



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220001799
Drinking-Water System Name:	Richard H. Neath Water Purification Plant
Drinking-Water System Owner:	City of Owen Sound
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2009 – December 31, 2009

<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 [X] No []</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</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;"> <ul style="list-style-type: none"> • Owen Sound City Website • City Clerk’s Office, City Hall • Public Works Office • Water Treatment Plant • Library </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">n/a</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No [X]</p> <p>Number of Interested Authorities you report to:</p> <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">n/a</div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No [X]</p>
--	---

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
Leith Water Distribution System	260065312

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 [X] 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
- 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 Richard H. Neath Water Purification plant is a surface water treatment plant with direct filtration, serving a population of 22,000 people. The City distribution network is divided into 6 pressure zones.

The Water Treatment process includes raw water screening, prechlorination, zebra mussel control (chlorination at Intake), flash mixing, coagulation/flocculation, UV disinfection, post chlorination, Fluoridation, and a wastewater detention tank to treat backwash water.

The City has a 22,000 m³ reservoir, with two booster stations that provides addition pressure in the Southeast and southwest portions of the City and outskirts.

List all water treatment chemicals used over this reporting period

Gaseous Chlorine, Hydrofluorosilicic Acid (HFS), SternPAC, PAX-XL1900 (formerly named SternPAC 2300), Sodium Bisulphite (dechlorination), and MagnaFloc 110L (polymer addition to waste detention tank)

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

Municipal Pump (TP1) – Rebuilt pump top to bottom - \$15,000
East Hill Pump Station Variable Frequency Drive – internal failure - \$27,000
Communication Module/New VPN Routers – SCADA system - \$7,000



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

Please see Appendix "A"

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	52	0-30	0-1030	n/a	n/a
Treated	52	0-0	0-0	23	<10 - 30
Distribution	466	0-0	0-0	119	<10 - 50

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	8760	0.02 – 2.99 NTU * peak result from Feb 14/09 adverse report.
Chlorine	8760	.63 – 2.81 * taken from entry point *
Fluoride (If the DWS provides fluoridation)	8760	.21 - .66 * taken from lab results *

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

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
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	January 9,12,22,28	0.00	mg/L



CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	February 2,10,18,23	0.00	mg/L
CofA# 9037-5WBLZX February 20 th , 2004	Aluminum	February 23	<.010	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Total Suspended Solids	March 17	5	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	February 2,10,18,23	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	March 2,13,15,17,25, 30	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	April 7,9,14,22	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	May 5,13,21,25	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	June 1,9,11,19,21, 29	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Total Suspended Solids	June 11	0	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	July 9,13,23,27	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	August 5,10,19,28	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	September 9,18,23,30	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Total Suspended Solids	September 10	13	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	October 6,11,19,26	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	November 2,13,19,26,30	0.00	mg/L



CofA# 6368-6YVKTY April 2 nd , 2007	Chlorine – Wastewater System	December 11,14,21	0.00	mg/L
CofA# 6368-6YVKTY April 2 nd , 2007	Total Suspended Solids	December 12	6	mg/L

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	February 23	<.0001	mg/L	NO
Arsenic	February 23	.0004	mg/L	NO
Barium	February 23	.011	mg/L	NO
Boron	February 23	<.005	mg/L	NO
Cadmium	February 23	<.00002	mg/L	NO
Chromium	February 23	<.002	mg/L	NO
*Lead	n/a	n/a	n/a	n/a
Mercury	February 23	<.00002	mg/L	NO
Selenium	February 23	.0016	mg/L	NO
Sodium	n/a	n/a	n/a	n/a
Uranium	February 23	.0002	mg/L	NO
Fluoride	December 31	0.50	mg/L	NO
Nitrite	Dec 14	<0.1	mg/L	NO
Nitrate	Dec 14	0.4	mg/L	NO

*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 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	132	<0.00002 – 0.0506	15
Distribution	24	0.00004 – 0.00493	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	Feb 23	<.0003	mg/L	NO



Aldicarb	Feb 23	<.003	mg/L	NO
Aldrin + Dieldrin	Feb 23	<.00002	mg/L	NO
Atrazine + N-dealkylated metabolites	Feb 23	<.0005	mg/L	NO
Azinphos-methyl	Feb 23	<.001	mg/L	NO
Bendiocarb	Feb 23	<.003	mg/L	NO
Benzene	Feb 23	<.0005	mg/L	NO
Benzo(a)pyrene	Feb 23	<.000005	mg/L	NO
Bromoxynil	Feb 23	<.0003	mg/L	NO
Carbaryl	Feb 23	<.003	mg/L	NO
Carbofuran	Feb 23	<.001	mg/L	NO
Carbon Tetrachloride	Feb 23	<.0002	mg/L	NO
Chlordane (Total)	Feb 23	<.00004	mg/L	NO
Chlorpyrifos	Feb 23	<.0005	mg/L	NO
Cyanazine	Feb 23	<.0005	mg/L	NO
Diazinon	Feb 23	<.001	mg/L	NO
Dicamba	Feb 23	<.005	mg/L	NO
1,2-Dichlorobenzene	Feb 23	<.0001	mg/L	NO
1,4-Dichlorobenzene	Feb 23	<.0002	mg/L	NO
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Feb 23	<.0001	mg/L	NO
1,2-Dichloroethane	Feb 23	<.0001	mg/L	NO
1,1-Dichloroethylene (vinylidene chloride)	Feb 23	<.0001	mg/L	NO
Dichloromethane	Feb 23	<.0003	mg/L	NO
2-4 Dichlorophenol	Feb 23	<.0001	mg/L	NO
2,4-Dichlorophenoxy acetic acid (2,4-D)	Feb 23	<.005	mg/L	NO
Diclofop-methyl	Feb 23	<.0005	mg/L	NO
Dimethoate	Feb 23	<.001	mg/L	NO
Dinoseb	Feb 23	<.0005	mg/L	NO
Diquat	Feb 23	<.005	mg/L	NO
Diuron	Feb 23	<.005	mg/L	NO
Glyphosate	Feb 23	<.025	mg/L	NO
Heptachlor + Heptachlor Epoxide	Feb 23	<.0001	mg/L	NO
Lindane (Total)	Feb 23	<.0001	mg/L	NO
Malathion	Feb 23	<.005	mg/L	NO
Methoxychlor	Feb 23	<.0001	mg/L	NO
Metolachlor	Feb 23	<.003	mg/L	NO
Metribuzin	Feb 23	<.003	mg/L	NO
Monochlorobenzene	Feb 23	<.0002	mg/L	NO
Paraquat	Feb 23	<.001	mg/L	NO
Parathion	Feb 23	<.003	mg/L	NO
Pentachlorophenol	Feb 23	<.0001	mg/L	NO
Phorate	Feb 23	<.0003	mg/L	NO
Picloram	Feb 23	<.005	mg/L	NO
Polychlorinated Biphenyls(PCB)	Feb 23	<.00005	mg/L	NO



Prometryne	Feb 23	<.0001	mg/L	NO
Simazine	Feb 23	<.0005	mg/L	NO
THM (NOTE: show latest annual average)	2009	.0338	mg/L	NO
Temephos	Feb 23	<.010	mg/L	NO
Terbufos	Feb 23	<.0003	mg/L	NO
Tetrachloroethylene	Feb 23	<.0002	mg/L	NO
2,3,4,6-Tetrachlorophenol	Feb 23	<.0001	mg/L	NO
Triallate	Feb 23	<.010	mg/L	NO
Trichloroethylene	Feb 23	<.0001	mg/L	NO
2,4,6-Trichlorophenol	Feb 23	<.0001	mg/L	NO
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Feb 23	<.010	mg/L	NO
Trifluralin	Feb 23	<.0005	mg/L	NO
Vinyl Chloride	Feb 23	<.0002	mg/L	NO

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
none			

APPENDIX “A”

#	Incident Date	AWQI #s)	Adverse Location	Adverse Parameter	Adverse Result	Units	Remedial Action
1	14-Feb	86624	Filter Effluent	Turbidity	1.29	NTU	Backwashed filter, adjusted coagulant dosage.
2	15-Feb	86635	Filter Effluent	Turbidity	1.76	NTU	Backwashed filter, adjusted coagulant dosage.
3	10-Jun	88489	Distribution Pressure	Pressure	17	psi	Caused from flushing a hydrant in reduced flow area.
4	23-Jun	88678	Distribution Pressure	Pressure	17	psi	Closed valve at construction site, reopened.
5	22-Jul	89782	Distribution Pressure	Pressure	0	psi	Caused by construction project, pressure restored and bacti samples collected. No adverse bacti results found.