Green Valley Group Home Well Supply

Waterworks # 260008232
System Category – Small Non-Municipal, Non-Residential

Annual Water Report

Prepared For:

Community Living Glengarry Inc./Intégration communautaire Glengarry Inc.

Reporting Period of January 1st – December 31st 2020

Issued: January 22nd, 2021

Revision: 0

Operating Authority:

OCWA
ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

This report has been prepared to satisfy the annual reporting requirements in O.Reg 170/03 Section 11

Table of Contents

Report Availability

This system does not serve more than 10,000 residence and the annual reports will be available to residents at the Community Living Glengarry office, located in Alexandria ON.

Compliance Report Card

Compliance Event	# of Events
Ministry of Environment Inspections	0
Ministry of Labour Inspections	0
QEMS External Audit	N/A
AWQI's/BWA	0
Non-Compliance	0
Community Complaints	0
Spills	0
Watermain Breaks	0

System Process Description

Treatment & Distribution

The Green Valley Residence well supply is a non-municipal, non-residential system for 6 residents serviced by a single NON GUDI well containing a submersible pump with a rated capacity of 8gpm.

As such the facility must provide 2 Log Inactivation of Virus by primary disinfection and is therefore equipped with:

- 60 000 grain water softener
- sodium hypochlorite chemical feed system consisting of one chemical metering pump
- sodium hypochlorite tank with containment
- micronic filter for sediment removal
- UV disinfection system
- 5 stage reverse osmosis system.

This facility does not require a Drinking Water License or Water Works Permit.

Treatment Chemicals used during the reporting year:

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Brenntag

Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI #	Location	Problem	Legislation	Corrective Action Taken
There were no adverse water quality incidents reported during the reporting period.					

Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
There were no non-compliance issues reported during the reporting period.				

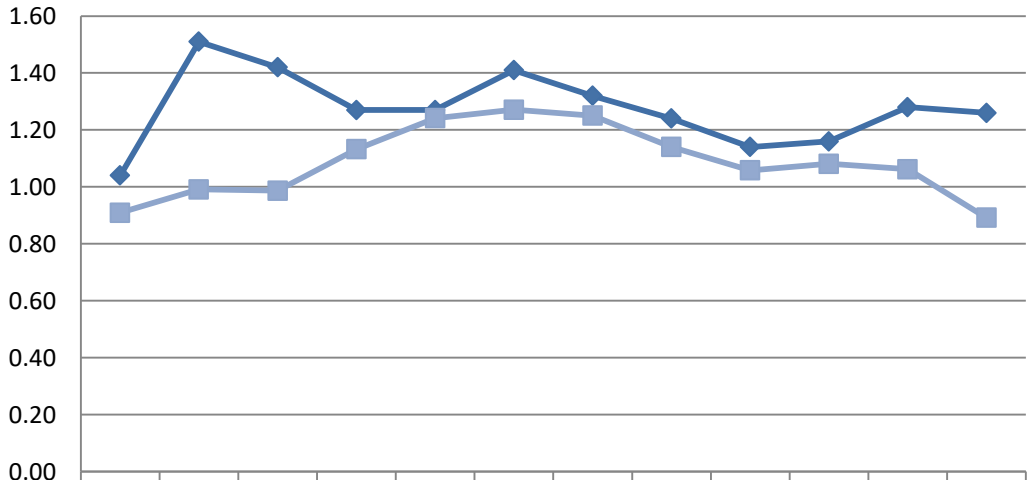
Non-Compliance Identified in a Ministry Inspection:

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
There was no inspection during this period.				

Flows

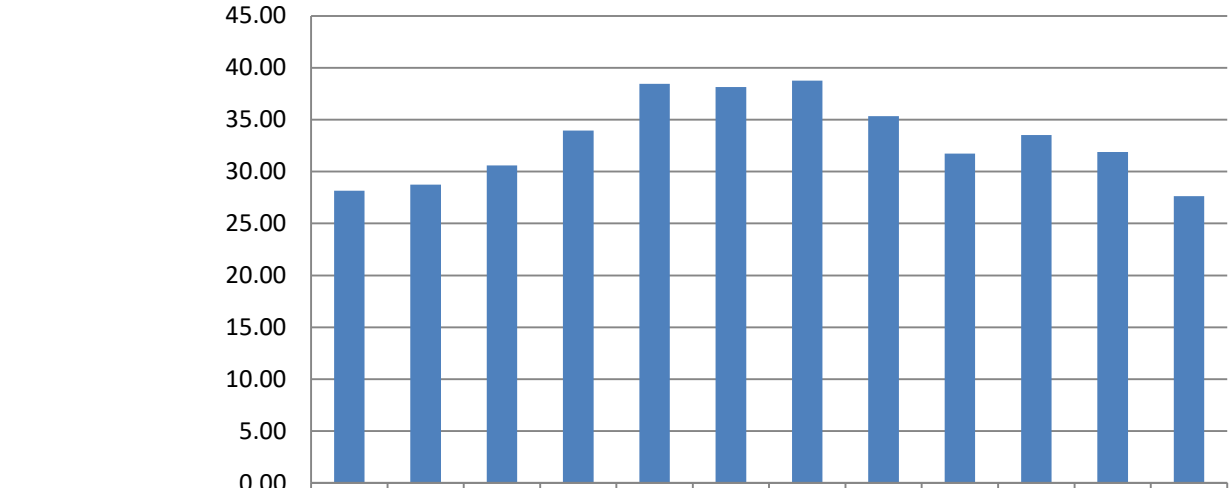
Raw Water Flows

Daily Flows (m3/d)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Daily Flow (m3/d)	1.04	1.51	1.42	1.27	1.27	1.41	1.32	1.24	1.14	1.16	1.28	1.26
Avg Daily Flow (m3/d)	0.91	0.99	0.99	1.13	1.24	1.27	1.25	1.14	1.06	1.08	1.06	0.89

Monthly Total Flow Comparison



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Monthly Flow (m3)	28.17	28.75	30.60	33.95	38.46	38.14	38.76	35.34	31.73	33.51	31.87	27.64

Regulatory Sample Results Summary

Microbiological Testing

	No. of Samples Collected	Range of E.Coli Results		Range of Total Coliform Results		Range of HPC Results	
		Min	Max	Min	Max	Min	Max
Raw Water	12	0	0	0	0		
Distribution Water	26	0	0	0	0	<2	4

Operational Testing

	No. of Samples Collected	Range of Results	
		Minimum	Maximum
Turbidity, In-House (NTU) - RW	12	0.48	7.30
Free Chlorine Residual, In-House (mg/L) - DW	365	0.40	2.10

Inorganic Parameters

These parameters are tested as a requirement under 170/03. Sodium and Fluoride are required to be tested every 5 years. Nitrate and Nitrite are tested quarterly and the metals are tested every three years as required under 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

- MAC = Maximum Allowable Concentration as per O.Reg 169/03
- MDL = Below the laboratory detection level

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Treated Water					
Antimony: Sb (ug/L) - TW	2019/06/03	<MDL 0.1	6.0	No	No
Arsenic: As (ug/L) - TW	2019/06/03	0.1	10.0	No	No
Barium: Ba (ug/L) - TW	2019/06/03	1.0	1000.0	No	No
Boron: B (ug/L) - TW	2019/06/03	79.0	5000.0	No	No
Cadmium: Cd (ug/L) - TW	2019/06/03	<MDL 0.02	5.0	No	No
Chromium: Cr (ug/L) - TW	2019/06/03	<MDL 2.0	50.0	No	No
Mercury: Hg (ug/L) - TW	2019/06/03	<MDL 0.02	1.0	No	No
Selenium: Se (ug/L) - TW	2019/06/03	<MDL 1.0	50.0	No	No
Uranium: U (ug/L) - TW	2019/06/03	<MDL 0.05	20.0	No	No
Additional Inorganics					
Fluoride (mg/L) - TW	2019/05/27	<MDL 0.1	1.5	No	No
Nitrite (mg/L) - TW	2020/01/13	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2020/04/14	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2020/07/06	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2020/10/13	<MDL 0.1	1.0	No	No
Nitrate (mg/L) - TW	2020/01/13	0.1	10.0	No	No
Nitrate (mg/L) - TW	2020/04/14	0.5	10.0	No	No
Nitrate (mg/L) - TW	2020/07/06	0.1	10.0	No	No
Nitrate (mg/L) - TW	2020/10/13	0.2	10.0	No	No
Sodium: Na (mg/L) - TW	2019/06/03	22.5	20*	No	No

*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified mg/L 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.

Schedule 15 Sampling:

The Schedule 15.2 Sampling is required under O.Reg 170/03. This system requires one lead sample to be taken per year.

Distribution System	Number of Sampling Points	Number of Samples	Results	MAC (ug/L)	Number of Exceedances
Lead (mg/L)	1	1	0.00009	0.01	0

Organic Parameters

These parameters are tested every three years as a requirement under O.Reg 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Treated Water					
Alachlor (ug/L) - TW	2019/06/03	<MDL 0.3	5.00	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2019/06/03	<MDL 1.0	5.00	No	No
Azinphos-methyl (ug/L) - TW	2019/06/03	<MDL 0.5	20.00	No	No
Benzene (ug/L) - TW	2019/06/03	<MDL 0.005	1.00	No	No
Benzo(a)pyrene (ug/L) - TW	2019/06/03	<MDL 0.5	0.01	No	No
Bromoxynil (ug/L) - TW	2019/06/03	<MDL 3.0	5.00	No	No
Carbaryl (ug/L) - TW	2019/06/03	<MDL 1.0	90.00	No	No
Carbofuran (ug/L) - TW	2019/06/03	<MDL 0.2	90.00	No	No
Carbon Tetrachloride (ug/L) - TW	2019/06/03	<MDL 0.5	2.00	No	No
Chlorpyrifos (ug/L) - TW	2019/06/03	<MDL 1.0	90.00	No	No
Diazinon (ug/L) - TW	2019/06/03	<MDL 10.0	20.00	No	No
Dicamba (ug/L) - TW	2019/06/03	<MDL 0.5	120.00	No	No
1,2-Dichlorobenzene (ug/L) - TW	2019/06/03	<MDL 0.5	200.00	No	No
1,4-Dichlorobenzene (ug/L) - TW	2019/06/03	<MDL 0.5	5.00	No	No
1,2-Dichloroethane (ug/L) - TW	2019/06/03	<MDL 5.0	5.00	No	No
1,1-Dichloroethylene (ug/L) - TW	2019/06/03	<MDL 0.1	14.00	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	2019/06/03	<MDL 10.0	50.00	No	No
2,4-Dichlorophenol (ug/L) - TW	2019/06/03	<MDL 0.9	900.00	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2019/06/03	<MDL 1.0	100.00	No	No
Diclofop-methyl (ug/L) - TW	2019/06/03	<MDL 5.0	9.00	No	No
Dimethoate (ug/L) - TW	2019/06/03	<MDL 5.0	20.00	No	No
Diquat (ug/L) - TW	2019/06/03	<MDL 25.0	70.00	No	No
Diuron (ug/L) - TW	2019/06/03	<MDL 5.0	150.00	No	No
Glyphosate (ug/L) - TW	2019/06/03	<MDL 3.0	280.00	No	No
Malathion (ug/L) - TW	2019/06/03	<MDL 3.0	190.00	No	No
2-Methyl-4chlorophenoxyacetic Acid (MCPA)	2019/06/03	<MDL 0.5	50.00	No	No
Metolachlor (ug/L) - TW	2019/06/03	<MDL 1.0	80.00	No	No
Metribuzin (ug/L) - TW	2019/06/03	<MDL 0.05	80.00	No	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	2019/06/03	<MDL 0.1	10.00	No	No
Paraquat (ug/L) - TW	2019/06/03	<MDL 0.3	3.00	No	No
PCB (ug/L) - TW	2019/06/03	<MDL 20.0	60.00	No	No
Pentachlorophenol (ug/L) - TW	2019/06/03	<MDL 0.1	2.00	No	No
Phorate (ug/L) - TW	2019/06/03	<MDL 0.5	190.00	No	No
Picloram (ug/L) - TW	2019/06/03	<MDL 0.3	1.00	No	No
Prometryne (ug/L) - TW	2019/06/03	<MDL 0.5	10.00	No	No
Simazine (ug/L) - TW	2019/06/03	<MDL 0.1	1.00	No	No
Terbufos (ug/L) - TW	2019/06/03	<MDL 10.0	10.00	No	No

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Tetrachloroethylene (ug/L) - TW	2019/06/03	<MDL 0.5	100.00	No	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2019/06/03	<MDL 0.1	230.00	No	No
Triallate (ug/L) - TW	2019/06/03	<MDL 10.0	5.00	No	No
Trichloroethylene (ug/L) - TW	2019/06/03	<MDL 0.5	5.00	No	No
2,4,6-Trichlorophenol (ug/L) - TW	2019/06/03	<MDL 0.2	45.00	No	No
Trifluralin (ug/L) - TW	2019/06/03	<MDL 0.3	1.00	No	No
Vinyl Chloride (ug/L) - TW	2019/06/03	<MDL 1.0	5.00	No	No
Distribution Water	**Most Recent Sample Date (yyyy/mm/dd)**	**4Q Running Average**			
Trihalomethane: Total (ug/L) Annual Average - DW	2020/10/13	5.25	100.0	No	No
Haloacetic acids: Total (ug/L) Annual Average - DW	2020/10/13	<5.3	80.0	No	No

MAC = Maximum Allowable Concentration as per O.Reg 169/03
MDL = Below the laboratory detection level

Additional Legislated Samples

There was no additional sampling required.

Major Maintenance Summary

Description
Replace micronic filters as required.
Replace filters on reverse osmosis system as required.
Add potassium chloride to softener as required.
September 24, 2020 – ORO onsite for annual water softener inspection
September 24, 2020 – Replace UV lamp