



DRINKING WATER SYSTEM



Summary
Report
2015

2015 Summary Report Toronto (R.C. Harris) Water Treatment Plant

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February 9, 2016

1.0 General Overview

Toronto Water treats, transmits, stores and distributes potable (drinkable) water to all industrial, commercial and household water users in the City of Toronto. The division also delivers water to the southern portion of the Region of York.

Staff in this area are highly trained and specialized, operating four water treatment plants, two laboratories, 18 pumping stations, 10 major ground level storage reservoirs and four elevated storage tanks. Staff maintains about 520 kilometres of trunk watermains that supply the water reservoirs and over 5,525 kilometres of local distribution mains. Policies and practices adopted by the section help the unit to manage significant issues and challenges, including meeting water demands throughout the year, complying with provincial regulations and working responsibly to protect the environment and local water bodies.

This Summary Report is issued by Toronto Water under Schedule 22-2, O. Reg. 170/03 for the R.C. Harris Water Treatment Plant. The report covers the period from January 1, 2015 to December 31, 2015 except where stated otherwise.

2.0 System Approval

The City of Toronto is the operating authority of the Toronto Drinking Water System and has demonstrated through accreditation (received November 10th, 2011) by an independent third party, that the Toronto Water Quality Management System meets the requirements of the Drinking Water Quality Management Standard and the Safe Drinking Water Act, 2002, and is managed in a planned and systematic manner.

A Municipal Drinking Water Licence was renewed for the R.C. Harris Water Treatment Plant by the Ministry of the Environment and Climate Change (MOECC) on February 11, 2015 and was designated as “Licence Number 010-101, Issue Number 4”.

A Drinking Water Works Permit was renewed for R.C. Harris Water Treatment Plant by the Ministry of the Environment and Climate Change on February 11, 2015 and was designated on as “Permit Number 010-201, Issue Number 3”..

An on-site reaccreditation audit of the City of Toronto Drinking Water Quality Management System (QMS) took place in December 2014 by an independent third party. The audit findings identified that the City of Toronto QMS was effectively maintained and continuous improvement of the system was evident. As a result, the City of Toronto received re-accreditation on December 19, 2014.

The R.C. Harris Water Treatment Plant is designated a Class 4 Water Treatment Facility (Certificate No. 445) and is referenced as Drinking Water System Number 220002262.

The current Permit to Take Water is designated by MOECC Reference Number 91-P-3040.

3.0 Site Inspections

The Ministry of the Environment (MOECC) has implemented a rigorous and comprehensive Province-wide approach for the inspection of water systems that focuses on the source, treatment and distribution components as well as water system management practices.

The primary focus of such inspections has been to confirm compliance with provincial legislation and control documents, as well as conformance with MOECC drinking-water related policies for the inspection period.

The Ministry of Environment conducted one (1) plant inspection of the R. C. Harris Water Treatment Plant-during 2015. The site inspection was carried out at the R. C. Harris on April 30, 2015

Specifically, the inspection included a review and assessment of operating practices in relation to the following documents:

- Safe Drinking Water Act, 2002
- Drinking Water Systems Regulation (O. Reg. 170/03)
- Ontario Drinking Water Quality Standards (O. Reg. 169/03)
- Operator Certification Regulation (O. Reg. 128/04)
- Municipal Drinking Water Licence (#010-101, Issue #3)
- Drinking Water Works Permit (#010-101, Issue #2)
- Permit to Take Water
- Director's Orders and/or Provincial Officer's Orders (if any)
- A Review of previous Ministry Inspection Reports

In all cases, there were no exceedances of health-related parameters for the Ministry of Environment audit samples of the treated water and water in the trunk distribution system.

4.0 Compliance with Terms and Conditions of System Approval and Any Other Orders

Plant production was fully compliant with the Permit to Take Water and at no time during the year 2015 did Raw Water flows exceed the maximum values stipulated in the Permit to Take Water.

Water production rates at the R.C. Harris Water Treatment Plant in 2015 were fully compliant with the Municipal Drinking Water Licence.

Residue Management operated on a continuous basis. The quality of the process residuals was in compliance with requirements cited in the Municipal Drinking Water Licence. The annual average concentration of total suspended solids (TSS) in the effluent discharged from the plant thickeners was 9.64 mg/L and average Total Chlorine was 0 mg/L.

All plant production fully conformed to the "Procedure for Disinfection of Drinking Water in Ontario" as referenced by O. Reg. 170/03. Routine operation and maintenance on all critical process equipment was carried out and flow meter calibrations were completed as per

manufacturer's recommendations.

5.0 Non-Compliance with Terms and Conditions of System Approval

There were no incidences of non-compliance with the Terms and Conditions of the Municipal Drinking Water Licence or Drinking Water Works Permit for the R.C. Harris Water Treatment Plant or in Water Supply in 2015.

6.0 Summary – Water Production

Monthly Average Output Water Flows for 2015 (As Conveyed to the Distribution System)

Month	Average Daily Volume (m ³)
January	442,000
February	560,000
March	568,000
April	425,000
May	391,000
June	395,000
July	335,000
August	328,000
September	343,000
October	411,000
November	288,000
December	249,000

NOTE: Non-production days not included in monthly average daily volume.

Annual Daily Volume and Capacity Assessment for 2015

Parameter	Value
Average Daily Flow	394,000 m ³
Maximum Day Flow (and Date Occurred)	673,000 m ³ (April 17, 2015)
Rated Capacity	950,000 m ³ /day
Highest Capacity Used	70.8 %

7.0 Summary of Flows Exceeding the Municipal Drinking Water Licence Requirements

There were no instances of treated water flows exceeding the rated capacity stated in the Municipal Drinking Water Licence for the R.C. Harris Water Treatment Plant in 2015.

8.0 City of Toronto Endorsement of Summary Report

This Summary Report has been signed off by Lou Di Gironimo, General Manager of Toronto Water, on behalf of the City of Toronto Council.

A copy of this report has been forwarded to the members of the City Council in 2016 as per regulatory requirements.

9.0 Contacts

While all efforts have been made to provide the required information in the proper format and degree of detail, it is acknowledged that additional information and/or detail may be required.

For additional information or inquiries, please contact customer service by phone at 311 or by email (311@toronto.ca).

2015 Summary Report Toronto (Island) Water Treatment Plant

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February 9, 2016

1.0 General Overview

Toronto Water treats, transmits, stores and distributes potable (drinkable) water to all industrial, commercial and household water users in the City of Toronto. The division also delivers water to the southern portion of the Region of York.

Staff in this area are highly trained and specialized, operating four water treatment plants, two laboratories, 18 pumping stations, 10 major ground level storage reservoirs and four elevated storage tanks. Staff maintains about 520 kilometres of trunk watermains that supply the water reservoirs and over 5,525 kilometres of local distribution mains. Policies and practices adopted by the section help the unit to manage significant issues and challenges, including meeting water demands throughout the year, complying with provincial regulations and working responsibly to protect the environment and local water bodies.

This Summary Report is issued by Toronto Water under Schedule 22-2, O. Reg. 170/03 for the Island Water Treatment Plant. The report covers the period from January 1, 2015 to December 31, 2015 except where stated otherwise.

2.0 System Approval

The City of Toronto is the operating authority of the Toronto Drinking Water System and has demonstrated through accreditation (received November 10th, 2011) by an independent third party, that the Toronto Water Quality Management System meets the requirements of the Drinking Water Quality Management Standard and the Safe Drinking Water Act, 2002, and is managed in a planned and systematic manner.

A Municipal Drinking Water Licence was renewed for the Island Water Treatment Plant by the Ministry of the Environment and Climate Change (MOECC) on February 11, 2015 and was designated as “Licence Number 010-101, Issue Number 4”.

A Drinking Water Works Permit was renewed for Island Water Treatment Plant by the Ministry of the Environment and Climate Change on February 11, 2015 and was designated on as “Permit Number 010-201, Issue Number 3”..

An on-site reaccreditation audit of the City of Toronto Drinking Water Quality Management System (QMS) took place in December 2014 by an independent third party. The audit findings identified that the City of Toronto QMS was effectively maintained and continuous improvement of the system was evident. As a result, the City of Toronto received re-accreditation on December 19, 2014.

The Island Water Treatment Plant is designated a Class 4 Water Treatment Facility (Certificate No. 443) and is referenced as Drinking Water System Number 220002244.

The current Permit to Take Water is designated by MOECC Reference Number 91-P-3041.

3.0 Site Inspections

The Ministry of the Environment (MOECC) has implemented a rigorous and comprehensive Province-wide approach for the inspection of water systems that focuses on the source, treatment and distribution components as well as water system management practices.

The primary focus of such inspections has been to confirm compliance with provincial legislation and control documents, as well as conformance with MOECC drinking-water related policies for the inspection period.

The Ministry of Environment conducted one (1) plant inspection of the Island Water Treatment Plant during 2015. The unannounced site inspection was carried out on August 20, 2015.

Specifically, the inspection included a review and assessment of operating practices in relation to the following documents:

- Safe Drinking Water Act, 2002
- Drinking Water Systems Regulation (O. Reg. 170/03)
- Ontario Drinking Water Quality Standards (O. Reg. 169/03)
- Operator Certification Regulation (O. Reg. 128/04)
- Municipal Drinking Water Licence (#010-101, Issue #2)
- Drinking Water Works Permit (#010-101, Issue #2)
- Permit to Take Water
- Director's Orders and/or Provincial Officer's Orders (if any)
- A Review of previous Ministry Inspection Reports

In all cases, there were no exceedances of health-related parameters for the Ministry of Environment audit samples of the treated water.

4.0 Compliance with Terms and Conditions of System Approval and Any Other Orders

Plant production was fully compliant with the Permit to Take Water and at no time during the year 2015 did Raw Water flows exceed the maximum values stipulated in the Permit to Take Water.

Water production rates at the Island Water Treatment Plant in 2015 were fully compliant with the Municipal Drinking Water Licence.

All plant production fully conformed to the "Procedure for Disinfection of Drinking Water in Ontario" as referenced by O. Reg. 170/03. Routine operation and maintenance on all critical process equipment was carried out and flow meter calibrations were completed as per manufacturer's recommendations.

The Residue Management settling tanks operated on a continuous basis. The quality of the process residuals was in compliance with the requirements cited in the Drinking Water Licence. The annual average concentration of total suspended solids in the effluent discharged from the Plant's slow sand filters was 9.9 mg/L and Total Chlorine was 0.002 mg/L.

5.0 Non-Compliance with Terms and Conditions of System Approval

There was no incidence of non-compliance with the Terms and Conditions of the Municipal Drinking Water Licence or Drinking Water Works Permit for the Island Water Treatment Plant in 2015.

6.0 Summary – Water Production

Monthly Average Output Water Flows for 2015 (As Conveyed to the Distribution System)

Month	Average Daily Volume (m ³)
January	201,000
February	0*
March	0*
April	206,000
May	272,000
June	294,000
July	326,000
August	324,000
September	323,000
October	250,000
November	251,000
December	243,000

*Island Water Treatment Plant was shut-down for maintenance.

NOTE: Non-production days not included in monthly average daily volume.

Annual Daily Volume and Capacity Assessment for 2015

Parameter	Value
Average Daily Flow	216,000 m ³
Maximum Day Flow (and Date Occurred)	370,000 m ³ (September 7, 2015)
Rated Capacity	410,000 m ³ /day
Highest Capacity Used	90.2 %

7.0 Summary of Flows Exceeding the Municipal Drinking Water Licence Requirements

There were no instances of treated water flows exceeding the rated capacity stated in the Municipal Drinking Water Licence for the Island Water Treatment Plant in 2015.

8.0 City of Toronto Endorsement of Summary Report

This Summary Report has been signed off by Lou Di Gironimo, General Manager of Toronto Water on behalf of the City of Toronto Council.

A copy of this report has been forwarded to the members of the City Council in 2016 as per regulatory requirements.

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2015 Summary Report

Toronto (R. L. Clark) Water Treatment Plant

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February 9, 2016

1.0 General Overview

Toronto Water treats, transmits, stores and distributes potable (drinkable) water to all industrial, commercial and household water users in the City of Toronto. The division also delivers water to the southern portion of the Region of York.

Staff in this area are highly trained and specialized, operating four water treatment plants, two laboratories, 18 pumping stations, 10 major ground level storage reservoirs and four elevated storage tanks. Staff maintains about 520 kilometres of trunk watermains that supply the water reservoirs and over 5,525 kilometres of local distribution mains. Policies and practices adopted by the section help the unit to manage significant issues and challenges, including meeting water demands throughout the year, complying with provincial regulations and working responsibly to protect the environment and local water bodies.

This Summary Report is issued by Toronto Water under Schedule 22-2, O. Reg. 170/03 for the R.L. Clark Water Treatment Plant. The report covers the period from January 1, 2015 to December 31, 2015 except where stated otherwise.

2.0 System Approval

The City of Toronto is the operating authority of the Toronto Drinking Water System and has demonstrated through accreditation (received November 10th, 2011) by an independent third party, that the Toronto Water Quality Management System meets the requirements of the Drinking Water Quality Management Standard and the Safe Drinking Water Act, 2002, and is managed in a planned and systematic manner.

A Municipal Drinking Water Licence was renewed for the R.L. Clark Water Treatment Plant by the Ministry of the Environment and Climate Change (MOECC) on February 11, 2015 and was designated as “Licence Number 010-101, Issue Number 4”.

A Drinking Water Works Permit was renewed for the R.L. Clark Water Treatment Plant by the Ministry of the Environment and Climate Change on February 11, 2015 and was designated on as “Permit Number 010-201, Issue Number 3”..

An on-site reaccreditation audit of the City of Toronto Drinking Water Quality Management System (QMS) took place in December 2014 by an independent third party. The audit findings identified that the City of Toronto QMS was effectively maintained and continuous improvement of the system was evident. As a result, the City of Toronto received re-accreditation on December 19, 2014.

The R.L. Clark Water Treatment Plant is designated a Class 4 Water Treatment Facility (Certificate No. 444) and is referenced as Drinking Water System Number 220002253 (MOECC).

The current Permit to Take Water is designated by MOECC Reference Number 91-P-3042.

3.0 Site Inspections

The Ministry of the Environment (MOECC) has implemented a rigorous and comprehensive Province-wide approach for the inspection of water systems that focuses on the source, treatment and distribution components as well as water system management practices.

The primary focus of such inspections has been to confirm compliance with provincial legislation and control documents, as well as conformance with MOECC drinking water-related policies for the inspection period.

The Ministry of Environment and Climate Change conducted one (1) focused site inspection of the R. L. Clark Water Treatment Plant on September 2nd, 2015.

Specifically, the inspection included a review and assessment of operating practices in relation to the following documents:

- Safe Drinking Water Act, 2002
- Drinking Water Systems Regulation (O. Reg. 170/03)
- Ontario Drinking Water Quality Standards (O. Reg. 169/03)
- Operator Certification Regulation (O. Reg. 128/04)
- Municipal Drinking Water Licence (#010-101, Issue #4)
- Drinking Water Works Permit (#010-101, Issue #3)
- Permit to Take Water
- Director's Orders and/or Provincial Officer's Orders (if any)
- A Review of previous Ministry Inspection Reports

In all cases, there were no exceedances of health-related parameters for the Ministry of Environment audit samples of the treated water.

4.0 Compliance with Terms and Conditions of System Approval and Any Other Orders

Plant production was fully compliant with the Permit to Take Water and at no time during the year 2015 did Raw Water flows exceed the maximum values stipulated in the Permit to Take Water.

Water production rates at the R.L. Clark Water Treatment Plant in 2015 were fully compliant with the Municipal Drinking Water Licence.

All plant production fully conformed to the "Procedure for Disinfection of Drinking Water in Ontario" as referenced by O. Reg. 170/03. Routine operation and maintenance on all critical process equipment was carried out and flow meter calibrations were completed as per manufacturer's recommendations.

5.0 Non-Compliance with Terms and Conditions of System Approval

There was one incidence of non-compliance identified during the 2015 MOECC annual Drinking Water inspection, however, no further action was required.

The Residue Management Facility (RMF) at the R.L. Clark Water Treatment Plant was not fully commissioned or operational at the time of the 2015 MOECC inspection, when it was identified that not all of the RMF effluent is monitored as required by the Municipal Drinking Water Licence (MDWL). As a result of this finding, the City of Toronto submitted a request to the MOECC Approvals and Licensing Branch to include a condition of relief from the RMF effluent monitoring criteria stated in the MDWL until the time that the RMF is fully commissioned. The MOECC Inspector was satisfied with this approach.

6.0 Summary – Water Production

Monthly Average Output Water Flows for 2015 (As Conveyed to the Distribution System)

Month	Average Daily Volume (m ³)
January	305,000
February	330,000
March	338,000
April	297,000
May	327,000
June	330,000
July	357,000
August	339,000
September	326,000
October	277,000
November	297,000
December	320,000

NOTE: Non-production days not included in monthly average daily volume.

Annual Daily Volume and Capacity Assessment for 2015

Parameter	Value
Average Daily Flow	321,000 m ³
Maximum Day Flow (and Date Occurred)	447,000 m ³ (July 31, 2015)
Rated Capacity	615,000 m ³ /day
Highest Capacity Used	72.7 %

7.0 Summary of Flows Exceeding the Municipal Drinking Water Licence Requirements

There were no instances of treated water flows exceeding the rated capacity stated in the Municipal Drinking Water Licence for the R.L. Clark Water Treatment Plant in 2015.

8.0 City of Toronto Endorsement of Summary Report

This Summary Report has been signed off by Lou Di Gironimo, General Manager of Toronto Water, on behalf of the City of Toronto Council.

A copy of this report has been forwarded to the members of the City Council in 2016 as per regulatory requirements.

9.0 Contacts

While all efforts have been made to provide the required information in the proper format and degree of detail, it is acknowledged that additional information and/or detail may be required.

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2015 Summary Report Toronto (F.J. Horgan) Water Treatment Plant

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February 9, 2016

1.0 General Overview

Toronto Water treats, transmits, stores and distributes potable (drinkable) water to all industrial, commercial and household water users in the City of Toronto. The division also delivers water to the southern portion of the Region of York.

Staff in this area are highly trained and specialized, operating four water treatment plants, two laboratories, 18 pumping stations, 10 major ground level storage reservoirs and four elevated storage tanks. Staff maintains about 520 kilometres of trunk watermains that supply the water reservoirs and over 5,525 kilometres of local distribution mains. Policies and practices adopted by the section help the unit to manage significant issues and challenges, including meeting water demands throughout the year, complying with provincial regulations and working responsibly to protect the environment and local water bodies.

This Summary Report is issued by Toronto Water under Schedule 22-2, O. Reg. 170/03 for the F.J. Horgan Water Treatment Plant. The report covers the period from January 1, 2015 to December 31, 2015 except where stated otherwise.

2.0 System Approval

The City of Toronto is the operating authority of the Toronto Drinking Water System and has demonstrated through accreditation (received November 10th, 2011) by an independent third party, that the Toronto Water Quality Management System meets the requirements of the Drinking Water Quality Management Standard and the Safe Drinking Water Act, 2002, and is managed in a planned and systematic manner.

A Municipal Drinking Water Licence was renewed for the F.J. Horgan Water Treatment Plant by the Ministry of the Environment and Climate Change (MOECC) on February 11, 2015 and was designated as “Licence Number 010-101, Issue Number 4”.

A Drinking Water Works Permit was renewed for F.J. Horgan Water Treatment Plant by the Ministry of the Environment and Climate Change on February 11, 2015 and was designated on as “Permit Number 010-201, Issue Number 3”.

An on-site reaccreditation audit of the City of Toronto Drinking Water Quality Management System (QMS) took place in December 2014 by an independent third party. The audit findings identified that the City of Toronto QMS was effectively maintained and continuous improvement of the system was evident. As a result, the City of Toronto received re-accreditation on December 19, 2014.

The F.J. Horgan Water Treatment Plant is designated a Class 4 Water Treatment Facility (Certificate No. 446) and is referenced as Drinking Water System Number 220004536 (MOECC).

The current Permit to Take Water is designated by MOECC Reference Number 91-P-3039.

3.0 Site Inspections

The Ministry of the Environment (MOECC) has implemented a rigorous and comprehensive Province-wide approach for the inspection of water systems that focuses on the source, treatment and distribution components as well as water system management practices.

The primary focus of such inspections has been to confirm compliance with provincial legislation and control documents, as well as conformance with MOECC drinking-water related policies for the inspection period.

The Ministry of Environment and Climate Change conducted one (1) plant inspection of the F. J. Horgan Water Treatment Plant on November 12, 2015.

Specifically, the inspection included a review and assessment of operating practices in relation to the following documents:

- Safe Drinking Water Act, 2002
- Drinking Water Systems Regulation (O. Reg. 170/03)
- Ontario Drinking Water Quality Standards (O. Reg. 169/03)
- Operator Certification Regulation (O. Reg. 128/04)
- Municipal Drinking Water Licence (#010-101, Issue #2)
- Drinking Water Works Permit (#010-101, Issue #2)
- Permit to Take Water
- Director's Orders and/or Provincial Officer's Orders (if any)
- A Review of previous Ministry Inspection Reports

4.0 Compliance with Terms and Conditions of System Approval and Any Other Orders

The following information is based on the preliminary MOECC Inspection Report as the final report has not yet been received.

Plant production was fully compliant with the Permit to Take Water and at no time during the year 2015 did Raw Water flows exceed the maximum values stipulated in the Permit to Take Water.

Water production rates at the F. J. Horgan Treatment Plant in 2015 were fully compliant with the Municipal Drinking Water Licence.

Residue Management operated on a continuous basis. The quality of the process residuals was in compliance with requirements cited in the Municipal Drinking Water Licence. The annual average concentration of total suspended solids in the effluent discharged from the plant's clarifiers was 6.92 mg/L.

All plant production fully conformed to the "Procedure for Disinfection of Drinking Water in Ontario" as referenced by O. Reg. 170/03. Routine operation and maintenance on all critical process equipment was carried out and flow meter calibrations were completed as per manufacturer's recommendations.

5.0 Non-Compliance with Terms and Conditions of System Approval

Based on the preliminary MOECC Inspection Report (final report not yet received), there were no incidents of non-compliance.

The drinking water conveyed to the distribution system during this period was properly treated and was safe for consumption and there were no negative impacts on water quality.

6.0 Summary – Water Production

Monthly Average Output Water Flows for 2015 (As Conveyed to the Distribution System)

Month	Average Daily Volume (m ³)
January	198,000
February	256,000
March	272,000
April	220,000
May	264,000
June	220,000
July	337,000
August	313,000
September	330,000
October	234,000
November	271,000
December	299,000

NOTE: Non-production days not included in monthly average daily volume.

Annual Daily Volume and Capacity Assessment for 2015

Parameter	Value
Average Daily Flow	268,000 m ³
Maximum Day Flow (and Date Occurred)	472,000 m ³ (September 30, 2015)
Rated Capacity	800,000 m ³ /day
Highest Capacity Used	59.0 %

7.0 Summary of Flows Exceeding the Municipal Drinking Water Licence Requirements

There were no instances of treated water flows exceeding the rated capacity stated in the Municipal Drinking Water Licence for the F.J. Horgan Water Treatment Plant in 2015.

8.0 City of Toronto Endorsement of Summary Report

This Summary Report has been signed off by Lou Di Gironimo, General Manager of Toronto Water on behalf of the City of Toronto Council.

A copy of this report has been forwarded to the members of the City Council in 2016 as per regulatory requirements.

9.0 Contacts

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2015 Summary Report City of Toronto Distribution System

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February 9, 2016

1.0 General Overview

Toronto Water treats, transmits, stores and distributes potable (drinkable) water to all industrial, commercial and household water users in the City of Toronto. The division also delivers water to the southern portion of the Region of York.

Staff in this area are highly trained and specialized, operating four water treatment plants, two laboratories, 18 pumping stations, 10 major ground level storage reservoirs and four elevated storage tanks. Policies and practices adopted by the section help the unit to manage significant issues and challenges, including meeting water demands throughout the year, complying with provincial regulations and working responsibly to protect the environment and local water bodies.

Toronto Water District Operations provides water distribution services to 515,345 residential and industrial/commercial accounts. Maintenance and operation of the distribution system is carried out by district staff in four Water Distribution Districts: North, West, East, and South. District Operations is responsible for regular hydrant and valve inspections, watermain flushing, investigation of water pressure and water quality complaints, cleaning and lining of watermains, repair or replacement of watermains, water services, valves and hydrants. District staff inspect, operate, rehabilitate and maintain the existing water distribution system which include, but is not limited to:

- 5,016 km of watermains
- 44,000 water hydrants
- 52,900 valves
- 12 pressure districts

This Summary Report is issued by Toronto Water under Schedule 22-2, O. Reg. 170/03 for the City of Toronto Distribution System (managed by Water Supply and District Units). The report covers the period from January 1, 2015 to December 31, 2015 except where stated otherwise.

2.0 System Approval

The City of Toronto Distribution System is categorized as a Large Municipal Residential System and is referenced as Drinking Water System Number 260090363 (MOECC). The name of the system is City of Toronto Drinking Water System – Toronto DS.

The City of Toronto is the operating authority of the Toronto Drinking Water System and has demonstrated through accreditation (renewed on December 19, 2014) by an independent third party, that the Toronto Water Quality Management System meets the requirements of the Drinking Water Quality Management Standard and the Safe Drinking Water Act, 2002, and is managed in a planned and systematic manner.

A Municipal Drinking Water Licence was renewed for the City of Toronto Distribution System by the Ministry of the Environment and Climate Change (MOECC) on February 11, 2015 and was designated as “Licence Number 010-101, Issue Number 4”.

A Drinking Water Works Permit was renewed for the City of Toronto Distribution System by the Ministry of Environment (MOECC) on February 11, 2015 and was designated on as “Permit Number 010-201, Issue Number 3”.

3.0 Site Inspections

The Ministry of the Environment (MOECC) has implemented a rigorous and comprehensive Province-wide approach for the inspection of water systems that focuses on the source, treatment and distribution components as well as water system management practices.

The primary focus of such inspections has been to confirm compliance with the provincial legislation and control documents, as well as conformance with Ministry of Environment drinking water-related policies and guidelines for the inspection period.

The MOECC conducted one (1) inspection of the City of Toronto Distribution System and Water Supply during 2015. The focused site inspection was carried out in the West Operations & Maintenance area, Water Supply and Engineering Construction Services on October 5th to December 3rd, 2015.

The inspection is based on a “stand alone connected distribution system”. The elements are reviewed to assess key compliance and conformance to issues associated with a receiver system as defined under O. Reg. 172/03. The inspection included a review and assessment of operating practices in relation to the following documentation:

- Treatment Processes
- Distribution System
- Operational Manuals
- Logbooks (O. Reg. 170/03)
- Security
- Certification and Training
- Water Quality Monitoring (O. Reg. 170/03)
- Water Quality Assessment (O. Reg. 169/03)
- Reporting and Corrective actions (O. Reg. 170/03)

4.0 Compliance with Terms and Conditions of the System Approval and Any Other Orders

District Operations and Water Supply maintained and operated the Toronto Distribution system in a manner that was fully compliant with the Terms and Conditions of the Municipal Drinking Water Licence and Permit to Take Water in 2015.

5.0 Non-Compliance with the Terms and Conditions of the System Approval

There were five (5) incidences of non-compliance with the Terms and Conditions of the Municipal Drinking Water Licence or Drinking Water Works Permit for the Toronto Water Distribution System in 2015. All incidences involved new watermain construction and disinfection performed

by contractors under the management of the Engineering & Construction Services division of the City of Toronto.

The incidences of non-compliance are as follows:

1. It was not clear during the review of records and interview with contractors that disinfection activities on new water mains was conducted in accordance with AWWA C651 standard as required by the Drinking Water Works Permit.
2. Fully compliant logs or other record keeping mechanisms were not available for at least five (5) years for work conducted by contracted persons on the Drinking Water System.
3. Records reviewed for new water main construction during this inspection period indicated that on some occasions persons that were not certified operators were performing activities that must be performed by or observed in person by an Operator. The records also did not confirm that a certified Operator was present at the time the work was conducted.
4. Some chain of custody records reviewed for samples collected by contractors did not indicate that a chlorine test was collected at the time the microbiological sample was collected.
5. City managers and employees from the Engineering & Construction Services Division interviewed during this inspection were not able to demonstrate that contractors hired to install and disinfect new water mains were aware of the Safe Drinking Water Act, applicable regulations, as well as the City's Municipal Drinking Water Works Licence and Permit requirements.

The Engineering and Construction Services division of the City of Toronto are taking these incidences of non-compliance very seriously. They have immediately put into effect short-term solutions to address these incidences of non-compliance and will continue to work closely with the MOECC to develop a long term solution to better manage all contracted work on the drinking water system.

6.0 City of Toronto Endorsement of Summary Report

This Summary Report has been signed off by Lou Di Gironimo, General Manager of Toronto Water on behalf of the City of Toronto Council.

A copy of this report has been forwarded to the members of the City Council in 2016 as per regulatory requirements.

7.0 Contacts

While all efforts have been made to provide the required information in the proper format and degree of detail, it is acknowledged that additional information and/or detail may be required.

For additional information or inquiries, please contact customer service by phone at 311 or by email (311@toronto.ca).