



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

OLIPHANT
DRINKING WATER SYSTEM

Small Municipal Residential

SCHEDULE 22
SUMMARY REPORT

For the period of
JANUARY 1, 2020 TO DECEMBER 31, 2020

Prepared by the Ontario Clean Water Agency
For The Corporation of the Town of South Bruce Peninsula

Summary

This report is a summary of water quality and quantity information submitted in accordance with Schedule 22 of Ontario’s Drinking Water System Regulation for the reporting period of January 1, 2020 to December 31, 2020 for the Oliphant Drinking Water System located in the Town of South Bruce Peninsula. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Issues of Non-Compliance

An MECP Drinking Water System Inspection was performed on September 4, 2020. On September 29, 2020 the report for this inspection was issued, the Oliphant Drinking Water System received an inspection rating of 100%.

The following is a summary of the requirements of the Act, the regulations, the system’s approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report; as well as the duration of the failure and the measures that were taken to correct the failure:

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
At the time of inspection, the OA for the owner identified that the DWIS Profile for the Oliphant DWS did not identify municipal staff changes and provide the change of information to the MECP Director in written form within 10 days of the change, O. Reg. 247/06, s.	n/a	The Oliphant DWS DWIS Profile was updated by the OA on September 29, 2020 and no further action is required.

Refer to the Section 11 Annual Report for a summary of any Adverse Water Quality Incident(s) which occurred during the reporting period.

Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities (Table 1) and flow rates (Table 2) of the water supplied during the period covered by the report, including monthly average and maximum daily flows as well as a comparison of the summary to the rated capacity and flow rates approved in the system’s approval, drinking water works permit or municipal drinking water license.

As per Municipal Drinking Water License (MDWL) 094-105 (Issue Number: 4) and the newly issued MDWL 094-105 (Issue Number: 5, expires March 6, 2025), the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a rated capacity of 75 m³/day. There is no maximum allowable limit listed in the MDWL for the flowrate of water that flows into a treatment subsystem.

The Oliphant Water Treatment Plant stopped treating water on January 16, 2011 and began receiving transported water from the Wiarton Water Treatment Plant, by the direction of the Town of South Bruce Peninsula. Water transported from the Wiarton Water Treatment Plant is pumped into the clearwell of the Oliphant Water Treatment Plant. Sodium hypochlorite (12%) is then added to increase the chlorine residual, when required, prior to entering the distribution system.

Table 1. Treated Water Monthly Average and Maximum Daily Flows and Comparison to Rated Capacity for 2020

2020	Flow (Treated Water from Wiarton)			
	Average Flow (m ³ /day)	Percent of Rated Capacity (%)	Maximum Flow (m ³ /day)	Percent of Rated Capacity (%)
January	10.67	14.2%	13.88	18.5%
February	10.73	14.3%	12.25	16.3%
March	11.54	15.4%	14.47	19.3%
April	12.34	16.5%	14.36	19.1%
May	14.18	18.9%	19.99	26.7%
June	16.22	21.6%	21.45	28.6%
July	16.90	22.5%	21.36	28.5%
August	15.96	21.3%	21.19	28.3%
September	16.77	22.4%	19.83	26.4%
October	17.55	23.4%	22.18	29.6%
November	16.70	22.3%	34.56	46.1%
December	16.52	22.0%	20.52	27.4%

Table 2. Treated Water Monthly Average and Maximum Flowrates for 2020

2020	Treated Water	
	Average Flowrate (l/s)	Maximum Flowrate (l/s)
January	1.28	4.23
February	1.28	4.26
March	1.29	4.18
April	1.29	4.23
May	1.31	2.33
June	1.33	2.88
July	1.33	10.00
August	1.32	3.32
September	1.32	3.09
October	1.32	3.08
November	1.34	4.92
December	1.32	3.05



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OLIPHANT
DRINKING WATER SYSTEM

Small Municipal Residential

SECTION 11
ANNUAL REPORT

For the period of
JANUARY 1, 2020 TO DECEMBER 31, 2020

Prepared by the Ontario Clean Water Agency
For The Town of South Bruce Peninsula

Drinking Water System Number:	220007695
Drinking Water System Name:	Oliphant
Drinking Water System Owner:	Town of South Bruce Peninsula
Drinking Water System Category:	Small Municipal Residential
Reporting Period:	January 1, 2020 to December 31, 2020

Does the Drinking Water System serve more than 10,000 people?

No.

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

Yes.

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

Town of South Bruce Peninsula
315 George Street
Warton, Ontario
N0H 2T0
519-534-1400

Drinking-Water Systems (if any), which receive all of their drinking water from your system:

n/a.

Did you provide a copy of the annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

n/a.

How system users are notified that the annual report is available, and is free of charge:

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Public access/notice via the web |
| <input checked="" type="checkbox"/> | Public access/notice via Government Office |
| <input type="checkbox"/> | Public access/notice via a newspaper |
| <input type="checkbox"/> | Public access/notice via Public Request |
| <input type="checkbox"/> | Public access/notice via a Public Library |
| <input type="checkbox"/> | Public access/notice via other method: _____ |

Description of Drinking Water System:

The Oliphant Water Treatment Plant currently transports all of its drinking water from the Warton Water Treatment Plant. The equipment that is currently being used consists of:

- 2 Clearwells
- 2 Highlift pumps
- Secondary Disinfection by Sodium Hypochlorite
- PLC/SCADA system
- Standby power diesel generator

NOTE: Starting January 20th, 2011, the Oliphant Water Treatment Plant began receiving its treated water from the Warton Water Treatment Plant.

List of water treatment chemicals used during the reporting period:

- Sodium hypochlorite 12%

Significant expenses were incurred to:

- | | |
|-------------------------------------|---------------------------------------|
| <input type="checkbox"/> | Install required equipment |
| <input checked="" type="checkbox"/> | Repair required equipment |
| <input type="checkbox"/> | Replace required equipment |
| <input type="checkbox"/> | No significant expenses were incurred |

Description of expenses:

- Schedule 80 repair parts

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:

Date of Incident	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
n/a	n/a	n/a	n/a	n/a	n/a

Table 1. Microbiological testing done under Schedule 10, 11 or 12 of Regulation 170/03 during this reporting Period

Location	Number of Samples	Range of E.coli Results		Range of Total Coliforms Results		Number of HPC Samples	Range of HPC Samples	
		Minimum	Maximum	Minimum	Maximum		Minimum	Maximum
Distribution (DW)	53	0	0	0	0	53	0	750

Table 2. Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results	
		Minimum	Maximum
Turbidity, On-Line (NTU) – Filter	8760	n/a*	n/a*
Free Chlorine Residual, On-Line (mg/L) - TW	8760	n/a*	n/a*
Free Chlorine Residual, In-House (mg/L) - DW	106	0.91	1.61
Free Chlorine Residual, Field (mg/L) - DW	59	0.92	1.44

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

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

*These parameters are currently not applicable as the drinking water from Oliphant WTP is transported from the Wiarton WTP.

Table 3. Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of Order	Parameter	Date Sampled	Result	Allowable Limit
January 12, 2018 094-105 (Issue 4)/ March 6, 2020 094-105 (Issue 5)	Total Suspended Solids (Filter backwash)	Monthly	n/a*	25 mg/L
March 6, 2020 094-105 (Issue 5)	Total Chlorine Residual (Filter backwash)	Monthly	n/a*	0.02 mg/L

*Currently this parameter is not being tested as the filters are not in use. Oliphant WTP has its water transported from the Wiarton WTP.

Table 4. Summary of Inorganic parameters tested during this reporting period or most recent sample results

Parameter	Sample Date (mm/dd/yyyy)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance
Antimony: Sb (µg/L) - TW	01/10/2011	<MDL 0.02	6.0	No
Arsenic: As (µg/L) - TW	01/10/2011	0.3	10.0	No
Barium: Ba (µg/L) - TW	01/10/2011	595	1000.0	Yes
Boron: B (µg/L) - TW	01/10/2011	33	5000.0	No
Cadmium: Cd (µg/L) - TW	01/10/2011	<MDL 0.003	5.0	No
Chromium: Cr (µg/L) - TW	01/10/2011	<MDL 0.5	50.0	No
Mercury: Hg (µg/L) - TW	01/10/2011	<MDL 0.02	1.0	No
Selenium: Se (µg/L) - TW	01/10/2011	<MDL 1.0	50.0	No
Uranium: U (µg/L) - TW	01/10/2011	0.008	20.0	No
Fluoride (mg/L) - TW	01/10/2011	0.24	1.5	No
Nitrite (mg/L) - TW	01/07/2013	<MDL 0.005	1.0	No
Nitrite (mg/L) - TW	04/02/2012	<MDL 0.005	1.0	No
Nitrite (mg/L) - TW	07/09/2012	<MDL 0.005	1.0	No
Nitrite (mg/L) - TW	10/16/2012	<MDL 0.005	1.0	No
Nitrate (mg/L) - TW	01/07/2013	0.258	10.0	No
Nitrate (mg/L) - TW	04/02/2012	0.281	10.0	No
Nitrate (mg/L) - TW	07/09/2012	0.250	10.0	No
Nitrate (mg/L) - TW	10/16/2012	0.233	10.0	No
Sodium: Na (mg/L) - TW	01/10/2011	0.13	20*	No

NOTE: There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

NOTE: Schedule 23, Sodium and Fluoride samples are to be taken every 60 months. The most recent sampling session was in January 2011 for Schedule 23, the next sampling session is scheduled for when the plant restarts. The most recent sampling session for Sodium was in January 2011, the next sampling session is scheduled for when the plant restarts. The most recent sampling session for Fluoride was in January 2011, the next sampling session is scheduled for when the plant restarts.

Table 5. Summary of lead testing under Schedule 15.1 during this reporting period.

Location Type	Number of Samples	Range of Lead Results		Number of Exceedances
		Minimum	Maximum	
Plumbing	n/a	n/a	n/a	n/a
Distribution (µg/L)	n/a	n/a	n/a	n/a

NOTE: This system now qualifies for the plumbing exemption as per Ontario Regulation 170/03 Schedule 15.1-5 (9) (10). Two (2) distribution lead samples are only taken every 36 months during the sampling periods (i.e. 1 distribution sample per period). The most current set of samples was taken in 2018; the next set of samples will be taken in 2021.

Table 6. Summary of Organic parameters sampled during this reporting period or most recent sample results.

Parameter	Sample Date (mm/dd/yyyy)	Result Value	MAC	Exceedance
Alachlor (µg/L) - TW	01/10/2011	<MDL 0.02	5.0	No
Aldicarb (µg/L) - TW	01/10/2011	<MDL 0.01		No
Aldrin+Dieldrin (µg/L) - TW	01/10/2011	< MDL 0.01		No
Atrazine + N-dealkylated metabolites (µg/L) - TW	01/10/2011	< MDL 0.01	5.0	No
Azinphos-methyl (µg/L) - TW	01/10/2011	< MDL 0.02	20.0	No
Bendiocarb (µg/L) - TW	01/10/2011	< MDL 0.01		No
Benzene (µg/L) - TW	01/10/2011	< MDL 0.32	1.0	No
Benzo(a)pyrene (µg/L) - TW	01/10/2011	< MDL 0.004	0.01	No
Bromoxynil (µg/L) - TW	01/10/2011	< MDL 0.33	5.0	No
Carbaryl (µg/L) - TW	01/10/2011	< MDL 0.01	90.0	No
Carbofuran (µg/L) - TW	01/10/2011	< MDL 0.01	90.0	No
Carbon Tetrachloride (µg/L) - TW	01/10/2011	< MDL 0.16	2.0	No
Chlordane: Total (µg/L) - TW	01/10/2011	< MDL 0.01		No
Chlorpyrifos (µg/L) - TW	01/10/2011	< MDL 0.02	90.0	No
Cyanazine (µg/L) - TW	01/10/2011	< MDL 0.03		No
Diazinon (µg/L) - TW	01/10/2011	< MDL 0.02	20.0	No
Dicamba (µg/L) - TW	01/10/2011	< MDL 0.2	120.0	No
1,2-Dichlorobenzene (µg/L) - TW	01/10/2011	< MDL 0.41	200.0	No
1,4-Dichlorobenzene (µg/L) - TW	01/10/2011	< MDL 0.36	5.0	No
DDT + metabolites (µg/L) - TW	01/10/2011	< MDL 0.01		No
1,2-Dichloroethane (µg/L) - TW	01/10/2011	< MDL 0.35	5.0	No
1,1-Dichloroethylene (µg/L) - TW	01/10/2011	< MDL 0.33	14.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW	01/10/2011	< MDL 0.35	50.0	No
2,4-Dichlorophenol (µg/L) - TW	01/10/2011	< MDL 0.15	900.0	No
Dimethoate (µg/L) - TW	01/10/2011	< MDL 0.03	20.0	No
Dinoseb (µg/L) - TW	01/10/2011	< MDL 0.36		No
Diquat (µg/L) - TW	01/10/2011	< MDL 1.0	70.0	No
Diuron (µg/L) - TW	01/10/2011	< MDL 0.03	150.0	No
Glyphosate (µg/L) - TW	01/10/2011	< MDL 6.0	280.0	No
Heptachlor+hepachlor epoxide (µg/L) - TW	01/10/2011	< MDL 0.01		No
Lindane (µg/L) - TW	01/10/2011	< MDL 0.01		No
Malathion (µg/L) - TW	01/10/2011	< MDL 0.02	190.0	No
Methoxychlor (µg/L) - TW	01/10/2011	< MDL 0.01		No
Metolachlor (µg/L) - TW	01/10/2011	< MDL 0.01	50.0	No
Metribuzin (µg/L) - TW	01/10/2011	< MDL 0.02	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW	01/10/2011	< MDL 0.3	80.0	No
Paraquat (µg/L) - TW	01/10/2011	< MDL 1.0	10.0	No
Parathion (µg/L) - TW	01/10/2011	< MDL 0.02		No
PCB (µg/L) - TW	01/10/2011	< MDL 0.04	3.0	No
Pentachlorophenol (µg/L) - TW	01/10/2011	< MDL 0.15	60.0	No
Phorate (µg/L) - TW	01/10/2011	< MDL 0.01	2.0	No
Picloram (µg/L) - TW	01/10/2011	< MDL 0.25	190.0	No
Prometryne (µg/L) - TW	01/10/2011	< MDL 0.03	1.0	No
Simazine (µg/L) - TW	01/10/2011	< MDL 0.01	10.0	No
Temephos (µg/L) - TW	01/10/2011	< MDL 0.01		No
Terbufos (µg/L) - TW	01/10/2011	< MDL 0.01	1.0	No
Tetrachloroethylene (µg/L) - TW	01/10/2011	< MDL 0.35	10.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW	01/10/2011	< MDL 0.14	100.0	No
Triallate (µg/L) - TW	01/10/2011	< MDL 0.01	230.0	No
Trichloroethylene (µg/L) - TW	01/10/2011	< MDL 0.43	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW	01/10/2011	1.3	5.0	No
Trifluralin (µg/L) - TW	01/10/2011	< MDL 0.02	45.0	No
Vinyl Chloride (µg/L) - TW	01/10/2011	< MDL 0.17	1.0	No
Trihalomethane: Total (µg/L) Annual Average - DW	2020 (Quarterly)	43.75	100.0	No
HAA Total (µg/L) Annual Average - DW	2020 (Quarterly)	27.3	80.0	No

NOTE: Schedule 24 samples are to be taken every 60 months. The most current sampling session was in January 2011 for Schedule 24, the next sampling session is scheduled for when the plant restarts.

Table 7. 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 (mm/dd/yyyy)
Barium	595	mg/L	01/10/2011

NOTE: This is required only if DWS category is large municipal residential, small municipal residential, large municipal non-residential, small municipal non-residential, large non municipal non-residential