



**QMS
Management Review
Minutes**

**Review Date:
Monday June 25, 2024, 1:00 PM to 3:00 PM**

**Ballantrae/Musselman's Lake
Class I Drinking Water System
&
Stouffville Class I Drinking Water System**

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LIST OF ATTACHMENTS

None

Attendees:

Sunny Bains (CAO, Top Management)

Jack Graziosi (Commissioner of Engineering and Public Works, Top Management)

Matt Sullivan (Manager of Environmental Services)

Chris Leney (Water/Wastewater Supervisor)

Jeff Thomson (Operations Technologist, QMS Representative) – Facilitator

1.0 Introduction to the Management Review

Element 20 of the Ministry of the Environment, Conservation and Parks (MECP) Drinking Water Quality Management Standard (The Standard) requires a Management Review to be conducted at least once every calendar year to evaluate the continuing suitability, adequacy and effectiveness of the Town's Quality Management System (QMS). For 2024, the Management Review period covers from June 1, 2023 to May 31, 2024, unless otherwise specified in the report. The Management Review Section of the Operational Plan defines the Town's procedure for this review.

The Standard requires a review of the following categories, in order, to identify if, where and when improvements to the QMS and its procedures are required:

- a. Incidents of regulatory non-compliance
- b. Incidents of adverse drinking water tests
- c. Deviations from critical control limits and response actions
- d. The effectiveness of the risk assessment process
- e. Results of internal and third-party audit results
- f. Results of emergency response testing
- g. Operational performance
- h. Raw water supply and drinking water quality trends
- i. Follow up on action items from previous management reviews
- j. Status of management action items identified between reviews
- k. Changes that could affect the Quality Management System
- l. Consumer feedback
- m. The resources needed to maintain the Quality Management System
- n. The results of the infrastructure review
- o. Operational Plan currency, content and updates
- p. Staff suggestions

2.0 Municipal Drinking Water License Status

The Municipal Drinking Water Licences for the Stouffville Drinking Water System and the Ballantrae/ Musselman's Lake Drinking Water System are in good standing with the MECP.

Municipal Drinking Water Licenses for both distribution systems were renewed on June 15, 2021.

3.0 Communications

Public Works staff are provided Meeting Minutes from the Quarterly DWQMS Meetings via email.

Awareness training for Licensed Operators was conducted on February 14, 2024.

On March 20, 2024, Council endorsed the current version of the Operational Plan.

Communication to Suppliers is done by the Manager of Environmental Services, Supervisors and Procurement staff through the issuance of tenders, contracts and/or purchase orders to suppliers. The QMS Policy and copies of specific standard operating procedures are provided to Suppliers of Essential Suppliers and Services along with the purchase orders, contracts or tender documents.

Essential Supplier contact information is updated as required. Generic contact information is utilized as often as possible to ensure minimal disruption in the event of Supplier staff changes.

Statutory Standard of Care

Section 19 of the Safe Drinking Water Act extends legal responsibility to people with decision-making authority over municipal drinking water systems. This statutory standard of care is the responsibility of the Owner (Mayor and Council) and those who have decision making authority for the Operating Authority (Top Management, Manager of Environmental Services, Water/Wastewater Supervisor).

4.0 Drinking Water System & Quality Management System Performance

A. Incidents of Regulatory Non-Compliance

The Ministry of the Environment, Conservation and Parks (MECP) conducted the annual inspection of the Ballantrae/Mussleman's Lake and Stouffville water distribution systems on January 12, 2024.

The Ballantrae/Mussleman's Lake water distribution system received a final inspection rating of 100.00%.

The Stouffville water distribution system received a final inspection rating of 94.12%.

The MECP Inspector found one instance of non-compliance in the Stouffville water distribution system. At the time of inspection, one Chain of Custody form did not record chlorine residual results with one of the microbiological samples. The Water/Wastewater Supervisor conducted training exercises on January 22, 2024 and February 8, 2024 to review the proper sampling process and completion of Chain of Custody forms. Future Chain of Custody forms will also be reviewed by the Water/Wastewater Supervisor to ensure that each submission is properly completed. The MECP also recommended the addition of a mandatory field to the digital sampling form to include the time each sample was collected. This field was added to the digital form on January 31, 2024. No further action was required from the MECP.

B. Incidents of Adverse Drinking Water Tests

Stouffville Distribution System:

On October 28, 2023, a regulated microbiological sample taken from the sampling tail at the Lloyd Street construction site exceeded the Provincial standard for Total Coliform (TC). The distribution system was flushed and re-sampled as directed by the York Region Health Department on November 2, 2023. The re-samples were found within the Provincial regulated parameters. (AWQI 163916).

On January 9, 2024, a regulated lead sample taken from the sampling station at 133 Charles Street exceeded the Provincial standard for Sodium (Na). Sodium was sampled as an additional parameter by an outsourced private laboratory and was neither required to be tested according to the regulated schedule of sodium sampling or requested to be tested by the Town. The distribution system was flushed and re-sampled as directed by the York Region Health Department on January 16, 2024. The re-samples were still above Provincial regulated parameters. The elevated level of sodium in the Stouffville drinking water system is known and documented by both the Town and York Region and is communicated to the public on both the Town's and the Region's websites as per regulatory requirements. This existing communication to the public through the Town's website was deemed sufficient to resolve the adverse water quality incident. (AWQI 164338).

Ballantrae/Musselman's Lake Distribution System:

No adverse water quality incidents occurred in the Ballantrae/Musselman's Lake drinking water system during the reporting period.

C. Deviations From Critical Control Limits and Response Actions

Between June 1, 2023, and May 31, 2024 one deviation from critical control points was identified.

Date	System	Parameter	Deviation	Critical Control Point/Limit	Action
May 21/24	Stouffville DWS	Free chlorine residual	Result from Kesterfarm sample point was 0.17 mg/L	0.20 mg/L	Increase flushing activity in the development, install autoflusher to increase chlorine residuals

D. The Effectiveness of the Risk Assessment Process

On January 26, 2024, the Risk Assessment team consisting of the Commissioner of Engineering and Public Works, Manager of Environmental Services, Water/Wastewater Supervisor, Operations Technologist (QMS Representative), Two Licensed Operators, and One Operator in Training met to conduct the annual QMS Risk Assessment review. Outcomes of the review have been recorded in QMS-APP-08-01 – Risk Assessment Outcomes.

The Commissioner of Engineering and Public Works suggested that an external consultant should periodically participate in the Risk Assessment process to introduce new ideas and recommendations to the Town's Risk Assessment. Since the existing contract for QMS Emergency Training and Internal Auditing Services will be renewed for 2025, the new contract will include participating in the full Risk Assessment every 36 months to enhance the effectiveness of the Risk Assessment Process and corresponding functions of Environmental Services.

E. Results of Internal and Third-Party Audits

The annual internal audit was performed by Acclaims Environmental on December 21, 2023. No major or minor non-conformances and five opportunities for improvement were found in the internal audit.

- Element 5: Document and Records Control: Internal or external audits were not listed on the records list - complete

- Element 10: Competencies: Consider adding formal training specific to operations to your competencies list that you deem a requirement for staff to complete and refresh on, such as Record Keeping, Watermain Disinfection procedure, etc. Consider developing a new staff onboarding training program – and expanding on-the-job training for all operators on job-specific tasks – ensuring everyone is on the same page as to what’s expected in system operations. - complete
- Element 19: Internal Audit: Consider updating OP EI. 19 Internal audits to include a statement that the QMS is evaluated against the requirements of the DWQMS and ensure it describes how audit criteria and scope is identified for each audit. - complete
- Element 21: Tracking Continual Improvement: Consider establishing a spreadsheet for tracking continual improvement (e.g. NC’s, OFI’s, audit and inspection results, staff suggestions, etc.). - complete
- Element 3: Resources OFI/Staff Suggestion: Consider improving the following management of resources:
 - Shared specialty equipment with roads (e.g. dump trucks)
 - Staffing changes and management of change (backfilling previous positions, trying to find ideal Class I and higher, OIT-anticipate shadowing and onboarding process; loss of knowledge and experience)
 - Regarding weather impacts to usability of materials needed for emergency repairs (e.g. sand and gravel): could be temperature controlled in domes – to keep material dry and malleable for the excavations, etc. - ongoing

The third-party surveillance audit was performed on January 18-19, 2024, by NSF-ISR Management. No major or minor non-conformance and five opportunities for improvement was found in the surveillance audit.

- Element 2: QMS Policy: The QMS policy statement was physically displayed at the entrance to the Operations Centre and the Water Room as described the Operational Plan. Interviewed two operators. It was noted that the awareness of the policy needed improvement
- Element 14: Review and Provision of Infrastructure: Reviewed records of an infrastructure review attended by the Manager of Operations, W/WW Supervisor, Operations Technologist, Director of Public Works, Manager of Capital Projects and Manager of Engineering, held on June 1, 2023. Reviewed records of pipe repair works and replacement of water services. This information was used to determine the need for planning rehabilitation

and replacements. As an improvement, the management may consider to translate this information into graphs to better represent their situations, for easier presentation for decision making in the future.

- Element 14: Review and Provision of Infrastructure: Reviewed the 10-year capital forecast for the town which included the infrastructures for the Stouffville drinking water system for 2024 to 2033 to be in general conformance. However, the Ballantrae-Musselman's Lake DWS was not included because it was a newer system. Regardless of the situation, the fact should be addressed. Therefore, an improvement is required for future infrastructure reporting of the Ballantrae-Musselman's Lake DWS.
- Element 20: Management Review: Reviewed records of a management review meeting attended by both members of top management together with the manager of operations, W/WW supervisor, W/WW lead hand and the operations technologist, on June 19, 2023. All prescribed agenda items were addressed. Although the QMS rep showed the action arising from this meeting were documented under a separate meeting minutes, as an improvement, future actions arising from a management review be tabulated immediately after the meeting minutes complete with the party responsible and action timeline.
- Element 16: Sampling, Testing and Monitoring: Reviewed sampling locations at both drinking water systems to be adequately spread. Witnessed a water sampling process and interviewed another operator for the sampling process in particular the purpose of running the initial water to waste. Although the sampling process was good, the understanding of the running water to waste needs to be improved.

F. Results of the Emergency Response Testing

Emergency training and testing for Licensed Operators was conducted on December 20, 2023 by Acclains Environmental.

G. Operational Performance

The operational system performance section outlines any health-related water quality parameters in the water distribution systems. The routine sampling, testing and monitoring of the water distribution systems by Environmental Services staff helps ensure health related water quality problems are kept to a minimum. Table 1 below outlines the operational performance for the water distribution systems for the reporting period.

Table 1 – Operational Performance

Health Related Water Quality Parameters	Ballantrae/ Musselman's Lake DWS	Stouffville DWS
Total Coliforms Adverse Samples	0	1
E. Coli Adverse Samples	0	0
Boil Water Advisories – Issued by York Region	0	0
Drinking Water Advisories - Issued by York Region Direction to the Town	0	0
THMs - Annual Running Average (100 µg/L regulatory level)	23.86 µg/L	12.51 µg/L
HAA - Annual Running Average (80 µg/L regulatory level)	22.08 µg/L	<8 µg/L
Lead (0.01 mg/L regulatory level)	0.0005 mg/L	0.0005 mg/L
Nitrate (10.0 mg/L regulatory level)	<0.50 mg/L	<0.50 – 2.16 mg/L
Nitrite (1.0 mg/L regulatory level)	<0.05 mg/L	<0.05 mg/L
Chlorine Residual (Free) (0.05-4.0 mg/L regulatory level)	0.35 – 1.85 mg/L	0.17 – 1.95 mg/L
Chlorine Residual (Total) (0.05-4.0 mg/L regulatory level)	0.40 – 2.16 mg/L	0.52 – 2.20 mg/L

**Table 2 – Watermain Breaks – Stouffville DWS,
January 1, 2019 to May 31, 2024**

Date	Location	WM Size/Type	Cause	# of Residents Affected
Jan. 21/19	372 South St	100mm DI	Circumferential Break	21
Feb. 2/19	Harold St	150mm DI	Circumferential Break	5
Feb. 6/19	Tenth Line @ Main St	150mm DI	Circumferential Break	3
Feb. 22/19	Baker St @ Hawthorne Av	150mm DI	Circumferential Break	9
March 19/19	Blake St	150mm DI	Circumferential Break	10
Aug. 27/19	Sandiford Dr	250mm PVC	Cracked Pipe	6
Nov. 23/19	Winona Dr	100mm DI	Circumferential break	5
Feb. 29/20	Lloyd St	100mm DI	Circumferential break	10
Aug. 29/20	Parkview Village Easement	250mm PVC	Split pipe	250
Oct. 26/20	Albert St @ Harold Ave	150mm CI	Circumferential break	3
Nov. 6/20	Spring St	150mm DI	Blow Holes	19
Dec. 3/20	Winona Dr	100mm CI	Circumferential break	0 Residents 9 Businesses
Feb. 3/21	Blake St	150mm DI	Circumferential break	9
Feb. 17/21	Loretta Cr	150mm DI	Blow Holes	21

May 4/21	Blake St	150mm DI	Circumferential break	9
Aug. 13/21	Millard St	300mm DI	Blow Holes	16
Mar. 28/22	Rupert Ave	150mm DI	Circumferential Break	0
April 4/22	Hoover Park Dr	400mm PVC	Pipe Deflection from Construction	0
Dec. 16/22	344 South St	100mm DI	Blow Hole	20
Dec. 21/22	Elm & Winlane	150mm DI	Circumferential break	0
Jan. 26/23	44 Edward St	150mm DI	Circumferential break	23
Sept. 18/23	6327 Main Street	200mm DI	Blow Hole	27
Oct. 5/23	100 Weldon Road	250mm PVC	Ripped gasket on tapping sleeve	1
Oct. 23/23	19 Lloyd Street	100mm PVC	Construction activity	20
Nov. 24/23	5710 Main Street	250mm DI	Circumferential break	4
Jan. 27/24	344 South Street	100mm DI	Blow Hole	9

Table 3 – Watermain Breaks – Ballantrae/Musselman’s Lake DWS, January 1, 2019 to May 31, 2024

Date	Location	WM Size/Type	Cause	# of Residents Affected	Repair
There were no watermain breaks in the Ballantrae/Musselman’s Lake DWS					

H. Raw Water Supply and Drinking Water Quality Trends

York Region, as supplier of the Town’s drinking water, notifies the Town of water quality trends. There were no major changes to water quality trends in the water supplies in the reporting period.

Swabbing of the watermains was performed in October 2023 to remove any buildup in the watermains and improve chlorine residual values in Pressure Zone 1 of the Stouffville DWS. The Town’s sampling program and analysis performed with York region have confirmed that chlorine residual values in Pressure Zone 1.

Environmental Services has been monitoring chlorine residuals lower than the operating normal in the McKean Subdivision between York-Durham Line and Tenth Line. Environmental Services is seeking to increase flushing activity in the area, and to install an autoflusher to increase chlorine residuals in the area.

I. Follow Up Action Items From Previous Management Reviews

2 action items were identified from the June 20, 2022 Management Review:

Action Item: CAO recommends Public Works to complete a business case for the Water/Wastewater Manager position in the 2023 budget

- Position request was approved in the 2023 Operating Budget for a July 1 start date.
- Recruitment is ongoing with job posting closing June 12, 2023
- Matt Sullivan was hired as the new Manager of Environmental Services, with Chris Leney accepting the Water/Wastewater Supervisor position and James Ainsworth accepting the position of Lead Hand, Water/Wastewater. No further action required

Action Item: Re-endorsement of the Operational Plan will be presented to Council after the October 2022 Municipal Election. The CAO and Director of Public Works endorsed the QMS Policy and QMS Representative October 1, 2019.

- Re-endorsement of the current Operational Plan was carried by Council March 22, 2023
- The CAO and Commissioner of Engineering and Public Works endorsed the QMS Policy and QMS Representative in November 2023. No further action required

J. Status of Management Action Items Identified between Reviews

Action Item: It is recommended that Top Management re-endorse their commitment and endorsement to the Quality Management System on QMS-APP-03-01 – Top Management Commitment and Endorsement at today's meeting with the appointment of Sunny Bains as CAO

The CAO and Commissioner of Engineering and Public Works endorsed the QMS Policy and QMS Representative in November 2023. No further action required.

Action Item: It is recommended that Top Management re-endorse QMS-APP-04-01 – Notice of Appointment – QMS Representative at today's meeting with the appointment of Sunny Bains as CAO

The CAO and Commissioner of Engineering and Public Works endorsed the QMS Policy and QMS Representative in November 2023. No further action required.

K. Changes That Could Affect the QMS

Human Resources –

- Jack Graziosi was hired as Commissioner of Engineering and Public Works
- Matt Sullivan was hired as Manager of Environmental Services
- Chris Leney was hired as Water/Wastewater Supervisor and designated as Overall Responsible Operator
- James Ainsworth was hired as Lead Hand, Water/Wastewater
- Wesley Trott was hired as Water/Wastewater Operator
- Victor Matanovic was hired as Water/Wastewater Operator
- Jeffrey Thomson was appointed as QMS Representative

Changes Affecting DWQMS or MECP Regulations

There were no changes to the regulations which directly affect the QMS or MECP Regulations

York Region is currently collaborating with the local municipalities to draft and implement a Service Level Agreement (SLA) to standardize municipalities' working relationships with York Region as they pertain to the provision of safe drinking water to residents. The latest discussion with York Region for the SLA occurred on June 5th, 2024, and a draft version of the agreement is still in progress. Once finalized and implemented, there may be changes made to the Town's QMS to satisfy the requirements of the agreement, while still upholding the requirements of the DWQMS and other applicable legislation and regulations for the provision of safe drinking water.

L. Consumer Feedback

Approximately 150 service requests for water quality complaints were received for the reporting period. There were no requests which required changes to procedures. This is down from 303 service requests from the 2023 Management Review reporting period. However, the number for the 2024 period does not include curb stops, leaks, or sewage complaints.

M. Resources Needed to Maintain the QMS

Town resources currently used for the maintenance of the QMS consist of:

- | | |
|--|--|
| • CAO | • Water/Wastewater Supervisor |
| • Commissioner of Engineering and Public Works | • Lead Hands |
| • Manager of Environmental Services | • Operations Technologist (QMS Representative) |
| • Manager of Capital Projects | • Licensed Operators |

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- Manager of Development Engineering
- Administration Staff

Town resources currently used for the support of the QMS consist of:

- Customer Service
- Finance
- Capital Projects
- Development Engineering

N. Results of the Infrastructure Review

The annual Infrastructure Review meeting was conducted May 14, 2024, with the Commissioner of Engineering and Public Works, Manager of Development Engineering, Manager of Environmental Services, Manager of Capital Projects, Water/Wastewater Supervisor and Operations Technologist in attendance.

The meeting reviewed the 10-year Capital Budget forecast, 2018 DC study, Water/Wastewater Master Plan and any new items required for the addition, maintenance, operation and replacement of the water distribution systems.

Meeting minutes have been compiled with the outcomes from the Infrastructure Review, which will be reported in the 2024 Capital and Operating Budgets, 10-year Capital Budget forecast and the Water/Wastewater Master Plan (currently under development).

O. Operational Plan Currency, Content and Updates

Council Endorsement of the current Operational Plan was conducted on March 20, 2024.

The CAO and Commissioner of Engineering and Public Works endorsed the QMS Policy and QMS Representative on November 6, 2023.

P. Staff Suggestions

Staff suggestions for changes to the Operational Plan or associated procedures to improve the efficiency of day to day duties are received from staff feedback to the Manager of Environmental Services, Water/Wastewater Supervisor, and/or Operations Technologist.

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Feedback is received on an ongoing basis from staff, and the Operational Plan, Standard Operating Procedures, and Emergency Procedures are updated accordingly as required.

5.0 Next Management Review

The next Management Review is scheduled for June 2025.