



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

March 22, 2011

Township of Malahide
Rob Johnson
Director of Physical Services
87 John Street South
Aylmer ON N5H 2C3

Re: Safe Drinking Water Act, O. Reg. 170/03 Schedule 22 Summary Report

Dear Mr. Johnson,

Attached is the 2010 Summary Report for the Port Burwell Area Secondary Water Supply System. This report is completed in accordance with Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act.

This Summary Report is to be provided to the members of the Port Burwell Area Secondary Water Supply System Joint Board of Management; please ensure this distribution.

We recently forwarded a copy of the 2010 Annual Report for the Port Burwell Area Secondary Water Supply System required under Section 11 of O. Reg. 170/03. Section 12 of O. Reg. 170/03, requires both the Summary Report and the Annual Report be made available for inspection by any member of the public during normal business hours, without charge. The reports should be made available for inspection at the office of the municipality, or at a location that is reasonably convenient to the users of the water system.

Please feel free to contact me should you require any additional information regarding these reports. I can be reached at 519-773-5266.

Sincerely,

Jim Laur
Process and Compliance Technician

C.c. Dale LeBritton, Operations Manager



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

Annual Summary Report

For the

**Port Burwell Area Secondary
Water Supply System**

For the Year

2010

**Prepared for the Township of Malahide,
Administering Municipality for the Port Burwell
Area Secondary Water Supply System**

By the Ontario Clean Water Agency

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2	Compliance with Regulations Schedule 22-2 (2)(a) List 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.	1&2
3	Corrective Actions Schedule 22-2 (2)(b) For each requirement referred to in section 2 that was not met, specify the duration of the failure and the measures that were taken to correct the failure.	2
4	Flow Summary Schedule 22-2 (3) <ol style="list-style-type: none"> 1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly total, average daily 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, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement. 	2
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SECTION 1: Overview of System

This report is a summary of water quality information for the Port Burwell Area Secondary Water Supply System, published in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation for the reporting period of January 1, 2010 to December 31, 2010. The Port Burwell Area Secondary Water Supply System (waterworks number 260004735) is categorized as Large Municipal Residential Drinking Water System.

This report was prepared by The Ontario Clean Water Agency on behalf of the Township of Malahide and must be supplied to the Port Burwell Area Secondary Water Supply System Joint Board of Management by March 31, 2011.

SECTION 2: Compliance

The Port Burwell Area Secondary Water Supply System received two compliance issues in 2010 otherwise the system was operated and maintained in such a manner that water supplied to the consumers and serviced by the system satisfied the requirements in the Safe Drinking Water Act, the regulations and the Certificate of Approval.

The Annual inspection of the Port Burwell Area Secondary Water Supply System conducted by Ministry of Environment Inspector Jim Miller began Aug.18/10. Following the Inspection there were two non-compliance issues with Regulatory Requirements recorded.

Non-Compliance Item #1:

- *The essential treatment components utilized by the system were indicating signs of excessive corrosion and in need of repair.*
- **Actions Required:** *The Owner/Operating Authority shall forthwith assess all essential system components of the Port Burwell Area Secondary Water System to address ongoing issues related to excessive corrosion of the chlorination facility.*
- *Additionally, the Owner/Operating Authority shall ensure that aspects of the drinking water system such as: spare critical instrumentation equipment, chemical pumps, controllers, electrical system components, ventilation systems, screens, roofs, doors, drainage systems, air/vacuum relief chambers, etc. are managed, maintained and operated to comply with all applicable regulations.*
- *The Owner/Operating Authority shall ensure all identified deficiencies in the system are upgraded, repaired or replaced by January 31, 2011. A summary of the findings and actions taken to correct identified gaps shall be forwarded to the inspector by February 28, 2011.*

Non-compliance Item #2:

- *The Township of Malahide, the administrative body for the Port Burwell Area Secondary Water Supply System, failed to distribute copies of the 2009 Summary Report to the members of the Joint Board of Management, and the owner of the drinking water system, as per Schedule 22-2 (1)(c) by March 31, 2010.*
- **Actions Required:** *The Township of Malahide, the administrative body for the Port Burwell Area Secondary Water Supply System shall develop a process that ensure all future summary reports as required under O.Reg. 170/03 Schedule 22 are sent to members of the Port Burwell Area Secondary Water Supply System Joint Board of Management by March 31 of the following year. The Township of Malahide shall provide a summary of how this will be accomplished to the Inspector, by no later than October 31, 2010.*

SECTION 3: Corrective Action

The Township of Malahide, the administrative body for the Port Burwell Area Secondary Water Supply System contracted an Engineering firm to conduct and assess the components of the chlorination system and the facility in which they contained. The report was forwarded to the inspecting officer.

The administrative authority for the Port Burwell Secondary Distribution System, have created an annual work order to ensure copies of the Annual Summary report are provided to the members of the joint board of Management the owner of the drinking water system, as per Schedule 22-2 (1)(c) by March 31.

Although there were two non-compliance items the system received 96.91% for the Final Inspection Rating.

SECTION 4: "Summary and Discussion of Quantity of Water Supplied"

The Certificate of Approval # 1617-5JASGS does not specify a rate of flow limit for this system.

The Owner/Operating Authority has implemented an ongoing leak detection and repair program and has reduced the water loss considerable for 2010.

The total annual flow for 2010 was 281,428m³ which is an increase of 1% from 2009. This corresponds with the maximum daily peak flow of 1,301m³/ day, which is a 1.6% increase from 2009.

APPENDIX A

The following table provides the Flow from the Port Burwell Valve Chamber.

Month	Total Monthly Flow m³	Average Daily Flow m³/ day	Maximum Flow m³/ day
January	18,118	560	660
February	15,450	555	653
March	18,660	603	766
April	20,529	710	886
May	26,242	849	1120
June	28,261	875	1099
July	33,333	1033	1301
August	28,527	999	1199
September	25,198	835	1094
October	23,165	743	912
November	21,580	741	871
December	22,335	725	939
TOTAL	281,428		

APPENDIX B

The following table indicates the total monthly flow at the boundary meters.

TOTAL	E014	E034	E038	V01
Month	Total Flow m³/ day	Total Monthly Flow m³	Total Flow m³/ day	Total Flow m³/ day
January	17,357	10,300	6,436	3,918
February	15,006	9,205	5,479	3,363
March	17,922	11,299	7,301	3,806
April	19,220	12,369	8,280	3,663
May	24,547	15,282	10,114	4,890
June	26,438	15,373	11,908	4,349
July	31,380	19,389	15,298	4,480
August	14,823	19,000	13,313	3,874
September	23,776	15,139	11,284	3,704
October	22,060	14,804	12,905	1,962
November	21,615	15,135	9,672	5,623
December	20,556	15,046	9,691	4,888
TOTAL	254,700	172,341	121,681	48,520