

2013 Section 11 Annual Report

Dubreuilville Drinking-Water System

January 2014

Prepared by the



Ontario Clean Water Agency
Agence Ontarienne Des Eaux



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

101 King Street, 2nd Floor- Unit D
P.O. Box 819
Longlac, Ontario. P0T 2A0
Tel: 807 876-1141
Fax: 807 876-2560

January 28, 2014

Mayor Louise Perrier and Council
The Corporation of the Township of Dubreuilville
P.O. Box 367
DUBREUILVILLE, Ontario
P0S 1B0

Re: O. Regulation 170 - 2013 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 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 2013 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,



Jamie McPherson
Senior Operations Manager
Northwestern Ontario Hub

Copy to: Director of Public Works
Operations Staff – Dubreuilville Well Supply



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

Section 11 ANNUAL REPORT

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

210001442
Dubreuilville Well Supply
The Corporation of the Township of Dubreuilville
Large Municipal Residential Drinking Water-System
January 1 – December 31, 2013

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 [] No [X]

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

Township of Dubreuilville 23, rue des Pins Dubreuilville, ON POS 1B0

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:

N/A

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	

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 []



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

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

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 1,215m³ 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



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

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	Well inspections and #2 well pump & drive replacement	\$ 46326
		X	Rehabilitate well #2	\$28380
	X		UV system annual service	\$ 5694
	X		Chlorine analyzer probes & supplies	\$ 5424
			Chemical pump and panel parts	\$ 3688
		X	Pilot flow control valve	\$ 2512
	X		Equipment calibration expenses	\$ 2263

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
March 3, 2013	Other observation – Low chlorine residual at well house	0.24	mg/L	Back flush chlorine contact loop, repair chlorination system	March 4, 2013
April 9, 2013	Other observation – Low pressure in distribution – Water break	< 20	PSI	Localized BWA – 2 sets of samples for bactl	April 12, 2013



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

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	53	<1 - <1	<1 - <1	N/A	N/A
Well #2	49	<1 - <1	<1 - <1	N/A	N/A
Treated	54	0 - 0	0 - 0	53	0 - 8
Distribution	99	0 - 0	0 - 0	53	0 - 11

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 #)
Turbidity*		
Raw Well #1	12	0.19 - 0.7 NTU
Raw Well #2	12	0.17 - 0.51 NTU
Treated	8760	0.027 - 4.997 NTU
Chlorine*		
Treated	8760	0 - 4.999 mg/L
Distribution	8760	0 - 4.999 mg/L
Fluoride (If the DWS provides fluoridation)	N/A	N/A

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

** Turbidity & chlorine Min/Max (lows/highs) are due to planned maintenance and not plant upset.*

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				



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	Jan-22-2013	<0.6	µg/L	No
Arsenic	Jan-22-2013	<1.0	µg/L	No
Barium	Jan-22-2013	86	µg/L	No
Boron	Jan-22-2013	<50.0	µg/L	No
Cadmium	Jan-22-2013	<0.1	µg/L	No
Chromium	Jan-22-2013	<1.0	µg/L	No
*Lead	Refer to Summary Table Below			
Mercury	Jan-22-2013	<0.1	µg/L	No
Selenium	Jan-22-2013	<5.0	µg/L	No
Sodium	Feb-17-2009	18.4	mg/L	No
Uranium	Jan-22-2013	<5.0	µg/L	No
Fluoride	Feb-17-2009	0.04	mg/L	No
Nitrite	Jan-7-2013	<0.020	mg/L	No
	Apr-2-2013	<0.020	mg/L	No
	Jul-2-2013	<0.020	mg/L	No
	Oct-21-2013	<0.020	mg/L	No
Nitrate	Jan-7-2013	1.16	mg/L	No
	Apr-2-2013	1.32	mg/L	No
	Jul-2-2013	1.43	mg/L	No
	Oct-21-2013	1.80	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	4	0.07– 0.43 µg/L	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	Jan-22-2013	<0.1	µg/L	No
Aldicarb	Jan-22-2013	<1.0	µg/L	No
Aldrin + Dieldrin	Jan-22-2013	<0.04	µg/L	No
Atrazine + N-dealkylated metabolites	Jan-22-2013	<0.2	µg/L	No
Azinphos-methyl	Jan-22-2013	<0.1	µg/L	No
Bendiocarb	Jan-22-2013	<0.2	µg/L	No
Benzene	Jan-22-2013	<0.5	µg/L	No
Benzo(a)pyrene	Jan-22-2013	<0.01	µg/L	No
Bromoxynil	Jan-22-2013	<0.2	µg/L	No
Carbaryl	Jan-22-2013	<0.2	µg/L	No
Carbofuran	Jan-22-2013	<0.2	µg/L	No
Carbon Tetrachloride	Jan-22-2013	<0.5	µg/L	No
Chlordane (Total)	Jan-22-2013	<0.3	µg/L	No
Chlorpyrifos	Jan-22-2013	<0.1	µg/L	No
Cyanazine	Jan-22-2013	<0.1	µg/L	No
Diazinon	Jan-22-2013	<0.1	µg/L	No
Dicamba	Jan-22-2013	<0.2	µg/L	No
1,2-Dichlorobenzene	Jan-22-2013	<0.5	µg/L	No
1,4-Dichlorobenzene	Jan-22-2013	<0.5	µg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan-22-2013	<0.4	µg/L	No
1,2-Dichloroethane	Jan-22-2013	<0.5	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan-22-2013	<0.5	µg/L	No
Dichloromethane	Jan-22-2013	<0.5	µg/L	No
2-4 Dichlorophenol	Jan-22-2013	<0.3	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan-22-2013	<0.2	µg/L	No
Diclofop-methyl	Jan-22-2013	<0.2	µg/L	No
Dimethoate	Jan-22-2013	<0.1	µg/L	No
Dinoseb	Jan-22-2013	<0.2	µg/L	No
Diquat	Jan-22-2013	<1.0	µg/L	No
Diuron	Jan-22-2013	<1.0	µg/L	No
Glyphosate	Jan-22-2013	<5.0	µg/L	No
Heptachlor + Heptachlor Epoxide	Jan-22-2013	<0.2	µg/L	No
Lindane (Total)	Jan-22-2013	<0.1	µg/L	No
Malathion	Jan-22-2013	<0.1	µg/L	No
Methoxychlor	Jan-22-2013	<0.1	µg/L	No
Metolachlor	Jan-22-2013	<0.1	µg/L	No



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

Metribuzin	Jan-22-2013	<0.1	µg/L	No
Monochlorobenzene	Jan-22-2013	<0.5	µg/L	No
Paraquat	Jan-22-2013	<1.0	µg/L	No
Parathion	Jan-22-2013	<0.1	µg/L	No
Pentachlorophenol	Jan-22-2013	<0.5	µg/L	No
Phorate	Jan-22-2013	<0.1	µg/L	No
Picloram	Jan-22-2013	<0.2	µg/L	No
Polychlorinated Biphenyls(PCB)	Jan-22-2013	<0.035	µg/L	No
Prometryne	Jan-22-2013	<0.1	µg/L	No
Simazine	Jan-22-2013	<0.1	µg/L	No
THM (NOTE: show latest annual average)	Oct-21-2013	31.6	µg/L	No
	2013 Average	34.45	µg/L	No
Temephos	Jan-22-2013	<0.1	µg/L	No
Terbufos	Jan-22-2013	<0.2	µg/L	No
Tetrachloroethylene	Jan-22-2013	<0.5	µg/L	No
2,3,4,6-Tetrachlorophenol	Jan-22-2013	<0.5	µg/L	No
Triallate	Jan-22-2013	<0.1	µg/L	No
Trichloroethylene	Jan-22-2013	<0.5	µg/L	No
2,4,6-Trichlorophenol	Jan-22-2013	<0.5	µg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan-22-2013	<0.2	µg/L	No
Trifluralin	Jan-22-2013	<0.1	µg/L	No
Vinyl Chloride	Jan-22-2013	<0.5	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
N/A			