Town of Richmond Hill
2011 Annual
Water Quality Report

Regulatory Reporting for Municipal Drinking Water Systems

Regulation 170/03

OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	**W260001968 Certificate #789**
Drinking-Water System Name:	Richmond Hill Distribution System
Drinking-Water System Owner:	Town of Richmond Hill
Drinking-Water System Category:	Large Municipal Residential Distribution
Period being reported:	January 1, 2011 to December 31, 2011

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [X] No [ ]

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.

- Web Site www.richmondhill.ca
- Town Hall, 225 East Beaver Creek 5th Floor, Environment & Infrastructure Services Department
- Operations Centre, 1200 Elgin Mills Road East
- Central Library

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 [ ]

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
N/A	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 [X] No [ ]

Indicate how you notified system users that your annual report is available, and is free of charge.

[X] Public access/notice via the web
[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[X] Public access/notice via Public Request
[X] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

The Community Services Department, Public Works Operations Division operates and maintains a Class 2 Drinking Water Distribution System. The water in this system originates in Lake Ontario, where it first tested and treated by the City of Toronto and the Regional Municipality of Peel. The Town of Richmond Hill receives the water from the Region of York and distributes it to consumers.

List all water treatment chemicals used over this reporting period

Water treatment is performed by the City of Toronto and the Regional Municipality of Peel

Were any significant expenses incurred to?

[ ] Install required equipment
[X] Repair required equipment
[X] Replace required equipment

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

Repair and maintenance of the distribution system - $2.4 million
Replacement of watermains - $3.3 million

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
June 29, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	June 29, 2011
July 6, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	July 6, 2011
July 7 , 2011	Total Coliforms	12	CFU/100ml	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	July 7, 2011
July 14, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	July 14, 2011
September 1, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	September 1, 2011

September 8, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI , upstream and downstream locations. Notified MOE and Health	September 8, 2011
September 28, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI , upstream and downstream locations. Notified MOE and Health	September 28, 2011
October 13, 2011	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI , upstream and downstream locations. Notified MOE and Health	October 13, 2011

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					
Treated					
Distribution	1654	0-0	0-12	816	0-70

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 #)	Unit of Measure
Turbidity			
Chlorine	1920	0.38 – 2.04	mg/L
Fluoride (If the DWS provides fluoridation)			

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

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

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				
Arsenic				
Barium				
Boron				
Cadmium				

Chromium				
***Lead**				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

*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 #)	Unit of Measure	Number of Exceedances
Plumbing	182	<0.0001– 0.0040	mg/L	0
Distribution	31	<0.0001 – 0.0026	mg/L	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				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				

1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE**:** show latest annual average)	Nov.16/11	0.017	mg/L	No
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

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