

# Drinking Water Systems



ANNUAL REPORT 2006

**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	R. C. Harris WTP – 220002262
<b>Drinking-Water System Name:</b>	Toronto (R.C. Harris) Water Treatment Plant
<b>Drinking-Water System Owner:</b>	City of Toronto
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2006 to December 31, 2006

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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;">                 Metro Hall, 18<sup>th</sup> Floor                  55 John Street                  Toronto, Ontario                  M5V 3C6             </div>	<p><b><u>Complete for all other Categories.</u></b> <b>NOT APPLICABLE</b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" type="text"/></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: <input style="width: 100px; height: 20px;" type="text"/></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:

Drinking Water System Name	Drinking Water System Number
Region of York – receives some of their water from Toronto	260001929

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**

- **Toronto Water Supply System consists of four water filtration plants, 18 pumping stations, 10 major underground storage reservoirs, four elevated storage tanks and approximately 510 kilometers of trunk watermains and 5,015 kilometers of distribution watermains.**

**The R.C. Harris Water Treatment Plant is a conventional water treatment, has a capacity of 950 ML/d and is located at 2701 Queens Street East, Toronto.**

**The other three Toronto Water Treatment plants are as follows:**

- **R.L. Clark Water Treatment Plant (capacity 615 ML/d) located at 45 Twenty Third Street, Etobicoke;**
- **F.J. Horgan Water Treatment Plant (capacity 570 ML/d) located at 201 Copperfield Road, Toronto; and**
- **Island Water Treatment Plant (capacity 410 ML/d) located on Centre Island, Toronto**

**List all water treatment chemicals used over this reporting period**

**Alum, chlorine, sulphur dioxide, sodium bisulphite, hydrofluosilicic acid and aqua ammonia.**

**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**

**Please note the following amounts relate to various projects during 2006 and does not represent the total Project cost. These numbers do not include normal operating and maintenance cost.**

<b>Residual management Facilities</b>	<b>\$26 Million</b>
<b>Intake repairs</b>	<b>\$300,000</b>
<b>Replacement indoor switchgear</b>	<b>\$3.5 Million</b>
<b>Valve refurbishing</b>	<b>\$600,000</b>

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

**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 for the R.C. Harris Water Treatment Plant.**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
8-Jun-06	Total Coliform	1	cfu/100mL	Reviewed treatment records. Resampled.	9-Jun-06
5-Nov-06	Total Coliform	1	cfu/100mL	Reviewed treatment records. Resampled.	7-Nov-06

**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 for the Distribution System (which is included under the R.C. Harris Drinking Water System Name and Number).**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
15-Mar-06	TC BKGD	240	cfu/100mL	System flushed, resampled location plus 2 vicinity points	16-Mar-06
22-Mar-06	Total Coliform TC BKGD	18 1100	cfu/100mL cfu/100mL	Local system flushed, resampled plus 2 vicinity points	23-Mar-06
06-Apr-06	Loss of Communication			Communication restored, chlorine residual checked	06-Apr-06
17-Apr-06	Chlorine analyzer readings erratic			Chlorine Analyzer reset. Residual checked	17-Apr-06
23-Apr-06	Loss of Communication			Communication Restored. Residual checked	23-Apr-06
25-Apr-06	HPC	798	cfu/1mL	Water main in vicinity flushed, resampled plus 2 vicinity points	27-Apr-06
02-May-06	Power Failure			Power restored. Residual checked	02-May-06
5-May-06	Total Coliform	9	cfu/100mL	Flushed, resampled plus 2 vicinity points	6-May-06
9-May-06	Total Coliform	2	cfu/100mL	Above ground main, resampled plus various vicinity samples	10-May-06
10-May-06	Total Coliform	10	cfu/100mL	Above ground main, resampled plus various vicinity samples	12-May-06
10-May-06	Total Coliform TC BKGD	2 260	cfu/100mL cfu/100mL	Above ground main, resampled plus various vicinity samples	12-May-06
12-May-06	Total Coliform	4	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	13-May-06
12-May-06	Total Coliform	1	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	13-May-06
12-May-06	Total Coliform	4	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	13-May-06
12-May-06	Total Coliform	10	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	13-May-06
12-May-06	Total Coliform TC BkGd	8 1600	cfu/100mL cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	13-May-06
13-May-06	Total Coliform	3	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	15-May-06
13-May-06	Total Coliform	7	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	15-May-06
13-May-06	Total Coliform	11	cfu/100mL	Above ground main, resampled plus various vicinity samples-relined main put back in service	15-May-06
18-May-06	Total Coliform	2	cfu/100mL	Resampled location plus 2 vicinity points	19-May-06

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

18-May-06	Total Coliform	10	cfu/100mL	Flushed, resampled plus 2 vicinity points	19-May-06
18-May-06	Total Coliform	3	cfu/100mL	Flushed, resampled plus 2 vicinity points	19-May-06
23-May-06	Power failure			Power restored, chlorine residual checked plus 2 vicinity points	23-May-06
29-May-06	Power Failure			Communication restored, chlorine residual checked	29-May-06
3-Jun-06	Power loss			Power restored, chlorine residual checked plus 2 vicinity points, instrument recalibration done	3-Jun-06
5-Jun-06	Erratic Cl2 Reading			Analyzer repaired and calibrated, resampled	5-Jun-06
7-Jun-06	Loss of communication			Communication restored, chlorine residual checked	7-Jun-06
15-Jun-06	Chlorine analyzer readings erratic			Analyzer checked, resampled location plus 2 vicinity points	15-Jun-06
18-Jun-06	Chlorine analyzer off-scale			Analyzer repaired and calibrated, resampled	18-Jun-06
5-Jun-06	Total Chlorine	0.03	mg/L	Flushed, resampled plus 2 vicinity points	5-Jun-06
23-Jun-06	Total Coliform	1	cfu/100mL	Resampled location plus 2 vicinity points	24-Jun-06
10-Jul-06	Total Coliform	2	cfu/100mL	Flushed, resampled plus 2 vicinity points	10-Jul-06
11-Jul-06	Communication loss			Communication restored, chlorine residual checked	11-Jul-06
11-Jul-06	Loss of communication			Communication restored, chlorine residual checked	11-Jul-06
12-Jul-06	Total Coliform	2	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	13-Jul-06
13-Jul-06	Total Coliform	3	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	14-Jul-06
14-Jul-06	Total Coliform	9	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	15-Jul-06
16-Jul-06	Power failure			Power restored, chlorine residual checked	16-Jul-06
19-Jul-06	Total Coliform	3	cfu/100mL	Resampled location plus 2 vicinity points	20-Jul-06
21-Jul-06	Total Coliform	1	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	22-Jul-06
24-Jul-06	Total Coliform	1	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	25-Jul-06
28-Jul-06	Total Coliform	1	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	29-Jul-06
28-Jul-06	Total Coliform	65	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	29-Jul-06
25-Jul-06	Chlorine analyzer malfunction			Analyzer repaired and calibrated by technician, resampled	25-Jul-06
31-Jul-06	Total Coliform	22	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	1-Aug-06
2-Aug-06	Total Coliform	7	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	3-Aug-06
24-Aug-06	Total Chlorine	0.07	mg/L	Flushed, resampled	24-Aug-06
4-Aug-06	Total Coliform	1	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	5-Aug-06
10-Sep-06	Total Chlorine	0.23	mg/L	Analyzer repaired and calibrated by technician, resampled, Harris Plant had ammonia dosing problems, which were resolved	10-Sep-06
12-Sep-06	Total Chlorine	0.16	mg/L	Flushed, resampled	12-Sep-06
12-Sep-06	Total Chlorine	0.24	mg/L	Milliken reservoir isolated for cleaning and drained to waste	12-Sep-06
15-Sep-06	Total Coliform	4	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	16-Sep-06
13-Oct-06	Total Coliform	2	cfu/100mL	Water main in vicinity and service flushed,	14-Oct-06

				resampled plus 2 vicinity points	
19-Oct-06	Total Coliform	2	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	20-Oct-06
31-Oct-06	Loss of communication			Communication restored, chlorine residual checked	31-Oct-06
1-Nov-06	Total Coliform	1	cfu/100mL	Water main in vicinity and service flushed, resampled plus 2 vicinity points	2-Nov-06
15-Nov-06	Loss of communication			Loss of signal caused by Bell, restored and resampled	15-Nov-06
11-Dec-06	Total Coliform	1	cfu/100mL	Resampled location plus 2 vicinity points	12-Dec-06
26-Dec-06	Loss of communication			Communication restored, chlorine residual checked	26-Dec-06

**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 #)
<b>Raw</b>	486	0-20	0-400	485	0-5400
<b>Treated</b>	1503	0-0	0-1	1503	0-1200
<b>Distribution</b>	5366	0-0	0-65	5051	0-5000

**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 #)
<b>Turbidity</b>	8376	0.02 – 0.36 NTU
<b>Chlorine</b>	8376	0.74 – 1.37
<b>Fluoride</b> (If the DWS provides fluoridation)	8376	0.02 – 1.03
<b>Chlorine for Distribution System</b>	5373	0.17 – 1.59

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

**Operational testing for Lead and THMs for End of the Line Distribution System done under Schedule 13 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
<b>Lead</b>	4	0 – 0.001
<b>THMs</b>	9	0.0104 – 0.0188

***NOTE:** Record the unit of measure if it is **not** milligrams per litre.*

**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	3/07 – 11/14	0-0	mg/L	No
Arsenic	3/07 – 11/14	0-0	mg/L	No
Barium	3/07 – 11/14	0.022-0.024	mg/L	No
Boron	3/07 – 11/14	0.023-0.026	mg/L	No
Cadmium	3/07 – 11/14	0-0	mg/L	No
Chromium	3/07 – 11/14	0-0	mg/L	No
Lead	3/07 – 11/14	0-0	mg/L	No
Mercury	3/07 – 11/14	0-0	mg/L	No
Selenium	3/07 – 11/14	0-0	mg/L	No
Sodium	1/05 – 9/19	11.4-18.8	mg/L	No
Uranium	3/07 – 11/14	0.0002-0.0004	mg/L	No
Fluoride	1/01 – 12/31	0.12-0.67	mg/L	No
Nitrite	1/17 – 12/12	0-0	mg/L	No
Nitrate	1/17 – 12/12	0.28-0.51	mg/L	No

**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	3/06-7/24	0-0	ug/L	No
Aldicarb	3/06-7/24	0-0	ug/L	No
Aldrin + Dieldrin	3/06-7/24	0-0	ug/L	No
Atrazine + N-dealkylated metabolites	3/06-7/24	0-0	ug/L	No
Azinphos-methyl	3/06-7/24	0-0	ug/L	No
Bendiocarb	3/06-7/24	0-0	ug/L	No
Benzene	1/09-11/20	0-0	ug/L	No
Benzo(a)pyrene	3/06-11/20	0-0	ug/L	No
Bromoxynil	3/06-7/24	0-0	ug/L	No
Carbaryl	3/06-7/24	0-0	ug/L	No
Carbofuran	3/06-7/24	0-0	ug/L	No
Carbon Tetrachloride	1/09-11/20	0-0	ug/L	No
Chlordane (Total)	3/06-7/24	0-0	ug/L	No
Chlorpyrifos	3/06-7/24	0-0	ug/L	No
Cyanazine	3/06-7/24	0-0	ug/L	No
Diazinon	3/06-7/24	0-0	ug/L	No
Dicamba	3/06-7/24	0-0	ug/L	No
1,2-Dichlorobenzene	1/09-11/20	0-0	ug/L	No
1,4-Dichlorobenzene	1/09-11/20	0-0	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	3/06-7/24	0-0	ug/L	No
1,2-Dichloroethane	1/09-11/20	0-0	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	1/09-11/20	0-0	ug/L	No
Dichloromethane	1/09-11/20	0-0	ug/L	No
2-4 Dichlorophenol	3/06-7/24	0-0	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	3/06-7/24	0-0	ug/L	No

Diclofop-methyl	3/06-7/24	0-0	ug/L	No
Dimethoate	3/06-7/24	0-0	ug/L	No
Dinoseb	3/06-7/24	0-0	ug/L	No
Diquat	3/06-7/24	0-0	ug/L	No
Diuron	3/06-7/24	0-0	ug/L	No
Glyphosate	3/06-7/24	0-0	ug/L	No
Heptachlor + Heptachlor Epoxide	3/06-7/24	0-0	ug/L	No
Lindane (Total)	3/06-7/24	0-0	ug/L	No
Malathion	3/06-7/24	0-0	ug/L	No
Methoxychlor	3/06-7/24	0-0	ug/L	No
Metolachlor	3/06-7/24	0-0	ug/L	No
Metribuzin	3/06-7/24	0-0	ug/L	No
Monochlorobenzene	1/09-11/20	0-0	ug/L	No
Paraquat	3/06-7/24	0-0	ug/L	No
Parathion	3/06-7/24	0-0	ug/L	No
Pentachlorophenol	3/06-7/24	0-0	ug/L	No
Phorate	3/06-7/24	0-0	ug/L	No
Picloram	3/06-7/24	0-0	ug/L	No
Polychlorinated Biphenyls(PCB)	3/06-7/24	0-0	ug/L	No
Prometryne	3/06-7/24	0-0	ug/L	No
Simazine	3/06-7/24	0-0	ug/L	No
THM (NOTE: show latest annual average)	1/09-11/20	10.8	ug/L	No
Temephos	3/06-7/24	0-0	ug/L	No
Terbufos	3/06-7/24	0-0	ug/L	No
Tetrachloroethylene	1/09-11/20	0-0	ug/L	No
2,3,4,6-Tetrachlorophenol	3/06-7/24	0-0	ug/L	No
Triallate	3/06-7/24	0-0	ug/L	No
Trichloroethylene	1/09-11/20	0-0	ug/L	No
2,4,6-Trichlorophenol	3/06-7/24	0-0	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	3/06-7/24	0-0	ug/L	No
Trifluralin	3/06-7/24	0-0	ug/L	No
Vinyl Chloride	3/06-7/24	0-0	ug/L	No

### Availability of the Report

This report along with a copy of the Summary Report (to be available after March 31, 2007) prepared under Schedule 22 of O. Reg. 170/03 will be posted on the City's website at [www.toronto.ca/water](http://www.toronto.ca/water).

These reports will also be available for inspection at the Toronto Water offices in Metro Hall, 18<sup>th</sup> Floor, 55 John Street, Toronto, Ontario M5V 3C6 or by calling (416) 392-8222.

*Report Prepared:  
February 27, 2007*



**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	<b>R.L. Clark WTP - 220002253</b>
<b>Drinking-Water System Name:</b>	Toronto (R.L. Clark) Water Treatment Plant
<b>Drinking-Water System Owner:</b>	City of Toronto
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2006 to December 31, 2006

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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;">                 Metro Hall, 18<sup>th</sup> Floor                  55 John Street                  Toronto, Ontario                  M5V 3C6             </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" type="text"/></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: <input style="width: 100px; height: 20px;" type="text"/></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**

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Drinking Water System Name	Drinking Water System Number
Region of York – receives some of their water from Toronto	260001929

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
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**Describe your Drinking-Water System**

Toronto Water Supply System consists of four water treatment plants, 18 pumping stations, 10 major underground storage reservoirs, four elevated storage tanks and approximately 510 kilometers of trunk watermains and 5,015 kilometers of distribution watermains.

The R.L. Clark Water Treatment Plant is a conventional water treatment plant, has a rated capacity of 615 ML/d and is located at 45 Twenty-Third Street, Etobicoke.

The other three Toronto water treatment plants are as follows:

- R.C. Harris Water Treatment Plant (capacity 950 ML/d) located at 2701 Queen Street East, Toronto;
- F.J. Horgan Water Treatment Plant (capacity 570 ML/d) located at 201 Copperfield Road, Toronto; and
- Island Water Treatment Plant (capacity 410 ML/d) located on Centre Island, Toronto

**List all water treatment chemicals used over this reporting period**

Alum, chlorine, sulphur dioxide, hydrofluosilicic acid, aqua ammonia and powdered activated carbon were used at the R.L. Clark Water Treatment Plant.

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**

Please note that the following amounts related to various projects outline expenditures during 2006 and do not represent the total project costs at the R.L. Clark Water Treatment Plant.

- Residue Management Facilities	\$ 21.4 M
- Secondary Flocculators Rehabilitation	\$ 1.5 M
- Raw Water Pump	\$ 0.9 M
- HVAC Rehabilitation	\$ 0.5 M

- Administration Building Rehab.	\$ 0.7 M
- Equipment Replacement/Repair/Rehab	\$ 0.3 M

**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
19-May-06	Alum Interruption			Process flow stopped immediately. Reviewed treatment records.	19-May-06
19-May-06	Chlorine analyzer out of service			New sample pump installed.	19-May-06
23-Jul-06	Total Coliforms	1	cfu/100ml	Reviewed treatment records. Resampled	24-Jul-06
30-Sep-06	Total Coliforms	1	cfu/100ml	Reviewed treatment records. Resampled	2-Oct-06
29-Nov-06	Coagulant Outage			Process flow stopped immediately. Reviewed treatment records. Alum feed pumps repaired.	29-Nov-06
5-Dec-06	Total Coliforms	1	cfu/100ml	Reviewed treatment records. Resampled	7-Dec-06

**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 #)
<b>Raw</b>	377	0-95	0-2000	376	0-2900
<b>Treated</b>	1450	0 – 0	0 – 1	1446	0 – 95
<b>Distribution</b>	n/a	n/a	n/a	n/a	n/a

**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 #)
<b>Turbidity</b>	8760	0.02 – 0.29
<b>Chlorine</b>	8760	0.77 – 1.27
<b>Fluoride</b> (If the DWS provides fluoridation) <b>(Plant output spot samples)</b>	2135	0.14 – 0.79

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

***NOTE:** Record the unit of measure if it is **not** milligrams per litre.*

**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	3/07 – 11/14	0-0	mg/L	No
Arsenic	3/07 – 11/14	0-0	mg/L	No
Barium	3/07 – 11/14	0.022-0.024	mg/L	No
Boron	3/07 – 11/14	0.023-0.027	mg/L	No
Cadmium	3/07 – 11/14	0-0	mg/L	No
Chromium	3/07 – 11/14	0-0	mg/L	No
Lead	3/07 – 11/14	0-0	mg/L	No
Mercury	3/07 – 11/14	0-0	mg/L	No
Selenium	3/07 – 11/14	0-0	mg/L	No
Sodium	1/05 – 9/19	11.4-19.6	mg/L	No
Uranium	3/07 – 11/14	0.0003-0.0003	mg/L	No
Fluoride	1/01 – 12/31	0.14-0.90	mg/L	No
Nitrite	1/17 – 12/12	0-0	mg/L	No
Nitrate	1/17 – 12/12	0.32-0.54	mg/L	No

**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	3/06-7/24	0-0	ug/L	No
Aldicarb	3/06-7/24	0-0	ug/L	No
Aldrin + Dieldrin	3/06-7/24	0-0	ug/L	No
Atrazine + N-dealkylated metabolites	3/06-7/24	0-0	ug/L	No
Azinphos-methyl	3/06-7/24	0-0	ug/L	No
Bendiocarb	3/06-7/24	0-0	ug/L	No
Benzene	1/09-11/20	0-0	ug/L	No
Benzo(a)pyrene	3/06-11/20	0-0	ug/L	No
Bromoxynil	3/06-7/24	0-0	ug/L	No
Carbaryl	3/06-7/24	0-0	ug/L	No
Carbofuran	3/06-7/24	0-0	ug/L	No
Carbon Tetrachloride	1/09-11/20	0-0	ug/L	No
Chlordane (Total)	3/06-7/24	0-0	ug/L	No
Chlorpyrifos	3/06-7/24	0-0	ug/L	No
Cyanazine	3/06-7/24	0-0	ug/L	No
Diazinon	3/06-7/24	0-0	ug/L	No
Dicamba	3/06-7/24	0-0	ug/L	No
1,2-Dichlorobenzene	1/09-11/20	0-0	ug/L	No
1,4-Dichlorobenzene	1/09-11/20	0-0	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	3/06-7/24	0-0	ug/L	No
1,2-Dichloroethane	1/09-11/20	0-0	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	1/09-11/20	0-0	ug/L	No
Dichloromethane	1/09-11/20	0-0	ug/L	No
2-4 Dichlorophenol	3/06-7/24	0-0	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	3/06-7/24	0-0	ug/L	No
Diclofop-methyl	3/06-7/24	0-0	ug/L	No
Dimethoate	3/06-7/24	0-0	ug/L	No

<b>Dinoseb</b>	3/06-7/24	0-0	ug/L	No
<b>Diquat</b>	3/06-7/24	0-0	ug/L	No
<b>Diuron</b>	3/06-7/24	0-0	ug/L	No
<b>Glyphosate</b>	3/06-7/24	0-0	ug/L	No
<b>Heptachlor + Heptachlor Epoxide</b>	3/06-7/24	0-0	ug/L	No
<b>Lindane (Total)</b>	3/06-7/24	0-0	ug/L	No
<b>Malathion</b>	3/06-7/24	0-0	ug/L	No
<b>Methoxychlor</b>	3/06-7/24	0-0	ug/L	No
<b>Metolachlor</b>	3/06-7/24	0-0	ug/L	No
<b>Metribuzin</b>	3/06-7/24	0-0	ug/L	No
<b>Monochlorobenzene</b>	1/09-11/20	0-0	ug/L	No
<b>Paraquat</b>	3/06-7/24	0-0	ug/L	No
<b>Parathion</b>	3/06-7/24	0-0	ug/L	No
<b>Pentachlorophenol</b>	3/06-7/24	0-0	ug/L	No
<b>Phorate</b>	3/06-7/24	0-0	ug/L	No
<b>Picloram</b>	3/06-7/24	0-0	ug/L	No
<b>Polychlorinated Biphenyls(PCB)</b>	3/06-7/24	0-0	ug/L	No
<b>Prometryne</b>	3/06-7/24	0-0	ug/L	No
<b>Simazine</b>	3/06-7/24	0-0	ug/L	No
<b>THM</b> (NOTE: show latest annual average)	1/09-11/20	10.9	ug/L	No
<b>Temephos</b>	3/06-7/24	0-0	ug/L	No
<b>Terbufos</b>	3/06-7/24	0-0	ug/L	No
<b>Tetrachloroethylene</b>	1/09-11/20	0-0	ug/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	3/06-7/24	0-0	ug/L	No
<b>Triallate</b>	3/06-7/24	0-0	ug/L	No
<b>Trichloroethylene</b>	1/09-11/20	0-0	ug/L	No
<b>2,4,6-Trichlorophenol</b>	3/06-7/24	0-0	ug/L	No
<b>2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)</b>	3/06-7/24	0-0	ug/L	No
<b>Trifluralin</b>	3/06-7/24	0-0	ug/L	No
<b>Vinyl Chloride</b>	3/06-7/24	0-0	ug/L	No

### Availability of the Report

This report along with a copy of the Summary Report (to be available after March 31, 2007) prepared under Schedule 22 of O. Reg. 170/03 will be posted on the City's website at [www.toronto.ca/water](http://www.toronto.ca/water).

These reports will also be available for inspection at Toronto Water offices in Metro Hall, 18<sup>th</sup> Floor, 55 John Street, Toronto, Ontario M5V 3C6 or by calling (416) 392-8222.

*Report Prepared:*  
February 28, 2007

**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	F. J. Horgan WTP – 220004536
<b>Drinking-Water System Name:</b>	Toronto (F.J. Horgan) Water Treatment Plant
<b>Drinking-Water System Owner:</b>	City of Toronto
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2006 to December 31, 2006

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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;">                 Metro Hall, 18<sup>th</sup> Floor                  55 John Street                  Toronto, Ontario                  M5V 3C6             </div>	<p><b><u>Complete for all other Categories.</u></b> <b>NOT APPLICABLE</b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" type="text"/></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: <input style="width: 100px; height: 20px;" type="text"/></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:

Drinking Water System Name	Drinking Water System Number
Region of York – receives some of their water from Toronto	260001929

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**

Toronto Water Supply System consists of four water filtration plants, 18 pumping stations, 10 major underground storage reservoirs, four elevated storage tanks and approximately 510 kilometers of trunk watermains and 5,015 kilometers of distribution watermains.

The F.J. Horgan Water Treatment Plant is a direct water treatment plant, has a rated capacity of 570 ML/d and is located at 201 Copperfield Road, Toronto.

The other three Toronto water treatment plants are as follows:

- R.C. Harris Water Treatment Plant (capacity 950 ML/d) located at 2701 Queens Street East, Toronto;
- R.L. Clark Water Treatment Plant (capacity 615 ML/d) located at 45 Twenty Third Street, Etobicoke; and
- Island Water Treatment Plant (capacity 410 ML/d) located on Centre Island, Toronto

List all water treatment chemicals used over this reporting period

Alum, poly aluminum chloride, magnafloc LT7996, chlorine, sulphur dioxide, hydrofluosilicic acid and aqua ammonia. Anionic polymer used for wastewater treatment. Powdered Activated Carbon (PAC) was used in 2006 for taste & odour control.

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

Please note that the following amounts related to various projects outline expenditures during 2006 and do not represent the total project costs at the F.J. Horgan Water Treatment Plant.

Plant expansion - \$ 893,748.00

<b>Facility security upgrades</b>	<b>- \$ 117,814.00</b>
<b>Facility interior enhancements</b>	<b>- \$ 208,170.00</b>
<b>PCS project</b>	<b>- \$ 123,209.00</b>
<b>Facility HVAC replacement</b>	<b>- \$ 211,474.00</b>
<b>Facility electrical equipment</b>	<b>- \$ 1,286,439.00</b>
<b>Facility instrumentation equipment</b>	<b>- \$ 37,189.00</b>
<b>Residue Management system enhancements</b>	<b>- \$ 50,021.00</b>

**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**

<b>Incident Date</b>	<b>Parameter</b>	<b>Result</b>	<b>Unit of Measure</b>	<b>Corrective Action</b>	<b>Corrective Action Date</b>
Jun 13/06	Total Coliform	1	cfu/100 mL	Resampled and increased post chlorine residual to 2.0 mg/L	Jun 14/06
Sep 6/06	Clarified Effluent	N/A	None	Upon receipt of complaint of "black water", samples were taken and no evidence of any exceedances was evident. Process operations were modified including reduction of transfer pump flow rate and performance of periodic visual checks to ensure that the treatment was effective.	Sep 6/06
Nov 21/06	Fluoride	1.64	mg/L	High fluoride levels were noted in the chemical mixing channel but not in the plant output water. Investigated cause of treatment upset. None found. All process data indicated treatment parameters were within acceptable limits.	Nov 21/06
Nov 24/06	Marginal exceedance of instantaneous flow conveyed to the distribution system	571	ML/D	Production reduced however the total production for the calendar day did not exceed C of A production limit.	Nov 24/06
Dec 17/06	Total Coliform	8	cfu/100 mL	Resampled and increased post chlorine residual to 2.4 mg/L	Dec 18/06



**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 #)
<b>Raw</b>	504	0 - 17	0 - 260	503	0 - 798
<b>Treated</b>	1561	0-0	0 - 8	1561	0 - 66

**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 #)
<b>Turbidity</b>	8760	0.05 - 0.07 NTU
<b>Chlorine</b>	8760	1.15 - 1.25
<b>Fluoride (If the DWS provides fluoridation) (Plant output spot samples)</b>	2183	0.14 - 0.74

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

*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
Date of order or C of A	Parameter	Date Sampled	Result (Average)	Unit of Measure
<b>F.J. Horgan Water Treatment Plant – C of A #6854-5ALGWQ dated February 19, 2002</b>				
<b>Clarifier Effluent</b>	Suspended Solids	1/1 - 12/28	5.58	mg/L
	Aluminum	1/1 - 12/28	1.32	mg/L
	Turbidity	1/1 - 12/28	1.35	NTU
	pH	1/1 - 12/28	7.87	
	Temperature	1/1 - 12/28	9.29	°C

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
<b>Antimony</b>	3/07 - 11/14	0	mg/L	No
<b>Arsenic</b>	3/07 - 11/14	0	mg/L	No
<b>Barium</b>	3/07 - 11/14	0.022-0.023	mg/L	No

<b>Boron</b>	3/07 – 11/14	0.022-0.026	mg/L	No
<b>Cadmium</b>	3/07 – 11/14	0	mg/L	No
<b>Chromium</b>	3/07 – 11/14	0	mg/L	No
<b>Lead</b>	3/07 – 11/14	0	mg/L	No
<b>Mercury</b>	3/07 – 11/14	0	mg/L	No
<b>Selenium</b>	3/07 – 11/14	0	mg/L	No
<b>Sodium</b>	1/05 – 9/19	11.4-18.6	mg/L	No
<b>Uranium</b>	3/07 – 11/14	0.0003-0.0004	mg/L	No
<b>Fluoride</b>	1/01 – 12/31	0.14-0.82	mg/L	No
<b>Nitrite</b>	1/17 – 12/12	0	mg/L	No
<b>Nitrate</b>	1/17 – 12/12	0.29-0.52	mg/L	No

**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Alachlor</b>	3/06-7/24	0 - 0	µg/L	No
<b>Aldicarb</b>	3/06-7/24	0 - 0	µg/L	No
<b>Aldrin + Dieldrin</b>	3/06-7/24	0 - 0	µg/L	No
<b>Atrazine + N-dealkylated metabolites</b>	3/06-7/24	0 - 0	µg/L	No
<b>Azinphos-methyl</b>	3/06-7/24	0 - 0	µg/L	No
<b>Bendiocarb</b>	3/06-7/24	0 - 0	µg/L	No
<b>Benzene</b>	1/09-11/20	0 - 0	µg/L	No
<b>Benzo(a)pyrene</b>	3/06-11/20	0 - 0	µg/L	No
<b>Bromoxynil</b>	3/06-7/24	0 - 0	µg/L	No
<b>Carbaryl</b>	3/06-7/24	0 - 0	µg/L	No
<b>Carbofuran</b>	3/06-7/24	0 - 0	µg/L	No
<b>Carbon Tetrachloride</b>	1/09-11/20	0 - 0	µg/L	No
<b>Chlordane (Total)</b>	3/06-7/24	0 - 0	µg/L	No
<b>Chlorpyrifos</b>	3/06-7/24	0 - 0	µg/L	No
<b>Cyanazine</b>	3/06-7/24	0 - 0	µg/L	No
<b>Diazinon</b>	3/06-7/24	0 - 0	µg/L	No
<b>Dicamba</b>	3/06-7/24	0 - 0	µg/L	No
<b>1,2-Dichlorobenzene</b>	1/09-11/20	0 - 0	µg/L	No
<b>1,4-Dichlorobenzene</b>	1/09-11/20	0 - 0	µg/L	No
<b>Dichlorodiphenyltrichloroethane (DDT) + metabolites</b>	3/06-7/24	0 - 0	µg/L	No
<b>1,2-Dichloroethane</b>	1/09-11/20	0 - 0	µg/L	No
<b>1,1-Dichloroethylene (vinylidene chloride)</b>	1/09-11/20	0 - 0	µg/L	No
<b>Dichloromethane</b>	1/09-11/20	0 - 0	µg/L	No
<b>2-4 Dichlorophenol</b>	3/06-7/24	0 - 0	µg/L	No
<b>2,4-Dichlorophenoxy acetic acid (2,4-D)</b>	3/06-7/24	0 - 0	µg/L	No
<b>Diclofop-methyl</b>	3/06-7/24	0 - 0	µg/L	No
<b>Dimethoate</b>	3/06-7/24	0 - 0	µg/L	No
<b>Dinoseb</b>	3/06-7/24	0 - 0	µg/L	No
<b>Diquat</b>	3/06-7/24	0 - 0	µg/L	No
<b>Diuron</b>	3/06-7/24	0 - 0	µg/L	No

Glyphosate	3/06-7/24	0 - 0	µg/L	No
Heptachlor + Heptachlor Epoxide	3/06-7/24	0 - 0	µg/L	No
Lindane (Total)	3/06-7/24	0 - 0	µg/L	No
Malathion	3/06-7/24	0 - 0	µg/L	No
Methoxychlor	3/06-7/24	0 - 0	µg/L	No
Metolachlor	3/06-7/24	0 - 0	µg/L	No
Metribuzin	3/06-7/24	0 - 0	µg/L	No
Monochlorobenzene (chlorobenzene)	1/09-11/20	0 - 0	µg/L	No
Paraquat	3/06-7/24	0 - 0	µg/L	No
Parathion	3/06-7/24	0 - 0	µg/L	No
Pentachlorophenol	3/06-7/24	0 - 0	µg/L	No
Phorate	3/06-7/24	0 - 0	µg/L	No
Picloram	3/06-7/24	0 - 0	µg/L	No
Polychlorinated Biphenyls(PCB)	7/24-7/24	0 - 0	µg/L	No
Prometryne	3/06-7/24	0 - 0	µg/L	No
Simazine	3/06-7/24	0 - 0	µg/L	No
THM (NOTE: show latest annual average)	1/09-11/20	10.7	µg/L	No
Temephos	3/06-7/24	0 - 0	µg/L	No
Terbufos	3/06-7/24	0 - 0	µg/L	No
Tetrachloroethylene	1/09-11/20	0 - 0	µg/L	No
2,3,4,6-Tetrachlorophenol	3/06-7/24	0 - 0	µg/L	No
Triallate	3/06-7/24	0 - 0	µg/L	No
Trichloroethylene	1/09-11/20	0 - 0	µg/L	No
2,4,6-Trichlorophenol	3/06-7/24	0 - 0	µg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	3/06-7/24	0 - 0	µg/L	No
Trifluralin	3/06-7/24	0 - 0	µg/L	No
Vinyl Chloride	3/06-7/24	0 - 0	µg/L	No

### Availability of the Report

This report along with a copy of the Summary Report (to be available after March 31, 2007) prepared under Schedule 22 of O. Reg. 170/03 will be posted on the City's website at [www.toronto.ca/water](http://www.toronto.ca/water).

These reports will also be available for inspection at Toronto Water offices in Metro Hall, 18<sup>th</sup> Floor, 55 John Street, Toronto, Ontario M5V 3C6 or by calling (416) 392-8222.

*Report Prepared:  
February 27, 2007*

**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	Island. WTP – 220002244
<b>Drinking-Water System Name:</b>	Toronto (Island) Water Treatment Plant
<b>Drinking-Water System Owner:</b>	City of Toronto
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2006 to December 31, 2006

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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;">                 Metro Hall, 18<sup>th</sup> Floor                  55 John Street                  Toronto, Ontario                  M5V 3C6             </div>	<p><b><u>Complete for all other Categories.</u></b> <b>NOT APPLICABLE</b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" type="text"/></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: <input style="width: 100px; height: 20px;" type="text"/></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:**

Drinking Water System Name	Drinking Water System Number
Region of York – receives some of their water from Toronto	260001929

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

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**Describe your Drinking-Water System**

- Toronto Water Supply System consists of four water filtration plants, 18 pumping stations, 10 major underground storage reservoirs, four elevated storage tanks and approximately 510 kilometers of trunk watermains and 5,015 kilometers of distribution watermains.

The Island Water Treatment Plant is a direct water treatment plant, has a capacity 410 ML/d and is located on Centre Island, Toronto.

The other three Toronto water treatment plants are as follows:

- R.C. Harris Water Treatment Plant (capacity 950 ML/d) located at 2701 Queens Street East, Toronto;
- R.L. Clark Water Treatment Plant (capacity 615 ML/d) located at 45 Twenty Third Street, Etobicoke; and
- F.J. Horgan Water Treatment Plant (capacity 570 ML/d) located at 201 Copperfield Road, Toronto.

**List all water treatment chemicals used over this reporting period**

Alum, chlorine, sulphur dioxide, hydrofluosilicic acid and aqua ammonia.

**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**

Please note the following amounts relate to various projects during 2006 and does not represent the total project cost. These numbers do not include normal operating and maintenance cost.

Winterization of facility \$500,000

Residue Management \$300,000

**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
8-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	8-May-06
18-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	18-May-06
22-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	22-May-06
23-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	23-May-06
25-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	25-May-06
25-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	25-May-06
25-May-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	25-May-06
5-Jun-06	Total Coliforms	1	cfu/100mL	Resampled. All samples including a distribution sample were clear. The original sample had a residual of 1.18 mg/L.	7-Jun-06
29-Sep-06	Fluoride Level > 1.2 mg/L	1.8	mg/L	Maintenance was completed on the system and fluoride feed was returned to normal. Filter #4 was backwashed to get rid of the water in the clearwell with higher concentration of fluoride.	29-Sep-06
27-Nov-06	Coagulation Interruption			Upon detection, alternate feed pump was put in service. There was no effect on the filtered water turbidity.	27-Nov-06

**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 #)
<b>Raw</b>	504	0-200	0-530	500	0-2500
<b>Treated</b>	1573	0	0-10	1564	0-510

**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	8730	0.03-0.11
Chlorine	8730	0.93-2.00
<b>Fluoride</b> (If the DWS provides fluoridation)	8075	0.02-2.00

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

*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 Avg	Unit of Measure
<b>Island Water Treatment Plant C of A #2646-5PPKLV dated August 14, 2003</b>				
	Suspended solids	1/1/06 to 12/31/06	41.67	mg/L
	Chlorine Residual	1/1/06 to 12/31/06	0.28	mg/L
	Aluminum	1/1/06 to 12/31/06	4.76	mg/L

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
<b>Antimony</b>	3/07 – 11/14	0-0	mg/L	No
<b>Arsenic</b>	3/07 – 11/14	0-0	mg/L	No
<b>Barium</b>	3/07 – 11/14	0.021-0.023	mg/L	No
<b>Boron</b>	3/07 – 11/14	0.021-0.025	mg/L	No
<b>Cadmium</b>	3/07 – 11/14	0-0	mg/L	No
<b>Chromium</b>	3/07 – 11/14	0-0	mg/L	No
<b>Lead</b>	3/07 – 11/14	0-0	mg/L	No
<b>Mercury</b>	3/07 – 11/14	0-0	mg/L	No
<b>Selenium</b>	3/07 – 11/14	0-0	mg/L	No
<b>Sodium</b>	1/05 – 9/19	11.5-18.7	mg/L	No
<b>Uranium</b>	3/07 – 11/14	0.0003-0.0004	mg/L	No
<b>Fluoride</b>	1/01 – 12/31	0.14-0.71	mg/L	No
<b>Nitrite</b>	1/17 – 12/12	0-0	mg/L	No
<b>Nitrate</b>	1/17 – 12/12	0.42-0.49	mg/L	No

**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	3/06-7/24	0-0	ug/L	No
Aldicarb	3/06-7/24	0-0	ug/L	No
Aldrin + Dieldrin	3/06-7/24	0-0	ug/L	No
Atrazine + N-dealkylated metabolites	3/06-7/24	0-0	ug/L	No
Azinphos-methyl	3/06-7/24	0-0	ug/L	No
Bendiocarb	3/06-7/24	0-0	ug/L	No
Benzene	1/09-11/20	0-0	ug/L	No
Benzo(a)pyrene	3/06-11/20	0-0	ug/L	No
Bromoxynil	3/06-7/24	0-0	ug/L	No
Carbaryl	3/06-7/24	0-0	ug/L	No
Carbofuran	3/06-7/24	0-0	ug/L	No
Carbon Tetrachloride	1/09-11/20	0-0	ug/L	No
Chlordane (Total)	3/06-7/24	0-0	ug/L	No
Chlorpyrifos	3/06-7/24	0-0	ug/L	No
Cyanazine	3/06-7/24	0-0	ug/L	No
Diazinon	3/06-7/24	0-0	ug/L	No
Dicamba	3/06-7/24	0-0	ug/L	No
1,2-Dichlorobenzene	1/09-11/20	0-0	ug/L	No
1,4-Dichlorobenzene	1/09-11/20	0-0	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	3/06-7/24	0-0	ug/L	No
1,2-Dichloroethane	1/09-11/20	0-0	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	1/09-11/20	0-0	ug/L	No
Dichloromethane	1/09-11/20	0-0	ug/L	No
2,4 Dichlorophenol	3/06-7/24	0-0	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	3/06-7/24	0-0	ug/L	No
Diclofop-methyl	3/06-7/24	0-0	ug/L	No
Dimethoate	3/06-7/24	0-0	ug/L	No
Dinoseb	3/06-7/24	0-0	ug/L	No
Diquat	3/06-7/24	0-0	ug/L	No
Diuron	3/06-7/24	0-0	ug/L	No
Glyphosate	3/06-7/24	0-0	ug/L	No
Heptachlor + Heptachlor Epoxide	3/06-7/24	0-0	ug/L	No
Lindane (Total)	3/06-7/24	0-0	ug/L	No
Malathion	3/06-7/24	0-0	ug/L	No
Methoxychlor	3/06-7/24	0-0	ug/L	No
Metolachlor	3/06-7/24	0-0	ug/L	No
Metribuzin	3/06-7/24	0-0	ug/L	No
Monochlorobenzene	1/09-11/20	0-0	ug/L	No
Paraquat	3/06-7/24	0-0	ug/L	No
Parathion	3/06-7/24	0-0	ug/L	No
Pentachlorophenol	3/06-7/24	0-0	ug/L	No
Phorate	3/06-7/24	0-0	ug/L	No
Picloram	3/06-7/24	0-0	ug/L	No
Polychlorinated Biphenyls(PCB)	7/24-7/24	0-0	ug/L	No
Prometryne	3/06-7/24	0-0	ug/L	No



<b>Simazine</b>	3/06-7/24	0-0	ug/L	No
<b>THM</b> (NOTE: show latest annual average)	1/09-11/20	9.6	ug/L	No
<b>Temephos</b>	3/06-7/24	0-0	ug/L	No
<b>Terbufos</b>	3/06-7/24	0-0	ug/L	No
<b>Tetrachloroethylene</b>	1/09-11/20	0-0	ug/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	3/06-7/24	0-0	ug/L	No
<b>Triallate</b>	3/06-7/24	0-0	ug/L	No
<b>Trichloroethylene</b>	1/09-11/20	0-0	ug/L	No
<b>2,4,6-Trichlorophenol</b>	3/06-7/24	0-0	ug/L	No
<b>2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)</b>	3/06-7/24	0-0	ug/L	No
<b>Trifluralin</b>	3/06-7/24	0-0	ug/L	No
<b>Vinyl Chloride</b>	3/06-7/24	0-0	ug/L	No

### Availability of the Report

This report along with a copy of the Summary Report (to be available after March 31, 2007) prepared under Schedule 22 of O. Reg. 170/03 will be posted on the City's website at [www.toronto.ca/water](http://www.toronto.ca/water).

These reports will also be available for inspection at the Toronto Water offices in Metro Hall, 18<sup>th</sup> Floor, 55 John Street, Toronto, Ontario M5V 3C6 or by calling (416) 392-8222.

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# Drinking Water Systems

ANNUAL REPORT 2006

