



**Ontario Clean Water Agency  
Agence Ontarienne Des Eaux**

**OLIPHANT  
WATER TREATMENT PLANT**

**Small Municipal Residential Drinking Water System**

**SCHEDULE 22  
SUMMARY REPORT**

**For the period of  
JANUARY 1, 2014 TO DECEMBER 31, 2014**

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, 2014 to December 31, 2014 for the Oliphant Water Treatment Plant located in the Town of South Bruce Peninsula.

The summary includes:

1. 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.
2. A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
3. A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

## **ISSUES OF NON-COMPLIANCE**

The following table lists the requirements of the Act, Regulations, System Approval(s) and any Order that the system failed to meet during the reporting period and the measures taken to correct each failure:

There was one MOE Compliance Inspection conducted during the reporting period on October 8, 2014 which was routine announced. The inspection resulted in an Inspection Report Rating of 100%.

**No actions required**

**ASSESSMENT OF FLOW RATES AND QUANTITIES OF WATER SUPPLIED**

The following table lists the quantities and flow rates of the water supplied during the reporting period covered by this report, including monthly average and maximum daily flows and a comparison to the rated capacity and flow rates specified in the system approval:

## Oliphant Water Treatment Plant

| Month        | Average Day Flow | % of Rated Capacity<br>327 m3/d | Maximum Day Flow | % of Rated Capacity<br>327 m3/d |
|--------------|------------------|---------------------------------|------------------|---------------------------------|
| January      |                  |                                 |                  |                                 |
| February     |                  |                                 |                  |                                 |
| March        |                  |                                 |                  |                                 |
| April        |                  |                                 |                  |                                 |
| May          |                  |                                 |                  |                                 |
| June         |                  |                                 |                  |                                 |
| July         |                  |                                 |                  |                                 |
| August       |                  |                                 |                  |                                 |
| September    |                  |                                 |                  |                                 |
| October      |                  |                                 |                  |                                 |
| November     |                  |                                 |                  |                                 |
| December *** | 56.25            | 17.20                           | 56.25            | 17.20                           |

**Note:** The Oliphant Water Treatment Plant stopped treating water on January 16, 2011 and began receiving transported water from the Warton Water Treatment Plant by direction of the Town of South Bruce Peninsula.

\*\*\* In December, following upgrades to the plant, tests were run to determine the practicality of treating water at the Oliphant Water Treatment Plant.

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|  |                                      |
|--|--------------------------------------|
| <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>Period being reported:</b>          | January 1, 2014 to December 31, 2014 |

|   |   |
|---|---|
| <p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>Town of South Bruce Peninsula<br/>315 George Street<br/>Warton, Ontario<br/>N0H 2T0<br/>519-534-1400</p> </div> | <p><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b><br/> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> </p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b><br/> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> </p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</b></p> |
|---|---|

**List Drinking-Water Systems, which receive all of their drinking water from your system:**

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 [ ] N/A [X]

**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
- [ ] 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 \_\_\_\_\_

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**Describe your Drinking-Water System**

- The Oliphant Drinking Water System currently transports all of its drinking water from the Wiarton Drinking Water System.
- 2 Clearwells
- 2 Highlift pumps
- Secondary Disinfection by Sodium Hypochlorite 12% solution.
- PLC/SCADA system
- Standby power diesel generator

**Note: As of January 20<sup>th</sup> 2011 the Oliphant Water Treatment Plant began receiving all of its treated water from the Wiarton Water Treatment Plant.**

**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

**Describe:**

- o Replacement of UPS
- o Upgrade of water plant to resume operations (SCADA upgrades; refurbish old pumps; installation of mixer; drill new well)

**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 |
|---------------|-----------|--------|-----------------|-------------------|------------------------|
|               |           |        |                 |                   |                        |

**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 or Fecal Results (min #) - (max #) | Range of Total Coliform Results (min #) - (max #) | Number of HPC Samples | Range of HPC Results (min #) - (max #) |
|-------------------|-------------------|---|---|-----------------------|--|
| Distribution - DW | 51                | 0 - 0   | 0 - 0   | 51                    | 0 - 10                                 |

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

|                                       | Number of Grab Samples | Range of Results (#-#) | <i>NOTE: For continuous monitors use 8760 as the number of samples.</i> |
|---------------------------------------|------------------------|------------------------|---|
| Filter Turbidity NTU                  | 8760                   | 0.02 – 0.16            |   |
| Chlorine                              | 8760                   | 1.12 – 1.55            |   |
| Chlorine Residual Distribution System | 8760                   | 0.95 – 2.00            |   |

*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 or order.

| Date of order or C of A     | Parameter        | Date Sampled   | Result | Unit of Measure |
|-----------------------------|------------------|----------------|--------|-----------------|
| MDWL #094-105<br>04/30/2010 | Suspended Solids | Annual average | N/A    | mg/L            |

\*\* Currently not required as all of the systems drinking water is transported from Wiarton.

Summary of Inorganic parameters tested during this reporting period or most recent

| Parameter    | Sample Date | Result Value | Unit of Measure | Exceedance |
|--------------|-------------|--------------|-----------------|------------|
| Antimony     | 01/10/11    | < 0.02       | ug/L            | No         |
| Arsenic      | 01/10/11    | 0.3          | ug/L            | No         |
| Barium       | 01/10/11    | 595          | ug/L            | No         |
| Boron        | 01/10/11    | 33           | ug/L            | No         |
| Cadmium      | 01/10/11    | < 0.03       | ug/L            | No         |
| Chromium     | 01/10/11    | < 0.5        | ug/L            | No         |
| Mercury      | 01/10/11    | < 0.02       | ug/L            | No         |
| Selenium     | 01/10/11    | < 1.0        | ug/L            | No         |
| Uranium      | 01/10/11    | 0.008        | ug/L            | No         |
| Nitrite - TW | 01/07/13    | < 0.005      | mg/L            | No         |
| Nitrite - TW | 04/02/12    | < 0.005      | mg/L            | No         |
| Nitrite - TW | 07/09/12    | < 0.005      | mg/L            | No         |
| Nitrite - TW | 10/16/12    | < 0.005      | mg/L            | No         |
| Nitrate - TW | 01/07/13    | 0.258        | mg/L            | No         |
| Nitrate - TW | 04/02/12    | 0.281        | mg/L            | No         |
| Nitrate - TW | 07/09/12    | 0.250        | mg/L            | No         |
| Nitrate - TW | 10/16/12    | 0.233        | mg/L            | No         |
| Sodium       | 01/10/11    | 0.13         | mg/L            | No         |
| Fluoride     | 01/10/11    | 0.24         | mg/L            | No         |

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Summary of Organic parameters sampled during this reporting period or most recent

| Parameter   | Sample Date | Result Value | Unit of Measure | Exceedance |
|---|-------------|--------------|-----------------|------------|
| Alachlor  | 01/10/11    | < 0.02       | ug/L            | No         |
| Aldicarb  | 01/10/11    | < 0.01       | ug/L            | No         |
| Aldrin + Dieldrin                                   | 01/10/11    | < 0.01       | ug/L            | No         |
| Atrazine + N-dealkylated metabolites                | 01/10/11    | < 0.01       | ug/L            | No         |
| Azinphos-methyl                                     | 01/10/11    | < 0.02       | ug/L            | No         |
| Bendiocarb  | 01/10/11    | < 0.01       | ug/L            | No         |
| Benzene   | 01/10/11    | < 0.32       | ug/L            | No         |
| Benzo(a)pyrene                                      | 01/10/11    | < 0.004      | ug/L            | No         |
| Bromoxynil  | 01/10/11    | < 0.33       | ug/L            | No         |
| Carbaryl  | 01/10/11    | < 0.01       | ug/L            | No         |
| Carbofuran  | 01/10/11    | < 0.01       | ug/L            | No         |
| Carbon Tetrachloride                                | 01/10/11    | < 0.16       | ug/L            | No         |
| Chlordane (Total)                                   | 01/10/11    | < 0.01       | ug/L            | No         |
| Chlorpyrifos  | 01/10/11    | < 0.02       | ug/L            | No         |
| Cyanazine   | 01/10/11    | < 0.03       | ug/L            | No         |
| Diazinon  | 01/10/11    | < 0.02       | ug/L            | No         |
| Dicamba   | 01/10/11    | < 0.20       | ug/L            | No         |
| 1,2-Dichlorobenzene                                 | 01/10/11    | < 0.41       | ug/L            | No         |
| 1,4-Dichlorobenzene                                 | 01/10/11    | < 0.36       | ug/L            | No         |
| Dichlorodiphenyltrichloroethane (DDT) + metabolites | 01/10/11    | < 0.01       | ug/L            | No         |
| 1,2-Dichloroethane                                  | 01/10/11    | < 0.35       | ug/L            | No         |
| 1,1-Dichloroethylene (vinylidene chloride)          | 01/10/11    | < 0.33       | ug/L            | No         |
| Dichloromethane                                     | 01/10/11    | < 0.35       | ug/L            | No         |
| 2-4 Dichlorophenol                                  | 01/10/11    | < 0.15       | ug/L            | No         |
| 2,4-Dichlorophenoxy acetic acid (2,4-D)             | 01/10/11    | < 0.19       | ug/L            | No         |
| Diclofop-methyl                                     | 01/10/11    | < 0.40       | ug/L            | No         |
| Dimethoate  | 01/10/11    | < 0.12       | ug/L            | No         |
| Dinoseb   | 01/10/11    | < 0.03       | ug/L            | No         |
| Diquat  | 01/10/11    | < 1.0        | ug/L            | No         |
| Diuron  | 01/10/11    | < 0.03       | ug/L            | No         |
| Glyphosate  | 01/10/11    | < 6          | ug/L            | No         |
| Heptachlor + Heptachlor Epoxide                     | 01/10/11    | < 0.01       | ug/L            | No         |
| Lindane (Total)                                     | 01/10/11    | < 0.01       | ug/L            | No         |
| Malathion   | 01/10/11    | < 0.02       | ug/L            | No         |
| Methoxychlor  | 01/10/11    | < 0.01       | ug/L            | No         |
| Metolachlor   | 01/10/11    | < 0.01       | ug/L            | No         |
| Metribuzin  | 01/10/11    | < 0.02       | ug/L            | No         |
| Monochlorobenzene                                   | 01/10/11    | < 0.30       | ug/L            | No         |
| Paraquat  | 01/10/11    | < 1          | ug/L            | No         |
| Parathion   | 01/10/11    | < 0.02       | ug/L            | No         |
| Pentachlorophenol                                   | 01/10/11    | < 0.15       | ug/L            | No         |
| Phorate   | 01/10/11    | < 0.01       | ug/L            | No         |

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|   |          |        |      |    |
|---|----------|--------|------|----|
| Picloram  | 01/10/11 | < 0.25 | ug/L | No |
| Polychlorinated Biphenyls(PCB)                  | 01/10/11 | < 0.04 | ug/L | No |
| Prometryne                                      | 01/10/11 | < 0.03 | ug/L | No |
| Simazine  | 01/10/11 | < 0.01 | ug/L | No |
| ***THM  | 2014     | 48.75  | ug/L | No |
| Temephos  | 01/10/11 | < 0.01 | ug/L | No |
| Terbufos  | 01/10/11 | < 0.01 | ug/L | No |
| Tetrachloroethylene                             | 01/10/11 | < 0.35 | ug/L | No |
| 2,3,4,6-Tetrachlorophenol                       | 01/10/11 | < 0.14 | ug/L | No |
| Triallate                                       | 01/10/11 | < 0.01 | ug/L | No |
| Trichloroethylene                               | 01/10/11 | < 0.43 | ug/L | No |
| 2,4,6-Trichlorophenol                           | 01/10/11 | 1.3    | ug/L | No |
| 2,4,5-Trichlorophenoxy acetic acid<br>(2,4,5-T) | 01/10/11 | < 0.22 | ug/L | No |
| Trifluralin                                     | 01/10/11 | < 0.02 | ug/L | No |
| Vinyl Chloride                                  | 01/10/11 | < 0.17 | ug/L | No |

\*\*\* Annual average. THM annual running average

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 |
|-----------|--------------|-----------------|----------------|
| THM       | 64           | ug/L            | 10/20/14       |
| Barium    | 595          | mg/L            | 01/10/11       |

### 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 (ug/L)<br>(min#) – (max #) | Number of Exceedances |
|---------------|-------------------|--|-----------------------|
| Distribution  | 0                 | N/A  | N/A                   |

\*\*\*The Oliphant Drinking Water System has qualified for the plumbing exemption in Accordance with O. Reg. 170/03 schedule 15.1-5 (9) and (10). The next distribution lead sampling is scheduled for the winter sampling period of 2015.



