



#### CITY OF TORONTO DRINKING WATER SYSTEM ANNUAL REPORT

Drinking-Water System Number:220002262Drinking-Water System Name:City of Toronto Drinking Water System (R. C. Harris)Drinking-Water System Owner:City of TorontoDrinking-Water System Category:Large Municipal ResidentialPeriod being reported:January 1, 2015 to December 31, 2015

Complete if your Category is Large Municipal	Complete for all other Categories.
Residential or Small Municipal Residential	
Does your Drinking-Water System serve more	Number of Designated Facilities served:
than 10,000 people? Yes [X ] No [ ]	
	Did you provide a copy of your annual report
Is your annual report available to the public at	to all Designated Facilities you serve?
no charge on a web site on the Internet?	Yes [ ] No [ ]
Yes [ X ] No [ ]	
	Number of Interested Authorities you report
Location where Summary Report required	to:
under O. Reg. 170/03 Schedule 22 will be	
available for inspection.	
Metro Hall	Did you provide a copy of your annual report
55 John Street	to all Interested Authorities you report to for
Toronto, Ontario	each Designated Facility?
M5V 3C6	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:

<b>Drinking Water System Name</b>	Drinking Water System Number
Region of York - receives some of their water from	260001929
Toronto	

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
- [ ] Public access/notice via Public Request
- [ ] Public access/notice via a Public Library
- Public access/notice via other method

**Drinking Water Systems Regulations** 

(PIBS 4435e01) Page **1** of **6** 

#### **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 520 kilometers of trunk watermains and 5,525 kilometers of distribution watermains.

The R.C. Harris Water Treatment Plant is a conventional water treatment, has a rated capacity of 950,000 m3/day and is located at 2701 Queen Street East, Toronto.

The other three (3) Toronto Water Treatment plants are as follows:

- R.L. Clark Water Treatment Plant (Rated Capacity of 615,000 m3/day) and is located at 45 Twenty Third Street, Toronto
- F.J. Horgan Water Treatment Plant (Rated Capacity of 800,000 m3/day) and is located at 201 Copperfield Road, Toronto
- Island Water Treatment Plant (Rated Capacity of 410,000 m3/day) and is located on Centre Island, Toronto

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

Alum (Aluminum sulphate
Chlorine
Sulphur dioxide
Sodium bisulphite
Hydrofluosilicic acid
Aqueous Ammonia
Phosphoric Acid

#### Were any significant expenses incurred to?

[X] Install required equipment

[X] Repair required equipment

[ ] Replace required equipment

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

**Capital Projects** - The following amounts relate to various projects during 2015 and do not represent the total project costs. These numbers do not include the normal operating and maintenance costs.

No.	Project Name	Description	Monetary Expense
1.	Settling Basin Rehabilitation	Rehabilitation of settling basins and associated equipment. Rehabilitation of cone valves and filter sluice gates.	\$1.50 Million

(PIBS 4435e01) Page 2 of 6

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
August 31, 2015	Diuoron Prometon Propazine Propoxur (Baygon)	0.0008 0.0014 0.0014 0.0002	ug/L ug/L ug/L ug/L	Resample	September 3, 2015
September 9, 2015	Prometon Propoxur (Baygon)	0.0015 0.0002	ug/L ug/L	As directed by Medical Officer of Health, no remedial action necessary at this time	October 5, 2015

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	362	0 - 14	0 - 48	362	0 - 1425
Treated	1458	1458 A (100%A)	1458 A (100%A)	1458	0 - 120

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min.) - (max.)	Unit of Measure
Turbidity	8760	0.02-0.10	NTU
Chlorine	8760	1.42-1.86	mg/L
*Fluoride (If the DWS provides fluoridation)	358 (plus continuous monitoring)	0.38-0.71	mg/L

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

<sup>\*</sup> Fluoride Grab Sample numbers and range of results are reported using data from days when fluoridation was in service

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Note: A result of zero indicates that the result obtained was below the method detection / reporting limit

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
13-Dec-2013 & 11-Feb- 2015 Municipal Drinking Water Licence	Suspended Solids	Jan 01 - Dec 01, 2015	9.64	mg/L
13-Dec-2012 & 11-Feb- 2015 Drinking Water Works Permit	Chlorine Residual	Jan 01 - Dec 31, 2015	0	mg/L

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Antimony	Jan - Dec 2015	0.0002 - 0.0002	mg/L	No
Arsenic	Jan - Dec 2015	0.0007 - 0.001	mg/L	No
Barium	Jan - Dec 2015	0.0217 - 0.0222	mg/L	No
Boron	Jan - Dec 2015	0.0232 - 0.0240	mg/L	No
Cadmium	Jan - Dec 2015	0 - 0	mg/L	No
Chromium	Jan - Dec 2015	0.0002 - 0.0003	mg/L	No
Lead	Jan - Dec 2015	0 - 0	mg/L	No
Mercury	Jan - Dec 2015	0 - 0	mg/L	No
Selenium	Jan - Dec 2015	0 - 0.0006	mg/L	No
Sodium	Jan - Dec 2015	13.2 - 15.9	mg/L	No
Uranium	Jan - Dec 2015	0.0003 - 0.0004	mg/L	No
Nitrite	Jan - Dec 2015	0 - 0.0004	mg/L	No
Nitrate	Jan - Dec 2015	0.29 - 0.41	mg/L	No

#### Summary of Lead (Pb) 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)

<b>Location Type</b>	Number of Samples	Range of Lead Results (min.) - (max.)	Unit of Measure	Number of Exceedances
*Plumbing				
*Distribution				

<sup>\*</sup>Note: Refer to Toronto DS (Distribution System) Annual Report for Lead (Pb) testing data

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Alachlor	Jan - Dec 2015	0 - 0	μg/L	No
Aldicarb	Jan - Dec 2015	0 - 0	μg/L	No
Aldrin + Dieldrin	Jan - Dec 2015	0 - 0	μg/L	No
Atrazine + N-dealkylated metobolites	Jan - Dec 2015	0.126 - 0.129	μg/L	No
Azinphos-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Bendiocarb	Jan - Dec 2015	0 - 0	μg/L	No
Benzene	Jan - Dec 2015	0 - 0	μg/L	No
Benzo(a)pyrene	Jan - Dec 2015	0 - 0	μg/L	No
Bromoxynil	Jan - Dec 2015	0 - 0	μg/L	No
Carbaryl	Jan - Dec 2015	0 - 0	μg/L	No
Carbofuran	Jan - Dec 2015	0 - 0	μg/L	No
Carbon Tetrachloride	Jan - Dec 2015	0 - 0	μg/L	No
Chlordane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Chlorpyrifos	Jan - Dec 2015	0 - 0	μg/L	No
Cyanazine	Jan - Dec 2015	0 - 0.0031	μg/L	No
Diazinon	Jan - Dec 2015	0 - 0	μg/L	No
Dicamba	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
1,4-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichloroethane	Jan - Dec 2015	0 - 0	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan - Dec 2015	0 - 0	μg/L	No
Dichloromethane	Jan - Dec 2015	0 - 0	μg/L	No
2-4 Dichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan - Dec 2015	0 - 0	μg/L	No
Diclofop-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Dimethoate	Jan - Dec 2015	0 - 0	μg/L	No
Dinoseb	Jan - Dec 2015	0 - 0	μg/L	No
Diquat	Jan - Dec 2015	0	μg/L	No
Diuron	Jan - Dec 2015	0 - 0	μg/L	No
Glyphosate	Jan - Dec 2015	0	μg/L	No
Heptachlor + Heptachlor Epoxide	Jan - Dec 2015	0 - 0	μg/L	No
Lindane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Malathion	Jan - Dec 2015	0 - 0	μg/L	No
Methoxychlor	Jan - Dec 2015	0 - 0	μg/L	No

(PIBS 4435e01) Page **5** of **6** 

Metolachlor	Jan - Dec 2015	0 - 0.0081	μg/L	No
Metribuzin	Jan - Dec 2015	0 - 0	μg/L	No
Monochlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Paraquat	Jan - Dec 2015	0	μg/L	No
Parathion	Jan - Dec 2015	0 - 0	μg/L	No
Pentachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Phorate	Jan - Dec 2015	0 - 0	μg/L	No
Picloram	Jan - Dec 2015	0 - 0	μg/L	No
Polychlorinated Biphenyls (PCB)	Jan - Dec 2015	0 - 0	μg/L	No
Prometryne	Jan - Dec 2015	0 - 0	μg/L	No
Simazine	Jan - Dec 2015	0 - 0.0031	μg/L	No
THM (Note: show latest annual average)	Jan - Dec 2015	16.8	μg/L	No
Temephos	Jan - Dec 2015	0 - 0	μg/L	No
Terbufos	Jan - Dec 2015	0 - 0	μg/L	No
Tetrachloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,3,4,6-Tetrachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Triallate	Jan - Dec 2015	0 - 0	μg/L	No
Trichloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,4,6-Trichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan - Dec 2015	0 - 0	μg/L	No
Trifluralin	Jan - Dec 2015	0 - 0	μg/L	No
Vinyl Chloride	Jan - Dec 2015	0 - 0	μg/L	No

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 (min.) - (max.)	Unit of Measure	Date of Sample
NONE			

Page **6** of **6** 

#### CITY OF TORONTO DRINKING WATER SYSTEM ANNUAL REPORT

Drinking-Water System Number:220002244Drinking-Water System Name:City of Toronto Drinking Water System (Island)Drinking-Water System Owner:City of TorontoDrinking-Water System Category:Large Municipal ResidentialPeriod being reported:January 1, 2015 to December 31, 2015

Complete if your Category is Large Municipal	Complete for all other Categories.
Residential or Small Municipal Residential	
Does your Drinking-Water System serve more	Number of Designated Facilities served:
than 10,000 people? Yes [X ] No [ ]	
	Did you provide a copy of your annual report
Is your annual report available to the public at	to all Designated Facilities you serve?
no charge on a web site on the Internet?	Yes [ ] No [ ]
Yes [ X ] No [ ]	
	Number of Interested Authorities you report
Location where Summary Report required	to:
under O. Reg. 170/03 Schedule 22 will be	
available for inspection.	
Metro Hall	Did you provide a copy of your annual report
55 John Street	to all Interested Authorities you report to for
Toronto, Ontario	each Designated Facility?
M5V 3C6	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:

<b>Drinking Water System Name</b>	Drinking Water System Number
Region of York - receives some of their water from	260001929
Toronto	

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
- [ ] Public access/notice via Public Request
- [ ] Public access/notice via a Public Library
- [ ] Public access/notice via other method \_\_\_\_\_

(PIBS 4435e01) Page 1 of 6

#### **Drinking Water Systems Regulations**

#### **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 520 kilometers of trunk watermains and 5,525 kilometers of distribution watermains.

The Island Water Treatment Plant is a direct water treatment plant, has a rated capacity of 410,000 m3/day and is located at Toronto Centre Island, Toronto.

The other three (3) Toronto Water Treatment plants are as follows:

- R.L. Clark Water Treatment Plant (Rated Capacity of 615,000 m3/day) and is located at 45 Twenty Third Street, Toronto
- R.C. Harris Water Treatment Plant (Rated Capacity of 950,000 m3/day) and is located at 2701 Queen Street East, Toronto
- F.J. Horgan Water Treatment Plant (Rated Capacity of 800,000 m3/day) and is located at 201 Copperfield Road, Toronto

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

Chlorine

Sulphur dioxide

Sodium bisulphite

Hydrofluosilicic acid

Aqua ammonia

Polyaluminum Chloride (PACL)

Phosphoric Acid

#### Were any significant expenses incurred to?

[X] Install required equipment

[X] Repair required equipment

[X] Replace required equipment

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

**Capital Projects** - The following amounts relate to various projects during 2015 and do not represent the total project costs. These numbers do not include the normal operating and maintenance costs.

No.	Project Description	Monetary Expense
1.	Design & Construction of Admin Building & Marine Yard Rehabilitation	\$568,000
2.	Design & Construction of Bumpless Transfer	\$508,000
3.	Design of Residuals Management System	\$360,000
4.	Design & Construction of Filter Air Scour System	\$243,000
5.	Design & Construction of Island Sea Wall and Crane Structure	\$ 60,000

Drinking Water Systems Regulations

(PIBS 4435e01) Page **2** of **6** 

6.	Design & Construction of Chemical Systems Electrical Feed Distribution	\$ 56,000
7.	Construction of Lower Filter Building Roof Rehabilitation	\$ 55,000
8.	Design support for Deep Lake Water Cooling and Process Retrofits	\$ 43,000
9.	Design of Ammonia & Fluoride System Upgrades	\$ 32,000
10	Design & site services for Island WTP Winterization Project	\$ 24,000
11.	Design of Plantwide HVAC Upgrades	\$ 20,000

## 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
August 31, 2015	Diuron Prometon Propazine	0.0008 0.0015 0.0015	μg/L	Resample	September 3, 2015
September 9, 2015	Prometon	0.0014	μg/L	As directed by Medical Officer of Health, no remedial action necessary at this time	October 5, 2015

## 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	281	0 - 35	0 - 89	281	0 - 3266
Treated	1141	1141 A (100%A)	1141 A (100%A)	1141	0 - 408

## Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min.) - (max.)	Unit of Measure	
Turbidity	6861	0.03 - 0.13	NTU	
Chlorine	6861	1.19 - 2.09	mg/L	
*Fluoride (If the DWS provides fluoridation)	283 (plus continuous monitoring)	0.52 - 0.72	mg/L	
<b>Note</b> : For continuous monitors use 8760 as the number of samples.				

<sup>\*</sup> Fluoride Grab Sample numbers and range of results are reported using data from days when fluoridation was in service

(PIBS 4435e01) Page **3** of **6** 

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
13-Dec-2013 & 11-Feb- 2015 Municipal Drinking Water Licence	Suspended Solids	Jan. 1, 2015 - Dec. 31, 2015	9.9	mg/L
13-Dec-2012 & 11-Feb- 2015 Drinking Water Works Permit	Chlorine Residual	Jan. 1, 2015 - Dec. 31, 2015	0.002	mg/L

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Antimony	Jan - Dec 2015	0.0002 - 0.0002	mg/L	No
Arsenic	Jan - Dec 2015	0.0011 - 0.0011	mg/L	No
Barium	Jan - Dec 2015	0.0227 - 0.0230	mg/L	No
Boron	Jan - Dec 2015	0.0232 - 0.0236	mg/L	No
Cadmium	Jan - Dec 2015	0 - 0	mg/L	No
Chromium	Jan - Dec 2015	0.0002 - 0.0003	mg/L	No
Lead	Jan - Dec 2015	0 - 0	mg/L	No
Mercury	Jan - Dec 2015	0 - 0	mg/L	No
Selenium	Jan - Dec 2015	0 - 0.0005	mg/L	No
Sodium	Jan - Dec 2015	12.8 - 14.1	mg/L	No
Uranium	Jan - Dec 2015	0.0003 - 0.0004	mg/L	No
Nitrite	Jan - Dec 2015	0 - 0	mg/L	No
Nitrate	Jan - Dec 2015	0.37 - 0.41	mg/L	No

#### Summary of Lead (Pb) 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)

<b>Location Type</b>	Number of Samples	Range of Lead Results (min.) - (max.)	Unit of Measure	Number of Exceedances
*Plumbing				
*Distribution				

<sup>\*</sup>Note: Refer to Toronto DS (Distribution System) Annual Report for Lead (Pb) testing data

(PIBS 4435e01) Page **4** of **6** 

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Alachlor	Jan - Dec 2015	0 - 0	μg/L	No
Aldicarb	Jan - Dec 2015	0 - 0	μg/L	No
Aldrin + Dieldrin	Jan - Dec 2015	0 - 0	μg/L	No
Atrazine + N-dealkylated metobolites	Jan - Dec 2015	0.126 - 0.133	μg/L	No
Azinphos-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Bendiocarb	Jan - Dec 2015	0 - 0	μg/L	No
Benzene	Jan - Dec 2015	0 - 0	μg/L	No
Benzo(a)pyrene	Jan - Dec 2015	0 - 0	μg/L	No
Bromoxynil	Jan - Dec 2015	0 - 0	μg/L	No
Carbaryl	Jan - Dec 2015	0 - 0	μg/L	No
Carbofuran	Jan - Dec 2015	0 - 0	μg/L	No
Carbon Tetrachloride	Jan - Dec 2015	0 - 0	μg/L	No
Chlordane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Chlorpyrifos	Jan - Dec 2015	0 - 0	μg/L	No
Cyanazine	Jan - Dec 2015	0.0024 - 0.0033	μg/L	No
Diazinon	Jan - Dec 2015	0 - 0	μg/L	No
Dicamba	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
1,4-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichloroethane	Jan - Dec 2015	0 - 0	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan - Dec 2015	0 - 0	μg/L	No
Dichloromethane	Jan - Dec 2015	0 - 0	μg/L	No
2-4 Dichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan - Dec 2015	0 - 0	μg/L	No
Diclofop-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Dimethoate	Jan - Dec 2015	0 - 0	μg/L	No
Dinoseb	Jan - Dec 2015	0 - 0	μg/L	No
Diquat	Jan - Dec 2015	0	μg/L	No
Diuron	Jan - Dec 2015	0 - 0.0008	μg/L	No
Glyphosate	Jan - Dec 2015	0	μg/L	No
Heptachlor + Heptachlor Epoxide	Jan - Dec 2015	0 - 0	μg/L	No
Lindane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Malathion	Jan - Dec 2015	0 - 0	μg/L	No
Methoxychlor	Jan - Dec 2015	0 - 0	μg/L	No

(PIBS 4435e01) Page **5** of **6** 

Metolachlor	Jan - Dec 2015	0.0066 - 0.0080	μg/L	No
Metribuzin	Jan - Dec 2015	0 - 0	μg/L	No
Monochlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Paraquat	Jan - Dec 2015	0	μg/L	No
Parathion	Jan - Dec 2015	0 - 0	μg/L	No
Pentachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Phorate	Jan - Dec 2015	0 - 0	μg/L	No
Picloram	Jan - Dec 2015	0 - 0	μg/L	No
Polychlorinated Biphenyls (PCB)	Jan - Dec 2015	0 - 0	μg/L	No
Prometryne	Jan - Dec 2015	0 - 0	μg/L	No
Simazine	Jan - Dec 2015	0.0067 - 0.0077	μg/L	No
THM (Note: show latest annual average)	Jan - Dec 2015	11.0	μg/L	No
Temephos	Jan - Dec 2015	0 - 0	μg/L	No
Terbufos	Jan - Dec 2015	0 - 0	μg/L	No
Tetrachloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,3,4,6-Tetrachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Triallate	Jan - Dec 2015	0 - 0	μg/L	No
Trichloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,4,6-Trichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan - Dec 2015	0 - 0	μg/L	No
Trifluralin	Jan - Dec 2015	0 - 0	μg/L	No
Vinyl Chloride	Jan - Dec 2015	0 - 0	μg/L	No

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 (min.) - (max.)	Unit of Measure	Date of Sample
NONE			

Page **6** of **6** 

#### CITY OF TORONTO DRINKING WATER SYSTEM ANNUAL REPORT

Drinking-Water System Number:220002253Drinking-Water System Name:City of Toronto Drinking Water System (R. L. Clark)Drinking-Water System Owner:City of TorontoDrinking-Water System Category:Large Municipal ResidentialPeriod being reported:January 1, 2015 to December 31, 2015

Complete if your Category is Large Municipal	Complete for all other Categories.
Residential or Small Municipal Residential	
Does your Drinking-Water System serve more	Number of Designated Facilities served:
than 10,000 people? Yes [X ] No [ ]	
	Did you provide a copy of your annual report
Is your annual report available to the public at	to all Designated Facilities you serve?
no charge on a web site on the Internet?	Yes [ ] No [ ]
Yes [ X ] No [ ]	
	Number of Interested Authorities you report
<b>Location where Summary Report required</b>	to:
under O. Reg. 170/03 Schedule 22 will be	
available for inspection.	
Metro Hall	Did you provide a copy of your annual report
55 John Street	to all Interested Authorities you report to for
Toronto, Ontario	each Designated Facility?
M5V 3C6	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:

<b>Drinking Water System Name</b>	Drinking Water System Number
Region of York - receives some of their water from	260001929
Toronto	

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
- [ ] Public access/notice via Public Request
- [ ] Public access/notice via a Public Library
- Public access/notice via other method

(PIBS 4435e01) Page **1** of **6** 

#### **Drinking Water Systems Regulations**

#### **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 520 kilometers of trunk watermains and 5,525 kilometers of distribution watermains.

The R.L. Clark Water Treatment Plant is a conventional water treatment plant, has a rated capacity of 615,000 m<sup>3</sup>/day and is located at 45 Twenty Third Street, Toronto.

The other three (3) Toronto Water Treatment plants are as follows:

- R.C. Harris Water Treatment Plant (Rated Capacity of 950,000 m³/day) and is located at 2701 Queen Street East, Toronto
- F.J. Horgan Water Treatment Plant (Rated Capacity of 800,000 m³/day) and is located at 201 Copperfield Road, Toronto
- Island Water Treatment Plant (Rated Capacity of 410,000 m³/day) and is located on Centre Island, Toronto

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

Alum (Aluminum sulphate)

Chlorine

Sulphur Dioxide

Hydrofluosilic Acid

Aqua Ammonia

Phosphoric Acid

Cationic polymer was used for residuals treatment.

#### Were any significant expenses incurred to?

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

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

**Capital Projects** - The following amounts relate to various projects during 2015 and do not represent the total project costs. These numbers do not include the normal operating and maintenance costs.

No.	Project Name	Description	Monetary Expense
1.	Voice Communication Upgrade	Telephone & paging system	\$630,000
2.	Filters Upgrade	Filter rehabilitation project	\$12 Million

(PIBS 4435e01) Page 2 of 6

3.	RMF Optimization	Residue Management Facility upgrades	\$130,000
4.	Process Equipment Upgrade, (design and contract admin)	Consultant design and project oversight for upgrade projects	\$590,000
5.	Miscellaneous Projects	Various plant equipment rehabilitation	\$230,000

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
August 31, 2015	Diuoron Prometon Propazine Propoxur (Baygon)	0.0013 0.0016 0.0014 0.0002	ug/L ug/L ug/L ug/L	Resample	September 3, 2015
September 3, 2015	Prometon	0.0013	ug/L	As directed by Medical Officer of Health, no remedial action necessary at this time	October 5, 2015
September 19, 2015	Individual filter effluent turbidity analyzer failure	0	NTU	Filter removed from service. Grab sample collected. Analyzer repaired and calibrated.	September 20, 2015
December 2, 2015	Total Coliform	Present	P/A result in 100 mL sample	Resample	December 2, 2015

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	281	0 - 30	0 - 103	281	0 ->5700
Treated	1425	1425 A (100%A)	1424 A (99.9%A)	1425	0 - 74

## Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min.) - (max.)	Unit of Measure
Turbidity	8578	0.03 - 0.21	NTU
Chlorine	8578	1.16 - 1.72	mg/L
*Fluoride (If the DWS provides fluoridation)	282 (plus continuous monitoring)	0.41 - 0.65	mg/L

**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
NONE				

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Antimony	Jan - Dec 2015	0.0002 - 0.0003	mg/L	No
Arsenic	Jan - Dec 2015	0.0008 - 0.0011	mg/L	No
Barium	Jan - Dec 2015	0.0220- 0.0334	mg/L	No
Boron	Jan - Dec 2015	0.0238 - 0.0242	mg/L	No
Cadmium	Jan - Dec 2015	0 - 0	mg/L	No
Chromium	Jan - Dec 2015	0.0002 - 0.0003	mg/L	No
Lead	Jan - Dec 2015	0 - 0	mg/L	No
Mercury	Jan - Dec 2015	0 - 0	mg/L	No
Selenium	Jan - Dec 2015	0 - 0.0054	mg/L	No
Sodium	Jan - Dec 2015	13.1 - 22.8	mg/L	Yes (Last reported in Feb 2012)
Uranium	Jan - Dec 2015	0.0003 - 0.0006	mg/L	No
Nitrite	Jan - Dec 2015	0 - 0.002	mg/L	No
Nitrate	Jan - Dec 2015	0.33 - 0.53	mg/L	No

(PIBS 4435e01) Page **4** of **6** 

<sup>\*</sup> Fluoride Grab Sample numbers and range of results are reported using data from days when fluoridation was in service.

#### Summary of Lead (Pb) 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)

<b>Location Type</b>	Number of Samples	Range of Lead Results (min.) - (max.)	Unit of Measure	Number of Exceedances
*Plumbing				
*Distribution				

<sup>\*</sup>Note: Refer to Toronto DS (Distribution System) Annual Report for Lead (Pb) testing data

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Alachlor	Jan - Dec 2015	0 - 0	μg/L	No
Aldicarb	Jan - Dec 2015	0 - 0	μg/L	No
Aldrin + Dieldrin	Jan - Dec 2015	0 - 0	μg/L	No
Atrazine + N-dealkylated metobolites	Jan - Dec 2015	0.125 - 0.146	μg/L	No
Azinphos-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Bendiocarb	Jan - Dec 2015	0 - 0	μg/L	No
Benzene	Jan - Dec 2015	0 - 0	μg/L	No
Benzo(a)pyrene	Jan - Dec 2015	0 - 0	μg/L	No
Bromoxynil	Jan - Dec 2015	0 - 0	μg/L	No
Carbaryl	Jan - Dec 2015	0 - 0	μg/L	No
Carbofuran	Jan - Dec 2015	0 - 0	μg/L	No
Carbon Tetrachloride	Jan - Dec 2015	0 - 0	μg/L	No
Chlordane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Chlorpyrifos	Jan - Dec 2015	0 - 0	μg/L	No
Cyanazine	Jan - Dec 2015	0.002 - 0.003	μg/L	No
Diazinon	Jan - Dec 2015	0 - 0	μg/L	No
Dicamba	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
1,4-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichloroethane	Jan - Dec 2015	0 - 0	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan - Dec 2015	0 - 0	μg/L	No
Dichloromethane	Jan - Dec 2015	0 - 0	μg/L	No
2-4 Dichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan - Dec 2015	0 - 0.0182	μg/L	No

(PIBS 4435e01) Page **5** of **6** 

Diclofop-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Dimethoate	Jan - Dec 2015	0 - 0	μg/L	No
Dinoseb	Jan - Dec 2015	0 - 0	μg/L	No
Diquat	Jan - Dec 2015	0	μg/L	No
Diuron	Jan - Dec 2015	0 - 0.0013	μg/L	No
Glyphosate	Jan - Dec 2015	0	μg/L	No
Heptachlor + Heptachlor Epoxide	Jan - Dec 2015	0 - 0	μg/L	No
Lindane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Malathion	Jan - Dec 2015	0 - 0	μg/L	No
Methoxychlor	Jan - Dec 2015	0 - 0	μg/L	No
Metolachlor	Jan - Dec 2015	0.0069 - 0.0195	μg/L	No
Metribuzin	Jan - Dec 2015	0 - 0	μg/L	No
Monochlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Paraquat	Jan - Dec 2015	0	μg/L	No
Parathion	Jan - Dec 2015	0 - 0	μg/L	No
Pentachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Phorate	Jan - Dec 2015	0 - 0	μg/L	No
Picloram	Jan - Dec 2015	0 - 0	μg/L	No
Polychlorinated Biphenyls (PCB)	Jan - Dec 2015	0 - 0	μg/L	No
Prometryne	Jan - Dec 2015	0 - 0	μg/L	No
Simazine	Jan - Dec 2015	0.0062 - 0.0066	μg/L	No
THM (Note: show latest annual average)	Jan - Dec 2015	17.7	μg/L	No
Temephos	Jan - Dec 2015	0 - 0	μg/L	No
Terbufos	Jan - Dec 2015	0 - 0	μg/L	No
Tetrachloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,3,4,6-Tetrachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Triallate	Jan - Dec 2015	0 - 0	μg/L	No
Trichloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,4,6-Trichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan - Dec 2015	0 - 0	μg/L	No
Trifluralin	Jan - Dec 2015	0 - 0	μg/L	No
Vinyl Chloride	Jan - Dec 2015	0 - 0	μg/L	No

## 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 (min.) - (max.)	Unit of Measure	Date of Sample
NONE			

(PIBS 4435e01) Page **6** of **6** 

#### CITY OF TORONTO DRINKING WATER SYSTEM ANNUAL REPORT

Drinking-Water System Number:220004536Drinking-Water System Name:City of Toronto Drinking Water System (F. J. Horgan)Drinking-Water System Owner:City of TorontoDrinking-Water System Category:Large Municipal ResidentialPeriod being reported:January 1, 2015 to December 31, 2015

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:

<b>Drinking Water System Name</b>	Drinking Water System Number
Region of York - receives some of their water from	260001929
Toronto	

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
- [ ] Public access/notice via Public Request
- [ ] Public access/notice via a Public Library
- Public access/notice via other method \_\_\_\_\_

(PIBS 4435e01) Page **1** of **6** 

#### **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 520 kilometers of trunk watermains and 5,525 kilometers of distribution watermains.

The F.J. Horgan Water Treatment Plant is a direct water treatment plant, has a rated capacity of 800,000 m<sup>3</sup>/day and is located at 201 Copperfield Road, Toronto.

The other three (3) Toronto Water Treatment plants are as follows:

- R.L. Clark Water Treatment Plant (Rated Capacity of 615,000 m<sup>3</sup>/day) and is located at 45 Twenty Third Street, Toronto
- R.C. Harris Water Treatment Plant (Rated Capacity of 950,000 m³/day) and is located at 2701 Queen Street East, Toronto
- Island Water Treatment Plant (Rated Capacity of 410,000 m³/day) and is located on Centre Island, Toronto

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

Alum (Aluminum sulphate)

Polyaluminum Chloride (PACL - SternPAC)

Chlorine

Sulphur dioxide

Hydrofluosilicic acid

Aqua ammonia

Liquid Oxygen

Ozone

Sodium bisulphite (SBS)

Phosphoric acid

Polymer - Anionic (FLO AF340) for waste residuals treatment

Polymer - Cationic (Magnafloc LT 7996)

#### Were any significant expenses incurred to?

[X] Install required equipment

[X] Repair required equipment

[X] Replace required equipment

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

**Capital Projects** - The following amounts relate to various projects during 2015 and do not represent the total project costs. These numbers do not include the normal operating and maintenance costs.

No.	Project Name	Description	Monetary Expense
1.	Plant Expansion	Design, Construction Admin and Construction	\$741,000
2.	Replacement of MCCS	Pre-design and contract Admin	\$132,000

(PIBS 4435e01) Page **2** of **6** 

3.	Facility & Process Upgrades	Raw & Treated water pump upgrades; Access road repaving; HVAC Rehab. & Scrubber Engineering; Elec. Grounding system & Bulk Chem. Un-loading improvement.	\$1.53 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
August 9, 2015	Individual Effluent Turbidity for Filter 11 & 12	N/A	NTU	Filters taken out of service due to suspect incorrect readings.	August 9, 2015
August 31, 2015	Prometon Propazine	0.0008 0.0010	μg/L	Resample.	September 3, 2015
September 9, 2015	Prometon Porpoxur	0.0006 0.0002	μg/L	As directed by Medical Officer of Health, no remedial action necessary at this time	October 5, 2015

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	356	0 - 3	0 - 10	356	0 - 57
Treated	1452	1452 A (100%A)	1452 A (100%A)	1452	0 - 38

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min.) - (max.)	Unit of Measure	
Turbidity	8760	0.05 - 0.20	NTU	
Chlorine	8760	1.27 - 1.86	mg/L	
*Fluoride (If the DWS provides fluoridation)	340 (plus continuous monitoring)	0.40 - 0.68	mg/L	
<b>Note</b> : For continuous monitors use 8760 as the number of samples.				

<sup>\*</sup> Fluoride Grab Sample numbers and range of results are reported using data from days when fluoridation was in service.

(PIBS 4435e01) Page **3** of **6** 

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
13-Dec-2013 & 11-Feb- 2015 Municipal Drinking Water Licence 13-Dec-2012 & 11-Feb- 2015 Drinking Water Works Permit	Total Suspended Solids	Jan 31 - Dec 31, 2015	6.92	mg/L

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Antimony	Jan - Dec 2015	0.0002 - 0.0002	mg/L	No
Arsenic	Jan - Dec 2015	0.0011 - 0.0013	mg/L	No
Barium	Jan - Dec 2015	0.0192 - 0.0221	mg/L	No
Boron	Jan - Dec 2015	0.0225 - 0.0234	mg/L	No
Cadmium	Jan - Dec 2015	0 - 0	mg/L	No
Chromium	Jan - Dec 2015	0 - 0.0005	mg/L	No
Lead	Jan - Dec 2015	0 - 0	mg/L	No
Mercury	Jan - Dec 2015	0 - 0	mg/L	No
Selenium	Jan - Dec 2015	0 - 0.0007	mg/L	No
Sodium	Jan - Dec 2015	12.6 - 15.9	mg/L	No
Uranium	Jan - Dec 2015	0.0003 - 0.0004	mg/L	No
Nitrite	Jan - Dec 2015	0 - 0.005	mg/L	No
Nitrate	Jan - Dec 2015	0.35 - 0.47	mg/L	No

#### Summary of Lead (Pb) 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)

<b>Location Type</b>	Number of Samples	Range of Lead Results (min.) - (max.)	Unit of Measure	Number of Exceedances
*Plumbing				
*Distribution				

<sup>\*</sup>Note: Refer to Toronto DS (Distribution System) Annual Report for Lead (Pb) testing data

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

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Alachlor	Jan - Dec 2015	0 - 0	μg/L	No
Aldicarb	Jan - Dec 2015	0 - 0	μg/L	No
Aldrin + Dieldrin	Jan - Dec 2015	0 - 0	μg/L	No
Atrazine + N-dealkylated metobolites	Jan - Dec 2015	0.043 - 0.06	μg/L	No
Azinphos-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Bendiocarb	Jan - Dec 2015	0 - 0	μg/L	No
Benzene	Jan - Dec 2015	0 - 0	μg/L	No
Benzo(a)pyrene	Jan - Dec 2015	0 - 0	μg/L	No
Bromoxynil	Jan - Dec 2015	0 - 0	μg/L	No
Carbaryl	Jan - Dec 2015	0 - 0	μg/L	No
Carbofuran	Jan - Dec 2015	0 - 0	μg/L	No
Carbon Tetrachloride	Jan - Dec 2015	0 - 0	μg/L	No
Chlordane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Chlorpyrifos	Jan - Dec 2015	0 - 0	μg/L	No
Cyanazine	Jan - Dec 2015	0.0009 - 0.001	μg/L	No
Diazinon	Jan - Dec 2015	0 - 0	μg/L	No
Dicamba	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
1,4-Dichlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan - Dec 2015	0 - 0	μg/L	No
1,2-Dichloroethane	Jan - Dec 2015	0 - 0	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan - Dec 2015	0 - 0	μg/L	No
Dichloromethane	Jan - Dec 2015	0 - 0.2	μg/L	No
2-4 Dichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan - Dec 2015	0 - 0	μg/L	No
Diclofop-methyl	Jan - Dec 2015	0 - 0	μg/L	No
Dimethoate	Jan - Dec 2015	0 - 0	μg/L	No
Dinoseb	Jan - Dec 2015	0 - 0	μg/L	No
Diquat	Jan - Dec 2015	0 - 0	μg/L	No
Diuron	Jan - Dec 2015	0 - 0	μg/L	No
Glyphosate	Jan - Dec 2015	0 - 0	μg/L	No
Heptachlor + Heptachlor Epoxide	Jan - Dec 2015	0 - 0	μg/L	No
Lindane (Total)	Jan - Dec 2015	0 - 0	μg/L	No
Malathion	Jan - Dec 2015	0 - 0	μg/L	No
Methoxychlor	Jan - Dec 2015	0 - 0	μg/L	No

(PIBS 4435e01) Page **5** of **6** 

Metolachlor	Jan - Dec 2015	0.0018 - 0.0023	μg/L	No
Metribuzin	Jan - Dec 2015	0 - 0	μg/L	No
Monochlorobenzene	Jan - Dec 2015	0 - 0	μg/L	No
Paraquat	Jan - Dec 2015	0 - 0	μg/L	No
Parathion	Jan - Dec 2015	0 - 0	μg/L	No
Pentachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Phorate	Jan - Dec 2015	0 - 0	μg/L	No
Picloram	Jan - Dec 2015	0 - 0	μg/L	No
Polychlorinated Biphenyls(PCB)	Jan - Dec 2015	0 - 0	μg/L	No
Prometryne	Jan - Dec 2015	0 - 0	μg/L	No
Simazine	Jan - Dec 2015	0.0012 - 0.0016	μg/L	No
THM	Jan - Dec 2015	6.5	μg/L	No
(Note: show latest annual average)	3411 1500 2013	0.5	μg/L	110
Temephos	Jan - Dec 2015	0 - 0	μg/L	No
Terbufos	Jan - Dec 2015	0 - 0	μg/L	No
Tetrachloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,3,4,6-Tetrachlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
Triallate	Jan - Dec 2015	0 - 0	μg/L	No
Trichloroethylene	Jan - Dec 2015	0 - 0	μg/L	No
2,4,6-Trichlorophenol	Jan - Dec 2015	0 - 0	μg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan - Dec 2015	0 - 0	μg/L	No
Trifluralin	Jan - Dec 2015	0 - 0	μg/L	No
Vinyl Chloride	Jan - Dec 2015	0 - 0	μg/L	No

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 (min.) - (max.)	Unit of Measure	Date of Sample
NONE			

Page **6** of **6** 

#### CITY OF TORONTO DRINKING WATER SYSTEM ANNUAL REPORT

Drinking-Water System Number:260090363Drinking-Water System Name:City of Toronto Drinking Water System – Toronto DSDrinking-Water System Owner:City of TorontoDrinking-Water System Category:Large Municipal ResidentialPeriod being reported:January 1, 2015 to December 31, 2015

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [X] No []	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet?  Yes [X] No []	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be	Number of Interested Authorities you report to:
available for inspection.  Metro Hall 55 John Street Toronto, Ontario M5V 3C6	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:

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

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
- [ ] Public access/notice via Public Request
- [ ] Public access/notice via a Public Library
- [ ] Public access/notice via other method \_\_\_\_\_

(PIBS 4435e01) Page 1 of 20

#### **Drinking Water Systems Regulations**

#### **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 520 kilometers of trunk watermains and 5,525 kilometers of distribution watermains.

Working from eight facilities across the city, District Operations staff inspects, operate and maintain the existing water distribution and wastewater collection systems as well as stormwater management facilities.

There are four (4) Toronto Water Treatment plants:

- R.L. Clark Water Treatment Plant (Rated Capacity of 615,000 m3/day) and is located at 45 Twenty Third Street, Toronto
- R.C. Harris Water Treatment Plant (Rated Capacity of 950,000 m3/day) and is located at 2701 Queen Street East, Toronto
- F.J. Horgan Water Treatment Plant (Rated Capacity of 800,000 m3/day) and is located at 201 Copperfield Road, Toronto
- Island Water Treatment Plant (Rated Capacity of 410,000 m3/day) and is located on Centre Island, Toronto

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

N/A

#### Were any significant expenses incurred to?

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

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

Please note that the following amounts relate to various projects during 2015 and do not represent the total project costs. These numbers do not include normal operating and maintenance costs.

#### **District Operations (Distribution):**

\$51.9 million Watermain Replacement Water Service Replacement \$23.8 million Watermain Rehabilitation \$40.7 million

#### Water Supply:

Cast Iron Trunk Main Replacement \$9.0 million Transmission Facility Rehabilitation \$5.6 million Transmission Main Rehabilitation \$0.62 million

(PIBS 4435e01) Page 2 of 20

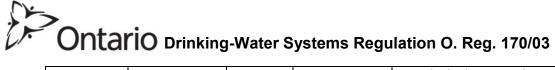
#### **Drinking Water Systems Regulations**

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

**Note**: "Incident date" is the date adverse result was reported to MOECC-SAC. "Corrective action date" is the date the location was resampled.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
1-Jan-15	E. Coli / Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	1-Jan-15
1-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	2-Jan-15
3-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	4-Jan-15
4-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Watermain Isolated	6-Jan-15
5-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Jan-15
5-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Jan-15
6-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	6-Jan-15
6-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	6-Jan-15
7-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	7-Jan-15
8-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Jan-15
8-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Jan-15
8-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	9-Jan-15
9-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Hydrant taken out of service	9-Jan-15
9-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	11-Jan-15
11-Jan-15	Total Coliform	Presence	Result in 100 mL sample	Hydrant taken out of service	12-Jan-15
12-Jan-15	Combined Chlorine Residual	<0.25	mg/L	Flushed watermain and resampled. Results Acceptable.	12-Jan-15
4-Mar-15	Analyzer failure –total chlorine residual not available	<0.25	mg/L	Communication loss with Dufferin Reservoir restored	4-Mar-15

(PIBS 4435e01) Page **3** of **20** 

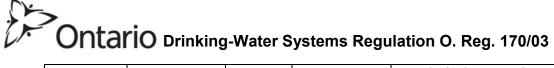


8-Apr-15	Lead	>0.010	mg/L	Flushed watermain and resampled. Results Acceptable.	9-Apr-15
17-Apr-15	Lead	>0.010	mg/L	Flushed watermain and resampled. Results Acceptable.	22-Apr-15
17-Apr-15	Lead	>0.010	mg/L	Flushed watermain and resampled. Results Acceptable.	22-Apr-15
4-May-15	Combined Chlorine Residual	<0.25	mg/L	Flushed watermain and resampled. Results Acceptable.	5-May-15
14-May-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-May-15
15-May-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	15-May-15
15-May-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	19-May-15
30-May-15	Analyzer failure – total chlorine residual not available	<0.25	mg/L	Analyzer calibrated and chlorine residual checked. Results acceptable	1-Jun-15
4-Jun-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	5-Jun-15
5-Jun-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	6-Jun-15
7-Jun-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	7-Jun-15
26-Jun-15	E. Coli / Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	26-Jun-15
27-Jun-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Jun-15
28-Jun-15	E. Coli / Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Jun-15
30-Jun-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Jun-15
1-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	30-Jun-15
1-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	2-Jul-15
1-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	30-Jun-15

(PIBS 4435e01) Page **4** of **20** 

		1			
1-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	30-Jun-15
1-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	2-Jul-15
1-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	2-Jul-15
2-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Jul-15
2-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	2-Jul-15
2-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable	8-Jul-15
3-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results acceptable	3-Jul-15
3-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	3-Jul-15
3-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	3-Jul-15
7-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	8-Jul-15
8-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	8-Jul-15
9-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	9-Jul-15
23-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	23-Jul-15
23-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	23-Jul-15
25-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable	24-Jul-15
26-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	27-Jul-15
29-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	29-Jul-15
29-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Jul-15
29-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Jul-15

(PIBS 4435e01) Page **5** of **20** 



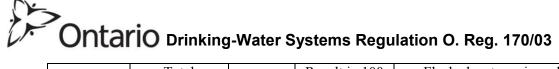
	_				
30-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	30-Jul-15
30-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	30-Jul-15
30-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	31-Jul-15
31-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	30-Jul-15
31-Jul-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	30-Jul-15
1-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	31-Jul-15
1-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	31-Jul-15
1-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	31-Jul-15
2-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Aug-15
2-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Aug-15
2-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Aug-15
2-Aug-15	E. Coli / Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	2-Aug-15
4-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	4-Aug-15
4-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	4-Aug-15
4-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	5-Aug-15
4-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	4-Aug-15
5-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled	5-Aug-15
7-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	7-Aug-15
7-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	6-Aug-15
8-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	7-Aug-15
8-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	7-Aug-15

(PIBS 4435e01) Page **6** of **20** 



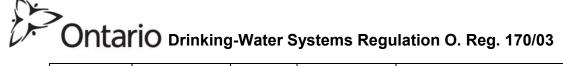
9-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Aug-15
9-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Aug-15
11-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	11-Aug-15
11-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	11-Aug-15
12-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	13-Aug-15
12-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	13-Aug-15
13-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	13-Aug-15
13-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	13-Aug-15
14-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	14-Aug-15
15-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Aug-15
15-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Aug-15
15-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Aug-15
15-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	16-Aug-15
15-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	16-Aug-15
16-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	16-Aug-15
16-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	14-Aug-15
16-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	17-Aug-15
16-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	18-Aug-15
16-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Aug-15
16-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	17-Aug-15
17-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	18-Aug-15

Page 7 of 20



18-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	17-Aug-15
18-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	17-Aug-15
18-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	17-Aug-15
18-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	17-Aug-15
18-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	17-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	20-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Blow off and Hydrant isolated from active distribution system	19-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	20-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	19-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	19-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Hydrant Isolated	19-Aug-15
19-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	20-Aug-15
20-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	20-Aug-15
21-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	21-Aug-15
21-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Blow off and section of watermain isolated from active distribution system	25-Aug-15
22-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	19-Aug-15
22-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	24-Aug-15
22-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	21-Aug-15
22-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	23-Aug-15
23-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	19-Aug-15
23-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	24-Aug-15

(PIBS 4435e01) Page **8** of **20** 



26-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Aug-15
26-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Aug-15
26-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	26-Aug-15
26-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	26-Aug-15
28-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Aug-15
28-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	27-Aug-15
29-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Aug-15
30-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	30-Aug-15
30-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	30-Aug-15
30-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	31-Aug-15
30-Aug-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	30-Aug-15
4-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	8-Sep-15
5-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	5-Sep-15
5-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Sep-15
7-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Sep-15
10-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	10-Sep-15
11-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	11-Sep-15
12-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	12-Sep-15
13-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	14-Sep-15
14-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	15-Sep-15

(PIBS 4435e01) Page **9** of **20** 

14-Sep-15			1			ı
14-Sep-15	14-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	15-Sep-15
14-Sep-15	146 15	Total	Ъ	Result in 100	Flushed watermain and	15.0 15
17-Sep-15	14-Sep-15	Coliform	Presence	mL sample	resampled.	15-Sep-15
17-Sep-15	16.0 15		Ъ		_	15.0 15
17-Sep-15	16-Sep-15	Coliform	Presence	mL sample	Resampled.	15-Sep-15
17-Sep-15	15.0 15		-		Flushed watermain and	160 15
17-Sep-15	17-Sep-15		Presence	mL sample		16-Sep-15
17-Sep-15	1- 0 1-		_			160 15
17-Sep-15	17-Sep-15		Presence			16-Sep-15
17-Sep-15	15.0 15		-			160 15
17-Sep-15	17-Sep-15	Coliform	Presence	mL sample		16-Sep-15
17-Sep-15   Coliform   Presence   Total   Coliform   Presence   Coliform   Presence   Coliform   Presence   Coliform   Presence   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Presence   Coliform   Coliform   Presence   Coliform   Coliform   Coliform   Presence   Coliform   Coliform   Coliform   Coliform   Presence   Coliform	15.0 15	Total	Ъ			16.0 15
Total Coliform	17-Sep-15		Presence	mL sample		16-Sep-15
17-Sep-15   Coliform   Presence   ML sample   Result in 100 mL sampl	15 0 15	Total	ъ			16.6 15
Total Coliform	17-Sep-15		Presence	mL sample		16-Sep-15
18-Sep-15   Total Coliform   Presence Colifo		TD 4 1		•		
18-Sep-15	18-Sep-15		Presence		l *	17-Sep-15
Total Coliform   Presence   Result in 100 mL sample   Result in 100 mL sample   Total Coliform   Presence   Result in 100 mL sample   Total Coliform   Tot	1	Coliform		mL sample		1
18-Sep-15   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   Result in 100   Total   Coliform   Presence   Result in 100   mL sample   Result in 100   Total   Result in 100   mL sample   Result in 100   Total   Result in 100   mL sample   Result in 100   Total   Result in 100   mL sample   Result in 100   Total   Total   Result in 100   Total   Total   Result in 100   Total   Total   Total   Result in 100   Total   Tot	10.0 15	Total	D.	Result in 100		10.0 15
18-Sep-15Total Coliform ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1518-Sep-15Total Coliform ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.19-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.19-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1520-Sep-15Total ColiformPresenceResult in	18-Sep-15		Presence		-	18-Sep-15
18-Sep-15   Coliform   Presence   mL sample   resampled.   17-Sep-15     18-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15     18-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15     18-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15     18-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   19-Sep-15     18-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   Results   19-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   17-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Presence   Result in 100   Flushed watermain and resampled.   1	10.0 15		ъ			15 6 15
18-Sep-15Total Coliform ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.19-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.19-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.17-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1520-Sep-15Total ColiformPresenceRes	18-Sep-15	Coliform	Presence	mL sample		17-Sep-15
18-Sep-15   Coliform   Presence   mL sample   resampled.   17-Sep-15   18-Sep-15   Total Coliform   Presence   Result in 100 mL sample   resampled.   17-Sep-15   18-Sep-15   Total Coliform   Presence   Result in 100 mL sample   Result in 100 mL sampl	10.0 15		-			15 0 15
18-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.19-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.19-Sep-1518-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1520-Sep-15Total ColiformPresenceResult in 100 mL sampleHydrant isolated and resampled.24-Sep-1520-Sep-15Total ColiformPresenceResult in 100 mL sampleHydrant isolated and resampled.21-Sep-15	18-Sep-15		Presence			17-Sep-15
18-Sep-15   Coliform   Presence   mL sample   resampled.   17-Sep-15     18-Sep-15   Total Coliform   Presence   Result in 100 mL sample   Results in 100 mL sample   Result in 100 mL sample   R	10.0 15		ъ			15 6 15
18-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.18-Sep-15Total ColiformPresence PresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.18-Sep-15Total ColiformPresence Presence PresenceResult in 100 mL sampleFlushed watermain and resampled. Plushed watermain and resampled.19-Sep-15Total ColiformPresence Presence PresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresence Presence Presen	18-Sep-15	Coliform	Presence	mL sample	resampled.	1/-Sep-15
18-Sep-15   Coliform   Presence   mL sample   Result in 100 mL sample   Total Coliform   Presence   Result in 100 mL sample   Result in 100 mL sample   Total Coliform   Presence   Result in 100 mL sample   Total Coliform   Total Coliform   Presence   Result in 100 mL sample   Total Coliform   Tot				Î		
Total Coliform   Presence   Result in 100 mL sample   Sample   Results mL sample   Result mL sample	18-Sep-15		Presence		resampled. Results	19-Sep-15
18-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled. Results Acceptable.18-Sep-15Total ColiformPresence ML sampleFlushed watermain and resampled.17-Sep-1519-Sep-15Total ColiformPresence ML sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresence ML sampleFlushed watermain and resampled.18-Sep-1520-Sep-15Total ColiformPresence ML sampleFlushed watermain and resampled.24-Sep-1520-Sep-15Total ColiformPresence ML sampleHydrant isolated and redisinfected21-Sep-1520-Sep-15Total ColiformPresence ML sampleHydrant isolated and redisinfected21-Sep-15	1	Coliform		mL sample	-	1
18-Sep-15   Coliform   Presence   mL sample   Results   Acceptable.   17-Sep-15     18-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   Result in 100   resampled.   17-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   mL sample   resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   18-Sep-15     19-Sep-15   Total   Coliform   Presence   Result in 100   Flushed watermain and resampled.   24-Sep-15     20-Sep-15   Total   Presence   Result in 100   Total   Coliform   Presence   Result in 100   Total   Presence   Presence   Presence   Presence   Presence   Presence   Presence   Presence		T . 1		D 1: 100		
18-Sep-15   Total Coliform   Presence Colifo	18-Sep-15		Presence		resampled. Results	19-Sep-15
18-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.17-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1520-Sep-15Total ColiformPresenceResult in 100 mL sampleHydrant isolated and re- disinfected21-Sep-1520-Sep-15Total ColiformPresenceResult in 100 mL sampleHydrant isolated and re- disinfected21-Sep-1520-Sep-15TotalPresenceResult in 100Flushed watermain and disinfected26-Sep-15	1	Colliorm		mL sample		•
19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  20-Sep-15 Total Coliform Result in 100 mL sample resampled.  20-Sep-15 Total Result in 100 mL sample Result in 100 mL sample disinfected  20-Sep-15 Total Result in 100 mL sample Result in 10	10 C 15	Total	D	Result in 100		17.0 15
19-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.24-Sep-1520-Sep-15Total ColiformPresenceResult in 100 mL sampleHydrant isolated and re- disinfected21-Sep-1520-Sep-15TotalPresenceResult in 100Flushed watermain and disinfected21-Sep-15	18-Sep-15	Coliform	Presence	mL sample	resampled.	1/-Sep-15
19-Sep-15	10 0 15		D			10 0 17
19-Sep-15Total ColiformPresence ColiformResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresence Presence ColiformResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresence ColiformResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresence ColiformResult in 100 mL sampleFlushed watermain and resampled.24-Sep-1520-Sep-15Total ColiformPresence ColiformResult in 100 mL sampleHydrant isolated and redisinfected21-Sep-1520-Sep-15Total ColiformPresence ColiformResult in 100 mL sampleFlushed watermain and disinfected21-Sep-15	19-Sep-15	Coliform	Presence	mL sample	resampled.	18-Sep-15
19-Sep-15	10 Can 15		Dragage			10 Car 15
19-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.24-Sep-1520-Sep-15Total ColiformPresence ME sampleHydrant isolated and redisinfected21-Sep-1520-Sep-15Total ColiformPresence ME sampleFlushed watermain and disinfected21-Sep-1520-Sep-15Total Presence ME sult in 100 mL sampleFlushed watermain and disinfected26-Sep-15	19-Sep-15	Coliform	Presence	mL sample	resampled.	18-Sep-15
19-Sep-15ColiformPresencemL sampleresampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresenceResult in 100 mL sampleFlushed watermain and resampled.24-Sep-1520-Sep-15Total ColiformPresence ML sampleHydrant isolated and redisinfected21-Sep-1520-Sep-15Total ColiformPresence ML sampleFlushed watermain and disinfected21-Sep-1520-Sep-15Total Presence ME sult in 100 mL sampleFlushed watermain and disinfected26-Sep-15	10 9 15	Total	D		Flushed watermain and	10 0 15
19-Sep-15Total ColiformPresence ColiformResult in 100 mL sampleFlushed watermain and resampled.18-Sep-1519-Sep-15Total ColiformPresence ML sampleFlushed watermain and resampled.24-Sep-1520-Sep-15Total ColiformPresence ML sampleHydrant isolated and redisinfected21-Sep-1520-Sep-15Total ColiformPresence ME sampleResult in 100 ML sampleFlushed watermain and disinfected21-Sep-1520-Sep-15Total Presence ME sult in 100 ME sampleFlushed watermain and ME sample26-Sep-15	19-Sep-15	Coliform	Presence			18-Sep-15
19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  20-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  20-Sep-15 Total Coliform Presence Result in 100 mL sample disinfected  20-Sep-15 Total Presence Result in 100 Flushed watermain and 21-Sep-15 mL sample disinfected  20-Sep-15 Total Presence Result in 100 Flushed watermain and 26-Sep-15	10 0 15	Total	D			10 0 17
19-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  20-Sep-15 Total Coliform Presence Result in 100 mL sample resampled.  20-Sep-15 Total Presence Result in 100 mL sample disinfected  20-Sep-15 Total Presence Result in 100 Flushed watermain and 21-Sep-15 mL sample disinfected  20-Sep-15 Total Presence Result in 100 Flushed watermain and 26-Sep-15	19-Sep-15	Coliform	Presence	mL sample	resampled.	18-Sep-15
20-Sep-15 Total Coliform Presence Result in 100 Hydrant isolated and redisinfected 21-Sep-15  Total Presence Result in 100 Flushed watermain and 26-Sep-15	10 Can 15	Total	Dragage			24 9 15
20-Sep-15 Total Coliform Presence Result in 100 Hydrant isolated and redisinfected 21-Sep-15  Total Presence Result in 100 Flushed watermain and 26-Sep-15	19-Sep-15	Coliform	Presence	mL sample	resampled.	24-Sep-15
20-Sep-15 Coliform Presence mL sample disinfected  20-Sep-15 Total Presence Result in 100 Flushed watermain and 26-Sep-15	20 9 15	Total	D			21 0 15
20-Sep-15 Total Presence Result in 100 Flushed watermain and 26-Sep-15	20-Sep-15	Coliform	Presence	mL sample		21-Sep-15
Coliform   Presence   mL sample   resampled.   26-Sep-15	20 Sam 15	Total	Dragage		Flushed watermain and	26 9 15
	20-Sep-15	Coliform	Presence	mL sample	resampled.	20-Sep-15

(PIBS 4435e01) Page **10** of **20** 

• • • • •	Total		Result in 100	Flushed watermain and	
20-Sep-15	Coliform	Presence	mL sample	resampled.	26-Sep-15
20-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	26-Sep-15
20-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	26-Sep-15
23-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	25-Sep-15
24-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	24-Sep-15
24-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	24-Sep-15
25-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	25-Sep-15
25-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	25-Sep-15
26-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	26-Sep-15
26-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Sample line disinfected and Flushed and resampled. Results Acceptable.	26-Sep-15
27-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	26-Sep-15
27-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	26-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
28-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	28-Sep-15
30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	29-Sep-15
30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Sep-15

(PIBS 4435e01) Page **11** of **20** 

30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Sep-15
30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Sep-15
30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	1-Oct-15
30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Sep-15
30-Sep-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	29-Sep-15
1-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	1-Oct-15
1-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	1-Oct-15
1-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	1-Oct-15
1-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	1-Oct-15
1-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	1-Oct-15
1-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	1-Oct-15
3-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Oct-15
3-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Oct-15
3-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Oct-15
3-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	2-Oct-15
4-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Oct-15
4-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Oct-15
4-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Oct-15
4-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	5-Oct-15
7-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	6-Oct-15
7-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	6-Oct-15
7-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	6-Oct-15
7-Oct-15	E. Coli / Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	8-Oct-15

(PIBS 4435e01) Page **12** of **20** 

8-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
8-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Oct-15
8-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Oct-15
8-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	8-Oct-15
9-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
9-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	9-Oct-15
9-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	9-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	9-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	13-Oct-15
10-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	11-Oct-15
11-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Oct-15
11-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	14-Oct-15
11-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Hydrant re-disinfected Flushed watermain and resampled. Results Acceptable.	17-Dec15
11-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Hydrant re-disinfected Flushed watermain and resampled. Results Acceptable.	17-Dec15
11-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Hydrant re-disinfected Flushed watermain and resampled. Results Acceptable.	17-Dec15
11-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	11-Oct-15

(PIBS 4435e01) Page **13** of **20** 

13-Oct-15	Total Coliform	Presence	Result in 100	Flushed watermain and	13-Oct-15
14-Oct-15	Total Coliform	Presence	mL sample Result in 100 mL sample	resampled.  Flushed watermain and resampled.	14-Oct-15
16-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	15-Oct-15
16-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	19-Oct-15
16-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	19-Oct-15
16-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Watermain taken out of service Oct 20 and redisinfected. Flushed watermain and resampled. Results Acceptable.	2-Dec-15
16-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	16-Oct-15
16-Oct-15	Combined Chlorine Residual	<0.25	mg/L	Flushed watermain and resampled. Results Acceptable.	16-Oct-15
23-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	23-Oct-15
23-Oct-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	23-Oct-15
31-Oct-15	Analyzer failure – total chlorine residual not available	<0.25	mg/L	Analyzer calibrated and chlorine residual checked. Results acceptable	31-Oct-15
7-Nov-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	7-Nov-15
9-Nov-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	9-Nov-15
22-Nov-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	23-Nov-15
25-Nov-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	26-Nov-15
2-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	3-Dec-15

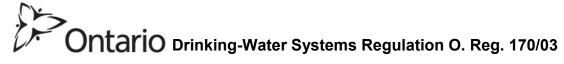
(PIBS 4435e01) Page **14** of **20** 

				Flushed watermain and	
7-Dec-15	Total Coliform	Presence	Result in 100 mL sample	resampled. Results Acceptable.	7-Dec-15
9-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	9-Dec-15
13-Dec-15	E. Coli / Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	13-Dec-15
17-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	18-Dec-15
17-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	18-Dec-15
17-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled.	18-Dec-15
20-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	19-Dec-15
23-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	23-Dec-15
24-Dec-15	Total Coliform	Presence	Result in 100 mL sample	Flushed watermain and resampled. Results Acceptable.	24-Dec-15

## $Microbiological\ testing\ done\ under\ the\ Schedule\ 10,\ 11\ or\ 12\ of\ Regulation\ 170/03,\ during\ this\ reporting\ period.$

	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.)
*Distribution	4186	4185 A (99.9% A)	4172 A (99.7% A)	4186	0 - 6000
Transmission	1084	1084 A (100% A)	1081 A (99.7% A)	1084	0 - 1321
Main Work	1196	1193 A (99.7% A)	1120 A (93.6% A)	1195	0 ->5700
Resample and vicinity	691	690 A (99.9% A)	542 A (78.4% A)	691	0 - 3477

<sup>\*</sup>Note: "Distribution" includes samples submitted for Water Quality Inquiry as well as distribution samples.



Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

#### For Distribution

	Number of Grab Samples	Range of Results (min.) - (max.)
Turbidity	4154	<0.1 – 4.67 NTU
Chlorine	4198	0.19 – 1.91 mg/L

#### For Transmission

	Number of Grab Samples	Range of Results (min.) - (max.)
Turbidity	1091	<0.1 – 4.34 NTU
Chlorine	1092	0.29 – 1.87 mg/L

#### For Main Work

	Number of Grab Samples	Range of Results (min.) - (max.)
Turbidity	1196	0 – 3.86 NTU
Chlorine	1200	0.41 - 1.80  mg/L

For Resample/Vicinity

	Number of Grab Samples	Range of Results (min.) - (max.)
Turbidity	699	<0.1 – 2.50 NTU
Chlorine	705	0.48 – 1.64 mg/L

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
None				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results for Transmission samples.

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				

(PIBS 4435e01) Page **16** of **20** 

Mercury				
Selenium				
Sodium	Jan – Dec 2015	12.8 - 17.8	mg/L	No
Uranium				
Fluoride				
Nitrite	Jan – Dec 2015	0 - 0.006	mg/L	No
Nitrate	Jan – Dec 2015	0.30 - 0.53	mg/L	No

#### Summary of Lead (Pb) 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)

<b>Location Type</b>	Number of Samples	Range of Lead Results (min.) - (max.)	Unit of Measure	Number of Exceedances
Plumbing				
Distribution	45	<0.00005 - 0.104	mg/L	3

<sup>\*</sup>Note: The City of Toronto has been granted Lead Regulatory Relief under Schedule D of the Municipal Drinking Water License.

## Summary of Organic parameters sampled during this reporting period or the most recent sample results for <u>DISTRIBUTION</u> samples

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value (min.) - (max.)	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated				
metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene	Jan-Dec 2015	0 - 0	mg/L	No
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride	Jan-Dec 2015	0 - 0	mg/L	No
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene	Jan-Dec 2015	0 - 0	mg/L	No
1,4-Dichlorobenzene	Jan-Dec 2015	0 - 0	mg/L	No
Dichlorodiphenyltrichloroethane				
(DDT) + metabolites				
1,2-Dichloroethane	Jan-Dec 2015	0 - 0	mg/L	No

(PIBS 4435e01) Page **17** of **20** 

	T			
1,1-Dichloroethylene	Jan-Dec 2015	0 - 0	mg/L	No
(vinylidene chloride)		0 0	_	3.7
Dichloromethane	Jan-Dec 2015	0 - 0	mg/L	No
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	Jan-Dec 2015	0 - 0	mg/L	No
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls (PCB)				
Prometryne				
Simazine				
THM				
(Note: show latest annual average)	Jan-Dec 2015	15.3	mg/L	No
Temephos				
Terbufos				
Tetrachloroethylene	Jan-Dec 2015	0 - 0	mg/L	No
2,3,4,6-Tetrachlorophenol	Jan-Dec 2013	0 - 0	IIIg/L	110
Triallate				
Trichloroethylene	Jan-Dec 2015	0-0	mg/L	No
2,4,6-Trichlorophenol	Jan-Dec 2013	0-0	mg/L	110
, , , , ,			+	
2,4,5-Trichlorophenoxy acetic acid				
(2,4,5-T)				
Trifluralin	Ion Dog 2015	0 0	400 O/I	No
Vinyl Chloride	Jan-Dec 2015	0 - 0	mg/L	No

(PIBS 4435e01) Page **18** of **20** 

Summary of Organic parameters sampled during this reporting period or the most recent sample results for <u>TRANSMISSION (SUPPLY)</u> samples.

**Note**: A result of zero indicates that the result obtained was below the method detection / reporting limit.

Parameter	Sample Date	Result Value	Unit of	Exceedance
	Sumple Bute	(min.) - (max.)	Measure	Zaccounico
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated				
metobolites				
Azinphos-methyl				
Bendiocarb			-	
Benzene	Jan-Dec 2015	0 - 0	mg/L	No
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride	Jan-Dec 2015	0 - 0	mg/L	No
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene	Jan-Dec 2015	0 - 0	mg/L	No
1,4-Dichlorobenzene	Jan-Dec 2015	0 - 0	mg/L	No
Dichlorodiphenyltrichloroethane				
(DDT) + metabolites				
1,2-Dichloroethane	Jan-Dec 2015	0 - 0	mg/L	No
1,1-Dichloroethylene	Jan-Dec 2015	0 - 0	mg/L	No
(vinylidene chloride)			mg/L	
Dichloromethane	Jan-Dec 2015	0 - 0	mg/L	No
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	Jan-Dec 2015	0 - 0	mg/L	No
Paraquat				

(PIBS 4435e01) Page **19** of **20** 

			•	
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls (PCB)				
Prometryne				
Simazine				
THM	Jan-Dec 2015	17.9	ma/I	No
(Note: show latest annual average)	Jan-Dec 2013	17.9	mg/L	NO
Temephos				
Terbufos				
Tetrachloroethylene	Jan-Dec 2015	0 - 0	mg/L	No
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene	Jan-Dec 2015	0 - 0	mg/L	No
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid				
(2,4,5-T)				
Trifluralin				
Vinyl Chloride	Jan-Dec 2015	0 - 0	mg/L	No

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
NONE			