

Drinking-Water Systems Regulation O. Reg. 170/03

Town of Richmond Hill 2009 Annual Water Quality Report



Regulatory Reporting for Municipal Drinking Water Systems

Regulation 170/03

Drinking-Water Systems Regulation O. Reg. 170/03

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, 2009 to 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"> • Web Site www.richmondhill.ca • Town Hall, 225 East Beaver Creek 5th Floor, Engineering Department • Operations Centre, 1200 Elgin Mills Road East • Central Library </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; text-align: center; width: 100px; height: 20px; margin: 5px 0;">N/A</div> <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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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.

- 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 Engineering and Public Works Department operates and maintains a 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
 Repair required equipment
 Replace required equipment

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

Repair and maintenance of the distribution system – \$2,252,394
 Replacement of watermains – \$3,086,400

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
January 6, 2009	Lead as Pb	0.171*	mg/L	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	January 7, 2009
June 19, 2009	Lead as Pb	0.0194	mg/L	Flushed watermain and resampled. Notified MOE and Health	June 19, 2009
June 19, 2009	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI, and upstream locations. Notified MOE and Health	June 19, 2009
June 25, 2009	Lead as Pb	0.0132	mg/L	Flushed watermain and resampled. Notified MOE and Health	June 25, 2009
July 17, 2009	Total Coliforms	1	CFU/100ml	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	July 17, 2009
July 19, 2009	Total Coliforms	2 8 1	CFU/100ml	Flushed watermain and resampled original AWQI, upstream and downstream locations. Notified MOE and Health	July 20, 2009
November 28, 2009	Total Coliforms	Present	P/A	Flushed watermain and resampled original AWQI, upstream and one downstream locations. Notified MOE and Health	November 28, 2009

* sample taken on December 17, 2008

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	2131	0-0	0-8	1055	0-400

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		
Chlorine	4344	0.30 – 1.50 mg/L
Fluoride (If the DWS provides fluoridation)		

*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

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 #)	Number of Exceedances
Plumbing	356	<0.0001 mg/L – 0.0310 mg/L	2
Distribution	62	<0.0001 mg/L - 0.171 mg/L*	3

* sample taken on December 17, 2008

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 metabolites				
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.16/09	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