corrective actions a treated water resample was taken on January 25, 2022. • Resample results received on February 2, 2022, results were above AO guidelines (52.5 mg/L). • No additional actions required by the Health Unit or MECP. Sodium levels will continue to be monitored every 60-months as required. In addition, at the request of the Nottawasaga Valley Conservation Authority (NVCA) annual sampling of sodium to commence in January, 2023 for additional monitoring purposes. • Annual sodium sampling was added to the sampling schedule and calendars on December 28, 2022. The first set of annual samples was taken on January 23, 2023 and will continue to

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Reporting Summary, Corrective Actions & Resolution
			be sampled each year in January moving forward. • Written notice of resolution submitted on February 3, 2022. No further actions required.
2022/01/25	Sodium	55.5 mg/L	• AWQI #157707 – Treated water sodium concentration exceeded the aesthetic objective (AO) for sodium (200 mg/L). The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L • Reportable as an adverse quality incident under O.Reg 170/03, Schedule 16(8) when a result indicating that the concentration of sodium exceeds 20 milligrams per litre in a sample of drinking water, if a report under subsection 18 (1) of the Act has not be made in the respect of sodium in the preceding 57 months. • Laboratory reported Weca TW2 exceedance to OCWA on January 25, 2022. OCWA notified MECP, local Health Unit and SAC on January 25, 2022. • As per O.Reg 170/03, Schedule 17-13(1)(2) corrective actions a treated water resample was taken on January 25, 2022. • Resample results received on February 2, 2022, results were above AO guidelines (62.3 mg/L). • No additional actions required by the Health Unit or MECP. Sodium levels will continue to be monitored every 60-months as required. In addition, at the request of the Nottawasaga Valley Conservation Authority (NVCA) annual sampling of sodium to commence in January, 2023 for additional monitoring purposes. • Annual sodium sampling was added to the sampling schedule and calendars on December 28, 2022. The first set of annual samples was taken on January 23, 2023 and will continue to be sampled each year in January moving forward. • Written notice of resolution submitted on February 3, 2022. No further actions required.
2022/01/25	Sodium	51.3 mg/L	• AWQI #157708 – Treated water sodium concentration exceeded the aesthetic objective (AO) for sodium (200 mg/L). The local Medical

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Reporting Summary, Corrective Actions & Resolution
			Officer of Health should be notified when the sodium concentration exceeds 20 mg/L • Reportable as an adverse quality incident under O.Reg 170/03, Schedule 16(8) when a result indicating that the concentration of sodium exceeds 20 milligrams per litre in a sample of drinking water, if a report under subsection 18 (1) of the Act has not be made in the respect of sodium in the preceding 57 months. • Laboratory reported Weca TW3-Loretto heights exceedance to OCWA on January 25, 2022. OCWA notified MECP, local Health Unit and SAC on January 25, 2022. • As per O.Reg 170/03, Schedule 17-13(1)(2) corrective actions a treated water resample was taken on January 25, 2022. • Resample results received on February 2, 2022, results were above AO guidelines (60.1 mg/L). • No additional actions required by the Health Unit or MECP. Sodium levels will continue to be monitored every 60-months as required. In addition, at the request of the Nottawasaga Valley Conservation Authority (NVCA) annual sampling of sodium to commence in January, 2023 for additional monitoring purposes. • Annual sodium sampling was added to the sampling schedule and calendars on December 28, 2022. The first set of annual samples was taken on January 23, 2023 and will continue to be sampled each year in January moving forward. • Written notice of resolution submitted on February 3, 2022. No further actions required.

Table 1. Microbiological testing done under the Schedule 10, 11 or 12 (as applicable) of O.Reg 170/03 during this reporting period *(O.Reg 170/03, Section 11.(6)(c)).*

Location	Number of Samples	Range of E. Coli or Fecal Results		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Samples	
		Min.	Max.	Min.	Max.		Min.	Max.
RW1[1A], PW1	50[1C]	0	0	0	5	0	N/A	N/A
RW2[1A], PW2	52	0	0	0	0	0	N/A	N/A

Location	Number of Samples	Range of E. Coli or Fecal Results		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Samples	
		Min.	Max.	Min.	Max.		Min.	Max.
RW3[1A], PW1-Loretto Heights	52	0	0	0	2	0	N/A	N/A
TW1[1B], Weca 1	52	0	0	0	0	52	<10	30
TW2[1B], Weca 2	52	0	0	0	0	52	<10	130
TW3[1B], Weca 3	52	0	0	0	0	52	<10	30
Distribution	101[1D]	0	0	0	0	51[1D]	<10	10

Note: HPC = Heterotrophic Plate Count

Note: Units for E.Coli or Fecal Results are cfu/100 mL, units for Total Coliform Results are cfu/100 mL, units for HPC results are cfu/1mL

[1A]RW1= Weca Well #1 (PW1) Raw Water; Weca Well #2 (PW2) Raw Water; Weca Well #3 (PW1-Loretto Heights) Raw Water

[1B]TW1= Weca Well No. 1 Pumphouse; TW2= Treated Water Weca Well No. 2 Pumphouse; TW3= Treated Water Weca Well No. 3 Loretto Heights Pumphouse;

[1C]No raw water samples collected for Weca Well #1 (PW1) on July 4 and July 11, 2022 as the well was offline for emergency repairs (well motor replacement).

[1D]O.Reg 170/03 Schedule 10-2.(1)(2)(3) requires that a system that serves 100,000 people or less, at least eight distribution samples, plus one additional distribution sample for every 1,000 people served by the system, are taken every month, with at least one of the samples being taken in each week and that each of the samples taken is tested for E.Coli, Total Coliforms. At least 25 percent of the samples required must be tested for general bacteria population expressed as colony counts on heterotrophic plate count (HPC). As of 2022, the population served by the Weca Drinking Water System is 417 persons via 143 private service connections, confirmed by the owner on November 12th, 2021 and thus requires at the minimum 8 monthly distribution samples.

Table 2. Operational testing done under Schedule 7, 8 or 9 (as applicable) O. Reg 170/03 during the period covered by this Annual Report *(O. Reg 170/03, Section 11.(6)(c)).*

Parameter & Location	Number of Samples	Range of Results	
		Min.	Max.
Turbidity, In-House (NTU) – RW1, PW1[2A]	12	0.39	14.2
Turbidity, In-House (NTU) – RW2, PW2[2A]	14	0.13	0.82
Turbidity, In-House (NTU) – RW3, PW1-Loretto Heights[2A]	13	0.23	1.00
Free Chlorine Residual, On-Line (mg/L) – TW1- Weca No. 1[2B]	8760	0.51	3.90
Free Chlorine Residual, On-Line (mg/L) – TW2- Weca No. 2[2B]	8760	0.90	4.74
Free Chlorine Residual, On-Line (mg/L) – TW3- Weca No. 3 (Loretto Heights)[2B]	8760	0.77	4.46
Free Chlorine Residual, DW Field (mg/L) – Distribution Water	366[2C]	0.71	3.20

Note: The number of samples used for continuous monitoring units is 8760.

[2A]O.Reg 170/03 Schedule 7-3.(1)(1.1) requires a raw water sample be taken at least once every month from each well that is supplying water to the system and tested for turbidity.

[2B]O.Reg 170/03 Schedule 7-2.(1) requires a drinking water system that provides chlorination for primary disinfection to sample and test for free chlorine residual with continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed.

[2C]O.Reg 170/03 Schedule 7-2.(3) requires a large municipal residential system that provides secondary disinfection to take at least seven distribution samples each week and immediately tested for free chlorine residual, if the system provides chlorination and does not provide chloramination

Table 3. Summary of additional testing and sampling results carried out in accordance with the requirement of an approval, municipal drinking water licence or order (including OWRA) or other legal instrument during the reporting period and if tests required under this Regulation in respect of a parameter were not required during that period, summarize the most recent results of tests of that parameter *(O. Reg 170/03, Section 11.(6)(c)):*

Legal Instrument & Issue Date (yyyy/mm/dd)	Sample Location & Parameter	Sampling Frequency	Allowable Result	Actual Result
N/A	N/A	N/A	N/A	N/A

Table 4. Summary of Inorganic parameters tested during this reporting period or the most recent sample results *(O.Reg 170/03, Section 11.(6)(c))*

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (µg/L) – TW1	2021/01/25	<MDL 0.9	6.0	No
Antimony: Sb (µg/L) – TW2	2021/02/16	<MDL 0.9	6.0	No
Antimony: Sb (µg/L) – TW3	2021/01/25	<MDL 0.9	6.0	No
Arsenic: As (µg/L) – TW1[4D]	2022/01/18	1.7	10.0	No
Arsenic: As (µg/L) – TW2[4D]	2022/01/18	2.5	10.0	No
Arsenic: As (µg/L) – TW3[4D]	2022/01/18	5.4	10.0	No
Arsenic: As (µg/L) – TW1[4D]	2022/04/19	2.3	10.0	No
Arsenic: As (µg/L) – TW2[4D]	2022/04/19	5.1	10.0	Np
Arsenic: As (µg/L) – TW3[4D]	2022/04/19	4.0	10.0	No
Arsenic: As (µg/L) – TW2[4D]	2022/07/18	2.0	10.0	No
Arsenic: As (µg/L) – TW3[4D]	2022/07/18	2.5	10.0	No
Arsenic: As (µg/L) – TW2[4D]	2022/10/18	5.3	10.0	No
Arsenic: As (µg/L) – TW3[4D]	2022/07/18	2.5	10.0	No
Barium: Ba (µg/L) – TW1	2021/01/25	143.0	1000.0	No
Barium: Ba (µg/L) – TW2	2021/02/16	154.0	1000.0	No
Barium: Ba (µg/L) – TW3	2021/01/25	102.0	1000.0	No
Boron: B (µg/L) – TW1	2021/01/25	98.0	5000.0	No
Boron: B (µg/L) – TW2	2021/02/16	121.0	5000.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Boron: B (µg/L) – TW3	2021/01/25	139.0	5000.0	No
Cadmium: Cd (µg/L) – TW1	2021/01/25	<MDL 0.003	5.0	No
Cadmium: Cd (µg/L) – TW2	2021/02/16	<MDL 0.003	5.0	No
Cadmium: Cd (µg/L) – TW3	2021/01/25	0.005	5.0	No
Chromium: Cr (µg/L) – TW1	2021/05/10	<MDL 0.08	50.0	No
Chromium: Cr (µg/L) – TW2	2021/05/10	<MDL 0.08	50.0	No
Chromium: Cr (µg/L) – TW3	2021/05/10	<MDL 0.08	50.0	No
Mercury: Hg (µg/L) – TW1	2021/01/25	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) – TW2	2021/02/16	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) – TW3	2021/01/25	<MDL 0.01	1.0	No
Selenium: Se (µg/L) – TW1	2021/01/25	<MDL 0.04	50.0	No
Selenium: Se (µg/L) – TW2	2021/02/16	1.32	50.0	No
Selenium: Se (µg/L) – TW3	2021/01/25	<MDL 0.04	50.0	No
Uranium: U (µg/L) – TW1	2021/01/25	0.068	20.0	No
Uranium: U (µg/L) – TW2	2021/02/16	0.043	20.0	No
Uranium: U (µg/L) – TW3	2021/01/25	0.009	20.0	No
Fluoride (mg/L) – TW1	2022/01/18	0.22[4B]	1.5	No
Fluoride (mg/L) – TW2	2022/01/18	0.25[4B]	1.5	No
Fluoride (mg/L) – TW3	2022/01/18	0.33[4B]	1.5	No
Nitrite (mg/L) – TW1	2022/01/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW1	2022/04/19	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW1	2022/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW1	2022/10/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW2	2022/01/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW2	2022/04/19	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW2	2022/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW2	2022/10/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW3	2022/01/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW3	2022/04/19	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW3	2022/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) – TW3	2022/10/18	<MDL 0.003	1.0	No
Nitrate (mg/L) – TW1	2022/01/18	0.013	10.0	No
Nitrate (mg/L) – TW1	2022/04/19	0.01	10.0	No
Nitrate (mg/L) – TW1	2022/07/18	0.008	10.0	No
Nitrate (mg/L) – TW1	2022/10/18	0.01	10.0	No
Nitrate (mg/L) – TW2	2022/01/18	0.013	10.0	No
Nitrate (mg/L) – TW2	2022/04/19	0.015	10.0	No
Nitrate (mg/L) – TW2	2022/07/18	0.018	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Nitrate (mg/L) – TW2	2022/10/18	0.013	10.0	No
Nitrate (mg/L) – TW3	2022/01/18	0.013	10.0	No
Nitrate (mg/L) – TW3	2022/04/19	0.013	10.0	No
Nitrate (mg/L) – TW3	2022/07/18	0.024	10.0	No
Nitrate (mg/L) – TW3	2022/10/18	0.015	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Aesthetic Objective (AO)	Exceedance	
				AO	> 20 mg/L
Sodium: Na (mg/L) – TW1	2022/01/25[4C]	52.5	200	No	Yes[4E]
Sodium: Na (mg/L) – TW2	2022/01/25[4C]	62.3	200	No	Yes[4E]
Sodium: Na (mg/L) – TW3	2022/01/25[4C]	60.1	200	No	Yes[4E]

Note: MDL = Minimum Detection Limit, TW = Treated Water

[4A]Inorganic Parameters (Schedule 23) are required to be tested every 36 months for a large municipal residential system, if the system obtains water from a raw water source that is ground water (O. Reg 170/03 Schedule 13-2(b). The last set of samples was collected and tested in 2021, the next set of samples is scheduled to be collected and tested in 2024.

[4B]Fluoride is reportable every 60 months. The most recent Fluoride samples were tested in 2022, the next set of samples is scheduled to be tested in 2027.

Note: There is no regulatory Maximum Allowable Concentration (MAC) Sodium. The aesthetic objective (AO) for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

[4C]Sodium is reportable every 60 months. The most recent Sodium samples were tested in 2022, the next set of reportable samples is scheduled to be tested in 2027. At the request of the NVCA, annual sodium sampling for monitoring purposes is to commence in 2023.

[4D]Weca Drinking Water System is currently undergoing additional treated water sampling and testing for arsenic due to a MAC exceedance that occurred during 36-month Inorganic parameter testing in May, 2021. In 2022, there have been no MAC exceedances on any treated water sources in the drinking water system. Refer to "Table 7: List of Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards for the reporting period" for further description on half the prescribe standard exceedances and additional sampling practices.

[4E]For more information on the 2022 sodium exceedances and adverse water quality incident reports, refer to the table located on page 2 titled "Summary of any reports/notices submitted to the Ministry and/or Spills Action Centre in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg 170/03 during the reporting period, including a description of any corrective actions taken under Schedule 17 or 18"..

Table 5: Summary of lead testing under Schedule 15.1 during this reporting period (O.Reg 170/03, Section 11.(6)(g))

Location/Type & Parameter	Number of Samples[5A]	Range of Results		Number of Lead Exceedances
		Min.	Max.	MAC = 10 µ/L
Period: January 1 to April 15				
Plumbing – Lead (µg/L)[5B]	N/A	N/A	N/A	0
Distribution – Lead (µg/L)[5C]	N/A	N/A	N/A	0
Distribution – Alkalinity (mg/L as $CaCO_3$)	2	196	197	N/A
Distribution – pH	2	7.11	7.16	N/A
Period: June 15 to October 15				
Plumbing – Lead (µg/L)[5B]	N/A	N/A	N/A	0
Distribution – Lead (µg/L)[5C]	N/A	N/A	N/A	0
Distribution – Alkalinity (mg/L as $CaCO_3$)	2	192	204	N/A
Distribution – pH	2	7.48	7.83	N/A
Period: December 15 to 31				
Plumbing – Lead (µg/L)[5B]	N/A	N/A	N/A	0
Distribution – Lead (µg/L)[5C]	N/A	N/A	N/A	0
Distribution – Alkalinity (mg/L as $CaCO_3$)	N/A	N/A	N/A	N/A
Distribution - pH	N/A	N/A	N/A	N/A

Note: this is required for large municipal residential systems, small municipal residential systems or non-municipal year-round residential system. (O.Reg 170/03, Section 11.(6)(g))

[5A]*The number of sampling points for the system is based on the population served by the system. As of 2022, the population served by the Weca Drinking Water is 417 persons via 143 private service connections, confirmed by the owner on November 12th, 2022 and therefore requires two (2) distribution sampling points per sampling period.*

[5B]*Plumbing samples are not applicable as this system qualifies for the plumbing exemption per O. Reg 170/03 Schedule 15.1-5 (9) (10).*

[5C]*This system follows a reduced sampling schedule (O.Reg 170/03, Section 15.1.5). Distribution lead samples are collected every 36 months. The most recent set of distribution lead samples were collected within the winter period of December 15, 2020 to April 15, 2021 and summer period of June 15, 2021 to October 15, 2021. The next set of distribution lead samples is scheduled to be collected within the winter period of December 15, 2023 to April 15, 2024 and summer period of June 15, 2024 to October 15, 2024.*

Table 6: Summary of Organic parameters sampled during this reporting period or the most recent sample results *(O.Reg 170/03, Section 11.(6)(c)).*

Parameter & Location	Sample Date[6A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Alachlor (µg/L) - TW1	2021/01/25	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW2	2021/02/16	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW3	2021/01/25	<MDL 0.02	5.0	No

Parameter & Location	Sample Date[6A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Atrazine + N-dealkylated metabolites (µg/L) - TW1	2021/01/25	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW2	2021/02/16	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW3	2021/01/25	<MDL 0.01	5.0	No
Azinphos-methyl (µg/L) - TW1	2021/01/25	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW2	2021/02/16	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW3	2021/01/25	<MDL 0.05	20.0	No
Benzene (µg/L) - TW1	2021/01/25	<MDL 0.32	1.0	No
Benzene (µg/L) - TW2	2021/02/16	<MDL 0.32	1.0	No
Benzene (µg/L) - TW3	2021/01/25	<MDL 0.32	1.0	No
Benzo(a)pyrene (µg/L) - TW1	2021/01/25	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW2	2021/02/16	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW3	2021/01/25	<MDL 0.004	0.01	No
Bromoxynil (µg/L) - TW1	2021/01/25	<MDL 0.33	5.0	No
Bromoxynil (µg/L) - TW2	2021/02/16	<MDL 0.33	5.0	No
Bromoxynil (µg/L) - TW3	2021/01/25	<MDL 0.33	5.0	No
Carbaryl (µg/L) - TW1	2021/01/25	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW2	2021/02/16	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW3	2021/01/25	<MDL 0.05	90.0	No
Carbofuran (µg/L) - TW1	2021/01/25	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW2	2021/02/16	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW3	2021/01/25	<MDL 0.01	90.0	No
Carbon Tetrachloride (µg/L) - TW1	2021/01/25	<MDL 0.17	2.0	No
Carbon Tetrachloride (µg/L) - TW2	2021/02/16	<MDL 0.17	2.0	No
Carbon Tetrachloride (µg/L) - TW3	2021/01/25	<MDL 0.17	2.0	No
Chlorpyrifos (µg/L) - TW1	2021/01/25	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW2	2021/02/16	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW3	2021/01/25	<MDL 0.02	90.0	No
Diazinon (µg/L) - TW1	2021/01/25	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW2	2021/02/16	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW3	2021/01/25	<MDL 0.02	20.0	No
Dicamba (µg/L) - TW1	2021/01/25	<MDL 0.2	120.0	No
Dicamba (µg/L) - TW2	2021/02/16	<MDL 0.2	120.0	No

Parameter & Location	Sample Date[6A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Dicamba (µg/L) - TW3	2021/01/25	<MDL 0.2	120.0	No
1,2-Dichlorobenzene (µg/L) - TW1	2021/01/25	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW2	2021/02/16	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW3	2021/01/25	<MDL 0.41	200.0	No
1,4-Dichlorobenzene (µg/L) - TW1	2021/01/25	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW2	2021/02/16	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW3	2021/01/25	<MDL 0.36	5.0	No
1,2-Dichloroethane (µg/L)- TW1	2021/01/25	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L)- TW2	2021/02/16	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L)- TW3	2021/01/25	<MDL 0.35	5.0	No
1,1-Dichloroethylene (µg/L) - TW1	2021/01/25	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW2	2021/02/16	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW3	2021/01/25	<MDL 0.33	14.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW1	2021/01/25	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW2	2021/02/16	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW3	2021/01/25	<MDL 0.35	50.0	No
2,4-Dichlorophenol (µg/L) - TW1	2021/01/25	<MDL 0.15	900.0	No
2,4-Dichlorophenol (µg/L) - TW2	2021/02/16	<MDL 0.15	900.0	No
2,4-Dichlorophenol (µg/L) - TW3	2021/01/25	<MDL 0.15	900.0	No

Parameter & Location	Sample Date[6A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW1	2021/01/25	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW2	2021/02/16	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW3	2021/01/25	<MDL 0.19	100.0	No
Diclofop-methyl (µg/L) - TW1	2021/01/25	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW2	2021/02/16	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW3	2021/01/25	<MDL 0.4	9.0	No
Dimethoate (µg/L) - TW1	2021/01/25	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW2	2021/02/16	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW3	2021/01/25	<MDL 0.06	20.0	No
Diquat (µg/L) - TW1	2021/01/25	<MDL 1.0	70.0	No
Diquat (µg/L) - TW2	2021/02/16	<MDL 1.0	70.0	No
Diquat (µg/L) - TW3	2021/01/25	<MDL 1.0	70.0	No
Diuron (µg/L) - TW1	2021/01/25	<MDL 0.03	150.0	No
Diuron (µg/L) - TW2	2021/02/16	<MDL 0.03	150.0	No
Diuron (µg/L) - TW3	2021/01/25	<MDL 0.03	150.0	No
Glyphosate (µg/L) - TW1	2021/01/25	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW2	2021/02/16	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW3	2021/01/25	<MDL 1.0	280.0	No
Malathion (µg/L) - TW1	2021/01/25	<MDL 0.02	190.0	No
Malathion (µg/L) - TW2	2021/02/16	<MDL 0.02	190.0	No
Malathion (µg/L) - TW3	2021/01/25	<MDL 0.02	190.0	No
Metolachlor (µg/L) - TW1	2021/01/25	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW2	2021/02/16	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW3	2021/01/25	<MDL 0.01	50.0	No
Metribuzin (µg/L) - TW1	2021/01/25	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW2	2021/02/16	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW3	2021/01/25	<MDL 0.02	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW1	2021/01/25	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW2	2021/02/16	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW3	2021/01/25	<MDL 0.3	80.0	No
Paraquat (µg/L) - TW1	2021/01/25	<MDL 1.0	10.0	No
Paraquat (µg/L) - TW2	2021/02/16	<MDL 1.0	10.0	No

Parameter & Location	Sample Date[6A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Paraquat (µg/L) - TW3	2021/01/25	<MDL 1.0	10.0	No
PCB (µg/L) - TW1	2021/01/25	<MDL 0.04	3.0	No
PCB (µg/L) - TW2	2021/02/16	<MDL 0.04	3.0	No
PCB (µg/L) - TW3	2021/01/25	<MDL 0.04	3.0	No
Pentachlorophenol (µg/L) - TW1	2021/01/25	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW2	2021/02/16	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW3	2021/01/25	<MDL 0.15	60.0	No
Phorate (µg/L) - TW1	2021/01/25	<MDL 0.01	2.0	No
Phorate (µg/L) - TW2	2021/02/16	<MDL 0.01	2.0	No
Phorate (µg/L) - TW3	2021/01/25	<MDL 0.01	2.0	No
Picloram (µg/L) - TW1	2021/01/25	<MDL 1.0	190.0	No
Picloram (µg/L) - TW2	2021/02/16	<MDL 1.0	190.0	No
Picloram (µg/L) - TW3	2021/01/25	<MDL 1.0	190.0	No
Prometryne (µg/L) - TW1	2021/01/25	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW2	2021/02/16	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW3	2021/01/25	<MDL 0.03	1.0	No
Simazine (µg/L) - TW1	2021/01/25	<MDL 0.01	10.0	No
Simazine (µg/L) - TW2	2021/02/16	<MDL 0.01	10.0	No
Simazine (µg/L) - TW3	2021/01/25	<MDL 0.01	10.0	No
Terbufos (µg/L) - TW1	2021/01/25	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW2	2021/02/16	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW3	2021/01/25	<MDL 0.01	1.0	No
Tetrachloroethylene (µg/L) - TW1	2021/01/25	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW2	2021/02/16	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW3	2021/01/25	<MDL 0.35	10.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW1	2021/01/25	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW2	2021/02/16	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW3	2021/01/25	<MDL 0.2	100.0	No
Triallate (µg/L) - TW1	2021/01/25	<MDL 0.01	230.0	No

Parameter & Location	Sample Date[6A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Triallate (µg/L) - TW2	2021/02/16	<MDL 0.01	230.0	No
Triallate (µg/L) - TW3	2021/01/25	<MDL 0.01	230.0	No
Trichloroethylene (µg/L) - TW1	2021/01/25	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW2	2021/02/16	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW3	2021/01/25	<MDL 0.44	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW1	2021/01/25	<MDL 0.25	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW2	2021/02/16	<MDL 0.25	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW3	2021/01/25	<MDL 0.25	5.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW1	2021/02/16	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW2	2021/02/16	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW3	2021/01/25	<MDL 0.12	100.0	No
Trifluralin (µg/L) - TW1	2021/01/25	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW2	2021/02/16	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW3	2021/01/25	<MDL 0.02	45.0	No
Vinyl Chloride (µg/L) - TW1	2001/25/21	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW2	2021/02/16	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW3	2021/01/25	<MDL 0.17	1.0	No
Trihalomethane: Total (µg/L) Annual Average - DW	2022 (Quarterly)	61.75	100.0	No
HAA Total (µg/L) Annual Average - DW	2022 (Quarterly)	9.85	80.0	No

Note: TW = Treated Water, DW = Distribution Water, MDL = Minimum Detection Limit, MAC = Maximum Allowable Concentration, HAA = Haloacetic Acids

Note: TW1 = Weca No.1 Pumphouse; TW2 Weca No. 2 Pumphouse; TW3 refers Weca No. 3- Loretto Heights Pumphouse

[6A]Organic Parameters (Schedule 24) are required to be tested every 36 months for a large municipal residential system, if the system obtains water from a raw water supply that is ground water (O. Reg 170/03 Schedule 13-4.(1b)). The last set of samples was collected and tested in 2021, the next set of samples is scheduled to be collected and tested in 2024.

Table 7: List of Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards for the reporting period.

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result
Trihalomethane: Total (ug/L) Annual Average - DW	2022 (Quarterly)	61.75
Arsenic: As (µg/L) – TW3[7(A)(C)]	2022/01/18	5.4
Arsenic: As (µg/L) – TW2[7(A)(B)]	2022/04/19	5.1
Arsenic: As (µg/L) – TW2[7(A)(B)]	2022/10/18	5.3

Note: As per O.Reg 170/03 Schedule 13-5(1) if a test result obtained under section 13-2 or 13-3 for a parameter exceeds half of the standard prescribed for the parameter in Schedule 2 to the Ontario Drinking Water Quality Standards, the frequency of sampling and testing for that parameter under the section shall be increased so that at least one water sample is taken and tested every three months. Additional, as per O.reg 170/03, Schedule 13.5(2)(a) increased frequency of sampling can cease to apply if in the case of a drinking water system that obtains water from a raw water source that is ground water, for two consecutive three-month periods in which the system is in operation, none of the test results for the parameter exceeds half of the standard prescribed.

[7A]In May 2021, during routine inorganic (Schedule 23) parameter testing, an arsenic MAC exceedance in a treated water sample (TW2) was observed. As a proactive approach to testing and monitoring, OCWA began testing all treated water sources (TW1, TW2, and TW3) in conjunction with the above noted regulatory requirements every three months. Since May 2021, fluctuations have occurred in all treated water sources, with two of the three TW sources (TW 2 and TW3) exceeding half the prescribed standard (5.0 µg/L). In 2022, OCWA continued to proactively sample all TW sources in Weca. Since May 20, 2021 TW1 has not exceeded the half MAC or MAC standard and on April 26, 2022 we were advised by the local MECP- Barrie District Office that arsenic testing could cease at Weca TW 1.

*[7B]On April 19, 2022 arsenic exceeded half the prescribed standard (5.0 µg/L), the next three month sample the parameter was below the half prescribed standard but on October 18, 2022 it exceeded half the prescribed standard again. Further sampling has continued into 2023, with January 23, 2023 results below the half MAC. Should the next three month sample, scheduled for April 17, 2023 be below the half prescribed standard, additional arsenic sampling can cease altogether at the Weca Drinking Water System until the next 36- month I*norganic parameter (Schedule 23) testing is due in 202*4.*

[7C]On January 18, 2022 Weca TW3 exceeded the half prescribed standard (5.0 µg/L) for arsenic, additional three month sampling continued at Weca TW3 in April and July, 2022 with both sample results below the half prescribed standard. OCWA was advised on July 26, 2022 by the MECP-Barrie District Office, that further additional testing for arsenic could cease at Weca TW3.