



**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, 2021 TO DECEMBER 31, 2021**

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, 2021 to December 31, 2021 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 October 13, 2021. On October 25, 2021 the report for this inspection was issued but an inspection rating has not been received as of yet.

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:

- No non-compliances during this period

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: 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 m<sup>3</sup>/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 2021

| 2021      | Flow (Treated Water from Wiarton)  |                               |                                    |                               |
|-----------|------------------------------------|-------------------------------|------------------------------------|-------------------------------|
|           | Average Flow (m <sup>3</sup> /day) | Percent of Rated Capacity (%) | Maximum Flow (m <sup>3</sup> /day) | Percent of Rated Capacity (%) |
| January   | 17.6                               | 23.5%                         | 22.1                               | 29.5%                         |
| February  | 21.8                               | 29.1%                         | 25.1                               | 33.5%                         |
| March     | 22.7                               | 30.3%                         | 25.6                               | 34.1%                         |
| April     | 13.5                               | 18.0%                         | 27.4                               | 36.5%                         |
| May       | 13.2                               | 17.6%                         | 21.9                               | 29.2%                         |
| June      | 19.2                               | 25.6%                         | 32.1                               | 42.8%                         |
| July      | 15.1                               | 20.1%                         | 18.9                               | 25.2%                         |
| August    | 20.0                               | 26.7%                         | 29.7                               | 39.6%                         |
| September | 24.3                               | 32.4%                         | 33.0                               | 44.0%                         |
| October   | 18.6                               | 24.8%                         | 24.0                               | 32.0%                         |
| November  | 17.2                               | 22.9%                         | 23.2                               | 30.9%                         |
| December  | 17.4                               | 23.2%                         | 21.7                               | 28.9%                         |

**Table 2.** Treated Water Monthly Average and Maximum Flowrates for 2021

| 2021      | Treated Water          |                        |
|-----------|------------------------|------------------------|
|           | Average Flowrate (l/s) | Maximum Flowrate (l/s) |
| January   | 1.33                   | 2.92                   |
| February  | 1.35                   | 3.02                   |
| March     | 1.15                   | 3.80                   |
| April     | 1.08                   | 4.10                   |
| May       | 1.06                   | 3.75                   |
| June      | 1.38                   | 10.00                  |
| July      | 1.34                   | 4.34                   |
| August    | 1.36                   | 4.20                   |
| September | 1.38                   | 5.11                   |
| October   | 1.25                   | 4.13                   |
| November  | 1.03                   | 3.98                   |
| December  | 1.15                   | 3.89                   |



**ONTARIO CLEAN WATER AGENCY**  
**AGENCE ONTARIENNE DES EAUX**

**OLIPHANT**  
**DRINKING WATER SYSTEM**

Small Municipal Residential

**SECTION 11**  
**ANNUAL REPORT**

For the period of  
**JANUARY 1, 2021 TO DECEMBER 31, 2021**

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

|  |                                      |
|--|--------------------------------------|
| <b>Drinking Water System Number:</b>   | 220007695                            |
| <b>Drinking Water System Name:</b>     | Oliphant                             |
| <b>Drinking Water System Owner:</b>    | Town of South Bruce Peninsula        |
| <b>Drinking Water System Category:</b> | Small Municipal Residential          |
| <b>Reporting Period:</b>               | January 1, 2021 to December 31, 2021 |

**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 20<sup>th</sup>, 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 type="checkbox"/>            | Repair required equipment             |
| <input type="checkbox"/>            | Replace required equipment            |
| <input checked="" type="checkbox"/> | No significant expenses were incurred |

**Description of expenses:**

- No major maintenance or repairs made

**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) | 52                | 0                       | 0       | 0                                | 0       | 52                    | 0                    | 2       |

**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) – TW                | 8760                   | 0.01             | 1.59    |
| Free Chlorine Residual, On-Line (mg/L) – TW  | 8760                   | 1.14             | 4.00    |
| Free Chlorine Residual, In-House (mg/L) – DW | 105                    | 0.79             | 1.57    |
| Free Chlorine Residual, Field (mg/L) – DW    | 53                     | 0.81             | 1.57    |

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

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

**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 |
|------------------------------------|--|--------------|--------|-----------------|
| March 6, 2020<br>094-105 (Issue 5) | Total Suspended Solids<br>(Filter backwash)  | Monthly      | n/a*   | 25 mg/L         |
| March 6, 2020<br>094-105 (Issue 5) | Total Chlorine Residual<br>(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 |       |
|--------------------------|--------------------------|---------------|---------------------------------------|------------|-------|
|                          |                          |               |                                       | MAC        | ½ MAC |
| Antimony: Sb (µg/L) - TW | 01/10/2011               | <MDL 0.02     | 6.0                                   | No         | No    |
| Arsenic: As (µg/L) - TW  | 01/10/2011               | 0.3           | 10.0                                  | No         | No    |
| Barium: Ba (µg/L) - TW   | 01/10/2011               | 595           | 1000.0                                | No         | Yes   |
| Boron: B (µg/L) - TW     | 01/10/2011               | 33            | 5000.0                                | No         | No    |
| Cadmium: Cd (µg/L) - TW  | 01/10/2011               | <MDL 0.003    | 5.0                                   | No         | No    |
| Chromium: Cr (µg/L) - TW | 01/10/2011               | <MDL 0.5      | 50.0                                  | No         | No    |
| Mercury: Hg (µg/L) - TW  | 01/10/2011               | <MDL 0.02     | 1.0                                   | No         | No    |
| Selenium: Se (µg/L) - TW | 01/10/2011               | <MDL 1.0      | 50.0                                  | No         | No    |
| Uranium: U (µg/L) - TW   | 01/10/2011               | 0.008         | 20.0                                  | No         | No    |
| Fluoride (mg/L) - TW     | 01/10/2011               | 0.24          | 1.5                                   | No         | No    |
| Nitrite (mg/L) - TW      | 01/07/2013               | <MDL 0.005    | 1.0                                   | No         | No    |
| Nitrite (mg/L) - TW      | 04/02/2012               | <MDL 0.005    | 1.0                                   | No         | No    |
| Nitrite (mg/L) - TW      | 07/09/2012               | <MDL 0.005    | 1.0                                   | No         | No    |
| Nitrite (mg/L) - TW      | 10/16/2012               | <MDL 0.005    | 1.0                                   | No         | No    |
| Nitrate (mg/L) - TW      | 01/07/2013               | 0.258         | 10.0                                  | No         | No    |
| Nitrate (mg/L) - TW      | 04/02/2012               | 0.281         | 10.0                                  | No         | No    |
| Nitrate (mg/L) - TW      | 07/09/2012               | 0.250         | 10.0                                  | No         | No    |
| Nitrate (mg/L) - TW      | 10/16/2012               | 0.233         | 10.0                                  | No         | No    |
| Sodium: Na (mg/L) - TW   | 01/10/2011               | 0.13          | 20*                                   | No         | 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) | 2                 | 0.04                  | 0.08    | 0                     |
| pH                  | 2                 | 8.40                  | 8.42    | 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 2021; the next set of samples will be taken in 2024.

**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 |       |
|--|--------------------------|--------------|------|------------|-------|
|  |                          |              |      | MAC        | ½ MAC |
| Alachlor (µg/L) - TW                             | 01/10/2011               | <MDL 0.02    | 5.0  | No         | No    |
| Aldicarb (µg/L) - TW                             | 01/10/2011               | <MDL 0.01    |      | No         | No    |
| Aldrin+Dieldrin (µg/L) - TW                      | 01/10/2011               | < MDL 0.01   |      | No         | No    |
| Atrazine + N-dealkylated metabolites (µg/L) - TW | 01/10/2011               | < MDL 0.01   | 5.0  | No         | No    |
| Azinphos-methyl (µg/L) - TW                      | 01/10/2011               | < MDL 0.02   | 20.0 | No         | No    |
| Bendiocarb (µg/L) - TW                           | 01/10/2011               | < MDL 0.01   |      | No         | No    |
| Benzene (µg/L) - TW                              | 01/10/2011               | < MDL 0.32   | 1.0  | No         | No    |
| Benzo(a)pyrene (µg/L) - TW                       | 01/10/2011               | < MDL 0.004  | 0.01 | No         | No    |
| Bromoxynil (µg/L) - TW                           | 01/10/2011               | < MDL 0.33   | 5.0  | No         | No    |
| Carbaryl (µg/L) - TW                             | 01/10/2011               | < MDL 0.01   | 90.0 | No         | No    |
| Carbofuran (µg/L) - TW                           | 01/10/2011               | < MDL 0.01   | 90.0 | No         | No    |
| Carbon Tetrachloride (µg/L) - TW                 | 01/10/2011               | < MDL 0.16   | 2.0  | No         | No    |
| Chlordane: Total (µg/L) - TW                     | 01/10/2011               | < MDL 0.01   |      | No         | No    |
| Chlorpyrifos (µg/L) - TW                         | 01/10/2011               | < MDL 0.02   | 90.0 | No         | No    |
| Cyanazine (µg/L) - TW                            | 01/10/2011               | < MDL 0.03   |      | No         | No    |

| Parameter  | Sample Date<br>(mm/dd/yyyy) | Result Value | MAC   | Exceedance |       |
|--|-----------------------------|--------------|-------|------------|-------|
|  |                             |              |       | MAC        | ½ MAC |
| Diazinon (µg/L) - TW                             | 01/10/2011                  | < MDL 0.02   | 20.0  | No         | No    |
| Dicamba (µg/L) - TW                              | 01/10/2011                  | < MDL 0.2    | 120.0 | No         | No    |
| 1,2-Dichlorobenzene (µg/L) - TW                  | 01/10/2011                  | < MDL 0.41   | 200.0 | No         | No    |
| 1,4-Dichlorobenzene (µg/L) - TW                  | 01/10/2011                  | < MDL 0.36   | 5.0   | No         | No    |
| DDT + metabolites (µg/L) - TW                    | 01/10/2011                  | < MDL 0.01   |       | No         | No    |
| 1,2-Dichloroethane (µg/L) - TW                   | 01/10/2011                  | < MDL 0.35   | 5.0   | No         | No    |
| 1,1-Dichloroethylene (µg/L) - TW                 | 01/10/2011                  | < MDL 0.33   | 14.0  | No         | No    |
| Dichloromethane (Methylene Chloride) (µg/L) - TW | 01/10/2011                  | < MDL 0.35   | 50.0  | No         | No    |
| 2,4-Dichlorophenol (µg/L) - TW                   | 01/10/2011                  | < MDL 0.15   | 900.0 | No         | No    |
| Dimethoate (µg/L) - TW                           | 01/10/2011                  | < MDL 0.03   | 20.0  | No         | No    |
| Dinoseb (µg/L) - TW                              | 01/10/2011                  | < MDL 0.36   |       | No         | No    |
| Diquat (µg/L) - TW                               | 01/10/2011                  | < MDL 1.0    | 70.0  | No         | No    |
| Diuron (µg/L) - TW                               | 01/10/2011                  | < MDL 0.03   | 150.0 | No         | No    |
| Glyphosate (µg/L) - TW                           | 01/10/2011                  | < MDL 6.0    | 280.0 | No         | No    |
| Heptachlor+hepachlor epoxide (µg/L) - TW         | 01/10/2011                  | < MDL 0.01   |       | No         | No    |
| Lindane (µg/L) - TW                              | 01/10/2011                  | < MDL 0.01   |       | No         | No    |
| Malathion (µg/L) - TW                            | 01/10/2011                  | < MDL 0.02   | 190.0 | No         | No    |
| Methoxychlor (µg/L) - TW                         | 01/10/2011                  | < MDL 0.01   |       | No         | No    |
| Metolachlor (µg/L) - TW                          | 01/10/2011                  | < MDL 0.01   | 50.0  | No         | No    |
| Metribuzin (µg/L) - TW                           | 01/10/2011                  | < MDL 0.02   | 80.0  | No         | No    |
| Monochlorobenzene (Chlorobenzene) (µg/L) - TW    | 01/10/2011                  | < MDL 0.3    | 80.0  | No         | No    |
| Paraquat (µg/L) - TW                             | 01/10/2011                  | < MDL 1.0    | 10.0  | No         | No    |
| Parathion (µg/L) - TW                            | 01/10/2011                  | < MDL 0.02   |       | No         | No    |
| PCB (µg/L) - TW                                  | 01/10/2011                  | < MDL 0.04   | 3.0   | No         | No    |
| Pentachlorophenol (µg/L) - TW                    | 01/10/2011                  | < MDL 0.15   | 60.0  | No         | No    |
| Phorate (µg/L) - TW                              | 01/10/2011                  | < MDL 0.01   | 2.0   | No         | No    |
| Picloram (µg/L) - TW                             | 01/10/2011                  | < MDL 0.25   | 190.0 | No         | No    |
| Prometryne (µg/L) - TW                           | 01/10/2011                  | < MDL 0.03   | 1.0   | No         | No    |
| Simazine (µg/L) - TW                             | 01/10/2011                  | < MDL 0.01   | 10.0  | No         | No    |
| Temephos (µg/L) - TW                             | 01/10/2011                  | < MDL 0.01   |       | No         | No    |
| Terbufos (µg/L) - TW                             | 01/10/2011                  | < MDL 0.01   | 1.0   | No         | No    |
| Tetrachloroethylene (µg/L) - TW                  | 01/10/2011                  | < MDL 0.35   | 10.0  | No         | No    |
| 2,3,4,6-Tetrachlorophenol (µg/L) - TW            | 01/10/2011                  | < MDL 0.14   | 100.0 | No         | No    |
| Triallate (µg/L) - TW                            | 01/10/2011                  | < MDL 0.01   | 230.0 | No         | No    |
| Trichloroethylene (µg/L) - TW                    | 01/10/2011                  | < MDL 0.43   | 5.0   | No         | No    |
| 2,4,6-Trichlorophenol (µg/L) - TW                | 01/10/2011                  | 1.3          | 5.0   | No         | No    |
| Trifluralin (µg/L) - TW                          | 01/10/2011                  | < MDL 0.02   | 45.0  | No         | No    |
| Vinyl Chloride (µg/L) - TW                       | 01/10/2011                  | < MDL 0.17   | 1.0   | No         | No    |
| Trihalomethane: Total (µg/L) Annual Average - DW | 2021 (Quarterly)            | 51.50        | 100.0 | No         | Yes   |
| HAA Total (µg/L) Annual Average - DW             | 2021 (Quarterly)            | 24.38        | 80.0  | No         | 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<br>(mm/dd/yyyy) |
|--|--------------|-----------------|--------------------------------|
| Trihalomethane: Total (µg/L) Annual Average – DW | 51.50 (RAA)  | mg/L            | 2021                           |

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