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February 28, 2020

Mayor Beverly Nantel and Council The Corporation of the Township of Dubreuilville P.O. Box 367 Dubreuilville, Ontario POS 1B0

#### Re: O. Regulation 170 - 2019 Section 11 Annual Report for the Dubreuilville 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 1<sup>st</sup> to December 31<sup>st</sup> in a year and *must be prepared not later than February 28<sup>th</sup>* of the following year. Pursuant to the legislative requirements, enclosed for your records is the 2019 Annual Report for the Dubreuilville 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 Senior Operations Manager Northwestern Ontario Regional Hub 807-853-0650

Copy to: Shelley B. Casey – CAO-Clerk/Deputy-Treasurer Operations Staff – Dubreuilville Well Supply

# 2019 Section 11 Annual Report

### Dubreuilville Drinking Water System

February 2020

Prepared by the



#### Section 11 ANNUAL REPORT

Drinking-Water System Number:	210001442
Drinking-Water System Name:	Dubreuilville Well Supply
Drinking-Water System Owner:	The Corporation of the Township of Dubreuilville
Drinking-Water System Category:	Large Municipal Residential Drinking Water-System
Period being reported:	January 1 – December 31, 2019

<u>Complete if your Category is Large Municipal</u> <u>Residential or Small Municipal Residential</u>	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]	Number of Designated Facilities served:
Is your annual report available to the public	Did you provide a copy of your annual report
at no charge on a web site on the Internet?	to all Designated Facilities you serve?
Yes [ x ] No [ ]	Yes [ ] No [ ]
Location where Summary Report required	Number of Interested Authorities you report
under O. Reg. 170/03 Schedule 22 will be	to:
available for inspection.	N/A
<b>Township of Dubreuilville</b>	Did you provide a copy of your annual report
23, rue des Pins	to all Interested Authorities you report to for
Dubreuilville, ON	each Designated Facility?
POS 1BO	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
- [X] Public access/notice via a Public Library
- [ ] Public access/notice via other method \_

Describe your Drinking-Water System

The Corporation of the Township of Dubreuilville receives its municipal potable water from a well system that was built in 1985. The system underwent significant upgrades to the treatment and pumphouse in 2005.

The Dubreuilville well supply system is comprised of the following:

- Well #1 is located beneath the addition to the pumphouse that was built in 2005. This well is
  not available in standby mode, however, when needed, can be manually initiated by an
  operator.
- Well #2 is also located beneath the pumphouse and is the well that is operated on a regular basis to deliver the municipal potable water to the community.
- There is an installation of an Ultraviolet (UV) disinfection system within the existing pump house which consists of two (2) UV reactors each rated for a designed flow of 31.8 L/sec
- Chlorine is added to the water as it leaves the pumphouse and contact time to achieve the appropriate CT is accomplished in 60m / 300mm main located between the pumphouse and the first service connection
- The distribution system includes an in-ground 1,215m<sup>3</sup> reservoir and services 38 fire hydrants and approximately 320 service connections
- Operation of the well pumps is controlled by the level in the reservoir which has an emergency storage capacity of approximately 2.5 days at normal flow conditions

#### List all water treatment chemicals used over this reporting period

- Sodium Hypochlorite

#### Were any significant expenses incurred to?

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

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

Install	Repair	Replace	Description	Expense
	Х		UV Annual Service - EDA	\$8408.06
			DWQMS External Audit	\$2911.14
	Х		Annual Generator Maintenance	\$1459.65

## 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
5-Mar-19	Other Observations - Power outage, generator failled to start at WTP and Chemin du Lac Lift Station. Data lost for 11 min. Distribution CL2 residual was 1.419 gm/L @ 12:49. Data was back online at 13:00	-	-	Operator addressed generator issues and UPS issues	08-Mar-19
28-Mar-19	Other Observations - Loss of communication at the Chemin du lac lift station, including the distribution chlorine	-	-	Technician discovered low strength at the radio, changed connection end from antenna to	5-Apr-19

# Ontario Drinking-Water Systems Regulation O. Reg. 170/03 analyzer. Distribution

analyzer. Distribution		outpost	
chlorine residual at time			
communication was lost:			
1.53 mg/L			

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					
Well #1	47			N/A	N/A
Well #2	47			N/A	N/A
Treated	46	0	0	44	0-53
Distribution	96	0	0	44	0-279

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

	Number of Grab Samples	Range of Results (min #)-(max #)	<b>NOTE</b> : For continuous monitors use 8760 as the
Turbidity*			number of samples.
Raw Well #1	13	0.67-2.3	
Raw Well #2	13	0.3-1.58	* Turbidity & chlorine
Treated	8760	NTU	Min/Max (lows/highs) c
Chlorine*			due to planned mainten
Treated	8760	0.00-4.99	and not plant upset.
Distribution	8760	0.00-4.99	
<b>Fluoride</b> (If the DWS provides	N/A	N/A	
fluoridation)	19/7		

**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	Parameter	Date Sampled	Result	Unit of Measure
issued				

# N/A N/A N/A N/A N/A N/A

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2019/01/08	< 0.6	μg/L	No
Arsenic	2019/01/08	< 1.0	μg/L	No
Barium	2019/01/08	69.0	μg/L	No
Boron	2019/01/08	< 50.0	μg/L	No
Cadmium	2019/01/08	< 0.1	μg/L	No
Chromium	2019/01/08	< 1.0	μg/L	No
*Lead	Refer to Summary Table Below			
Mercury	2019/01/08	< 0.1	μg/L	No
Selenium	2019/01/08	< 1.0	μg/L	No
Sodium	2019/01/08	16.5	mg/L	No
Uranium	2019/01/08	5.9	μg/L	No
Fluoride	2019/01/08	0.03	mg/L	No
	2019/01/08	< 0.01	mg/L	No
Nitrite	2019/04/02	< 0.01	mg/L	No
Nitite	2019/07/03	< 0.01	mg/L	No
	2019/10/02	< 0.01	mg/L	No
	2019/01/08	1.69	mg/L	No
Nitrate	2019/04/02	1.29	mg/L	No
itilate	2019/07/03	1.27	mg/L	No
	2019/10/02	1.24	mg/L	No

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

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential 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
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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	2019/01/08	< 0.1	μg/L	No
Atrazine + N-dealkylated metobolites	2018/01/23	< 0.2	μg/L	No
Azinphos-methyl	2019/01/08	< 0.1	μg/L	No
Benzene	2019/01/08	< 0.5	μg/L	No
Benzo(a)pyrene	2019/01/08	< 0.01	μg/L	No
Bromoxynil	2019/01/08	< 0.2	μg/L	No
Carbaryl	2019/01/08	< 0.2	μg/L	No
Carbofuran	2019/01/08	< 0.2	μg/L	No
Carbon Tetrachloride	2019/01/08	< 0.2	μg/L	No
Chlorpyrifos	2019/01/08	< 0.1	μg/L	No
Diazinon	2019/01/08	< 0.1	μg/L	No
Dicamba	2019/01/08	< 0.2	μg/L	No
1,2-Dichlorobenzene	2019/01/08	< 0.5	μg/L	No
1,4-Dichlorobenzene	2019/01/08	< 0.5	μg/L	No
1,2-Dichloroethane	2019/01/08	< 0.5	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2019/01/08	< 0.5	μg/L	No
Dichloromethane (Methylene Chloride)	2019/01/08	< 5.0	μg/L	No
2-4 Dichlorophenol	2019/01/08	< 0.3	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2019/01/08	< 0.2	μg/L	No
Diclofop-methyl	2019/01/08	< 0.2	μg/L	No
Dimethoate	2019/01/08	< 0.1	μg/L	No
Diquat	2019/01/08	< 1.0	μg/L	No
Diuron	2019/01/08	< 1.0	μg/L	No
Glyphosate	2019/01/08	< 5.0	μg/L	No
Haloacetic acids (HAA)* (NOTE: show latest annual average)	2-Oct-2019 2019 Average	4.2 7.525	μg/L	No
Malathion	2019/01/08	< 0.1	μg/L	No
Metolachlor	2019/01/08	< 0.1	μg/L	No
Metribuzin	2019/01/08	< 0.1	μg/L	No
Monochlorobenzene (Chlorobenzene)	2019/01/08	< 0.5	μg/L	No
Paraquat	2019/01/08	< 1.0	μg/L	No
Pentachlorophenol	2019/01/08	< 0.035	μg/L	No

			-	
Phorate	2019/01/08	< 0.5	μg/L	No
Picloram	2019/01/08	< 0.1	μg/L	No
Polychlorinated Biphenyls(PCB)	2019/01/08	< 0.2	μg/L	No
Prometryne	2019/01/08	< 0.1	μg/L	No
Simazine	2019/01/08	< 0.1	μg/L	No
тнм	2-Oct-2019	29.3	μg/L	No
(NOTE: show latest annual average)	2019 Average	20.275	μg/L	No
Terbufos	2019/01/08	< 0.2	μg/L	No
Tetrachloroethylene	2019/01/08	< 0.5	μg/L	No
2,3,4,6-Tetrachlorophenol	2019/01/08	< 0.5	μg/L	No
Triallate	2019/01/08	< 0.1	μg/L	No
Trichloroethylene	2019/01/08	< 0.5	μg/L	No
2,4,6-Trichlorophenol	2019/01/08	< 0.5	μg/L	No
Trifluralin	2019/01/08	< 0.1	μg/L	No
Vinyl Chloride	2019/01/08	< 0.2	μg/L	No
МСРА	2019/01/08	< 0.2	µg/L	No

\*Parameter exceedance not reportable until 2020

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
Sodium: Na	16.5	mg/L	2019/01/08