



Drinking Water Quality Management System

Operational Plan

for

Richmond Hill Distribution System



City of Richmond Hill
QMS Operational Plan 9

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*The *Safe Drinking Water Act, 2002*, requires the inclusion of Schedule “C” from the Director’s Directions in all Operational Plans.

1.0 Quality Management System

1.1. Requirement

Element 1 of the Drinking Water Quality Management Standard (DWQMS) version 2 (April 6 ,2017) requires the City of Richmond Hill (“the City”) to establish and maintain a Quality Management System (QMS) that conforms to the standard, and to document this QMS in an Operational Plan.

1.2. Operational Plan

This document is the City’s Operational Plan for its drinking water QMS. It provides a short summary of the system that describes how the QMS meets the requirements of the DWQMS. More detailed QMS documents, such as Element Procedures, and Standard Operating Procedures, can be appended as required.

The Operational Plan is the primary instrument for communicating the City’s QMS from staff to Council, and from Council to Ontario’s Ministry of Environment, Conservation and Parks (“the Ministry”) and to the Richmond Hill public. It is endorsed by QMS Top Management and City Council, accredited by a provincially-appointed Accreditation Authority and approved by the Ministry.

1.3. Scope

a. Drinking Water System

The City owns a stand-alone drinking water distribution system. This system receives potable water at transfer points from York Region watermains and distributes it to service connections for customer consumption and to hydrants for fire protection. Quality Management System policies and procedures govern those activities and services performed by the City, as the system’s operating authority, that relate to drinking water.

The City’s Community Services Department, Public Works Division, maintains a network of watermains and related valves, hydrants and meters. Trained and certified Public Works staff perform preventative and operational maintenance on this infrastructure, and take regular water samples for lead, chlorine residual, disinfection by-product, and microbiological testing. Engineering staff from the Infrastructure and Engineering Services Department design and construct new watermains as part of an ongoing Capital Replacement program. Watermains added as part of new subdivision development are reviewed and approved by the Infrastructure Planning Delivery. Municipal Inspectors ensure all applicable standards are met when new watermains are connected to the existing network.

b. Personnel

The DWQMS prescribes roles and responsibilities for the drinking water system owner and operating authority, including Top Management. Accordingly, the scope of the City of Richmond Hill’s QMS extends to the following:

- City of Richmond Hill Council (System Owner)
- Community Services (CS) Department– Public Works Operations Division

- Infrastructure and Engineering Services (IES) Department – Infrastructure Delivery Division (Project Managers-Capital Infrastructure and Municipal Inspections)
- QMS Top Management:
 - Commissioner of Community Services Department
 - Director Public Works Operations
 - Director Infrastructure Delivery
 - Manager Water & Wastewater
 - Manager Design and Construction
 - Manager Capital Infrastructure Planning & Project Management Office (PMO)
 - QMS Program Coordinator

1.4. Documentation

The QMS Policy and Operational Plan are public documents that set broad commitments and establish the framework for Richmond Hill's QMS. Internal documents such as procedures, tables, and forms are organized into three levels and are located and coded according to the format below:

- a. EP (Element Procedure) – correspond to the 'plan' requirements of the DWQMS and demonstrate how the QMS conforms to the provincial standard. Reviews and outcomes required by certain Element Procedures are included as attachments to those procedures. Element procedures are coded as EP-DW-1
- b. SOP (Standard Operating Procedure) – umbrella document for a category of work activities, coded as SOP-DW-4. Standard operating procedures are made up of various specific work instructions, coded as WI-DW-4.1.
- c. Records and other documents – forms and work orders used to capture output of an activity; these are not coded.

1.5. Associated Documents

- WI-DW-4.3 *Operational Plan*

2.0 QMS Policy

2.1 Requirement

Element 2 of the DWQMS requires the inclusion of a QMS Policy in the Operational Plan. The Policy must be appropriate for the size and type of drinking water system, and must state commitments to:

1. maintain and continually improve a QMS
2. provide safe drinking water to the consumer
3. comply with all applicable legislation and regulations

The Policy must also be accessible to all QMS personnel, Council, and the public.

2.2 Associated Documents

- EP-DW-9 *QMS Policy*
 - Attachment 1: *QMS Policy*

3.0 Commitment and Endorsement

3.1 Requirement

Element 3 of the DWQMS requires written endorsement of the Operational Plan from QMS Top Management and Council. As well, it requires Top Management to ensure a QMS is in place, ensure QMS personnel are aware of applicable legislative and regulatory requirements, communicate the QMS as required, and determine, obtain, or provide resources to maintain and continually improve the QMS.

3.2 Associated Documents

- EP-DW-10 *Council and Endorsement*
- WI-DW-4.2 *Reports to Council*
- WI-DW-4.3 *Operational Plan*

4.0 QMS Representative

4.1 Requirement

Element 4 of the DWQMS requires Top Management to appoint and authorize a QMS Representative to carry out the following:

- Administer the Quality Management System by ensuring that applicable processes and procedures are established and maintained.
- Report QMS performance and need for improvement to Top Management.
- Ensure the use of the most current versions of QMS documents.
- Ensure personnel are aware of applicable legislative and regulatory requirements.
- Promote awareness of the QMS throughout the Operating Authority.

The QMS Representative must be identified in the Operational Plan.

4.2 Associated Documents

- EP-DW-11 *QMS Representative*
 - Attachment 1: *QMS Representative Appointment and Authorization*

5.0 Document and Records Control

5.1 Requirement

Element 5 of the DWQMS requires a procedure for document and record control that describes how documents and are kept current, and how documents and records are kept legible and identifiable, retrieved, stored, protected, retained and disposed of.

5.2 Document Control

All required QMS documents are controlled and stored on the City's network server and are accessible through the City's RHLink website, which permits read-only access.

Documents are kept current through periodic review process led by the QMS Representative. All QMS personnel within the CS & IES Departments can access and request changes to documents through the QMS Representative. The QMS Representative maintains the master copy of all QMS documents. Once printed, all QMS documents become 'uncontrolled'.

5.3 Records Control

Electronic records are stored, managed and maintained in the following applications: Maximo (water quality and maintenance), and other software applications in the City's network.

Hard-copy records are stored, managed, and maintained by Public Works personnel or the Municipal Offices File Clerk using the City's ATRIUM records management system. All record keeping is in accordance with the Records Classification and Retention Schedule. Retention and disposal practices comply with applicable provincial legislation. In addition, pdf copies of records are maintained in chronological order in the City's network server.

5.4 Associated Documents – Document Control

- EP-DW-1 *Control of Documents*
 - Attachment 1: Release of New and Revise Documents using RHLink website
 - Attachment 2: *External Document Control*

5.5 Associated Documents – Records Control

- EP-DW-2 *Control of Records*
- WI-DW-4.1 *Record Keeping*

6 Drinking Water System Description

6.1 Requirement

Element 6 of the DWQMS requires a description of the City's drinking water system, including treatment processes and distribution components, as well as a process flow chart and summary descriptions of any connected drinking water systems.

6.2 Associated Documents

- EP-DW-12 *Drinking Water System Description*
 - Attachment 1: *Drinking Water Description*
 - Attachment 2: *Richmond Hill Drinking Water System – Process Flow Chart*

7.0& 8.0 Risk Assessment & Risk Assessment Outcomes

7.1/8.1 Requirement

Element 7 of the DWQMS requires the City to document a risk assessment process and to conduct a risk assessment accordingly. Risk assessments must be conducted every three years, and consider the reliability and redundancy of equipment. In addition, on an annual basis the currency of the information and the validity of the assumptions must be reviewed.

Elements 8 of the DWQMS requires the City to document the outcomes of the risk assessment, including procedures for monitoring Critical Control Limits, and for responding to, reporting and recording deviations from Critical Control Limits.

7.2/8.2 Risk Assessment Process

The City of Richmond Hill manages risk to its drinking water system through proactive planning and preventative measures. The QMS Risk Assessment identifies and ranks potential hazards and events, referencing existing procedures to monitor limits and measures to prevent, mitigate, or respond to hazards. As well, it defines Critical Control Points and Critical Control Limits where required. The Risk Assessment process reveals gaps where no measures exist to address certain risks, providing direction for future improvement. Top Management annually reviews the currency of outcomes and the validity of the process as part of Management Review.

7.3/8.3 Risk Assessment Outcomes

The QMS Team conducts a risk assessment for the City's drinking water system once every three years. Risk Assessment outcomes are recorded and communicated to Top Management through the Management Review process.

7.4/8.4 Associated Documents

- EP-DW-3 *Risk Assessment and Risk Assessment Outcomes*
 - Attachment 1: *Potential Hazardous Events Table*
 - Attachment 2: *High Risk Table*
- WI-DW-4.5 *Risk Assessment*

9.0 Organizational Structure, Roles, Responsibilities and Authorities

9.1 Requirement

Element 9 of the DWQMS requires a description of the organizational structure of the Operating Authority that includes roles, responsibilities, and authorities. Owner, Top Management, and those responsible for Management Review must also be identified.

9.2 Owner and Operating Authority

The City of Richmond Hill, as represented by Council, is identified as 'Owner' of the drinking water system and by the Public Works Operations Division of the Community Services Department, is identified as the Operating Authority.

9.3 Associated Documents

- EP-DW-13 *Organizational Chart and Table of Roles, Responsibilities, Authorities and Competencies*
 - Attachment 1: *Organizational Chart*

10.0 Competencies

10.1 Requirement

Element 10 of the DWQMS requires documentation of competencies for drinking water personnel, and of activities for developing and maintaining these competencies and for ensuring personnel are aware of the relevance of their duties. It also requires that competencies are achieved, and records of the activities are maintained.

10.2 Associated Documents

- EP-DW-13 *Organizational Chart and Table of Roles, Responsibilities, Authorities and Competencies*
 - Attachment 2: *Table of Roles, Responsibilities, Authorities and Competencies*

11 Personnel Coverage

11.1 Requirement

Element 11 of the DWQMS requires a procedure for ensuring sufficient trained personnel are available to maintain the City's drinking water system.

11.2 Personnel Coverage

The Public Works Division ensures that a Certified Operator is always available to operate the City's drinking water system and on stand-by after hours to respond to emergencies. Administrative staff is available on-call and to fill in for each other to ensure respective duties can be fulfilled.

11.3 Associated Documents

- EP-DW-14: QMS Personnel Coverage
 - Attachment 1: QMS Personnel Coverage Table

12 Communications

12.1 Requirement

Element 12 of the DWQMS requires a procedure for communications between Top Management and Council, Operating Authority, suppliers and the public.

12.2 Procedure

The QMS Representative shall facilitate required communication between Top Management and Council, department personnel, suppliers, and the public in the following ways:

- a. Top Management and Council
 - Formal communication is achieved through preparing and submitting Staff Reports to Council on a regular and as-needed basis
 - Informal communication occurs between the Commissioner of Community Services and Council at regular Council meetings and through personal correspondence
- b. Top Management and Operating Authority personnel
 - The Drinking Water QMS Policy is posted at City facilities and is available electronically on the City's website.
 - The QMS Representative facilitates communication between Department personnel and Top Management at least once every calendar year through Management Review meeting, as detailed in EP-DW-7: *Management Review*.
 - Management and staff meet regularly through Department Meetings, and Manager/Staff, Manager/Supervisor, and Supervisor/Staff Meetings.
 - Relevant QMS information is delivered through staff meetings.
 - Informal communication occurs on an as-needed basis through emails, written memos, phone calls, bulletin boards, informal meetings, etc.
 - Managers and staff can communicate in the form of non-conformance reports and opportunities for improvement, corrective and preventive actions, and document change requests.
- c. Top Management and Suppliers
 - Regular meetings (pre-construction, progress, etc.)
 - Informal 'field' communications (inspectors and other City staff)
 - Contract documents, RFQ's, tenders, information packages
 - City of Richmond Hill QMS Contractors and Suppliers Responsibilities Package
 - City of Richmond Hill Design Standards and Specifications Manual

d. Top Management and the Public

- The QMS Policy is accessible to the public through postings at City facilities and is available electronically on the City's website.
- The City's website contains pertinent drinking water information and is regularly updated with important notices and changes.
- The Operational Plan and Annual Water Quality Report are available to the public through the City's website and upon request from the Community Services Dept.
- The Public communicates with Top Management through calling Access Richmond Hill, customer inquiries & complaints and their resolution are logged using the appropriate work order as detailed in WI-DW-5.3 Water Quality Inquiries and Complaints.
- Customer inquiries and complaints are communicated to Top Management under Consumer Feedback during the Management Review.

12.3 Associated Documents

- *EP-DW-7 Management Review*
- *WI-DW-4.2 Reports to Council*
- *WI-DW-5.3 Water Quality Inquiries and Complaints*

13 Essential Supplies and Services

13.1 Requirement

Element 13 of the DWQMS requires identification of all essential supplies and services, and a procedure for ensuring procurement and quality of each supply or service.

13.2 Essential Supplies and Services

Supplies and services deemed essential for the City to deliver safe drinking water to Richmond Hill consumers are identified within *EP-DW-4 Essential Supplies and Services*. This list includes alternate or contingent contacts (where possible) to ensure essential supplies and services can be procured whenever necessary.

Quality requirements for supplies and services are determined through provincial regulations, City standards, and industry best practices. Quality requirements are ensured through the City's purchasing practices, which are subject to Purchasing By-Law No.113-16.

13.3 Associated Documents

- *EP-DW-4 Essential Supplies and Services*
 - *Attachment 1: Essential Suppliers and Services Table*
 - *Attachment 2: QMS Essential Supplies List*
 - *Attachment 3: QMS Contractors and Suppliers Responsibilities Package*

14 Review and Provision of Infrastructure

14.1 Requirement

Element 14 of the DWQMS requires a procedure for the annual review of drinking water infrastructure. The outcomes of this review must be communicated to Council.

14.2 Infrastructure Review

The Public Works Division on an ongoing basis through maintenance management data tracking assesses the immediate status and adequacy of Richmond Hill's drinking water infrastructure. Resource requirements for maintaining adequacy are determined and communicated annually through the budget process.

Applicable sections within CS and IES Departments annually update the Ten-Year Capital Forecast for Roads, Water and Wastewater, which establishes future infrastructure needs based on factors such as population growth, break rates, and material aging. This program is communicated to Council through the budget process.

14.3 Associated Documents

- EP-DW-5 *Infrastructure*

15 Infrastructure Maintenance, Rehabilitation and Renewal

15.1 Requirement

Element 15 of the DWQMS requires a summary of infrastructure maintenance, rehabilitation and renewal programs. The Operating Authority is required to keep this summary current, communicate it to Council, and monitor the effectiveness of its maintenance program.

15.2 Infrastructure Maintenance, Rehabilitation and Renewal Programs

The Public Works Division performs scheduled and unscheduled/emergency maintenance and rehabilitation on the City's drinking water infrastructure. Maintenance and rehabilitation activities are planned and tracked using maintenance management software. The Infrastructure Delivery Division also participates in rehabilitation activities, depending on the nature of the project, and are responsible for infrastructure renewal and replacement under the Ten-Year Capital Forecast for Roads, Water and Wastewater Program. Infrastructure maintenance, rehabilitation and renewal programs are summarized and communicated to Council through the QMS Annual Report.

15.3 Associated Documents

- EP-DW-5 *Infrastructure*
 - Attachment 1: *Infrastructure Process Flow Chart*
 - Attachment 2: *QMS Infrastructure Maintenance Rehabilitation and Renewal Programs*

- Attachment 3: QMS Infrastructure Maintenance, Rehabilitation and Renewal Responsibilities

16 Sampling, Testing and Monitoring

16.1 Requirement

Element 16 of the DWQMS requires a procedure for process control that details sampling, testing and monitoring requirements and activities, and how results are communicated to Council. Relevant upstream sampling, testing and monitoring activities must also be described.

16.2 Sampling, Testing and Monitoring

The Public Works Division maintains procedures for sampling, testing, and monitoring activities required under provincial legislation and regulations. These procedures are developed for both normal and unscheduled/emergency conditions, and staff are trained accordingly. Outcomes from these activities are communicated to Council through the Annual and Summary Reports as required by O. Reg. 170/03. Upstream sampling, testing and monitoring activities are performed by the City of Toronto and the Regional Municipalities of Peel and York. Details and outcomes of these activities are available through respective annual/summary reports.

16.3 Associated Documents

- SOP 3 WI-DW-3.1 *Water Samples*
- WI-DW-3.1 *Water Samples*
- WI-DW-3.2 *Residual Chlorine Monitoring*
- WI-DW-3.4 *Adverse Water Quality Reporting – Large Drinking Water System*
- WI-DW-3.5 *Trihalomethanes*
- WI-DW-3.6 *Lead Samples (pH)*
- WI-DW-3.7 *Dead End Flushing*
- WI-DW-3.10 *Halo-acetic Acids*
- WI-DW-3.11 *Nitrosodimethylamine*
- WI-DW-5.3 *Water Quality Inquiries and Complaints*

17 Equipment Calibration and Maintenance

17.1 Requirement

Element 17 of the DWQMS requires a procedure for the calibration and maintenance of measurement and recording equipment.

17.2 Equipment Calibration and Maintenance

Applicable standard operating procedures contain instructions for calibration and maintenance of measurement and recording equipment. Calibration and maintenance are performed either in house or by the manufacturer or contractor, in accordance with relevant legislative requirements and/or manufacturers' specifications.

17.3 Associated Documents

- WI-DW-6.1 *HACH Equipment Calibration and Inspection*

18 Emergency Management

18.1 Requirement

Element 18 of the DWQMS requires a procedure for maintaining a state of emergency preparedness that identifies potential emergencies and covers response and recovery, training and testing, responsibilities, and communications.

18.2 Emergency Management

The City of Richmond Hill, through its QMS Risk Assessment identifies and documents potential emergency situations that might ultimately impact drinking water safety. Preventive, response and recovery measures are identified for each type of emergency and described in applicable procedures.

Response and recovery measures are initiated when adverse water conditions are detected. Internal procedures contain communications protocols, departmental and corporate roles and responsibilities, contact lists, and where appropriate references to the Corporate *Emergency Plan*. An inter-municipal communications procedure contains instructions for reporting adverse conditions between connected drinking water systems.

Staff are trained to deal with emergencies and to follow applicable procedures in accordance with provincial and municipal regulations. Where possible, emergency procedures are tested and emergency equipment inspected and maintained.

18.3 Associated Documents

- EP-DW-6 *Emergency Management*
- WI-DW-4.8 *Emergency Response*
- WI-DW-4.9 *After Action Review*

19 Internal Audits

19.1 Requirement

Element 19 of the DWQMS requires a procedure for internal audits to evaluate QMS conformity with the standard. Audits must be conducted at least once every calendar year.

19.2 Internal Audits

On an annual basis, the QMS Representative establishes an Internal Audit program that evaluates conformity with the requirements of the provincial Drinking Water Quality Management Standard. This program is set up in accordance with QMS procedure WI-DW-4.4 *Internal Audit*, that outline how the audit should be conducted, who will perform the audit, the frequency, and how the outcomes will be recorded and communicated. Non-conformities and opportunities for improvement that are identified through the interview process are recorded and tracked following EP-DW-8 *Continual Improvement* work instruction. Internal Audit outcomes are summarized and communicated to the Operating Authority.

19.3 Associated Documents

- EP-DW-8 *Continual Improvement*
- WI-DW-4.4 *Internal Audits*

20 Management Review

20.1 Requirement

Element 20 of the DWQMS requires a procedure for management review that evaluates the continuing suitability, adequacy and effectiveness of the QMS.

20.2 Management Review

At least once every calendar year, the QMS Top Management is required to evaluate the suitability, adequacy, and effectiveness of the QMS. This evaluation occurs through the Management Review process:

- The QMS Representative collects QMS information, such as Internal Audit and Risk Assessment outcomes, and distributes it to Top Management for review
- At a meeting or series of meetings, Top Management provide feedback, direction, and recommendations to the QMS Representative regarding system status and improvement
- Recommendations are recorded following EP-DW-8 *Continual Improvement*.

Outcomes of the annual Management Review are communicated to Council through the QMS Annual Report.

20.3 Associated Documents

- EP-DW-7 *Management Review*
- EP-DW-8 *Continual Improvement*

21 Continual Improvement

21.1 Requirement

Element 21 of the DWQMS requires the Operating Authority shall develop a procedure for tracking and measuring continual improvement of its QMS by:

- Reviewing and considering applicable best management practices.
- Documenting a process for identification and management of QMS corrective and preventative actions.

21.2 Continual Improvement

Continual improvement is understanding what is done well and then finding ways to do it better. Therefore, the QMS shall strive to implement programs and initiatives with the objective of reaching goals and targets that ensure continual improvement.

Best management practices for drinking water will be assess for feasibility of implementation as continual improvement for the City's QMS.

Corrective Actions that are generated through internal and external audits, management reviews, document reviews and on an ongoing basis through non-conformities and opportunities for improvement submissions will be addressed and evaluated to ensure its application improves the QMS. Preventative Actions will be undertaken to address potential problems that have been identified within the QMS.

21.3 Associated Documents

- EP-DW-8 *Continual Improvement*
 - Attachment 1: *QMS Continual Improvement Process – Flow Chart*
 - Attachment 2: *Corrective Action Report*

DEFINITIONS

“Adverse Water Quality Incident” – occurs when testing of water samples reveals a breach of Ontario’s prescribed drinking water quality standards, indicating the potential presence of a drinking water health hazard in the water.

“Certified Operator” – an individual who has been certified by the province, based on a combination of relevant and ongoing education and experience, to perform operational duties on a drinking water system. Certification is renewed every three years.

“Critical Control Limit” – a determined threshold for a *critical control point* that, if exceeded, triggers initiation of an appropriate response procedure

“Critical Control Point” – an essential step or point in the drinking water system at which control can be applied to prevent or eliminate a drinking water health hazard, or reduce it to an acceptable level (from DWQMS Terms and Definitions)

“DWQMS” – the Drinking Water Quality Management Standard (*DWQMS*) is a provincially developed management standard based on ISO 9001 and HACCP standards. It was created, in response to the Walkerton Report’s recommendations for quality management in municipal drinking water systems, and was first released in 2006.

“the Ministry” – Ontario’s Ministry of Environment, Conservation and Parks.

“Operating Authority” – means, in respect to the drinking water system, the person or entity that is given responsibility by the Owner for the operation, management, maintenance or alteration of the drinking water system.

“Operator-in-Charge” – is a certified operator in position of ensuring that all equipment used in the processes within his or her responsibility is properly monitored, inspected and evaluated and that records of equipment operating status are prepared and available at the end of every operating shift.

“Owner” – City of Richmond Hill Council.

“Quality Management” – in the context of drinking water, is to protect public health by achieving consistent good practice in managing and operating a water system (Walkerton Report, Part II).

“Quality Management System” (QMS) – a system to:

- a. establish policy and objectives, and to achieve those objectives; and
- b. direct and control an organization regarding quality (from DWQMS Terms and Definitions)

“QMS Team” – composed of, but not limited to the Manager of Water and Wastewater, Supervisors, Water Quality Analyst and QMS Program Coordinator.

HISTORY OF CHANGES

Version Number	Release Date	Details of Changes
1.0	10/20/2008	Original version.
1.1	11/20/2008	<ul style="list-style-type: none"> • Element 18 - Emergency Management now specific to QMS • Minor wording and format changes • Schedule 'C' added
1.2	07/01/2010	Minor updates stemming from Annual Review of document.
2.0	04/20/2011	<ul style="list-style-type: none"> • Updates from Annual Review and departmental re-organization • Printed documents considered 'uncontrolled' • Internal Audit outcomes no longer required to be communicated to Council
2.1	Not released	<ul style="list-style-type: none"> • Added 'Definitions' and 'History of Changes' sections • Changed 'Senior Management' to 'Top Management' • 5.2 – multiple hard copy QMS binders no longer maintained • 9.3 – Added information about 'Overall Responsible Operator' • Other minor wording and formatting changes
3.0	09/06/2013	<ul style="list-style-type: none"> • Elements 1-4, 6, 9-12: Element Procedures eliminated, and where possible relevant information and/or Element Outcome incorporated into Plan • Element 1 – added reference to approval process for new watermain • Modified description of and references to QMS documentation • Combined Elements 7 & 8 in OP • Created new Element Procedure for Element 21 Continual Improvement • Added signed Top Management endorsement
3.1	12/02/2013	<ul style="list-style-type: none"> • Added Release Date for v. 3.0 • Updated Contact Information in Schedule "C"
3.2	02/05/2014	<ul style="list-style-type: none"> • Added March 24, 2014 Council Endorsement to Appendix 'C' • Updated QMS Organizational Chart in Appendix 'F'
4.0	03/05/2015	<ul style="list-style-type: none"> • Updated QMS Representative in Appendix 'D' • Updated QMS Organizational Chart in Appendix 'F' • Other minor wording and formatting changes
4.1	04/20/2015	<ul style="list-style-type: none"> • Updated name of Acting Manager of Water & Wastewater with current Manager of Water & Wastewater information. • Inserted Council Endorsement in Appendix 'C'
4.2	02/29/2016	<ul style="list-style-type: none"> • Associated Documents cited for each Element of the Standard. • Added to Element 12, in section 12.2.d clarification as to how the Public communicates with Top Management. • TRH(water drop)DWQMS symbol has been updated to RH(tap)WATER for it promotes the quality of the water instead of the quality management system. • Organizational Chart and Table of Roles and Responsibilities has been updated to include Project Managers for Capital Infrastructure

Version Number	Release Date	Details of Changes
4.3	02/28/2017	<ul style="list-style-type: none"> Updated Design and Construction Division in Element 1 as Project Managers-Capital Infrastructure are part of 'Appendix F' Element 7 & 8 updated to include annual review of the currency of the information and the validity of the assumptions. Corrected associated documents within all Elements as Standard Operating Procedures have changed. Other minor wording and formatting changes. New Endorsement Form 'Appendix B' updated to include current Operational Plan Version/Release Date and Endorsement Date.
5.0	01/21/2019	<ul style="list-style-type: none"> All Elements updated to conform to Version 2 of the DWQMS dated April 6, 2017. Updated Commissioner in Appendix B and D Updated QMS Representative in Appendix B and D Updated information within Appendix E Updated information within Appendix F
6.0	02/05/2020	<ul style="list-style-type: none"> Richmond Hill has change from Town to City. Updated Element 1, Appendix B and Appendix F as Director Infrastructure Delivery Services, Manager Design and Construction and Manager Capital Infrastructure Planning & Project Management Office are now part of Top Management. Updated Element 1 and 15 with Infrastructure Delivery Services for the former Design and Construction Division. Updated Element 19 and 20, with "QMS Corrective Action Database" as Intellex is no longer utilized as QMS Document Control tool. Added "Operator-in-Charge" to the Definitions section Updated Competencies and Responsibilities to Appendix F 1.2A, in Section 6, 10, 11.
6.1	03/22/2021	<ul style="list-style-type: none"> Updated Director in Appendix B. Updated section 7.4/8.4 with corrected names for attachments. Updated section 10.3 with Attachment 1: Work Duties Training Log Updated section 13.3 with corrected Attachment number.
7.0	02/08/2023	<ul style="list-style-type: none"> Updated section 1.3.b with Planning and Infrastructure Services for the former Environmental and Infrastructure Services. Updated section 5.2 as documents are not password protected and are not longer kept in a master hard binder. Updated section 9.2 with Council's responsibility to attend the "Responsibilities under the Statutory Standard of Care: Safe Drinking Water Act" training session at minimum once per Council term (four years). Updated section 9.3 with acronym "ORO" for Overall Responsible Operator.

		<ul style="list-style-type: none"> Updated section 11.3 as Supervisors in addition to the Manager are in charge of appropriate Personnel coverage by adhering to the most up to date stand-by list. Updated section 12.c with QMS Contractors and Suppliers Responsibilities Package for the former QMS Contractor and Suppliers Brochure. Updated section 13.3 by removing “Attachments 4 and 5 as they are now part of “Attachment 3 – QMS Contractors and Suppliers Responsibilities Package”. Updated section 17.3 with Associated Document: “WI-DW-6.2 Confined Space Entry Equipment Calibration. Updated sections 19.2 and 20.2 as corrective action report are not kept in “Opportunities for Improvement List”. Updated section 21.3 by adding “Attachment 2 – Corrective Action Report” Updated Appendix A by removing reference to outdated “Strategic Plan” Updated Commissioner in Appendix B and D Updated Manager of Capital Infrastructure Planning & Project Management Office in Appendix B. Updated information within Appendix E. Updated position titles within Appendix F.
8.0	09/05/2023	<ul style="list-style-type: none"> Updated Director of Public Works Operations in Appendix B. Updated information within Appendix E.
9.0	09/19/2025	<ul style="list-style-type: none"> Updated section 1.3 with the new names of the Departments after reorganization of the City. Updated sections 2, 3, 4, 6, 9, 10, and 11 with new Element procedures and attachments in reference to the Appendices (see change under Appendices). Removed from section 5.3 and 5.5 reference to “WaterTrax” application which is not longer in use and also replaced “Chapter 290 Record-Retention-Destruction of the Richmond Hill Municipal Code” with the “Records Classification and Retention Schedule”. Corrected typo in section 5.4. Removed from section 12.2.d reference to Richmond Hill’s The Liberal newspaper as it no longer exist. Updated section 19.2 and 19.3 with reference to “WI-DW-4.4 Internal Audit” and “EP-DW-8 Continual Improvement”. Updated section 20.2 and 20.3 with reference to “EP-DW-8 Continual Improvement”. Appendices have been removed and transformed into element Procedures as follows: Appendix A into EP-DW-9 QMS Policy; Appendix B & C into EP-DW-10 Commitment and Endorsement; Appendix D into EP-DW-11 QMS Representative; Appendix E into EP-DW-12 Drinking Water System Description; Appendix F into EP-DW-13 Operational Chart and Table of Roles,

		<p>Responsibilities, Authorities and Competencies; Appendix G into EP-DW-14 Personnel Coverage.</p> <ul style="list-style-type: none">• Updated Schedule C-Director's Directions for Operational Plans to latest version and contact information for Supervisor of Water and Wastewater.
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Ministry of the Environment,
Conservation and Parks

Schedule C – Director’s Directions for Operational Plans (Subject System Description Form) Municipal Residential Drinking Water System

Fields marked with an asterisk (*) are mandatory.

Owner of Municipal Residential Drinking Water System *
[The Corporation of the City of Richmond Hill](#)

Subject Systems

Name of Drinking Water System (DWS) *	Licence Number *	Name of Operating Subsystems (if applicable)	Name of Operating Authority *	DWS Number(s) *
1. Richmond Hill Distribution System	022-101		City of Richmond Hill	W260001968

Contact Information for Questions Regarding the Operational Plan

Primary Contact

Last Name *	Diogo	First Name *	Diogo	Middle Initial
Title *	Manager Roads, Water and Wastewater	Telephone Number *	905-780-2971 ext. 2971	Email Address *
				diogo.oliveira@richmondhill.ca

Secondary Contact

Last Name	Klein	First Name	Mike	Middle Initial
Title	Supervisor of Water and Wastewater	Telephone Number	905-780-2916 ext. 2916	Email Address
				mike.klein@richmondhill.ca



Richmond Hill Drinking Water