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February 2023

The Corporation of the Municipality of Oliver Paipoonge 3250 Highway 130 Rosslyn, Ontario P7K 0B1

Re: O. Regulation 170 - 2022 Section 11 Annual Report for the Rosslyn Village Subdivision Drinking-Water System

Ontario's Drinking-Water Systems Regulation (O.Reg. 170/03), made under the *Safe Drinking Water Act, 2002*, requires that the owner of a drinking water system prepare an annual report on the operation of the system and the quality of its water.

The annual report must cover the period of January 1st to December 31st in a year and must be prepared not later than February 28th of the following year. Pursuant to the legislative requirements, enclosed for your records is the 2022 Annual Report for the Rosslyn Village Subdivision Drinking-Water System.

Pursuant to the legislative requirements, Section 11 (6): the annual report must:

- (a) Contain a brief description of the drinking-water system, including a list of water treatment chemicals used by the system during the period covered by the report;
- (b) Summarize any reports made to the Ministry under subsection 18 (1) of the Act or section 16-4 of Schedule 16 during the period covered by the report;
- (c) Summarize the results of tests required under this Regulation, or an approval or order, including an OWRA order, during the period covered by the report 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;
- (d) Describe any corrective actions taken under Schedule 17 or 18 during the period covered by the report;
- (e) Describe any major expenses incurred during the period covered by the report to install, repair or replace required equipment; and

(f) In the case of a large municipal residential system or a small municipal residential system, include a statement of where a report prepared under Schedule 22 will be available for inspection under subsection 12 (4). O. Reg. 170/03, s. 11 (6)

In addition, Section 11 (7) gives the direction that a copy of an annual report for the system is given, without charge, to every person who requests a copy and be made available for inspection by any member of the public during normal business hours. The report should be made available at the office of the municipality, or at a location that is accessible to the users of the water system.

Yours truly,

Maurice

Ty Maurice Senior Operations Manager Northwestern Ontario Regional Hub 807-938-5067

Copy to: Wayne Hanchard - CAO

Chris Bowles – Director of Operations

Operations Staff – Rosslyn Drinking Water System

2022 Section 11 Annual Report

Rosslyn Village Subdivision Drinking Water System

February 2023

Prepared by the



Section 11 ANNUAL REPORT

Drinking-Water System Number: Drinking-Water System Name: Drinking-Water System Owner: Drinking-Water System Category: Period being reported: 210001081

Rosslyn Village Subdivision Well Supply

Municipality of Oliver Paipoonge

Small Municipal Residential Drinking Water-System

January 1 – December 31, 2022

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]

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

Yes [x] No[]

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

Municipality of Oliver Paipoonge Office 3250 Highway 130 Rosslyn, ON P7K 0B1

Complete for all other Categories.

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?
Yes [] No []

Number of Interested Authorities you report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes [] No []

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

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	
N/A	N/A	

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?

Yes [] No []

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

[X] Public access/notice via the web
[X] Public access/notice via Government Office (Municipal
[] 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

Describe your Drinking-Water System

Rossyln Village received its raw water supply from two drilled wells. The first has a depth of 34.5 meters and the second has a depth of 38.7 meters. Sodium hypochlorite is used for primary and secondary disinfection. In 2018, the system was upgraded to feed a 10,000 liter storage and sedimentation tank. The system will shut down the low-lift pumps if the chlorine reaches any critical levels. For maintenance or mechanical issues, the system can be switched back to the previously engineered treatment system. Two spin-down filters (a 100 mircron and a 20 micron) filter the water before going into the contact tanks. Five 454 litre tanks located in the water treatment facility provide storage and retention time. Two pressure tanks which maintain the discharge pressure are located adjacent to the storage tanks. The water then flows into the storage and sedimentation tank which is then delivered by two high-lift pumps. The distribution system now has a 3-inch flushing line at the dead end of Maple Street and a 2-inch flushing line extending South across Rosslyn Road. In-Line monitors record continuous flows, turbidity and chlorine readings. Information on the in-line monitoring data base is accessed on line using Endress Houser Field Data Manager Software Program. The equipment allows off-site monitoring complete with the capability of providing reports and alarms. A stand-by diesel generator provides emergency hydro in the event of a power failure.

List all water treatment chemicals used over this reporting period

Were any significant expenses incurred to?

- [X] Install required equipment
- [X] Repair required equipment
- [X] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Install	Repair	Replace	Description	Expense	
		х	Compliance Equipment Purchase	\$7,964.29	
	Х		Electrical Heater Connected to New Panel	\$2,436.44	
Х		Х	New Flow Meters & Turbidity Analyzer	\$15,940.34	
		х	Storage Tank Cleaning	\$1,412.69	
			Annual Compliance Calibrations	\$936.19	

Provide 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	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
17-Jun-22	Treated water flow meter failure			Install new flow meter, collect bacti sample	24-Jun-22
June 21 2022	NC for not immediately verbally notifying and NC for not submitting written notification within 24hrs				
5-Jul-22	TC present in distribution sample	Present		Flush & resample at same sample point	July 9 2022

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)	
Raw North Well South Well	8 14	0 – 0 0-0	0 – Present 0 – 0	N/A	N/A	
Treated	N/A	N/A	N/A	N/A	N/A	
Distribution	27	0-0	0 – Present	26	0 – 4	

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab	Range of Results (min #)-(max #)
	Samples	
Turbidity		
Raw North Well	8	0.8 – 8.11 NTU
Raw South Well	12	<0.10 – 8.15 NTU
Chlorine		
Treated	8760	0-5
Distribution	139	0.93 - 1.92
Fluoride (If the		
DWS provides	N/A	N/A
fluoridation)		

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: Record the unit of measure if it is **not** milligrams per litre.

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
N/A	N/A	N/A	N/A	N/A

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



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2021/02/12	<0.6	μg/L	No
Arsenic	2022/01/10	8.9	μg/L	No
North Well	2022/06/20	19.8	μg/L	Yes
	2022/07/18	15.4	μg/L	Yes
	2022/08/15	13.3	μg/L	Yes
	2022/09/12	7.8	μg/L	No
	2022/10/11	11.7	μg/L	Yes
	2022/11/09	6.2	μg/L	No
	2022/12/06	5	μg/L	No
South Well	2022/01/10	7.9	μg/L	No
	2022/02/22	7.7	μg/L	No
	2022/03/14	8.4	μg/L	No
	2022/04/27	6.8	μg/L	No
	2022/05/11	8.2	μg/L	No
	2022/06/20	8.3	μg/L	No
	2022/07/18	8.3	μg/L	No
	2022/08/15	8.2	μg/L	No
	2022/09/12	7.5	μg/L	No
	2022/10/11	8.4	μg/L	No
	2022/11/09	8.2	μg/L	No
	2022/12/06	10	μg/L	Yes
Barium	2021/02/12	192	μg/L	No
Boron	2021/02/12	210	μg/L	No
Cadmium	2021/02/12	<0.1	μg/L	No
Chromium	2021/02/12	<1.0	μg/L	No
*Lead	Refer to Summary			
Lead	Table Below			
Mercury	2021/01/28	<0.1	μg/L	No
Selenium	2021/02/12	5.0	μg/L	No
Sodium	2018/01/28	110	mg/L	Yes
Uranium	2021/02/12	5.0	μg/L	no
Fluoride	2021/01/28	1.39	mg/L	No
	2022/01/26	<0.020	mg/L	No
	2022/03/28	< 0.010	mg/L	No
Nitrite	2022/04/14	<0.020	mg/L	No
	2022/07/20	<0.010	mg/L	No
	2022/10/11	< 0.010	mg/L	No
	2022/01/26	<0.040	mg/L	No
Nituata	2022/03/28	<0.020	mg/L	No
Nitrate	2022/04/14	<0.040	mg/L	No
	2022/07/20	<0.020	mg/L	No

		2022/10/11	<0.020	mg/L	No	
*on	ly for drinking water	systems testing under	Schedule 15 20	this includes large	municinal non-	

^{*}only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	N/A	N/A	N/A
Distribution	0	0	0

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

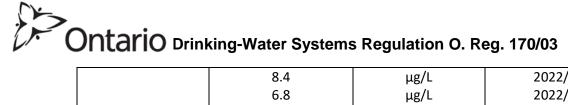
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2021-01-28	0.10	μg/L	No
Atrazine	2021-01-28	0.0050	μg/L	No
Atrazine & Metabolites	2021-01-28	0.10	μg/L	No
Azinphos-methyl	2021-01-28	0.20	μg/L	No
Benzene	2021-01-28	0.10	μg/L	No
Benzo(a)pyrene	2021-01-28	0.20	μg/L	No
Bromoxynil	2021-01-28	0.10	μg/L	No
Carbaryl	2021-01-28	0.20	μg/L	No
Carbofuran	2021-01-28	0.20	μg/L	No
Carbon Tetrachloride	2021-01-28	0.10	μg/L	No
Chlorpyrifos	2021-01-28	0.50	μg/L	No
Diazinon	2021-01-28	0.20	μg/L	No
Dicamba	2021-01-28	0.20	μg/L	No
1,2-Dichlorobenzene	2021-01-28	<0.5	μg/L	No
1,4-Dichlorobenzene	2021-01-28	<0.5	μg/L	No
1,2-Dichloroethane	2021-01-28	<0.5	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2021-01-28	<0.5	μg/L	No
Dichloromethane (methylene chloride)	2021-01-28	5.0	μg/L	No
2-4 Dichlorophenol	2021-01-28	<0.3	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2021-01-28	<0.2	μg/L	No
Diclofop-methyl	2021-01-28	<0.2	μg/L	No
Dimethoate	2021-01-28	<0.1	μg/L	No

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Diquat	2021-01-28	<1.0	μg/L	No
Diuron	2021-01-28	<5.0	μg/L	No
Glyphosate	2021-01-28	<0.1	μg/L	No
Haloacetic acids (HAA)	2022/10/11	<5.0	μg/L	No
(NOTE: show latest annual average)	2022 Average	3.3	ug/L	No
Malathion	2021-01-28	<0.10	μg/L	No
Metolachlor	2021-01-28	<0.10	μg/L	No
Metribuzin	2021-01-28	<0.10	μg/L	No
Monochlorobenzene	2021-01-28	<0.50	μg/L	No
Paraquat	2021-01-28	<1.0	μg/L	No
Pentachlorophenol	2021-01-28	<0.20	μg/L	No
Phorate	2021-01-28	<0.035	μg/L	No
Picloram	2021-01-28	<0.10	μg/L	No
Polychlorinated Biphenyls(PCB)	2021-01-28	<0.10	μg/L	No
Prometryne	2021-01-28	<0.10	μg/L	No
Simazine	2021-01-28	<0.10	μg/L	No
THM	2022/10/11	36.1	μg/L	No
(NOTE: show latest annual average)	2022 Average	21.7	ug/L	No
Terbufos	2021/01/13	<0.2	μg/L	No
Tetrachloroethylene	2021/01/13	<0.5	μg/L	No
2,3,4,6-Tetrachlorophenol	2021/01/13	<0.5	μg/L	No
Triallate	2021/01/13	<0.1	μg/L	No
Trichloroethylene	2021/01/13	<0.5	μg/L	No
2,4,6-Trichlorophenol	2021/01/13	<0.5	μg/L	No
Trifluralin	2021/01/13	<0.1	μg/L	No
Vinyl Chloride	2021/01/13	<0.2	μg/L	No
MCPA	2021/01/13	<0.2	μg/L	No

List any 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
Arconio	8.9	μg/L	2022/01/10
Arsenic North Well	19.8	μg/L	2022/06/20
North Well	15.4	μg/L	2022/07/18
	13.3	μg/L	2022/08/15
	7.8	μg/L	2022/09/12
	11.7	μg/L	2022/10/11
	6.2	μg/L	2022/11/09
	5	μg/L	2022/12/06
South Well	7.9	μg/L	2022/01/10
	7.7	μg/L	2022/02/22



	8.4	μg/L	2022/03/14
	6.8	μg/L	2022/04/27
	8.2	μg/L	2022/05/11
	8.3	μg/L	2022/06/20
	8.3	μg/L	2022/07/18
	8.2	μg/L	2022/08/15
	7.5	μg/L	2022/09/12
	8.4	μg/L	2022/10/11
	8.2	μg/L	2022/11/09
	10	μg/L	2022/12/06
Sodium	110	Mg/L	2018/01/28