

# 2010 SUMMARY REPORT FOR MUNICIPALITIES

## Lakefield Water Treatment Plant

PERIOD: JANUARY 1, 2010 – DECEMBER 31, 2010



Certificate of Approval: 6714-6JCQ6J

MOE Waterworks No: 220000488

January 10, 2011

### **Submission of this Report**

Schedule 22, section 22-2(1) of O. Reg. 170/03 under the Safe Drinking Water Act requires this report be submitted to the Township of Smith-Ennismore-Lakefield Council as it is the Lakefield drinking water system owner.

### **Period Covered by this Report**

Schedule 22, section 22-2(5) of O. Reg. 170/03 under the Safe Drinking Water Act requires this report cover the period of January 1, 2010 to December 31, 2010.

### **Failure to Meet Requirements of the Safe Drinking Water Act and Regulations**

There are no known failures to meet the requirements of the Safe Drinking Water Act, 2002 or any current regulation made under this Act.

### **Failure to Meet Requirements of the Certificate of Approval**

A summary of the terms and conditions under Certificate of Approval number 6714-6JCQ6J are listed in Table A.

There are currently no known failures to meet the requirements of the terms and conditions of Certificate of Approval number 6714-6JCQ6J.

### **Failure to Meet Requirements of Provincial Officer Orders**

There were no Provincial Officer's Orders issued during the period covered by this report. Any previously issued orders have been addressed. There are currently no known failures to meet the requirements of the terms and conditions of any Provincial Officer's Orders.

### **Capability of Water System**

The annual summary of water delivered in 2010 is as follows:

Month	Average Day (ML/d)	Maximum Day (ML/d)	Peak Flows (L/m)
January	1.31	1.55	1,076
February	1.31	1.63	1,134
March	1.25	1.64	1,138
April	1.45	1.85	1,281
May	1.60	2.44	1,692
June	1.57	2.55	1,772
July	1.61	2.24	1,558
August	1.47	1.84	1,280
September	1.38	1.94	1,350

Month	Average Day (ML/d)	Maximum Day (ML/d)	Peak Flows (L/m)
October	1.46	1.88	1,308
November	1.19	1.52	1,058
December	1.27	1.53	1,062
Rated Capacity	N/A	3.59	N/A
Approved Flowrate (Permit to Take Water 6010-67VQDT)	N/A	3.59	2,500

The Certificate of Approval rates the plant at 3.59 ML/day therefore there were no exceedences of this rating. The Permit to Take Water allows a maximum taking of 3,590 m<sup>3</sup>/day (3.59 ML/day); therefore there were no exceedences of this permit.

This report has been prepared by D. Wayne Stiver, P. Eng., Peterborough Utilities Services Inc., representative of the contracted operating authority.




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D. Wayne Stiver, P.Eng.  
Vice-President, Water Utility Services  
Peterborough Utilities Services Inc.

Table A: Summary of Terms and Conditions for Certificate of Approval

Certificate Number: 6714-6JCQ6Y (November 30, 2005).

Site Location: Lakefield Water Treatment Plant

Section	Condition	Compliance?	Details
3.1	Operate to SDWA and regulations	Yes	
3.2	Owner and operator jointly liable	N/A	
3.3	Operators informed of SDWA and regulations	Yes	Ongoing training as required by O.Reg.128/04
3.4	Copy of C of A available	Yes	
3.5	DWS designed, developed, built, operated & maintained as per Part 1 & Sch A	Yes	
3.6	Legislative hierarchy	N/A	
3.7	Requirements of C of A severable	N/A	
3.8	Compliance with Environmental Assessment Act	N/A	
3.9	Other legal obligations	N/A	
3.10	Other legal obligations	N/A	
3.11	Nothing permits discharge of contaminant	N/A	
3.12	Minimize adverse affects on natural environment	N/A	
3.13	Fulfillment of any does not eliminate need to meet all conditions	N/A	
3.14 (i)	Notification of change of owner or operating authority	Yes	N/A
3.14 (ii)	Notification of change of address for owner or operating authority	Yes	N/A
3.14 (iii)	Notification of partnership or change to partnership	Yes	No partnership
3.14 (iv)	Change of name for owner or operating authority	Yes	N/A
3.15	In case of change of ownership, notify new owner of existence of this certificate (CofA)	Yes	N/A
3.16	Shall not hinder Provincial Officer	Yes	
3.17	Information requested by MOE to be provided	Yes	
3.18	Records kept at least 5 years and available for Provincial Officer	Yes	
3.19	Failure of MOE to act does not imply approval or acceptance	N/A	
4.1	DWS to not exceed rated capacity	Yes	Contained in report
4.2	DWS may be operated beyond rated capacity to maintain DWS	Yes	N/A
4.3	If 4.2 applies, all standards & legal requirements must be met	Yes	

Section	Condition	Compliance?	Details
4.4	Residual management, suspended solids shall not exceed 25 mg/L	Yes	
5.1	Install flow meters to measure; i. max day flow and volume into treatment plant ii. max day flow and volume into distribution system	Yes Yes	In place In place
5.2	Where exceedence of flow, date, time and duration recorded	Yes	No exceedence
5.3	Flow measuring devices checked and calibrated in accordance with manufacturer's instructions	Yes	
5.4	If manufacturer's info unavailable in 5.3, calibrate annually	Yes	
5.5	Residue sampling shall be composite monthly at point of discharge	Yes	
5.6	Definition of composite sample	N/A	
6.1	Chemical certificates to AWWA or NSF	Yes	
6.2	Current chemical documentation available	Yes	
6.3	6.2 not required if Minister has approved chemical	N/A	
6.4	Up-to-date operations manual	Yes	
6.5	Operations manual shall contain at least: i: requirements of C of A ii: O&M recommendations from Engineer's Report iii: procedures for monitoring & recording iv: procedures for O&M of monitoring equipment v: contingency plans for equipment and materials vi: complaint procedures	Yes Yes Yes Yes Yes Yes	
6.6	Any alterations coming into operation to be incorporated in O&M manual	Yes	
6.7	Up-to-date P&ID for entire plant	Yes	
6.8	As constructed drawings to be retained and readily available for inspection	Yes	
6.9	Any alterations coming into operation to be incorporated in P&ID	Yes	
7.1	N/A	N/A	
7.2	N/A	N/A	
8.1	Upgrades from Engineer's Report by December 31, 2004	Yes	
8.1 (a)	All works to ensure appropriate chlorine residual and contact time	Yes	

Section	Condition	Compliance?	Details
8.1 (a)(i)	All works necessary for 0.5 log inactivation of giardia cysts and 2 log inactivation of viruses	Yes	
8.1 (a)(ii)	Additional chlorine injection point on high-lift discharge	Yes	
8.1 (a)(iii)	Control system to disable high-lift pumping with low chlorine alarm	Yes	
8.1 (b)(i)	Install sufficient water storage for disinfection, backwashing and proper plant operations	Yes	
8.1 (b)(ii)	Install backwash pump for the filters	Yes	
8.1 (b)(iii)	Install filter-to-waste provision	Yes	
5.1 (b)(iv)	Install filter capacity so filter rate < 18m/hr with any one filter out-of-service	Yes	
8.1 (b)(v)	Install proper chemical storage and handling facilities	Yes	
8.1 (c)(i)	Operate to maintain free chlorine 0.2 mg/L in distribution system	Yes	
8.1 (c)(ii)	Maintain clearwell full where possible	Yes	
8.2	No construction until licenses and permits from MOE	Yes	
9.1	Relief from regulations - None	N/A	
9.2	Conditions for Relief - None	N/A	

N/A = Not applicable