

ANNUAL REPORT

ONTARIO REGULATION 170/03
SECTION 11

EVERETT DRINKING WATER SYSTEM



**FOR THE PERIOD:
JANUARY 1, 2021 – DECEMBER 31, 2021**

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



Drinking-Water System Number:	220011680
Drinking-Water System Name:	Everett Drinking Water System
Drinking-Water System Owner:	The Corporation of the Township of Adjala-Tosorontio
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2021 to December 31, 2021

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

No

Is your annual report available to the public at no charge on a web site on the Internet?

Yes

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Summary Report is available for inspection at the Township of Adjala-Tosorontio Municipal Office at 7855 Side Road 30, Alliston, ON or on the following website: <http://www.adjtos.ca>

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

Drinking Water System Name	Drinking Water System Number
Not Applicable	Not Applicable

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Not Applicable

Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method

Description of Drinking-Water System:

The Everett water system is classified as a Large Municipal Residential water system with 657 service connections. Water is supplied via three (3) municipal wells, two (2) pumphouses and an in ground reservoir to the people in the Village of Everett. Inspections and maintenance duties are conducted by Ontario Clean Water Agency staff on a regular basis to maintain compliance with Ontario Regulation 170/03 to ensure that Everett's water supply is safe to drink.

List of water treatment chemicals used during the reporting period:

- Sodium Hypochlorite 12% Solution NSF, Primary Disinfection

Significant expenses incurred to:

- Install required equipment
- Purchase required equipment
- Repair required equipment
- Replace required equipment

Description of significant expenses incurred:

1. Flushing Control Line added to the Backflush Line- Grohal
2. New Pressure Tanks- Grohal
3. Installation of New Standby Diesel Generator with a Silent Enclosure- Grohal

Details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre:

Incident Date (yyyy/mm/dd)	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date (yyyy/mm/dd)
Not Applicable					

Table 1: Microbiological testing done under the Schedule 11 of Regulation 170/03 during this reporting period.

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
Raw - RW1	47*	0	0	0	0	N/A	N/A	N/A
Raw - RW2	52	0	0	0	41	N/A	N/A	N/A
Raw - RW3	52	0	0	0	0	N/A	N/A	N/A
Treated - TW1	52	0	0	0	0	52	<10	60
Treated - TW2	52	0	0	0	0	52	<10	10
Distribution - DW	132	0	0	0	0	53	<10	10

Note:

- RW1 – Grohal Production Well
- RW2 – Grohal Standby Well
- RW3 – Ballpark Production Well
- TW1 – Grohal Treated Water
- TW2 – Ballpark Treated Water

* RW1- Grohal Production well was offline from Dec 2020-February 9th, 2021. Weekly raw water samples were not taken in January or the first week of February while offline for maintenance and repair activities.

Table 2: Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report.

Location & Test	Number of Samples	Range of Results	
		Minimum	Maximum
Turbidity, Raw RW1 (Grab) [NTU]	11*	0.09	6.86**
Turbidity, Raw RW2 (Grab) [NTU]	12	0.29	0.95
Turbidity, Raw RW3 (Grab) [NTU]	12	0.19	0.82
Free Chlorine Residual, Treated Grohal (Continuous) [mg/L]	8760	0.04 ^	4.87
Free Chlorine Residual, Treated Ballpark (Continuous) [mg/L]	8760	0.08 ^	4.20
Free Chlorine Residual, Treated Grohal (Grab) [mg/L]	168	0.77	2.40
Free Chlorine Residual, Treated Ballpark (Grab) [mg/L]	167	0.78	1.48
Total Chlorine Residual, Treated Grohal (Grab) [mg/L]	167	0.91	2.60
Total Chlorine Residual, Treated Ballpark (Grab) [mg/L]	167	0.90	1.81
Free Chlorine Residual, Distribution (Grab) [mg/L]	364	0.46	1.61

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

* RW1- Grohal Production well was not in service January 2021, no turbidity sample taken.

** RW1- Grohal production well high turbidity reading for February 2021 was recorded prior to Production Well being placed back into service.

^The minimum treated free chlorine residual did not result in an Adverse Observation because the wells were locked out during the event. Adequate CT achieved.

Table 3: Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of Legal Instrument Issued	Parameter	Date Sampled	Result	Unit of Measure
Not Applicable				

Table 4: Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedances	
				MAC	½ MAC
Antimony: Sb (µg/L) - TW1	2020/02/11	<MDL 0.09	6.0	No	No
Antimony: Sb (µg/L) - TW2	2020/02/11	<MDL 0.09	6.0	No	No
Arsenic: As (µg/L) - TW1	2020/02/11	0.3	10.0	No	No
Arsenic: As (µg/L) - TW2	2020/02/11	<MDL 0.2	10.0	No	No
Barium: Ba (µg/L) - TW1	2020/02/11	81.2	1000.0	No	No
Barium: Ba (µg/L) - TW2	2020/02/11	91.5	1000.0	No	No
Boron: B (µg/L) - TW1	2020/02/11	19.0	5000.0	No	No
Boron: B (µg/L) - TW2	2020/02/11	29.0	5000.0	No	No
Cadmium: Cd (µg/L) - TW1	2020/02/11	<MDL 0.003	5.0	No	No
Cadmium: Cd (µg/L) - TW2	2020/02/11	<MDL 0.003	5.0	No	No
Chromium: Cr (µg/L) - TW1	2020/02/11	0.09	50.0	No	No
Chromium: Cr (µg/L) - TW2	2020/02/11	0.09	50.0	No	No
Mercury: Hg (µg/L) - TW1	2020/02/11	0.01	1.0	No	No

Parameter	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedances	
				MAC	½ MAC
Mercury: Hg (µg/L) - TW2	2020/02/11	<MDL 0.01	1.0	No	No
Selenium: Se (µg/L) - TW1	2020/02/11	<MDL 0.04	50.0	No	No
Selenium: Se (µg/L) - TW2	2020/02/11	<MDL 0.04	50.0	No	No
Uranium: U (µg/L) - TW1	2020/02/11	0.097	20.0	No	No
Uranium: U (µg/L) - TW2	2020/02/11	0.021	20.0	No	No
Fluoride (mg/L) - TW1	2017/01/11	0.12	1.5	No	No
Fluoride (mg/L) - TW2	2017/01/11	0.15	1.5	No	No
Nitrite (mg/L) - TW1	2021/01/26	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2021/05/04	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2021/07/21	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2021/10/19	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW2	2021/01/26	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW2	2021/05/04	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW2	2021/07/21	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW2	2021/10/19	<MDL 0.003	1.0	No	No
Nitrate (mg/L) - TW1	2021/01/26	0.009	10.0	No	No
Nitrate (mg/L) - TW1	2021/05/04	0.006	10.0	No	No
Nitrate (mg/L) - TW1	2021/07/21	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW1	2021/10/19	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW2	2021/01/26	0.011	10.0	No	No
Nitrate (mg/L) - TW2	2021/05/04	0.008	10.0	No	No
Nitrate (mg/L) - TW2	2021/07/21	0.006	10.0	No	No
Nitrate (mg/L) - TW2	2021/10/19	0.006	10.0	No	No
Sodium: Na (mg/L) - TW1	2017/01/11	10.4	20*	N/A	N/A
Sodium: Na (mg/L) - TW2	2017/01/11	14.1	20*	N/A	N/A

Note: MDL = Minimum Detection Limit

*There is no "MAC" for Sodium. The aesthetic objective 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. Sodium is reportable every 60 months, the next set of sodium samples is due in 2022.

Table 5: Summary of lead testing under Schedule 15.1 during this reporting period

Location Type	Number of Samples	Range of Lead Results		MAC	Exceedances
		Minimum	Maximum		
Lead – Plumbing (µg/L)	Not Applicable - Relief from all Plumbing Requirements*				
Lead – Distribution** (µg/L)	4	0.07	0.21	10	0

Note: The Alkalinity results for 2021 were 179, 193, 195 and 171 mg/L as CaCO₃. pH for 2021 ranged from 7.50 to 7.83. The aesthetic objective/operational guideline for pH is 6.5-8.5.

*This system qualifies for the plumbing exemption as per O. Regulation 170/03 Schedule 15.1-5 (9) (10).

**Distribution lead samples are taken every 36 months. The last set of distribution lead samples were taken in 2021. The next set of distribution lead samples is scheduled for 2024.

Table 6: Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedances	
				MAC	½ MAC
Alachlor (µg/L) - TW1	2020/02/11	<MDL 0.02	5.00	No	No
Alachlor (µg/L) - TW2	2020/02/11	<MDL 0.02	5.00	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW1	2020/02/11	<MDL 0.01	5.00	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW2	2020/02/11	<MDL 0.01	5.00	No	No
Azinphos-methyl (µg/L) - TW1	2020/02/11	<MDL 0.05	20.00	No	No
Azinphos-methyl (µg/L) - TW2	2020/02/11	<MDL 0.05	20.00	No	No
Benzene (µg/L) - TW1	2020/02/11	<MDL 0.32	1.00	No	No
Benzene (µg/L) - TW2	2020/02/11	<MDL 0.32	1.00	No	No
Benzo(a)pyrene (µg/L) - TW1	2020/02/11	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (µg/L) - TW2	2020/02/11	<MDL 0.004	0.01	No	No
Bromoxynil (µg/L) - TW1	2020/02/11	<MDL 0.33	5.00	No	No
Bromoxynil (µg/L) - TW2	2020/02/11	<MDL 0.33	5.00	No	No
Carbaryl (µg/L) - TW1	2020/02/11	<MDL 0.05	90.00	No	No
Carbaryl (µg/L) - TW2	2020/02/11	<MDL 0.05	90.00	No	No
Carbofuran (µg/L) - TW1	2020/02/11	<MDL 0.01	90.00	No	No
Carbofuran (µg/L) - TW2	2020/02/11	<MDL 0.01	90.00	No	No
Carbon Tetrachloride (µg/L) - TW1	2020/02/11	<MDL 0.17	2.00	No	No
Carbon Tetrachloride (µg/L) - TW2	2020/02/11	<MDL 0.17	2.00	No	No
Chlorpyrifos (µg/L) - TW1	2020/02/11	<MDL 0.02	90.00	No	No
Chlorpyrifos (µg/L) - TW2	2020/02/11	<MDL 0.02	90.00	No	No
Diazinon (µg/L) - TW1	2020/02/11	<MDL 0.02	20.00	No	No
Diazinon (µg/L) - TW2	2020/02/11	<MDL 0.02	20.00	No	No
Dicamba (µg/L) - TW1	2020/02/11	<MDL 0.2	120.00	No	No
Dicamba (µg/L) - TW2	2020/02/11	<MDL 0.2	120.00	No	No
1,2-Dichlorobenzene (µg/L) - TW1	2020/02/11	<MDL 0.41	200.00	No	No
1,2-Dichlorobenzene (µg/L) - TW2	2020/02/11	<MDL 0.41	200.00	No	No
1,4-Dichlorobenzene (µg/L) - TW1	2020/02/11	<MDL 0.36	5.00	No	No
1,4-Dichlorobenzene (µg/L) - TW2	2020/02/11	<MDL 0.36	5.00	No	No
1,2-Dichloroethane (µg/L) - TW1	2020/02/11	<MDL 0.35	5.00	No	No
1,2-Dichloroethane (µg/L) - TW2	2020/02/11	<MDL 0.35	5.00	No	No
1,1-Dichloroethylene (µg/L) - TW1	2020/02/11	<MDL 0.33	14.00	No	No
1,1-Dichloroethylene (µg/L) - TW2	2020/02/11	<MDL 0.33	14.00	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW1	2020/02/11	<MDL 0.35	50.00	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW2	2020/02/11	<MDL 0.35	50.00	No	No
2,4-Dichlorophenol (µg/L) - TW1	2020/02/11	<MDL 0.15	900.00	No	No
2,4-Dichlorophenol (µg/L) - TW2	2020/02/11	<MDL 0.15	900.00	No	No

Parameter	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedances	
				MAC	½ MAC
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW1	2020/02/11	<MDL 0.19	100.00	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW2	2020/02/11	<MDL 0.19	100.00	No	No
Diclofop-methyl (µg/L) - TW1	2020/02/11	<MDL 0.4	9.00	No	No
Diclofop-methyl (µg/L) - TW2	2020/02/11	<MDL 0.4	9.00	No	No
Dimethoate (µg/L) - TW1	2020/02/11	<MDL 0.06	20.00	No	No
Dimethoate (µg/L) - TW2	2020/02/11	<MDL 0.06	20.00	No	No
Diquat (µg/L) - TW1	2020/02/11	<MDL 1.0	70.00	No	No
Diquat (µg/L) - TW2	2020/02/11	<MDL 1.0	70.00	No	No
Diuron (µg/L) - TW1	2020/02/11	<MDL 0.03	150.00	No	No
Diuron (µg/L) - TW2	2020/02/11	<MDL 0.03	150.00	No	No
Glyphosate (µg/L) - TW1	2020/02/11	<MDL 1.0	280.00	No	No
Glyphosate (µg/L) - TW2	2020/02/11	<MDL 1.0	280.00	No	No
Malathion (µg/L) - TW1	2020/02/11	<MDL 0.02	190.00	No	No
Malathion (µg/L) - TW2	2020/02/11	<MDL 0.02	190.00	No	No
Metolachlor (µg/L) - TW1	2020/02/11	<MDL 0.01	50.00	No	No
Metolachlor (µg/L) - TW2	2020/02/11	<MDL 0.01	50.00	No	No
Metribuzin (µg/L) - TW1	2020/02/11	<MDL 0.02	80.00	No	No
Metribuzin (µg/L) - TW2	2020/02/11	<MDL 0.02	80.00	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW1	2020/02/11	<MDL 0.3	80.00	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW2	2020/02/11	<MDL 0.3	80.00	No	No
Paraquat (µg/L) - TW1	2020/02/11	<MDL 1.0	10.00	No	No
Paraquat (µg/L) - TW2	2020/02/11	<MDL 1.0	10.00	No	No
PCB (µg/L) - TW1	2020/02/11	<MDL 0.04	3.00	No	No
PCB (µg/L) - TW2	2020/02/11	<MDL 0.04	3.00	No	No
Pentachlorophenol (µg/L) - TW1	2020/02/11	<MDL 0.15	60.00	No	No
Pentachlorophenol (µg/L) - TW2	2020/02/11	<MDL 0.15	60.00	No	No
Phorate (µg/L) - TW1	2020/02/11	<MDL 0.01	2.00	No	No
Phorate (µg/L) - TW2	2020/02/11	<MDL 0.01	2.00	No	No
Picloram (µg/L) - TW1	2020/02/11	<MDL 1.0	190.00	No	No
Picloram (µg/L) - TW2	2020/02/11	<MDL 1.0	190.00	No	No
Prometryne (µg/L) - TW1	2020/02/11	<MDL 0.03	1.00	No	No
Prometryne (µg/L) - TW2	2020/02/11	<MDL 0.03	1.00	No	No
Simazine (µg/L) - TW1	2020/02/11	<MDL 0.01	10.00	No	No
Simazine (µg/L) - TW2	2020/02/11	<MDL 0.01	10.00	No	No
Terbufos (µg/L) - TW1	2020/02/11	<MDL 0.01	1.00	No	No
Terbufos (µg/L) - TW2	2020/02/11	<MDL 0.01	1.00	No	No
Tetrachloroethylene (µg/L) - TW1	2020/02/11	<MDL 0.35	10.00	No	No
Tetrachloroethylene (µg/L) - TW2	2020/02/11	<MDL 0.35	10.00	No	No

Parameter	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedances	
				MAC	½ MAC
2,3,4,6-Tetrachlorophenol (µg/L) - TW1	2020/02/11	<MDL 0.2	100.00	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW2	2020/02/11	<MDL 0.2	100.00	No	No
Triallate (µg/L) - TW1	2020/02/11	<MDL 0.01	230.00	No	No
Triallate (µg/L) - TW2	2020/02/11	<MDL 0.01	230.00	No	No
Trichloroethylene (µg/L) - TW1	2020/02/11	<MDL 0.44	5.00	No	No
Trichloroethylene (µg/L) - TW2	2020/02/11	<MDL 0.44	5.00	No	No
2,4,6-Trichlorophenol (µg/L) - TW1	2020/02/11	<MDL 0.25	5.00	No	No
2,4,6-Trichlorophenol (µg/L) - TW2	2020/02/11	<MDL 0.25	5.00	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW1	2020/02/11	<MDL 0.12	100.00	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW2	2020/02/11	<MDL 0.12	100.00	No	No
Trifluralin (µg/L) - TW1	2020/02/11	<MDL 0.02	45.00	No	No
Trifluralin (µg/L) - TW2	2020/02/11	<MDL 0.02	45.00	No	No
Vinyl Chloride (µg/L) - TW1	2020/02/11	<MDL 0.17	1.00	No	No
Vinyl Chloride (µg/L) - TW2	2020/02/11	<MDL 0.17	1.00	No	No
Trihalomethane: Total Annual Average (µg/L) - DW	4 Quarters of 2021	8.15	100.00	No	No
Haloacetic Acid: Total Annual Average (µg/L) - DW	4 Quarters of 2021	5.3	80.00	No	No

Note: MDL = Minimum Detection Limit

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

Parameter	Result Value	Unit of Measure	Date of Sample
Not Applicable			