
	DWQMS Operational Plan	Form 05-12
	Date: November 10, 2011	Revision: 1
	Approved By: Vice President Operations & Engineering	
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**Richard's Landing
 Well Pumphouse
 Waterworks # 20007212
 Annual & Summary Reports
 2011**

ANNUAL REPORT 2011

Drinking-Water System Number:	220007212
Drinking-Water System Name:	Richards Landing Pumping Station
Drinking-Water System Owner:	Corporation of the Township of St. Joseph
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	Jan 1 – Dec 31, 2011

<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 [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [] No [x]</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <p>Township of St. Joseph Municipal Office 1669 Arthur Street Richard's Landing, ON P0R 1J0</p>	<p><u>Complete for all other Categories.</u></p> <p>n/a Number of Designated Facilities served:</p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to:</p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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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: n/a

Drinking Water System Name	Drinking Water System Number

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? n/a
Yes [] 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 Island Clippings/ Twp newsletter

Describe your Drinking-Water System

The water treatment system is comprised of two wells equipped with submersible pumps, one monitoring well, cartridge bag filtration, disinfection (UV and sodium hypochlorite), in-ground storage, with high lift and fire pumps. A diesel generator is located on-site to provide emergency power, and two pressure tanks maintain distribution system pressure during low flow conditions.

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

Please provide a brief description and a breakdown of monetary expenses incurred

Main break repair
 Installation of Priva top controller
 New level transmitter
 Repair of Highlift

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 -n/a

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
May 3/11	High Filter Turbidity	<1.0	NTU	Reading incorrect due to air into analyzer	May 3/11

*The aesthetic objective for sodium in drinking water is 200 mg/L. Notifications are required when the sodium concentration exceeds 20 mg/L so that this information may be communicated by the local Medical Officer of Health to local physicians for their use with patients on sodium restricted diets.

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

Sample	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	106	0-1	0-61	-	-
Treated	54	0-0	0-0	53	0-13
Distribution	111	0-0	0-0	36	0-10

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Sample	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity (Filter #1)	105059	0-2.04
Turbidity (Filter #2)	105059	0-2.03
Chlorine	105059	0.26-1.50
Fluoride (If the DWS provides fluoridation)	-	-

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

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

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	May 9, 2011	<0.02	ug/L	No
Arsenic	May 9, 2011	0.20	ug/L	No
Barium	May 9, 2011	16.2	ug/L	No
Boron	May 9, 2011	25.0	ug/L	No
Cadmium	May 9, 2011	0.004	ug/L	No
Chromium	May 9, 2011	3.1	ug/L	No
Mercury	May 9, 2011	<0.02	ug/L	No
Lead *				
Selenium	May 9, 2011	<1.0	ug/L	No
Sodium	May 9, 2011	44.5	mg/L	Yes
Uranium	May 9, 2011	<0.02	ug/L	No
Fluoride	May 9, 2011	0.06	mg/L	No

Parameter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Date	Jan 17,2011	May 9,2011	Aug 15,2011	Nov 7,2011
Unit of Measure	mg/L	mg/L	mg/L	mg/L
Nitrite	<0.005	<0.005	<0.005	<0.005
Nitrate	1.72	1.56	1.60	1.61

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	12	0.55-8.95	0
Distribution	2	0.22-2.19	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	May 9, 2011	<0.02	ug/L	No
Aldicarb	May 9, 2011	<0.01	ug/L	No
Aldrin + Dieldrin	May 9, 2011	<0.01	ug/L	No
Atrazine + N-dealkylated metabolites	May 9, 2011	<0.01	ug/L	No
Azinphos-methyl	May 9, 2011	<0.02	ug/L	No
Bendiocarb	May 9, 2011	<0.01	ug/L	No
Benzene	May 9, 2011	<0.32	ug/L	No
Benzo(a)pyrene	May 9, 2011	<0.004	ug/L	No
Bromoxynil	May 9, 2011	<0.33	ug/L	No
Carbaryl	May 9, 2011	<0.01	ug/L	No
Carbofuran	May 9, 2011	<0.01	ug/L	No
Carbon Tetrachloride	May 9, 2011	<0.16	ug/L	No
Chlordane (Total)	May 9, 2011	<0.01	ug/L	No
Chlorpyrifos	May 9, 2011	<0.02	ug/L	No
Cyanazine	May 9, 2011	<0.03	ug/L	No
Diazinon	May 9, 2011	<0.02	ug/L	No
Dicamba	May 9, 2011	<0.20	ug/L	No
1,2-Dichlorobenzene	May 9, 2011	<0.41	ug/L	No
1,4-Dichlorobenzene	May 9, 2011	<0.36	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	May 9, 2011	<0.01	ug/L	No
1,2-Dichloroethane	May 9, 2011	<0.35	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	May 9, 2011	<0.33	ug/L	No
Dichloromethane	May 9, 2011	<0.35	ug/L	No
2-4 Dichlorophenol	May 9, 2011	<0.15	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	May 9, 2011	<0.19	ug/L	No

Parameter	Date	Result Value	Unit of Measure	Exceedance
Diclofop-methyl	May 9, 2011	<0.40	ug/L	No
Dimethoate	May 9, 2011	<0.03	ug/L	No
Dinoseb	May 9, 2011	<0.36	ug/L	No
Diquat	May 9, 2011	<1.0	ug/L	No
Diuron	May 9, 2011	<0.03	ug/L	No
Glyphosate	May 9, 2011	<6.0	ug/L	No
Heptachlor + Heptachlor Epoxide	May 9, 2011	<0.01	ug/L	No
Lindane (Total)	May 9, 2011	<0.01	ug/L	No
Malathion	May 9, 2011	<0.02	ug/L	No
Methoxychlor	May 9, 2011	<0.01	ug/L	No
Metolachlor	May 9, 2011	<0.01	ug/L	No
Metribuzin	May 9, 2011	<0.02	ug/L	No
Monochlorobenzene	May 9, 2011	<0.3	ug/L	No
Paraquat	May 9, 2011	<1.0	ug/L	No
Parathion	May 9, 2011	<0.02	ug/L	No
Pentachlorophenol	May 9, 2011	<0.15	ug/L	No
Phorate	May 9, 2011	<0.01	ug/L	No
Picloram	May 9, 2011	<0.25	ug/L	No
Polychlorinated Biphenyls(PCB)	May 9, 2011	<0.04	ug/L	No
Prometryne	May 9, 2011	<0.03	ug/L	No
Simazine	May 9, 2011	<0.01	ug/L	No
THM (NOTE: show latest annual average)	May 9, 2011	41.7	ug/L	No
Temephos	May 9, 2011	<0.01	ug/L	No
Terbufos	May 9, 2011	<0.01	ug/L	No
Tetrachloroethylene	May 9, 2011	<0.35	ug/L	No
2,3,4,6-Tetrachlorophenol	May 9, 2011	<0.14	ug/L	No
Triallate	May 9, 2011	<0.01	ug/L	No
Trichloroethylene	May 9, 2011	<0.43	ug/L	No
2,4,6-Trichlorophenol	May 9, 2011	<0.25	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	May 9, 2011	<0.22	ug/L	No
Trifluralin	May 9, 2011	<0.02	ug/L	No
Vinyl Chloride	May 9, 2011	<0.17	ug/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards. – n/a

Parameter	Result Value	Unit of Measure	Date of Sample

**Richard's Landing
Well Pumphouse
Waterworks # 20007212**

**Summary Reports for Municipalities
2011**

**As required by
Schedule 22 of O. Reg 170/03**

This report is prepared by PUC Services for the Township of St. Joseph for Richard's Landing Pumphouse in accordance with Schedule 22 of O Reg 170/03. The report is a requirement for all Large and Small Municipal Residential systems.

Summary Report Requirements:

The owner of a drinking water system shall ensure that, not later than March 31 of each year, a report is prepared in accordance with Schedule 22 of O. Reg. 170/03 for the preceding calendar year.

The report must include the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence and any orders applicable to the system that were not met at any time during the period covered by the report and specify the duration of the failure. Each failure described must also include the measures that were taken to correct the failure.

The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:

1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit, or municipal drinking water licence.

Regulations:

Safe Drinking Water Act, 2002 - O. Reg. 170/03 Drinking Water Systems

System Approval:

MUNICIPAL DRINKING WATER LICENCE, Licence Number: 284-101, Issue Number: 1, Issued May 27, 2011
 DRINKING WATER WORKS PERMIT, Permit Number: 284-201, Issue Number: 1, Issued May 27, 2011

Most recent Drinking Water System Inspection Report:

DWS Number: 220007212
 Inspected by: Trisha Westman
 Inspection Number: 1-8CZFL
 Date of Inspection: April 07, 2010
 Date of Previous Inspection: April 7, 2009

The following table identifies any non-compliance with requirement of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence and any orders applicable to the system that were not met at any time during the period covered by the report

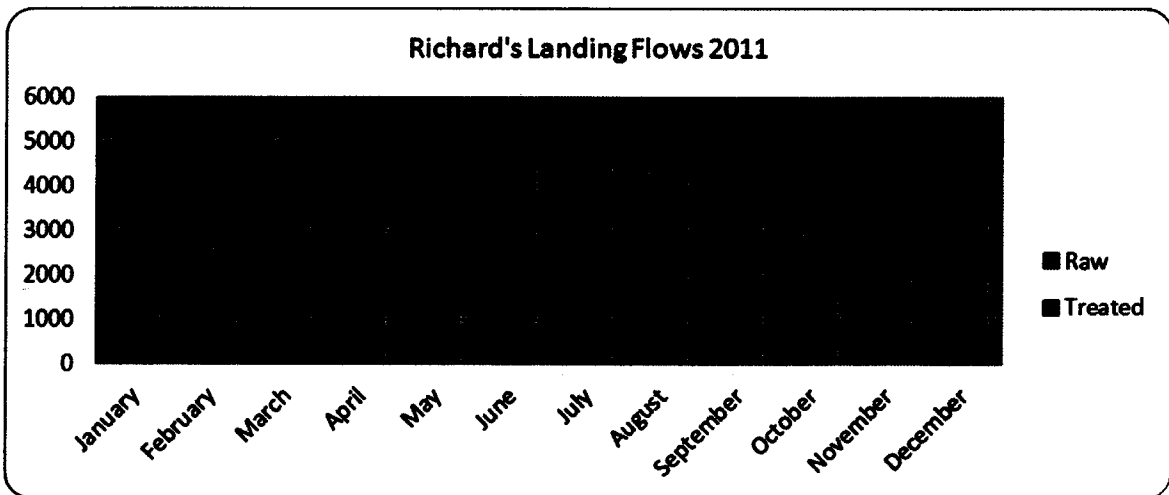
Non- Compliance with Regulatory Requirements and Actions Required:

n/a

The Richard's Landing Pumphouse has complied with all the requirements set out in the system's Approval, the Act and the regulations.

Flows Summary 2011

Raw Water Flows 2011					
Month	Raw Water (m3)	Min Day (m ³ /d)	Max Day (m ³ /d)	Average Day (m ³ /d)	% of Max. Day to PTTW (1037 m3/d)
January	2903	42	199	90.87	19.2
February	2717	32	227	93.79	21.9
March	3236	66	170	103.23	16.4
April	2950	0	178	94.57	17.2
May	3789	1	198	118.13	19.1
June	4448	78	256	145.13	24.7
July	5243	7	368	163.9	35.5
August	4244	65	211	133	20.3
September	3275	35	181	108.63	17.5
October	2832	0	233	67.43	22.5
November	2434	46	160	59.37	15.4
December	3291	53	196	78.36	18.9



Treated Water Flows 2011					
Month	Treated Water (m3)	Min Day (m ³ /d)	Max Day (m ³ /d)	Average Day (m ³ /d)	% of Max. Day to Rated Capacity (1011 m3/d)
January	2935	77	202	94.65	20.0
February	2526	77	111	90.21	11.0
March	3277	80	132	105.71	13.1
April	3499	72	145	116.63	14.3
May	3943	93	165	127.19	16.3
June	4637	122	238	154.57	23.5
July	5315	128	229	171.45	22.7
August	4321	107	213	139.39	21.1
September	3470	85	168	115.67	16.6
October	3129	79	183	74.5	18.1
November	2449	72	114	59.73	11.3
December	3307	73	148	78.74	14.6

Capacity Assessment

The Permit to Take Water authorizes the municipality to draw water from the wells at a rate not to exceed 1037 m³/d. The maximum daily volume taken was 368 m³, 35.5% of the permit limit.

Municipal Drinking Water Licence: 284-101 specifies a maximum rated flow of 1011 m³/day . The max flow rate reported was 238 m³, 23.5 % of the rated capacity.

This Summary report for Richard's Landing Pumphouse for the period of January 1st to December 31st 2011 has been prepared in accordance to Schedule 22 of O. Reg 170/03. The report has been reviewed and accepted by the Township of St. Joseph council.



29 Feb - 2012

Date