

February 2022

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

Re: O. Regulation 170 - 2021 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 2021 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,

Patrick Albert

Patrick Albert
Senior Operations Manager
Northwestern Ontario Regional Hub
807-853-0650

Copy to: Wayne Hanchard - CAO
Chris Bowles – Director of Operations
Operations Staff – Rosslyn Drinking Water System

2021 Section 11 Annual Report

Rosslyn Village Subdivision Drinking Water System

February 2022

Prepared by the



Ontario Clean Water Agency
Agence Ontarienne Des Eaux



Section 11 ANNUAL REPORT

Drinking-Water System Number:	210001081
Drinking-Water System Name:	Rosslyn Village Subdivision Well Supply
Drinking-Water System Owner:	Municipality of Oliver Paipoonge
Drinking-Water System Category:	Small Municipal Residential Drinking Water-System
Period being reported:	January 1 – December 31, 2021

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Municipality of Oliver Paipoonge Office 3250 Highway 130 Rosslyn, ON P7K 0B1</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
--	---

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.

- Public access/notice via the web**
- 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

Rosslyn 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 micron 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

- Sodium Hypochlorite

Were any significant expenses incurred to?

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

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

Install	Repair	Replace	Description	Expense
		X	Compliance Equipment Purchase	\$7,964.29
	X		Electrical Heater Connected to New Panel	\$2,436.44
X		X	New Flow Meters & Turbidity Analyzer	\$15,940.34
		X	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
February 4 2021	Low free chlorine residual	0	mg/L	Improvements are ongoing through the 3 rd party reviews	March 16 2021
February 4 2021	High levels of Sodium	110	mg/L		March 17 2021
February 17 2021	Water main break at 133 Maple Street			Repaired water main, flushed, collected bacti sample	March 17 2021
February 17 2021	High levels of Arsenic	11.1	mg/L	North well not being used, using South well only for production	March 15 2021



February 22 2021	High levels of Arsenic	10.6	mg/L	North well not being used, using South well only for production	March 15 2021
June 4 2021	Low treated water chlorine residual of 0.4mg/L, CT was maintained. Also unable to receive critical control alarms, BWA issued	0.4	mg/L	System was flushed to restore higher chlorine. Instrumentation technician was able to get the alarm dialer to work. BWA lifted	June 9 2021
August 3 2021	Low chlorine on the contact loop analyzer, reading 0 mg/L. Alarm dialer did not call out to operator over the weekend. BWA issued.	0	mg/L	System was flushed to restore higher chlorine. Alarm dialer issue resolved. BWA lifted	August 10 2021
October 14 2021	Loss of pressure in distribution system due to pump kicking out. Pressure lost for 15 minutes			Issue with distribution pumps, two loss of pressure community complaints. Two sets of bacti samples collected. BWA lifted	October 19 2021

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	13	0 – 0	0 – 0	N/A	N/A
South Well	18	0-0	0 – 0		
Treated	N/A	N/A	N/A	N/A	N/A
Distribution	46	0 – 0	0 – 27	31	0 – 300<

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

**Note: This data reflects only the time period of which OCWA was the Operating Authority. The data prior to this is unavailable to both the OCWA and the Municipality.*

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity		
Raw North Well	7	1.11 – 12.9 NTU
Raw South Well	7	1.24 – 1.87 NTU
Chlorine		
Treated	8760	0 – 5
Distribution	118	0.47-1.92
Fluoride (If the DWS provides fluoridation)	N/A	N/A

***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 North Well	2021/02/18	13.8	µg/L	Yes
	2021/03/03	8.4	µg/L	No
	2021/04/29	9.1	µg/L	No
	2021/05/28	8.0	µg/L	No
	2021/06/23	20.2	µg/L	Yes
	2021/07/26	13.2	µg/L	Yes
	2021/08/16	16.4	µg/L	Yes
	2021/09/21	7.1	µg/L	No
	2021/10/22	26.8	µg/L	Yes
	2021/11/15	14.8	µg/L	Yes
	2021/12/13	10.2	µg/L	Yes



South Well	2021/02/18	8.3	µg/L	No
	2021/03/03	8.5	µg/L	No
	2021/04/29	9.3	µg/L	No
	2021/05/28	7.7	µg/L	No
	2021/06/23	8.4	µg/L	No
	2021/07/26	8.0	µg/L	No
	2021/08/16	7.0	µg/L	No
	2021/09/21	7.7	µg/L	No
	2021/10/14	7.3	µg/L	No
	2021/11/15	8.0	µg/L	No
	2021/12/13	7.6	µg/L	No
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 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	No
Uranium	2021/02/12	5.0	µg/L	No
Fluoride	2021/01/28	1.39	mg/L	No
Nitrite	2021/01/28	<0.02	mg/L	No
	2021/04/29	<0.02	mg/L	No
	2021/08/25	<0.02	mg/L	No
	2021/10/27	< 0.02	mg/L	No
Nitrate	2021/01/28	<0.04	mg/L	No
	2021/04/29	<0.04	mg/L	No
	2021/08/25	<0.04	mg/L	No
	2021/10/27	<0.04	mg/L	No

*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	2	1 – 1	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
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) (NOTE: show latest annual average)	2021/10/27 2021 Average	2.2 2.2	µg/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 (NOTE: show latest annual average)	2021/10/27 2021 Average	22.2 14.2	µg/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