



**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, 2012 TO DECEMBER 31, 2012**

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, 2012 to December 31, 2012 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 no MOE Compliance Inspection during the reporting period, however the most recent MOE Compliance Inspection of October 18, 2011 found that;

**Records did not indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a Permit, Licence or Approval issued under Part V of the SDWA at all times that water was being supplied to consumers.**

Since production of water at the Oliphant drinking water system was brought to a halt, Associated Engineering was retained by the Town to review the Oliphant WTP design and past performance and to conduct a treatability study to identify mitigation measures with the end goal being to return the Oliphant WTP back into service. The Oliphant WTP Peer Review and Treatability Study report was drafted and recommendations were forwarded to the Town.

The Town is presently reviewing Associated Engineering's recommendations and considering implementation options.

**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 327 m <sup>3</sup> /d	Maximum Day Flow	% of Rated Capacity 327 m <sup>3</sup> /d
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

**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.

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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, 2012 to December 31, 2012

**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 [X] No [ ]**

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

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

**Complete for all other Categories.**

**Number of Designated Facilities served:**

**Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]**

**Number of Interested Authorities you report to:**

**Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]**

**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.**

- Public access/notice via the web**
- 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 Wiaraton 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 it's treated water from the Wiaraton Water Treatment Plant and continued to received all of it's treated water for the remainder of this reporting period.**

## 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:

Repair main header inside the treatment facility.  
Replace SCADA CPU and programing

## 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
10/23/2012	Loss of Service, main header break	N/A	N/A	Repair, flush, sam[ple	10/25/2012

## 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	54	0 - 0	0 - 0	54	0 - 4

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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	N/A	
Chlorine	365	0.76 – 1.44	
Chlorine Residual Distribution System	105	0.35 – 1.29	

*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 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	01/09/12	< 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	01/09/12	0.274	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

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Phorate	01/10/11	< 0.01	ug/L	No
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	2012	51.0	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 (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	58	ug/L	07/09/12
THM	60	ug/L	10/16/12
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) (min#) – (max #)	Number of Exceedances
Distribution	2	0.15 – 0.22	0

\*\*\*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.