

Gail Jaremy

From: David Hoffman <DHoffman@ocwa.com>
Sent: February 26, 2020 2:24 PM
To: Gail Jaremy
Cc: Tyler McMullen; Mark Van Breda; Patrick Albert
Subject: Section 11 Annual Report
Attachments: Hornepayne 2019 Section 11 Report - Complete.pdf



Please find attached the Annual Report required under Section 11 of O. Reg. 170.

The report is to be made available to the public as per the regulation.

Please distribute as applicable.

If you have any questions please contact me.

David Hoffman
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Northwestern Ontario Hub

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Ontario Clean Water Agency
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February 28, 2020

Mayor Cheryl Fort and Council
The Corporation of the Township of Hornepayne
P.O. Box 370
Hornepayne, Ontario
P0M 1Z0

Re: O. Regulation 170 - 2019 Section 11 Annual Report for the Hornepayne 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 2019 Annual Report for the Hornepayne 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)

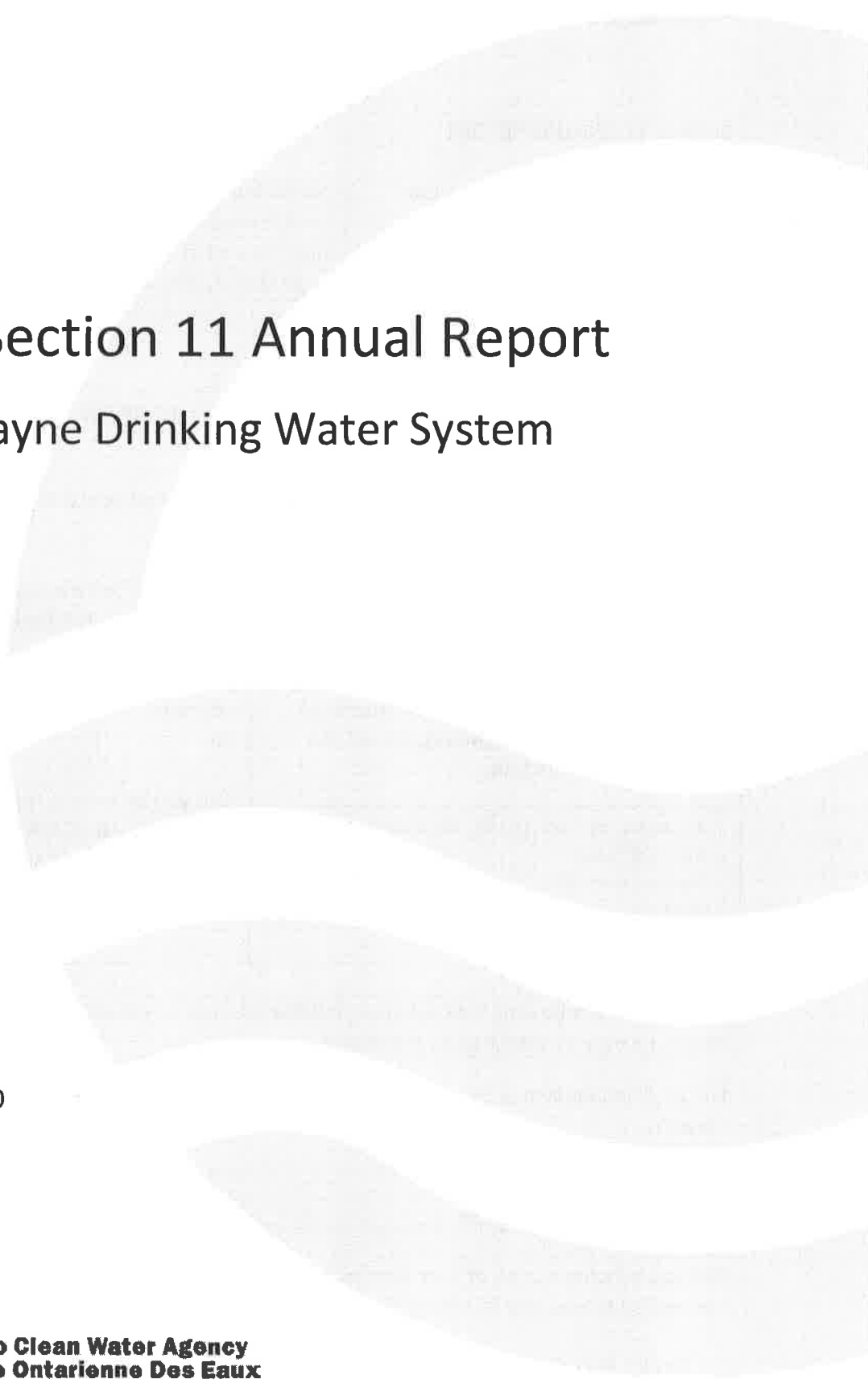
In addition, Section 11 (7) gives the direction that a copy of an annual report for the system is given, without charge, to every person who requests a copy and be made available for inspection by any member of the public during normal business hours. The reports should be made available at the office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

Yours truly,

A handwritten signature in black ink, appearing to be 'PA', enclosed within a large, loopy oval scribble.

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

Copy to: Gail Jaremy – CAO/Clerk
Operations Staff – Hornepayne WTP



2019 Section 11 Annual Report

Hornepayne Drinking Water System

February 2020

Prepared by the



Ontario Clean Water Agency
Agence Ontarienne Des Eaux



Section 11 ANNUAL REPORT

Drinking-Water System Number:	260092040
Drinking-Water System Name:	Herbert Avenue Water Treatment Plant
Drinking-Water System Owner:	The Corporation of the Township of Hornepayne
Drinking-Water System Category:	Large Municipal Residential Drinking Water-System
Period being reported:	January 1 – December 31, 2019

<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 [] No [X]</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;"> Township of Hornepayne, Municipal Office 68 Front Street Hornepayne, ON POM 120 </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>
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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

The raw water pumping station provides screening and chlorination if required for pre-disinfection/zebra mussel control. A standby diesel generator provides emergency power. The station pumps water approximately 5.5 km to the Herbert Avenue water treatment plant.

The Herbert Avenue Water Treatment Plant is a surface water treatment system providing coagulation, membrane filtration and primary/secondary disinfection. The treatment process consists of three membrane filter trains, each preceded by a flocculation tank with mixer. Coagulant and sulphuric acid are used in the flocculation process with the chemically treated water being fed directly to the filters. Filtered water is directed to a two-cell clear well with a total capacity of 280.2 m³ for treated water storage and post filtration disinfection. There is a third chamber, a high lift well containing the high lift pumps. Sodium hypochlorite is injected with the filtered water discharge for primary disinfection. Additional chlorine dosing is available at the plant discharge to distribution for the purpose of secondary disinfection. Sodium Hydroxide is used for pH adjustment of the treated water.

The town's original distribution system is approximately 40 years old. In the area of the standpipe the lines are approximately 25 years old. A variety of materials have been used for water mains in the distribution system including ductile iron, AC and PVC. PVC is now being used for all repairs/replacements. Fire hydrants are located throughout the distribution system which is well looped but has several lengthy dead ends. Depending on the elevation, the system pressure ranges from 60 – 105 psi. The distribution system includes a concrete pedestal standpipe (water tower) with a capacity of 1100m³. A separate pressure zone in the vicinity of the standpipe is normally kept at 60 psi. Water from the treatment plant can either enter the standpipe or supply the distribution and consumers directly. The valve at the tower remains in the open position and treated water flows in or out through the same piping. When the standpipe is full, high-lift pumps at the treatment plant shut-off and the distribution system is then supplied from the standpipe.



List all water treatment chemicals used over this reporting period

- Sulphuric Acid 51%
- Sodium hydroxide solution 50%
- Pax-XL 1900
- Sodium Hypochlorite 12%

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		Electrical assessment and upgrades	\$46783.26
	X		Filter train replacement assessment and long term maintenance plan	\$9836.08
	X		Raw water intake inspection	\$4167.50

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
19-Jun-2019	Other Observations - water main shut off for service line repair. Approx <50 houses affected. Boil Water issued	-	-	Water main flushed, free chlorine residual taken, 2 bacti samples to be collected 24 hours apart.	27-Jun-2019



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 (Surface) Water	52	0 – 100	0 – 400	N/A	N/A
Treated Water	52	0 – 0	0 – 0	52	0 – 10
Distribution	115	0 – 0	0 – 0	63	0 – 10

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	148	0.046 – 2.22 NTU
Filter 1	8760	0.00 – 0.17 NTU
Filter 2	8760	0.00 – 1.00NTU
Filter 3	8760	0.00 – 1.00 NTU
Treated	8760	0.02 – 10.0 NTU
Chlorine*		
Treated	8760	0.03 – 5.01
Distribution	499	0.12 – 2.86
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	N/A	N/A	N/A	N/A

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	04-Apr-2019	< 0.6	µg/L	No
Arsenic	04-Apr-2019	< 1.0	µg/L	No
Barium	04-Apr-2019	16	µg/L	No
Boron	04-Apr-2019	< 50.0	µg/L	No
Cadmium	04-Apr-2019	< 0.1	µg/L	No
Chromium	04-Apr-2019	< 1.0	µg/L	No
*Lead	Refer to Summary Table Below			
Mercury	04-Apr-2019	< 0.1	µg/L	No
Selenium	04-Apr-2019	< 1.0	µg/L	No
Sodium	5-Apr-2016	14.2	mg/L	No
Uranium	04-Apr-2019	< 2.0	µg/L	No
Fluoride	5-Apr-2016	0.04	mg/L	No
Nitrite	08-Jan-2019	< 0.01	mg/L	No
	04-Apr-2019	< 0.01	mg/L	No
	08-Jul-2019	< 0.01	mg/L	No
	07-Oct-2019	< 0.01	mg/L	No
Nitrate	08-Jan-2019	0.06	mg/L	No
	04-Apr-2019	0.14	mg/L	No
	08-Jul-2019	<0.05	mg/L	No
	07-Oct-2019	<0.05	mg/L	No



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	-	-

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	04-Apr-2019	< 0.235	µg/L	No
Atrazine + N-dealkylated metabolites	04-Apr-2019	< 0.5	µg/L	No
Azinphos-methyl	04-Apr-2019	< 0.176	µg/L	No
Benzene	04-Apr-2019	< 0.1	µg/L	No
Benzo(a)pyrene	04-Apr-2019	< 0.009	µg/L	No
Bromoxynil	04-Apr-2019	< 0.091	µg/L	No
Carbaryl	04-Apr-2019	< 1.0	µg/L	No
Carbofuran	04-Apr-2019	< 1.0	µg/L	No
Carbon Tetrachloride	04-Apr-2019	< 0.2	µg/L	No
Chlorpyrifos	04-Apr-2019	< 0.176	µg/L	No
Diazinon	04-Apr-2019	< 0.176	µg/L	No
Dicamba	04-Apr-2019	< 0.08	µg/L	No
1,2-Dichlorobenzene	04-Apr-2019	< 0.2	µg/L	No
1,4-Dichlorobenzene	04-Apr-2019	< 0.3	µg/L	No
1,2-Dichloroethane	04-Apr-2019	< 0.2	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	04-Apr-2019	< 0.3	µg/L	No
Dichloromethane (methylene chloride)	04-Apr-2019	< 1.0	µg/L	No
2-4 Dichlorophenol	04-Apr-2019	< 0.2	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	04-Apr-2019	< 0.342	µg/L	No
Diclofop-methyl	04-Apr-2019	< 0.114	µg/L	No
Dimethoate	04-Apr-2019	< 0.176	µg/L	No
Diquat	04-Apr-2019	< 0.2	µg/L	No
Diuron	04-Apr-2019	< 6.0	µg/L	No
Glyphosate	04-Apr-2019	< 20.0	µg/L	No
Haloacetic acids (HAA)* (NOTE: show latest annual average)	07-Oct-2019 2019 Average	35 79	µg/L	Yes



Malathion	04-Apr-2019	< 0.176	µg/L	No
Metolachlor	04-Apr-2019	< 0.117	µg/L	No
Metribuzin	04-Apr-2019	< 0.117	µg/L	No
Monochlorobenzene	04-Apr-2019	< 0.5	µg/L	No
Paraquat	04-Apr-2019	< 0.2	µg/L	No
Pentachlorophenol	04-Apr-2019	< 0.3	µg/L	No
Phorate	04-Apr-2019	< 0.117	µg/L	No
Picloram	04-Apr-2019	< 0.08	µg/L	No
Polychlorinated Biphenyls(PCB)	04-Apr-2019	<0.06	µg/L	No
Prometryne	04-Apr-2019	< 0.059	µg/L	No
Simazine	04-Apr-2019	< 0.176	µg/L	No
THM – Herbert Avenue WTP (NOTE: show latest annual average)	07-Oct-2019 2019 Average	74.5 65.1	µg/L µg/L	No No
Terbufos	04-Apr-2019	< 0.117	µg/L	No
Tetrachloroethylene	04-Apr-2019	< 0.3	µg/L	No
2,3,4,6-Tetrachlorophenol	04-Apr-2019	< 0.3	µg/L	No
Triallate	04-Apr-2019	< 0.117	µg/L	No
Trichloroethylene	04-Apr-2019	< 0.2	µg/L	No
2,4,6-Trichlorophenol	04-Apr-2019	< 0.2	µg/L	No
Trifluralin	04-Apr-2019	< 0.117	µg/L	No
Vinyl Chloride	04-Apr-2019	< 0.1	µg/L	No
MCPA	04-Apr-2019	< 5.7	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
2019 THM – Running Annual Average (RAA)	65.1	µg/L	N/A
2019 HAA – Running Annual Average (RAA)*	79.0	µg/L	N/A

*Parameter exceedance not reportable until 2020