



Revised General Committee Meeting Agenda

Revised items are marked with an asterisk ()*

Meeting No. 5 | April 30, 2024 | 9:30AM | Live streamed

Members of the public have the option to attend either remotely via Zoom or in-person in the council Chamber at the Civic Centre

Members of the public can participate by:

1. VIEWING THE ONLINE LIVESTREAM:

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2. EMAILING A WRITTEN SUBMISSION:

Members of the public may submit written deputations by email to clerkspublic@markham.ca.

Written submissions must be received by 5:00 PM the day before the meeting.

If the deadline for written submission has passed, you may:

Email your written submission directly to [Members of Council](#); or

Make a deputation at the meeting by completing and submitting an online [Request to Speak Form](#)

If the deadline for written submission has passed **and** Council has finished debate on the item at the meeting, you may email your written submission directly to [Members of Council](#).

3. REQUEST TO SPEAK / DEPUTATION:

Members of the public who wish to make a live deputation, please register prior to the start of the meeting by: Completing an online [Request to Speak Form](#), or,

E-mail clerkspublic@markham.ca providing full name, contact information and item they wish to speak, or,

If you do not have access to email, contact the Clerk's office at **905-479-7760** on the day of the meeting.

*If Council or Committee has finished debate at the meeting on the item, you may email your written submission directly to [Members of Council](#).

The list of [Members of Council is available online at this link](#).

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**Note: As per Section 7.1(h) of the Council Procedural By-Law,
Council will take a ten minute recess after two hours have passed since the last break.**

Information Page

General Committee Members:

All Members of Council

General Committee

Chair: Councillor Keith Irish

Vice Chair: Deputy Mayor Michael Chan

Finance & Administrative Matters

Chair: Councillor Keith Irish

Vice Chair: Deputy Mayor Michael Chan

Community Services Matters

Chair: Councillor Isa Lee

Vice Chair: Councillor Juanita Nathan

Environment & Sustainability Matters

Chair: Councillor Amanda Collucci

Vice Chair: Councillor Ritch Lau

Land, Building & Parks Construction Matters

Chair: Councillor Andrew Keyes

Vice Chair: Councillor Keith Irish

General Committee meetings are audio and video streamed live at the City of Markham's website.

Alternate formats are available upon request.

Consent Items: All matters listed under the consent agenda are considered to be routine and are recommended for approval by the department. They may be enacted on one motion, or any item may be discussed if a member so requests.

Note: The times listed on this agenda are approximate and may vary; Council may, at its discretion, alter the order of the agenda items.

**Note: As per the Council Procedural By-Law, Section 7.1 (h)
General Committee will take a 10-minute recess after
two hours have passed since the last break.**

**General Committee is scheduled to recess for lunch from
approximately 12:00 PM to 1:00 PM.**



General Committee Meeting Revised Agenda

Revised items are identified by an asterisk (*)

Meeting Number: 6

April 30, 2024, 9:30 AM - 1:00 PM

Live streamed

Please bring this General Committee Agenda to the Council meeting on May 1, 2024.

Pages

1. CALL TO ORDER

INDIGENOUS LAND ACKNOWLEDGEMENT

We begin today by acknowledging the traditional territories of Indigenous peoples and their commitment to stewardship of the land. We acknowledge the communities in circle. The North, West, South and Eastern directions, and Haudenosaunee, Huron-Wendat, Anishnabeg, Seneca, Chippewa, and the Mississaugas of the Credit peoples. We share the responsibility with the caretakers of this land to ensure the dish is never empty and to restore relationships that are based on peace, friendship, and trust. We are committed to reconciliation, partnership and enhanced understanding.

2. DISCLOSURE OF PECUNIARY INTEREST

3. APPROVAL OF PREVIOUS MINUTES

3.1 MINUTES OF THE APRIL 16, 2024 GENERAL COMMITTEE (16.0)

4

1. That the minutes of the April 16, 2024 General Committee meeting be confirmed.

4. DEPUTATIONS

5. COMMUNICATIONS

6. PETITIONS

7. CONSENT REPORTS - FINANCE & ADMINISTRATIVE MATTERS

7.1 CANCELLATION, REDUCTION, OR REFUND OF TAXES UNDER SECTIONS 357 AND 358 OF THE MUNICIPAL ACT, 2001 (7.3) 16

S. Manson, ext. 7514

1. That the Report for the "Cancellation, Reduction or Refund of Taxes under Sections 357 and 358 of the *Municipal Act, 2001*" be received; and,
2. That the taxes totalling approximately \$591,462 (incl. \$6,410 of Stormwater Fees) be adjusted under Section 357 and 358 of the *Municipal Act, 2001* of which the City's tax portion is estimated to be \$109,785; and,
3. That the associated interest be cancelled in proportion to the tax adjustments; and,
4. That the Treasurer be directed to adjust the tax roll accordingly; and further,
5. That staff be authorized and directed to do all things necessary to give effect to this resolution.

7.2 2024 FIRST QUARTER INVESTMENT PERFORMANCE REVIEW (7.0) 25

M. Visser, ext. 4260

1. That the report dated April 30, 2024 entitled "2024 First Quarter Investment Performance Review" be received.

8. CONSENT REPORTS - ENVIRONMENT & SUSTAINABILITY MATTERS

8.1 THE MECP – MARKHAM DISTRIBUTION SYSTEM - DRINKING WATER INSPECTION REPORT (5.3) 47

H. Frantzke, ext. 2449

1. That the report entitled "The MECP – Markham Distribution System – Drinking Water Inspection Report, January 30, 2024" be received; and further,
2. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

9. MOTIONS

10. NOTICES OF MOTION

11. NEW/OTHER BUSINESS

*As per Section 2 of the Council Procedural By-Law, "New/Other Business" would generally apply to an item that is to be added to the **Agenda** due to an urgent statutory*

time requirement, or an emergency, or time sensitivity".

12. ANNOUNCEMENTS

13. CONFIDENTIAL ITEMS

That, in accordance with Section 239 (2) of the Municipal Act, General Committee resolve into a confidential session to discuss the following matters:

13.1 FINANCE & ADMINISTRATIVE MATTERS

13.1.1 GENERAL COMMITTEE CONFIDENTIAL MINUTES-
JANUARY 30 & MARCH 19, 2024 (16.0) [Municipal Act, 2001,
Section 239 (2) (b)(c)(e)(f)]

*13.1.2 A PROPOSED OR PENDING ACQUISITION OR DISPOSITION
OF LAND BY THE CITY OR LOCAL BOARD -

(WARD 1) (8.1); [MUNICIPAL ACT, 2001, Section 239 (2) (c)]

13.1.3 LITIGATION OR POTENTIAL LITIGATION, INCLUDING
MATTERS BEFORE ADMINISTRATIVE TRIBUNALS,
AFFECTING THE MUNICIPALITY OR LOCAL BOARD;
ADVICE THAT IS SUBJECT TO SOLICITOR-CLIENT
PRIVILEGE, INCLUDING COMMUNICATIONS NECESSARY
FOR THAT PURPOSE

(16.23); [MUNICIPAL ACT, 2001, Section 239 (2)(e)(f)]

*13.2 LAND, BUILDING & PARKS CONSTRUCTION MATTERS

*13.2.1 A POSITION, PLAN, PROCEDURE, CRITERIA OR
INSTRUCTION TO BE APPLIED TO ANY NEGOTIATIONS
CARRIED ON OR TO BE CARRIED ON BY OR ON BEHALF OF
THE MUNICIPALITY OR LOCAL BOARD - DONATION OF
MONUMENT

(WARD 2)(6.6); [MUNICIPAL ACT, 2001, Section 239 (2)(k)]

14. ADJOURNMENT

General Committee Meeting Minutes

Meeting Number: 4
April 16, 2024, 9:30 AM - 1:00 PM
Live streamed

Roll Call	Mayor Frank Scarpitti	Councillor Reid McAlpine
	Deputy Mayor Michael Chan	Councillor Karen Rea
	Regional Councillor Jim Jones	Councillor Andrew Keyes
	Regional Councillor Joe Li	Councillor Amanda Collucci
	Regional Councillor Alan Ho	Councillor Juanita Nathan
	Councillor Keith Irish	Councillor Isa Lee
	Councillor Ritch Lau	
Staff	Andy Taylor, Chief Administrative Officer	Graham Seaman, Director, Sustainability & Asset Management
	Morgan Jones, Commissioner, Community Services	Darryl Lyons, Acting Director, Planning & Urban Design
	Arvin Prasad, Commissioner, Development Services	Alex Moore, Manager of Purchasing & Accounts Payable
	Claudia Storto, City Solicitor and Director of Human Resources	Chris Bullen, Manager, By-Law Services
	Bryan Frois, Senior Manager, Executive Operations and Strategic Initiatives	Giulio Cescato, Director of Planning & Urban Design
	Joseph Silva, Treasurer	Mark Visser, Sr Manager Strategy Innovation & Investments
	Kimberley Kitteringham, City Clerk	Eddy Wu, Acting Director, Environmental Services
	Martha Pettit, Deputy City Clerk	Hristina Giantsopoulos, Election/Council & Committee Coordinator
	Sumon Acharjee, Chief Information Officer	Tharsikaa Irajewaran, Assistant to Council/Committee
	Stephanie DiPerna, Director, Building Standards	Andrea Cecchetto, Director Service Excellence
	Mary Creighton, Director, Recreation Services	Dana Honsberger, Project Manager, Facilities Assets Sustainability & Asset Management

1. CALL TO ORDER

INDIGENOUS LAND ACKNOWLEDGEMENT

We begin today by acknowledging the traditional territories of Indigenous peoples and their commitment to stewardship of the land. We acknowledge the communities in circle. The North, West, South and Eastern directions, and Haudenosaunee, Huron- Wendat, Anishnabeg, Seneca, Chippewa, and the Mississaugas of the Credit peoples. We share the responsibility with the caretakers of this land to ensure the dish is never empty and to restore relationships that are based on peace, friendship, and trust. We are committed to reconciliation, partnership and enhanced understanding.

General Committee convened at 9:35 AM with Councillor Keith Irish presiding as Chair for all items on the agenda.

Due to technical difficulties with internet connectivity and sound the Committee recessed at 10:30 AM and reconvened at 10:40 AM. The Committee recessed again at 10:55 AM and reconvened at 11:05 AM to allow staff additional time to resolve the issues.

2. DISCLOSURE OF PECUNIARY INTEREST

There were no disclosures of pecuniary interest.

3. APPROVAL OF PREVIOUS MINUTES

3.1 MINUTES OF THE MARCH 19, 2024 GENERAL COMMITTEE (16.0)

Moved by Regional Councillor Joe Li

Seconded by Regional Councillor Jim Jones

1. That the minutes of the March 19, 2024 General Committee meeting be confirmed.

Carried

4. DEPUTATIONS

There were no deputations.

5. COMMUNICATIONS

5.1 YORK REGION COMMUNICATIONS (13.4)

Moved by Councillor Juanita Nathan

Seconded by Councillor Amanda Collucci

1. That the following communications dated March 28, 2024 from York Region be received for information purposes:
 - i. 2024 to 2027 York Region Plan to Support Seniors: Navigating Forward Together
 - ii. A Place to Thrive: York Region's 2024 to 2027 Plan for Newcomer Inclusion
 - iii. Approach to Developing York Region's 2025 to 2035 10-Year Housing and Homelessness Plan
 - iv. Go Transit Station Funding Act, 2023 – Regulatory Recommendations
 - v. Support for York Region's Northern Six Municipalities Housing Accelerator Fund Applications
 - vi. York Region Vision Zero Traveller Safety Plan

Carried

6. PETITIONS

There were no petitions.

7. CONSENT REPORTS - FINANCE & ADMINISTRATIVE MATTERS

7.1 MINUTES OF THE JANUARY 29, 2024 MARKHAM PUBLIC LIBRARY BOARD (16.0)

Moved by Councillor Reid McAlpine

Seconded by Councillor Karen Rea

1. That the minutes of the January 29, 2024 Markham Public Library Board meeting be received for information purposes.

Carried

7.2 AWARD OF RFP 009-R-24 CONSULTING SERVICES FOR CIPP WATERMAIN REHABILITATION DESIGN (7.12)

Moved by Councillor Reid McAlpine

Seconded by Councillor Karen Rea

1. That the report entitled "Award of RFP 009-R-24 Consulting Services for CIPP Watermain Rehabilitation Design" be received; and,

2. That Contract 009-R-24 Consulting Services for CIPP Watermain Rehabilitation detailed design be awarded to the highest ranked / lowest priced Bidder, Accardi Schaeffers & Associates Ltd. in the amount of \$308,827.35, inclusive of HST; and,
3. That a 10% contingency in the amount of \$30,882.74 inclusive of HST, be established to cover any additional designs costs and that authorization to approve expenditures of the contingency amount up to the specified limit be in accordance with the Expenditure Control Policy; and,
4. That the award for detailed design services in the amount of \$339,710.09 (\$308,827.35 + \$30,882.74) be funded from the account 053-6150-24262-005 "CI Watermain Rehabilitation Design", with an available budget of \$466,600; and,
5. That remaining funding of \$126,889.91 (\$466,600.00 less \$339,710.09) be returned to the original funding source; and,
6. That the contract administration services (inclusive of 10% contingency) be awarded to Accardi Schaeffers & Associates Ltd in the amount of \$362,959.20 subject to Council adoption of the 2025 capital budget request; and,
7. That the future Purchase Order for contract administration be updated to reflect the actual construction time required based on the final design; and further,
8. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

7.3 059-S-24 SUPPLY & DELIVERY OF TWO SINGLE AXLE TRUCKS AND ONE TANDEM AXLE TRUCK (7.12)

The Committee requested that a picture of the purchased vehicles be included in future reports and inquired about the difference in cost between the two trucks.

Staff indicated that with the supply chain constraints and cost escalations, there were opportunities identified by staff to purchase the vehicles at different times to split the procurement which resulted in cost benefits.

Moved by Regional Councillor Alan Ho

Seconded by Regional Councillor Joe Li

1. That the report entitled “059-S-24 Supply & Delivery of Two Single Axle Trucks and One Tandem Axle Truck” be received; and,
2. That the contracts for the supply and delivery of two single axle trucks be awarded as follows:
 - a. Supply and delivery of two trucks and chassis to Premier Truck Group in the amount of \$314,439.44 inclusive of HST; and,
 - b. Supply, installation, delivery and upfit of the winter control equipment on these two trucks and chassis to Viking Cives in the amount of \$413,420.35 inclusive of HST; and,
 - c. That the total award amount for two trucks of \$727,859.79 (\$314,439.44 + \$413,420.35) inclusive of HST be funded from capital project #23020 (057-6150-23470-005 Corporate Fleet Replacement – Non-Fire) with available budget of \$582,400; and,
3. That the budget shortfall for the single axle trucks (project #23020) in the amount of \$145,459.79 (\$582,400.00 - \$727,859.79) be funded from the Life Cycle Replacement and Capital Reserve Fund; and,
4. That the contracts for the supply and delivery of one tandem axle truck be awarded as follows:
 - a. Supply and delivery of one truck and chassis to Premier Truck Group in the amount of \$207,171.66 inclusive of HST; and,
 - b. Supply, installation, delivery and upfit of the winter control equipment on this truck and chassis to Viking Cives in the amount of \$213,075.26, inclusive of HST; and,
 - c. That the total award amount of \$420,246.93 (\$207,171.66 + \$213,075.26) inclusive of HST be funded from capital project #24230 (057-6150-24230-005 Corporate Fleet Replacement – Non-Fire) with available budget of \$428,402.75; and,
5. That the budget remaining for the tandem axle truck (project #24230) in the amount of \$8,155.82 (\$428,402.75 - \$420,246.93) be returned to the original funding source; and,
6. That the tendering process be waived in accordance with Purchasing By-Law 2017-18, Part II, Section 11.1 (f) where, for any reason, a Quotation issued by the City does not result in a successful Contract Award; and further,

7. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

8. CONSENT REPORTS - COMMUNITY SERVICES MATTERS

8.1 OPERATIONAL TRANSITION OF THE VICTORIA SQUARE SATELLITE COMMUNITY CENTRE TO THE CITY OF MARKHAM - RECREATION SERVICES (6.6)

The Committee expressed concerns regarding the composition and administration of this community board and that currently there is no community centre in Ward 2.

A discussion ensued in relation to funding sources, the budget process and the criteria in which community centre locations are determined.

Moved by Mayor Frank Scarpitti
Seconded by Councillor Ritch Lau

1. That the report entitled “Operational Transition of the Victoria Square Community Centre to the City of Markham – Recreation Services” be received; and,
2. That the transfer of the management of the Victoria Square Community Centre to the City of Markham – Recreation Services be approved; and,
3. That the Victoria Square Community Centre Board be dissolved, and that Council extend its sincere thanks to all Victoria Square Community Centre Board members, past and present, for the unwavering commitment they have demonstrated towards ensuring the community centre’s smooth operation; and further,
4. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

9. PRESENTATIONS - FINANCE & ADMINISTRATIVE MATTERS

9.1 2023 CONSOLIDATED FINANCIAL REPORTS (7.0)

Joseph Silva, Treasurer, addressed the Committee to bring forward the financial statements and audit findings for the year ending December 31, 2023. Mr. Silva

indicated that there were a number of new accounting standards that the City implemented in 2023. He noted that the City has received the Government Finance Officers Association (GFOA) ‘*Canadian Award for Financial Reporting*’, for the last 22 years and noted that the award provides recognition for excellence in governmental accounting and financial reporting.

Mr. Silva introduced Kishor Soneji, Manager, Financial Reporting and indicated that Mr. Soneji's presentation will identify key aspects of the financial statements and will compliment the staff report to General Committee. Mr. Silva also introduced, Maria Khoushnood, Lead Audit Engagement Partner, KPMG who was in attendance to present the audit findings of the Consolidated Financial Statements.

Mr. Soneji, addressed the Committee and presented the 2023 Consolidated Financial Statements, which provided an overview of the City's financial position health and strength as required under *The Municipal Act*.

Ms. Khoushnood, addressed the Committee to present the audit findings of the Consolidated Financial Statements which were found to present a fair representation of the City's financial position.

Moved by Mayor Frank Scarpitti

Seconded by Deputy Mayor Michael Chan

1. That the presentation titled “2023 Consolidated Financial Statements” be received; and,
2. That the report titled “2023 Consolidated Financial Statements” be received; and,
3. That Council approve the draft Consolidated Financial Statements of The Corporation of the City of Markham (the City), including Community Boards, Business Improvement Areas (BIAs), Destination Markham Corporation and Investment in Markham Enterprises Corporation (MEC), for the fiscal year ended December 31, 2023; and,
4. That Council authorize Staff to publish the final audited Statements for the fiscal year ended December 31, 2023 upon receiving the Independent Auditors’ Report; and,
5. That the KPMG LLP Audit Findings Report for the year ended December 31, 2023 be received; and further,
6. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

Moved by Councillor Amanda Collucci

Seconded by Councillor Ritch Lau

That Item 9.1 be moved up on the agenda and be addressed after Item 6. Petitions.

Carried

9.2 BUILDING MARKHAM'S FUTURE TOGETHER (BMFT) 2020 – 2023 STRATEGIC PLAN UPDATE (16.23)

Bryan Frois, Senior Manager, Executive Operations and Strategic Initiatives, introduced, Andy Taylor, Chief Administrative Officer who provided opening remarks and noted that the Building Markham's Future Together, Strategic Plan illustrates that Markham is an organization that is inclusive, efficient, and customer focused and that there is pride in delivering exceptional services by exceptional people. He highlighted some of the recent City achievements which included; the launch of the new recreation and culture registration system, the Contact Centre, who has provided 20-years of excellence, the purchase of the Shouldice property, the Markham Innovation Exchange, being on the Forbes list of top employers, and awards for financial reporting for 22 years in a row, the implementation of the Diversity Action Plan and the Anti-Black Racism Action Plan. Mr. Taylor thanked all staff for their commitment to service excellence.

Mr. Frois, addressed the Committee and provided an update on the City's accomplishments in the last year as they are related to their respective Building Markham's Future Together goals.

The Committee appreciated the report and commended staff for the contributions, leadership and daily delivery of services.

Moved by Mayor Frank Scarpitti

Seconded by Regional Councillor Jim Jones

1. That the report entitled Building Markham's Future Together (BMFT) 2020 – 2023 Strategic Plan Update be received; and further,
2. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

9.3 BUILDING MARKHAM'S FUTURE TOGETHER (BMFT) 2020 - 2026 STRATEGIC PLAN REPORT (16.23)

Andy Taylor, Chief Administrative Officer, addressed the Committee to provide opening remarks and indicated that all the feedback received was taken into account in the revised strategic plan and thanked all Members of Council, and members of the community for their feedback and validation that the goals and action items are relative, innovative and community focused. Mr. Taylor introduced, Bryan Frois, Senior Manager, Executive Operations and Strategic Initiatives, who presented the Building Markham's Future Together 2022-2026 Strategic Plan Report.

Mr. Frois advised that this report concludes the final phase of the strategic plan update. He outlined the steps taken to this point which included consultation and identification of new action items under each of the for overall goals. He thanked all those involved for their contributions.

The Committee requested that the Key Services section be expanded to identify and include a broader range of services provided. The Committee made a suggestion to engage in increase engagement with the York Region Police on community safety initiatives.

Moved by Mayor Frank Scarpitti
Seconded by Councillor Andrew Keyes

1. That the report entitled Building Markham's Future Together (BMFT) 2020 – 2026 Strategic Plan be received; and,
2. That the revised Building Markham's Future Together 2020 – 2026 Strategic Plan attached as Appendix A, be adopted by the City; and,
3. That Staff report annually on the status of Building Markham's Future Together 2020 - 2026 Strategic Plan; and further,
4. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

10. REGULAR REPORTS - FINANCE & ADMINISTRATIVE MATTERS

10.1 MINUTES OF THE NOVEMBER 27, 2023 ADVISORY COMMITTEE ON ACCESSIBILITY (16.0)

Moved by Councillor Ritch Lau

Seconded by Regional Councillor Alan Ho

1. That the minutes and notes of the November 27, 2023 Environmental Advisory Committee meeting be received for information purposes, and,
2. That Council consider increasing the number of times the Advisory Committee on Accessibility meets from 4 to 10 times per year, to allow for the Committee to fulfill its legislative requirements.

Carried

11. MOTIONS

11.1 BLUE BOX END OF LIFE MANAGEMENT (10.0)

Moved by Councillor Karen Rea

Seconded by Mayor Frank Scarpitti

WHEREAS under Ontario Regulation 391/2, Blue Box producers are fully accountable and financially responsible for their products and packaging once they reach their end of life and are disposed of, for ‘eligible’ sources only; and,

WHEREAS ‘ineligible’ sources, which producers are not responsible for, include business improvement areas, places of worship, daycares, camp grounds, public-facing and internal areas of municipal-owned buildings, and not-for-profit organizations, such as shelters and food banks; and,

WHEREAS should a municipality continue to provide services to the ‘ineligible’ sources, the municipality will be required to oversee the collection, transportation, and processing of the recycling, assuming 100% of the costs.

Therefore, be it resolved:

1. That the Council of the City of Markham hereby request that the province amend Ontario Regulation 391/21, Blue Box so that producers are responsible for the end-of-life management of recycling products from all sources as stated above; and,
2. That Council hereby request the support of all Ontario Municipalities; and,
3. This resolution be forwarded to the Honourable Doug Ford, Premier of Ontario, the Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks, Leader of the opposition, Leaders of the Liberal and Green Parties and all City of Markham MPP’s; and further,

4. That a copy of this Motion to be sent to the Association of Municipalities of Ontario (AMO).

Carried

12. NOTICES OF MOTION

There were no notices of motion.

13. NEW/OTHER BUSINESS

There was no new or other business.

13.1 THORNHILL SUB-COMMITTEE PUBLIC MEETING (APRIL 9, 2024) - STATUTORY NOTICE EXCEPTION

The Committee made inquiries regarding the reasons to increase the notification radius, whether notices would be sent to property owners within the legislated notification radius, and why there was another statutory public meeting planned on the Baha'i National Centre item.

There was discussion regarding the significance of the location and that it is widely used by residents and visitors, many who have an interest in what will happen to this property. Staff advised that the notification radius required is within 120 meters and will be used to identify property owners in the City of Toronto.

The Committee consented to an amendment to send notices to property owners in the City of Toronto within the statutory requirements in addition to increasing the notification radius in the City of Markham to 500 meters.

Moved by Regional Councillor Jim Jones

Seconded by Regional Councillor Joe Li

1. That the statutory notice for the May 14, 2024, Development Services Public Meeting be expanded to a 500-metre radius for the Baha'i National Centre item.

Carried

Moved by Councillor Karen Rea

Seconded by Councillor Amanda Collucci

1. That the statutory notice radius for the May 14, 2024, Development Services Public Meeting include property owners in the City of Toronto

within the statutory notice requirements for the Baha'i National Centre item.

Carried

14. ANNOUNCEMENTS

There were no announcements.

15. ADJOURNMENT

Moved by Councillor Juanita Nathan

Seconded by Councillor Andrew Keyes

General Committee adjourned at 12:28 PM.

Carried



Report to: General Committee

Meeting Date: April 30, 2024

SUBJECT: Cancellation, Reduction, or Refund of Taxes under Sections 357 and 358 of the *Municipal Act, 2001*

PREPARED BY: Shane Manson, Senior Manager, Revenue & Property Tax

RECOMMENDATION:

1. That the Report for the Cancellation, Reduction or Refund of Taxes under Sections 357 and 358 of the *Municipal Act, 2001* be received; and,
2. That the taxes totalling approximately \$591,462 (incl. \$6,410 of Stormwater Fees) be adjusted under Section 357 and 358 of the *Municipal Act, 2001* of which the City's tax portion is estimated to be \$109,785; and,
3. That the associated interest be cancelled in proportion to the tax adjustments; and,
4. That the Treasurer be directed to adjust the tax roll accordingly; and,
5. That staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to authorize the Treasurer to adjust the Collector's Roll under Section 357 and 358 of the *Municipal Act, 2001 (The Act)*.

BACKGROUND:

Sections 357 and 358 of *The Act* allows for the reduction, cancellation or refund of taxes. Section 357 subsection (1) states that: upon application to the Treasurer of a local municipality, the local municipality may cancel, reduce or refund all or part of taxes levied on land in the year in respect of which the application is made if:

- a. if a property or portion of a property is eligible to be reclassified in a different class of property, and that class has a lower tax ratio for the taxation year than the class the property or portion of the property was in before the change, and if no supplementary assessment is made in respect of the change under subsection 34(2) of the *Assessment Act*;
- b. property that has become vacant land or excess land during the year;
- c. property that has become exempt from taxation during the year;
- d. building that during the year was razed by fire, demolition or otherwise, or was damaged by fire, demolition or otherwise so as to render it substantially unusable for the purposes for which it was used immediately prior to the damage;
- d.1. person who was unable to pay taxes because of sickness or extreme poverty;
- e. mobile unit that was removed from the land during the year;

-
- f. property overcharged by reason of any gross or manifest error that is a clerical error, the transposition of figures, a typographical error or similar type of error, but not an error in judgment in making the assessment upon which the taxes have been levied; or
 - g. in respect of a property which by reason of repairs or renovations could not be used for its normal use for a period of at least three months during the year.

Pursuant to Section 357 subsection (3), an application must be filed with the Treasurer on or before the last day of February of the year following the year in respect of which the application is made.

Pursuant to Section 358 subsection (3), an application must be filed with the Treasurer between March 1 and December 31 of a year and may apply to taxes levied for one or both of the two years preceding the year in which the application is made and the application shall indicate to which year or years it applies. This section permits applications for tax adjustment, related to taxes levied in each or either of the two years preceding the year in which the application is made, by owners who are overcharged by reason of any gross or manifest error in the preparation of the assessment roll by the Municipal Property Assessment Corporation (MPAC) that was factual in nature. This may include, but is not limited to; clerical errors, the transposition of figure or typographical errors, but not an error in judgment in making the assessment upon which the taxes have been levied.

OPTIONS/ DISCUSSION:

In accordance with *The Act*, the notices of hearing for the properties listed in Appendix B, were mailed to the applicants fourteen days before the date of which the applications are heard. The notices for these properties were mailed to applicants on April 9, 2024.

The schedules attached identify the associated year of taxation, the assessment roll number of each property, the reason for the tax appeal, the resulting tax adjustment along with the proportionate share for the City, Region, and School Board. There are four (4) primary reasons for a property tax appeal application to be filed:

1. Razed by Fire / Demolition / Unusable: representing properties that have experience a structural fire, structural demolition or Unusable. All such applications include a copy of the applicable permit and associated documentation.
2. Became Exempt: representing properties that were assessed on the assessment roll as taxable but became exempt from taxation during the year.
3. Gross or Manifest Error: representing properties that require the property assessment to be amended due to errors identified in the overall valuation of the property.
4. Change in Tax Class: representing properties that were assessed on the assessment roll as one tax class but became eligible to be reclassified into a different property during the year.

Applications submitted to the City undergo review by MPAC. Following this review, they are returned with either a recommendation for tax adjustment or without any recommendation. Applications without a recommendation indicate that the tax appeal does not meet the specified criteria under The Act. These applications, totalling 15, have been thoroughly reviewed and deemed ineligible for relief.

Among the 66 properties that received tax adjustments, the total adjustment amount is \$591,462 (including a \$6,410 Stormwater Fee). Notably, 69.4% or \$410,453 of this total is attributable to just 4 properties, which are described below.

1. 1936 010 081 55410 (*7750 Bayview Avenue*)

This property is located on the west side of Bayview Avenue, north of John Street. The property was purchased by the City of Markham in January 2023, which has changed a portion of its tax class to exempt. The resulting total tax adjustment for the 2023 taxation year is \$117,305, of which the City's proportionate share is \$18,507.

2. 1936 030 212 17505 (*0 Kirkham Drive*)

This property is located on the south side of Kirkham Drive, east of Markham Road. The property was conveyed to the City of Markham in 2020, upon review its tax class has been changed to exempt. The resulting total tax adjustment for the 2021-23 taxation years is \$101,645, of which the City's proportionate share is \$23,579.

3. 1936 020 121 42260 (*85 Torbay Road*)

This property is located on the east side of Woodbine Avenue, north of Steeles Avenue East. The property was purchased by the City of Markham in May 2021, which has changed its tax class to exempt. The resulting total tax adjustment for the 2021-23 taxation years is \$97,206, of which the City's proportionate share is \$13,234.

4. 1936 020 121 42250 (*55 Torbay Road*)

This property is located on the east side of Woodbine Avenue, north of Steeles Avenue East. The property was purchased by the City of Markham in May 2021, which has changed its tax class to exempt. The resulting total tax adjustment for the 2021-23 taxation years is \$94,297, of which the City's proportionate share is \$12,952.

FINANCIAL CONSIDERATIONS

As shown in Figure 1 below, Markham's share of the total tax adjustments amounts to \$109,785. The remaining proportionate amounts, detailed in Figure 1, will be charged back to the other two levying bodies (Region of York and Province of Ontario).

Figure 1: Tax Adjustments by Levying Body	
City of Markham	\$109,785
Region of York	\$236,676
Province of Ontario (<i>Education</i>)	\$238,591
Total Tax Adjustment	\$585,052
Stormwater Fee	\$6,410
Total Adjustment	\$591,462

The City of Markham annually budgets for property tax adjustments, which come as a result of assessment appeals and from tax appeals filed under either the *Assessment Act* or *Municipal Act, 2001*. The 2024 property tax adjustment budget is \$1,301,000, which will fund the City's portion of the total tax adjustments noted in figure 1 above.

The remaining property tax adjustment budget will fund other tax adjustments received throughout 2024. Staff will report back with additional details through the year-end results of operations report.

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Not applicable

RECOMMENDED BY:

Joseph Silva
Treasurer

Trinela Cane
Commissioner, Corporate Services

ATTACHMENTS:

Appendix A – Tax Adjustments under Section 357 and 358 of the *Municipal Act, 2001*

Appendix B – Tax Adjustments Detailed List

APPENDIX A

Tax Adjustments under Section 357 and 358 of the *Municipal Act, 2001*
 April 30, 2024 - General Committee Meeting

Appeal Reason	Total Adjusted Amount	City Adjusted	Appeal Count
Gross or Manifest Error	\$27,874	\$5,463	6
Became Exempt	\$523,511	\$97,302	47
Razed by Fire / Demolition / Unusable	\$33,667	\$7,020	13
Total	\$585,052	\$109,785	66

APPENDIX B: Tax Adjustments under Section 357 & Section 358 – Tax Adjustments Detailed List

TAX APPEALS: SECTION 357 – RESIDENTIAL					
Tax Year	Application	Roll Number	Property Address	Appeal Reason	Amount
2023	5158	36-01-0-010-23100-0000	118 HIGHLAND PARK BLVD	Damaged by fire/unusable	\$379
2023	5175	36-01-0-010-43800-0000	17 GRANDVIEW AVE	Became Exempt, Purchased by City	\$7,495
2023	5166	36-01-0-089-47600-0000	18 FOREST PARK CRES	Demolished/ Razed by fire	\$2,419
2023	5165	36-02-0-133-50036-0000	2 BRANTWOOD CRT	Demolished/ Razed by fire	\$2,717
2023	5153	36-02-0-133-51252-0000	34 CARNFORTH DR	Demolished/ Razed by fire	\$108
2023	5186	36-02-0-140-00398-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$398
2023	5192	36-02-0-140-00403-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$278
2023	5189	36-02-0-140-00408-0000	0 WARDEN AVE	Became Exempt, Purchased by City	\$3,870
2023	5195	36-02-0-140-00413-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$484
2023	5198	36-02-0-140-00443-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$176
2023	5201	36-02-0-140-00460-0000	0 WARDEN AVE	Became Exempt, Purchased by City	\$2,710
2023	5204	36-02-0-140-00614-0000	0 ROUGESIDE PROM	Became Exempt, Purchased by City	\$2,903
2023	5207	36-02-0-140-00634-0000	0 VERDALE CROSS	Became Exempt, Purchased by City	\$50
2023	5213	36-02-0-140-00654-0000	260 ROUGESIDE PROM	Became Exempt, Purchased by City	\$437
2023	5148	36-02-0-143-30900-0000	202 CARLTON RD	Demolished/ Razed by fire	\$3,413
2023	5134	36-02-0-160-66500-0000	11172 WARDEN AVE	Demolished/ Razed by fire	\$1,995
2023	5164	36-02-0-180-18200-0000	31 VICTORIA AVE	Correction to tax class	\$1,007
2023	5143	36-03-0-210-15180-0000	129 WOODHALL RD	Damaged by fire/unusable	\$357
2023	5226	36-03-0-212-17505-0000	0 KIRKHAM DR	Became Exempt, Conveyed to the City	\$33,222
2023	5216	36-03-0-220-86405-0000	0 SOUTH UNIONVILLE AVE	Became Exempt, Purchased by City	\$11
2023	5219	36-03-0-221-00150-0000	0 IAN BARON AVE	Became Exempt, Purchased by City	\$129
2023	5150	36-03-0-221-45501-0000	0 DEVIATION RD	Correction to tax class	\$2,768
2023	5254	36-03-0-232-74926-0000	0 HAMMERSLY BLVD	Became Exempt, Purchased by City	\$272
2023	5222	36-03-0-235-07000-0000	6418 MAJOR MACKENZIE DR	Became Exempt, Purchased by City	\$4,434
2023	5230	36-03-0-256-10679-0000	0 CORNELL ROUGE BLVD	Became Exempt, Purchased by City	\$1,173

Report to: General Committee

Meeting Date: April 30, 2024

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2023	5233	36-03-0-256-10681-0000	0 STAUFFER CRES	Became Exempt, Purchased by City	\$12,240
2023	5236	36-03-0-256-10682-0000	0 RUSTLE WOODS AVE	Became Exempt, Purchased by City	\$1,471
2023	5239	36-03-0-256-10683-0000	0 RUSTLE WOODS AVE	Became Exempt, Purchased by City	\$1,895
2023	5242	36-03-0-256-10684-0000	0 RUSTLE WOODS AVE	Became Exempt, Purchased by City	\$2,266
2023	5250	36-04-0-310-26600-0000	35 BAKERDALE RD	Demolished/ Razed by fire	\$1,263
2023	5154	36-04-0-330-00500-0000	0 MAIN ST S	Correction to tax class	\$5,056
2023	5146	36-04-0-350-65764-0000	7 SIR ECTOR CRT	Swimming pool filled in	\$292
Total s.357 Residential				32 Appeals	\$97,687

TAX APPEALS: SECTION 357 – NON-RESIDENTIAL

Tax Year	Application	Roll Number	Property Address	Appeal Reason	Amount
2023	5156	36-01-0-081-55410-0000	7750 BAYVIEW AVE	Became Exempt, Purchased by City	\$117,305
2023	5180	36-02-0-121-42250-0000	55 TORBAY RD	Became Exempt, Purchased by City	\$36,854
2023	5183	36-02-0-121-42260-0000	85 TORBAY RD	Became Exempt, Purchased by City	\$41,827
2023	5167	36-02-0-132-67700-0000	8885 WOODBINE AVE	Demolished/ Razed by fire	\$10,539
2023	5264	36-03-0-220-06500-0000	7997 KENNEDY	Demolished/ Razed by fire	\$8,571
Total s.357 Non-Residential				5 Appeals	\$215,097

TAX APPEALS: SECTION 358 - RESIDENTIAL

Tax Year	Application	Roll Number	Property Address	Appeal Reason	Amount
2022	5174	36-01-0-010-43800-0000	17 GRANDVIEW AVE	Became Exempt, Purchased by City	\$7,295
2021 / 2022	5138 / 5139	36-01-0-040-10242-0000	120 KIRK DR	Swimming pool filled in	\$358
2021 / 2022	5140 / 5141	36-02-0-133-50945-0000	24 LANCASHIRE RD	Gross/ Manifest Error	\$434
2021 / 2022	5184 / 5185	36-02-0-140-00398-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$767
2021 / 2022	5190 / 5191	36-02-0-140-00403-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$935
2021 / 2022	5187 / 5188	36-02-0-140-00408-0000	0 WARDEN AVE	Became Exempt, Purchased by City	\$3,998
2021 / 2022	5193 / 5194	36-02-0-140-00413-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$847
2021 / 2022	5196 / 5197	36-02-0-140-00443-0000	0 BIRCHMOUNT RD	Became Exempt, Purchased by City	\$589
2021 / 2022	5199 / 5200	36-02-0-140-00460-0000	0 WARDEN AVE	Became Exempt, Purchased by City	\$2,726

Report to: General Committee

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2021 / 2022	5202 / 5203	36-02-0-140-00614-0000	0 ROUGESIDE PROM	Became Exempt, Purchased by City	\$2,936
2021 / 2022	5205 / 5206	36-02-0-140-00634-0000	0 VERDALE CROSS	Became Exempt, Purchased by City	\$97
2021 / 2022	5211 / 5212	36-02-0-140-00654-0000	260 ROUGESIDE PROM	Became Exempt, Purchased by City	\$843
2021 / 2022	5162 / 5163	36-02-0-180-18200-0000	31 VICTORIA AVE	Correction to tax class	\$1,198
2021 / 2022	5224 / 5225	36-03-0-212-17505-0000	0 KIRKHAM DR	Became Exempt, Conveyed to the City	\$64,062
2021 / 2022	5214 / 5215	36-03-0-220-86405-0000	0 SOUTH UNIONVILLE AVE	Became Exempt, Purchased by City	\$20
2021 / 2022	5217 / 5218	36-03-0-221-00150-0000	0 IAN BARON AVE	Became Exempt, Purchased by City	\$249
2021 / 2022	5252 / 5253	36-03-0-232-74926-0000	0 HAMMERSLY BLVD	Became Exempt, Purchased by City	\$323
2021 / 2022	5220 / 5221	36-03-0-235-07000-0000	6418 MAJOR MACKENZIE DR	Became Exempt, Purchased by City	\$8,549
2021 / 2022	5228 / 5229	36-03-0-256-10679-0000	0 CORNELL ROUGE BLVD	Became Exempt, Purchased by City	\$2,262
2021 / 2022	5231 / 5232	36-03-0-256-10681-0000	0 STAUFFER CRES	Became Exempt, Purchased by City	\$23,603
2021 / 2022	5234 / 5235	36-03-0-256-10682-0000	0 RUSTLE WOODS AVE	Became Exempt, Purchased by City	\$2,837
2021 / 2022	5237 / 5238	36-03-0-256-10683-0000	0 RUSTLE WOODS AVE	Became Exempt, Purchased by City	\$3,655
2021 / 2022	5240 / 5241	36-03-0-256-10684-0000	0 RUSTLE WOODS AVE	Became Exempt, Purchased by City	\$4,371
2022	5147	36-04-0-350-65764-0000	7 SIR ECTOR CRT	Swimming pool filled in	\$284
2022	5145	36-04-0-351-21600-0000	148 CHURCH ST	Demolition of structure	\$1,264
Total s.358 Residential				25 Appeals	\$134,503

TAX APPEALS: SECTION 358 – NON-RESIDENTIAL					
Tax Year	Application	Roll Number	Property Address	Appeal Reason	Amount
2021 / 2022	5178 / 5179	36-02-0-121-42250-0000	55 TORBAY RD	Became Exempt, Purchased by City	\$57,442
2021 / 2022	5181 / 5182	36-02-0-121-42260-0000	85 TORBAY RD	Became Exempt, Purchased by City	\$55,378
2021	5168	36-03-0-213-47400-0000	120 TRAVAIL RD	Correction to tax class	\$10,629
2021	5152	36-04-0-300-08500-0000	8 DUBLIN	Correction to tax class	\$14,315
Total s.358 Non-Residential				4 Appeals	\$137,765
Total				66 Appeals	\$585,052



Report to: General Committee

Meeting Date: April 30, 2024

SUBJECT: 2024 First Quarter Investment Performance Review
PREPARED BY: Mark Visser, Senior Manager of Financial Strategy & Investments, x4260

RECOMMENDATION:

- 1) THAT the report dated April 30, 2024 entitled “2024 First Quarter Investment Performance Review” be received.

EXECUTIVE SUMMARY:

Not Applicable

PURPOSE:

Pursuant to Regulation 438/97 Section 8, the Municipal Act requires the Treasurer to “prepare and provide to the Council, each year or more frequently as specified by Council, an investment report”.

The investment report shall contain,

- (a) a statement about the performance of the portfolio of investments of the municipality during the period covered by the report;
- (b) a description of the estimated portion of the total investments of a municipality that are invested in its own long-term and short-term securities to the total investment of the municipality and a description of the change, if any, in that estimated proportion since the previous year’s report;
- (c) a statement by the Treasurer as to whether or not, in his opinion, all investments were made in accordance with the investment policies and goals adopted by the municipality;
- (d) a record of the date of each transaction in or disposal of its own securities, including a statement of the purchase and sale price of each security;
- (e) such other information that the Council may require or that, in the opinion of the Treasurer, should be included.

BACKGROUND:

Not Applicable

OPTIONS/ DISCUSSION:

Not Applicable

FINANCIAL CONSIDERATIONS:

The 2024 budget for Income Earned on Investments is \$17.479 million (an increase of \$3.000 million from the 2023 budget). The \$17.479 million budget is based on a forecasted \$500.0 million average balance invested at an average rate of 3.50%. Note: Interest rates are at levels that have not been seen for decades, which translates into higher investment income. The budget was not fully increased to reflect current rates; however, was set based on what was deemed sustainable over a number of years. Therefore, it is likely there will be investment income surpluses over the next 12-24 months.

The following table shows the budgeted investment income by quarter. The quarterly budget allocations reflect the projected changing portfolio balances throughout the year.

Period	Avg. Balance	Avg. Rate	Forecast
Q1	\$460.0m	3.50%	\$3,965,099
Q2	\$530.0m	3.50%	\$4,619,245
Q3	\$530.0m	3.50%	\$4,670,066
Q4	\$479.5m	3.50%	\$4,224,650
2024 Budget	\$500.0m	3.50%	\$17,479,000

The first quarter typically has lower average portfolio balances as Markham makes payments to the Region and School Board on December 15th and doesn't begin collecting tax payments again until February. As a result, the Q1 2024 forecast assumes an average general fund portfolio balance of \$460.0 million to be invested at an average rate of return of 3.50%. Both the actual average portfolio balance and average rate of return were greater than budget.

For the three months ending March 31, 2024, the City of Markham's Income Earned on Investments was \$11.173 million, compared to a budget of \$3.965 million, representing a \$7.208 million favourable variance to budget. Any surpluses at year-end will be transferred to reserves (e.g., Life Cycle Replacement and Capital Reserve) to help meet future City needs and requirements, as per City policies.

Interest Rate

Since March 2022, the Bank of Canada have raised interest rates multiple times. Throughout the first quarter of 2024, the Prime Rate remained unchanged at 7.2%.

The City's general portfolio investments (including interest charged to reserves with negative balances) had an average interest rate of 5.76%; 226 basis points higher than forecast. Additionally, through the sale of Principal Protected Notes in Q1, the City earned \$4.619 million of capital gains, thereby increasing the rate of return to 9.83%.

The difference in the rate of return accounts for a favourable variance of \$7.198 million.

Portfolio Balance

The forecasted average portfolio balance for Q1 2024 was \$460.0 million. The actual average general fund portfolio balance (including cash balances) for the first quarter of 2024 was \$461.1 million. The higher portfolio balance accounts for a favourable variance of \$10,000.

Variance Summary

	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
Portfolio Balance	\$460.0m	\$461.1m	\$1.1m
Interest Rate	3.50%	9.83%	6.33%
Investment Income	\$3.965m	\$11.173m	\$7.208m
Portfolio Balance Variance Impact			\$0.010m
Interest Rate Variance Impact			\$7.198m

Portfolio Composition

All investments made in the first quarter of 2024 adhered to the City of Markham investment policy. At March 31, 2024, 38% of the City's portfolio (not including bank balances) was comprised of government issued securities. The remaining 62% of the portfolio was made up of instruments issued by Schedule 1 Banks (Exhibit 1). All of these levels are within the targets established in the City's Investment Policy.

The March 31, 2024 investment portfolio (not including bank balances) was comprised of the following instruments: Bonds 45%, Principal Protected Notes (PPNs) 39%, and GICs 16% (Exhibit 2).

At March 31, 2024, the City's general portfolio balance (all funds excluding DC) was \$532.1 million (including bank balances). The City's portfolio (all funds excluding DCA) was broken down into the following investment terms (Exhibit 3):

Under 1 month	46.3%
1 month to 3 months	2.5%
3 months to 1 year	9.0%
Over 1 year	42.2%
Weighted average investment term	1,566.6 days
Weighted average days to maturity	1,023.3 days

Money Market Performance

The City of Markham uses the 3-month T-bill rates to gauge the performance of investments in the money market. The average 3-month T-bill rate for the first quarter of 2024 was 4.94% (source: Bank of Canada). Money market investments (including bank balances) held by the City of Markham during the first quarter of 2024 had an average return of 5.23%. Therefore, the City's money market investments outperformed 3-month T-Bills by 29 basis points. See Exhibit 4 for all Money Market securities held by the City of Markham in the first quarter of 2024.

Bond Market Performance

The 2024 YTD highlights of Markham's bond portfolio are as follows:

- 9 Bonds/Principal Protected Note (PPNs) purchased with a face value of \$49.0 million
- 1 bond matured with a face value of \$5.0 million
- 3 Principal Protected Notes (PPNs) sold with a face value of \$12.0 million
- \$4.619 million of capital gains earned

See Exhibit 5 for all Bonds held by the City of Markham in the first quarter of 2024.

Outlook

Interest rates are expected to start to decline in 2024. There has been a focused effort to invest any excess cash the City has in longer term bonds and PPNs in Q1 and the goal is to continue with this approach while the rates are high.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not Applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Not Applicable

RECOMMENDED BY:

X

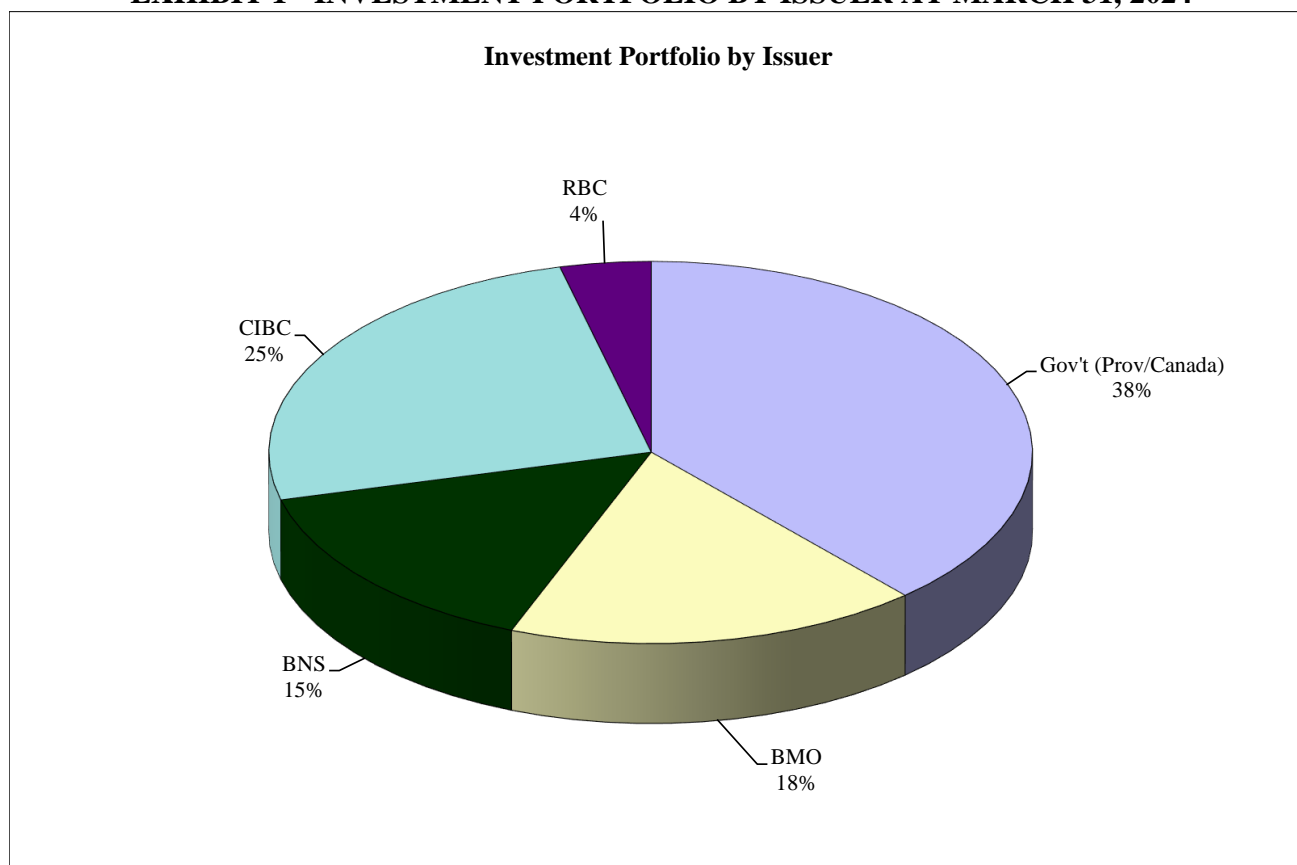
Joseph Silva
Treasurer

X

Trinela Cane
Commissioner, Corporate Services

ATTACHMENT:

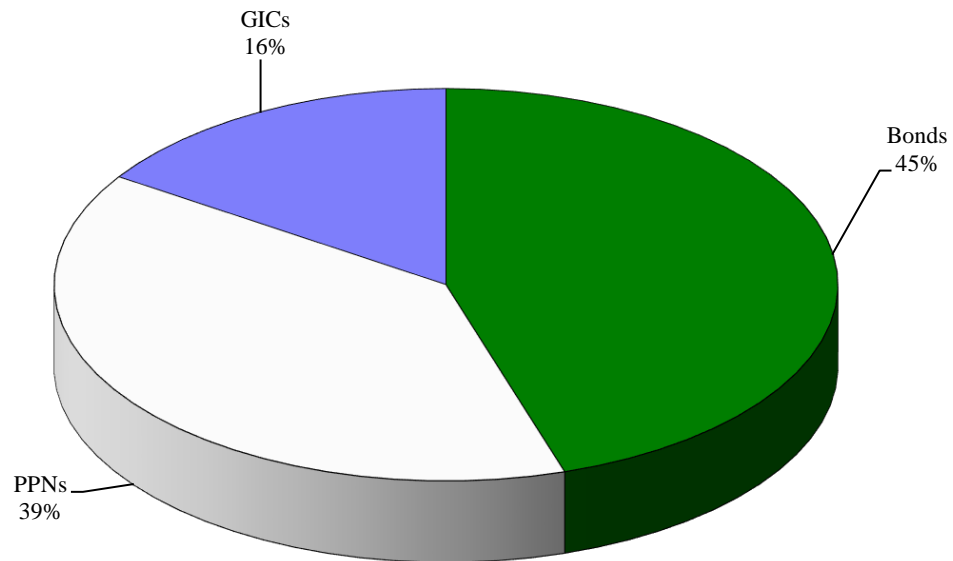
- Exhibit 1 – Investment Portfolio by Issuer
- Exhibit 2 – Investment Portfolio by Instrument
- Exhibit 3 – Investment Terms
- Exhibit 4 – 2024 Q1 Money Market Investments
- Exhibit 5 – 2024 Q1 Bond Market Investments
- Exhibit 6 – 2024 Q1 DCA Fund Investments

EXHIBIT 1 - INVESTMENT PORTFOLIO BY ISSUER AT MARCH 31, 2024

Quarter-End Portfolio Balance (All Funds; excluding bank balances): \$286.0m

	Investment Policy Targets	Portfolio at Mar 31/24
Government (Federal/Provincial)	>40%, no max	38% *
Government (Municipal)	max 30%	0%
Schedule A Banks:		
Bank of Nova Scotia	max 20%	15%
Bank of Montreal	max 20%	18%
CIBC	max 20%	25% *
Royal Bank of Canada	max 20%	4%
Toronto Dominion	max 20%	0%
Schedule A Banks Total	max 60%	62%
Schedule B Banks:		
Hong Kong Bank	max 15%	0%
		<u>100%</u>

* The City's Investment Policy allows for deviations of +/- 5% in order to take advantage of market conditions

EXHIBIT 2 - INVESTMENT PORTFOLIO BY INSTRUMENT AT MARCH 31, 2024

Quarter-End Portfolio Balance (All Funds, excluding cash balances): \$286.0m

EXHIBIT 3 - INVESTMENT TERMS (All Funds excluding DCA)

INSTRUMENT	ISSUER	INT_RATE	DATE_BGT	DATE_SOLD	BOUGHT	MATURITY VALUE	LENGTH	AYS to MA
BANK ACCOUNT		5.54	31-Mar-2024	01-Apr-2024	246,119,303.64	246,156,659.83	1	1
Less than 1 month					246,119,304	46.3%		
PPN	BMO	0.00	17-May-2023	17-May-2024	6,000,000.00	6,000,000.00	366	47
BOND	ONT	3.53	10-Feb-2014	02-Jun-2024	3,496,950.00	5,000,000.00	3,765	63
BOND	BNS	3.33	26-Jun-2018	26-Jun-2024	4,000,000.00	4,000,000.00	2,192	87
Between 1 and 3 months					13,496,950	2.5%		
BOND	ONT	3.48	21-Mar-2014	02-Dec-2024	2,774,800.00	4,000,000.00	3,909	246
GIC (2027)	CIBC	3.40	06-Jan-2024	06-Jan-2025	30,000,000.00	31,020,000.00	366	281
GIC (2027)	CIBC	3.40	12-Jan-2024	12-Jan-2025	15,000,000.00	15,510,000.00	366	287
Between three months and one year					47,774,800	9.0%		
BOND	SASK	2.56	07-Mar-2019	30-May-2025	4,272,250.00	5,000,000.00	2,276	425
BOND	ONT	1.48	05-Mar-2020	08-Sep-2025	7,377,760.00	8,000,000.00	2,013	526
PPN	BMO	0.00	31-Mar-2016	31-Mar-2026	3,000,000.00	3,000,000.00	3,652	730
BOND	ONT	2.13	18-Oct-2019	02-Dec-2026	3,442,000.00	4,000,000.00	2,602	976
PPN	BMO	1.00	05-Apr-2017	05-Apr-2027	5,000,000.00	5,000,000.00	3,652	1,100
PPN	CIBC	0.00	24-Feb-2021	24-Feb-2028	4,000,000.00	4,000,000.00	2,556	1,425
BOND	RBC	5.30	28-Mar-2024	28-Mar-2028	5,000,000.00	5,000,000.00	1,461	1,458
BOND	ONT	2.81	27-Apr-2016	02-Jun-2028	4,291,440.00	6,000,000.00	4,419	1,524
BOND	ONT	2.63	13-Dec-2017	02-Jun-2028	7,620,000.00	10,000,000.00	3,824	1,524
PPN	CIBC	0.00	22-Jun-2021	22-Jun-2028	4,000,000.00	4,000,000.00	2,557	1,544
PPN	BMO	0.00	16-May-2023	16-Nov-2028	3,000,000.00	3,000,000.00	2,011	1,691
BOND	ONT	3.06	21-Dec-2016	02-Dec-2028	6,959,700.00	10,000,000.00	4,364	1,707
BOND	ONT	2.93	13-Jan-2017	02-Dec-2028	4,965,800.00	7,000,000.00	4,341	1,707
PPN	BNS	3.00	29-Dec-2023	29-Dec-2028	3,000,000.00	3,000,000.00	1,827	1,734
PPN	BNS	0.00	11-Apr-2019	12-Apr-2029	5,000,000.00	5,000,000.00	3,654	1,838
PPN	CIBC	0.00	20-Jul-2022	20-Jul-2029	7,000,000.00	7,000,000.00	2,557	1,937
PPN	BNS	0.00	08-Aug-2019	08-Aug-2029	2,000,000.00	2,000,000.00	3,653	1,956
PPN	BNS	1.55	08-Aug-2019	08-Aug-2029	2,000,000.00	2,000,000.00	3,653	1,956
PPN	BMO	1.50	15-Sep-2017	14-Sep-2029	6,000,000.00	6,000,000.00	4,382	1,993
BOND	ONT	3.11	17-Apr-2018	02-Dec-2029	4,900,700.00	7,000,000.00	4,247	2,072
BOND	ONT	3.05	18-Jun-2018	02-Dec-2029	4,253,700.00	6,000,000.00	4,185	2,072
PPN	BMO	1.00	20-Feb-2020	20-Feb-2030	7,000,000.00	7,000,000.00	3,653	2,152
PPN	BNS	1.00	20-Feb-2020	20-Feb-2030	7,000,000.00	7,000,000.00	3,653	2,152
PPN	BMO	0.00	22-Mar-2023	22-Mar-2030	5,000,000.00	5,000,000.00	2,557	2,182
PPN	BMO	0.00	24-Jun-2023	24-Jun-2030	4,000,000.00	4,000,000.00	2,557	2,276
PPN	CIBC	4.49	16-Oct-2023	16-Oct-2030	4,000,000.00	4,000,000.00	2,557	2,390
PPN	BNS	1.50	26-Jan-2024	26-Jan-2031	3,000,000.00	3,000,000.00	2,557	2,492
PPN	BNS	3.00	15-Feb-2024	16-Feb-2031	5,000,000.00	5,000,000.00	2,558	2,513
PPN	BMO	0.00	05-Mar-2021	05-Mar-2031	6,000,000.00	6,000,000.00	3,652	2,530
PPN	CIBC	0.00	06-Mar-2024	06-Mar-2031	4,000,000.00	4,000,000.00	2,556	2,531
PPN	BMO	0.00	28-Mar-2024	28-Mar-2031	5,000,000.00	5,000,000.00	2,556	2,553
PPN	BNS	0.00	21-May-2021	21-May-2031	5,000,000.00	5,000,000.00	3,652	2,607
BOND	ONT	1.47	28-Sep-2020	02-Jun-2031	4,277,500.00	5,000,000.00	3,899	2,619
BOND	ONT	2.20	01-Mar-2021	02-Dec-2031	3,165,268.00	4,000,000.00	3,928	2,802
BOND	ONT	2.30	17-May-2021	02-Dec-2031	2,359,680.00	3,000,000.00	3,851	2,802
PPN	BNS	0.00	17-Dec-2021	17-Dec-2031	4,000,000.00	4,000,000.00	3,652	2,817
BOND	ONT	1.81	24-Feb-2021	02-Dec-2032	2,429,940.00	3,000,000.00	4,299	3,168
BOND	ONT	2.01	15-Sep-2021	02-Dec-2032	4,000,000.00	5,000,000.00	4,096	3,168
BOND	BC	2.51	03-Mar-2022	18-Jun-2033	3,777,300.00	5,000,000.00	4,125	3,366
PPN	BNS	0.00	11-Aug-2023	11-Aug-2033	3,000,000.00	3,000,000.00	3,653	3,420
BOND	CIBC	2.52	22-Sep-2021	22-Sep-2033	4,000,000.00	4,000,000.00	4,383	3,462
BOND	ONT	2.84	17-Feb-2022	02-Dec-2033	5,752,480.00	8,000,000.00	4,306	3,533
BOND	ONT	3.19	23-Mar-2022	02-Dec-2033	6,929,700.00	10,000,000.00	4,272	3,533
BOND	BC	3.60	28-Apr-2022	18-Dec-2033	4,638,340.00	7,000,000.00	4,252	3,549
BOND	RBC	4.88	08-Feb-2024	08-Feb-2034	6,000,000.00	6,000,000.00	3,653	3,601
BOND	ONT	4.25	07-Feb-2024	02-Dec-2034	4,462,416.00	7,000,000.00	3,951	3,898
BOND	ONT	4.71	03-Oct-2023	02-Jun-2035	4,645,200.00	8,000,000.00	4,260	4,080
BOND	ONT	4.20	05-Mar-2024	02-Jun-2035	2,518,560.00	4,000,000.00	4,106	4,080
BOND	ONT	4.28	01-Feb-2024	02-Dec-2035	6,701,640.00	10,000,000.00	4,322	4,263
Over 1 year					224,741,374	42.2%		

Bonds/PPNs
Money Market

241,013,124
291,119,304

Average Length of Investment (days)

Portfolio Balance Mar 31, 2024
General Fund and Other Reserves
(not including DCA)

532,132,428

Weighted Average Days to Maturity

EXHIBIT 4 - 2024 Q1 MONEY MARKET INVESTMENTS (All Funds excluding DCA)

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
BANK BALANCE	5.53	31-Mar-24	1-Apr-24	246,119,303.64	246,156,659.83

BONDS/PPNs THAT MATURED IN 2024:

ISSUER	COUPON RATE	YIELD	PURCHASE DATE	MATURITY DATE	COST	FACE VALUE
ONT		3.20	2-Oct-12	7-Feb-24	3,499,150.00	5,000,000.00

BONDS/PPNs SOLD IN 2024:

ISSUER	PARTICIPATION RATE	YIELD	PURCHASE DATE	DATE SOLD	COST	FACE VALUE	SALE PROCEEDS	CAPITAL GAIN/(LOSS)
BNS PPN	195%	1.50	31-Dec-2018	23-Jan-2028	7,000,000.00	7,000,000.00	8,851,260.27	1,851,260.27
BMO PPN	370%	0.00	01-Mar-2019	01-Mar-2029	2,000,000.00	2,000,000.00	2,909,782.00	909,782.00
BMO PPN	350%	0.00	31-Mar-2016	31-Mar-2026	3,000,000.00	3,000,000.00	4,857,900.00	1,857,900.00

BOLD HOLDINGS at MARCH 31, 2024:

ISSUER	COUPON RATE	YIELD	PURCHASE DATE	MATURITY DATE	COST	FACE VALUE
ONT		3.530	10-Feb-2014	02-Jun-2024	3,496,950.00	5,000,000.00
BNS	3.300	3.300	26-Jun-2018	26-Jun-2024	4,000,000.00	4,000,000.00
ONT		3.480	21-Mar-2014	02-Dec-2024	2,774,800.00	4,000,000.00
SASK		2.560	07-Mar-2019	30-May-2025	4,272,250.00	5,000,000.00
ONT		1.480	05-Mar-2020	08-Sep-2025	7,377,760.00	8,000,000.00
ONT		2.130	18-Oct-2019	02-Dec-2026	3,442,000.00	4,000,000.00
RBC	5.300	5.300	28-Mar-2024	28-Mar-2028	5,000,000.00	5,000,000.00
ONT		2.809	27-Apr-2016	02-Jun-2028	4,291,440.00	6,000,000.00
ONT		2.630	13-Dec-2017	02-Jun-2028	7,620,000.00	10,000,000.00
ONT		3.060	21-Dec-2016	02-Dec-2028	6,959,700.00	10,000,000.00
ONT		2.930	13-Jan-2017	02-Dec-2028	4,965,800.00	7,000,000.00
ONT		3.110	17-Apr-2018	02-Dec-2029	4,900,700.00	7,000,000.00
ONT		3.050	18-Jun-2018	02-Dec-2029	4,253,700.00	6,000,000.00
ONT		1.472	28-Sep-2020	02-Jun-2031	4,277,500.00	5,000,000.00
ONT		2.200	01-Mar-2021	02-Dec-2031	3,165,268.00	4,000,000.00
ONT		2.300	17-May-2021	02-Dec-2031	2,359,680.00	3,000,000.00
ONT		1.810	24-Feb-2021	02-Dec-2032	2,429,940.00	3,000,000.00
ONT		2.010	15-Sep-2021	02-Dec-2032	4,000,000.00	5,000,000.00
BC		2.510	03-Mar-2022	18-Jun-2033	3,777,300.00	5,000,000.00
CIBC	2.520	2.520	22-Sep-2021	22-Sep-2033	4,000,000.00	4,000,000.00
ONT		2.840	17-Feb-2022	02-Dec-2033	5,752,480.00	8,000,000.00
ONT		3.190	23-Mar-2022	02-Dec-2033	6,929,700.00	10,000,000.00
BC		3.600	28-Apr-2022	18-Dec-2033	4,638,340.00	7,000,000.00
RBC	4.880	4.880	08-Feb-2024	08-Feb-2034	6,000,000.00	6,000,000.00
ONT		4.250	07-Feb-2024	02-Dec-2034	4,462,416.00	7,000,000.00
ONT		4.710	03-Oct-2023	02-Jun-2035	4,645,200.00	8,000,000.00
ONT		4.201	05-Mar-2024	02-Jun-2035	2,518,560.00	4,000,000.00
ONT		4.276	01-Feb-2024	02-Dec-2035	6,701,640.00	10,000,000.00
					129,013,124.00	170,000,000.00

PPN HOLDINGS at MARCH 31, 2023:

ISSUER	COUPON RATE	PARTICIPATION RATE	PURCHASE DATE	MATURITY DATE	COST	FACE VALUE
BMO	-	100%	17-May-2023	17-May-2024	6,000,000.00	6,000,000.00
BMO	-	350%	31-Mar-2016	31-Mar-2026	3,000,000.00	3,000,000.00
BMO	1.000	100%	05-Apr-2017	05-Apr-2027	5,000,000.00	5,000,000.00
CIBC	-	100%	24-Feb-2021	24-Feb-2028	4,000,000.00	4,000,000.00
CIBC	-	100%	22-Jun-2021	22-Jun-2028	4,000,000.00	4,000,000.00
BMO	-	245%	16-May-2023	16-Nov-2028	3,000,000.00	3,000,000.00
BNS	3.000	65%	29-Dec-2023	29-Dec-2028	3,000,000.00	3,000,000.00
BNS	-	448%	11-Apr-2019	12-Apr-2029	5,000,000.00	5,000,000.00
CIBC	-	100%	20-Jul-2022	20-Jul-2029	7,000,000.00	7,000,000.00
BNS	-	425%	08-Aug-2019	08-Aug-2029	2,000,000.00	2,000,000.00
BNS	1.550	100%	08-Aug-2019	08-Aug-2029	2,000,000.00	2,000,000.00
BMO	1.500	100%	15-Sep-2017	14-Sep-2029	6,000,000.00	6,000,000.00
BNS	1.000	265%	20-Feb-2020	20-Feb-2030	7,000,000.00	7,000,000.00
BMO	1.000	265%	20-Feb-2020	20-Feb-2030	7,000,000.00	7,000,000.00
BMO	-	330%	22-Mar-2023	22-Mar-2030	5,000,000.00	5,000,000.00
BMO	-	380%	24-Jun-2023	24-Jun-2030	4,000,000.00	4,000,000.00
CIBC	4.490	180%	16-Oct-2023	16-Oct-2030	4,000,000.00	4,000,000.00
BNS	1.500	220%	26-Jan-2024	26-Jan-2031	3,000,000.00	3,000,000.00
BNS	3.000	115%	15-Feb-2024	16-Feb-2031	5,000,000.00	5,000,000.00
BMO	-	245%	05-Mar-2021	05-Mar-2031	6,000,000.00	6,000,000.00
CIBC	-	575%	06-Mar-2024	06-Mar-2031	4,000,000.00	4,000,000.00
BMO	-	500%	28-Mar-2024	28-Mar-2031	5,000,000.00	5,000,000.00
BNS	-	100%	21-May-2021	21-May-2031	5,000,000.00	5,000,000.00
BNS	-	100%	17-Dec-2021	17-Dec-2031	4,000,000.00	4,000,000.00
BNS	-	625%	11-Aug-2023	11-Aug-2033	3,000,000.00	3,000,000.00
					112,000,000.00	112,000,000.00

TOTAL BONDS AND PPNs

241,013,124.00	282,000,000.00
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
Current Holdings:					
BANK BALANCE	5.54	31-Mar-24	1-Apr-24	83,864,874.55	83,877,603.63
				83,864,874.55	

EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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EXHIBIT 6 - 2024 Q1 DCA FUND INVESTMENTS

ISSUER	INT RATE	DATE BOUGHT	DATE SOLD	BOUGHT	SOLD
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Report to: General Committee

Meeting Date: April 30, 2024

SUBJECT: The MECP – Markham Distribution System – Drinking Water Inspection Report, January 30, 2024

PREPARED BY: Helena Frantzke, Ext. 2449
Water Quality Coordinator

RECOMMENDATION:

1. That the report entitled “The MECP – Markham Distribution System – Drinking Water Inspection Report, January 30, 2024” be received;
2. And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

Not Applicable

PURPOSE:

The purpose of this report is to provide Council with an update on the findings of the Ontario Ministry of Environment, Conservation and Parks (MECP)’s Inspection of Markham’s Water Distribution System undertaken on January 30, 2024. This MECP inspection covered regulatory compliance since our last inspection conducted, from January 27, 2023 to January 22, 2024.

BACKGROUND:

The objective of the MECP Inspection is to provide a rigorous and comprehensive inspection program for municipal residential drinking water systems to determine if the systems are in compliance with the Safe Drinking Water Act, 2002 (SDWA) and associated Regulations as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The Safe Drinking Water Act, 2002 (SDWA) states that a provincial officer may at any reasonable time conduct an inspection for the purpose of determining compliance with regulatory requirements contained within the Act, or any of the associated Regulations. Traditionally, the MECP has conducted an annual inspection of Markham’s Water Distribution System.

On January 30, 2024 the MECP conducted an unannounced annual inspection of Markham’s Drinking Water Distribution System. Since the last inspection date held last year on January 26, 2023, the MECP Inspector reviewed Waterworks procedures, policies and records covered within the inspection period between January 27, 2023 to January 22, 2024.

The final MECP inspection report was received on March 01, 2024, (see attachment “A”).

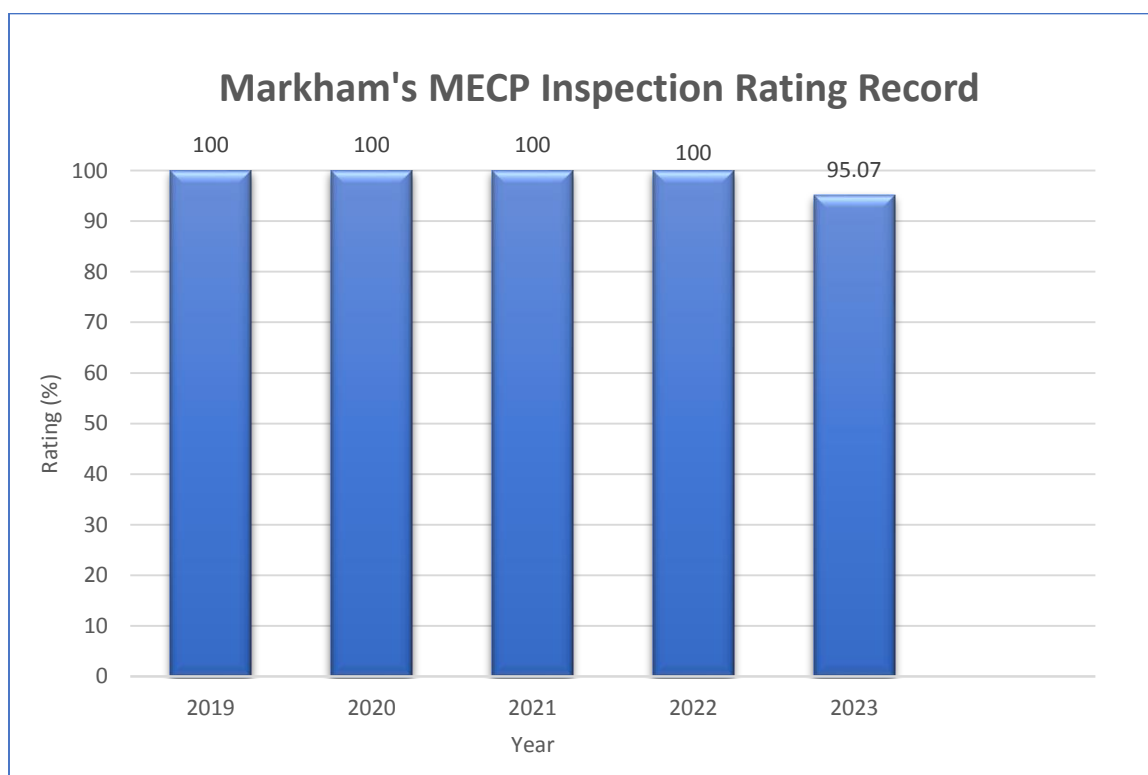
OPTIONS/ DISCUSSION:

On January 30, 2024 the MECP Inspector conducted an unannounced inspection on site with staff which included a detailed discussion with regard to Markham Waterwork's existing procedures, reviewed operational logbooks and also took a water sample.

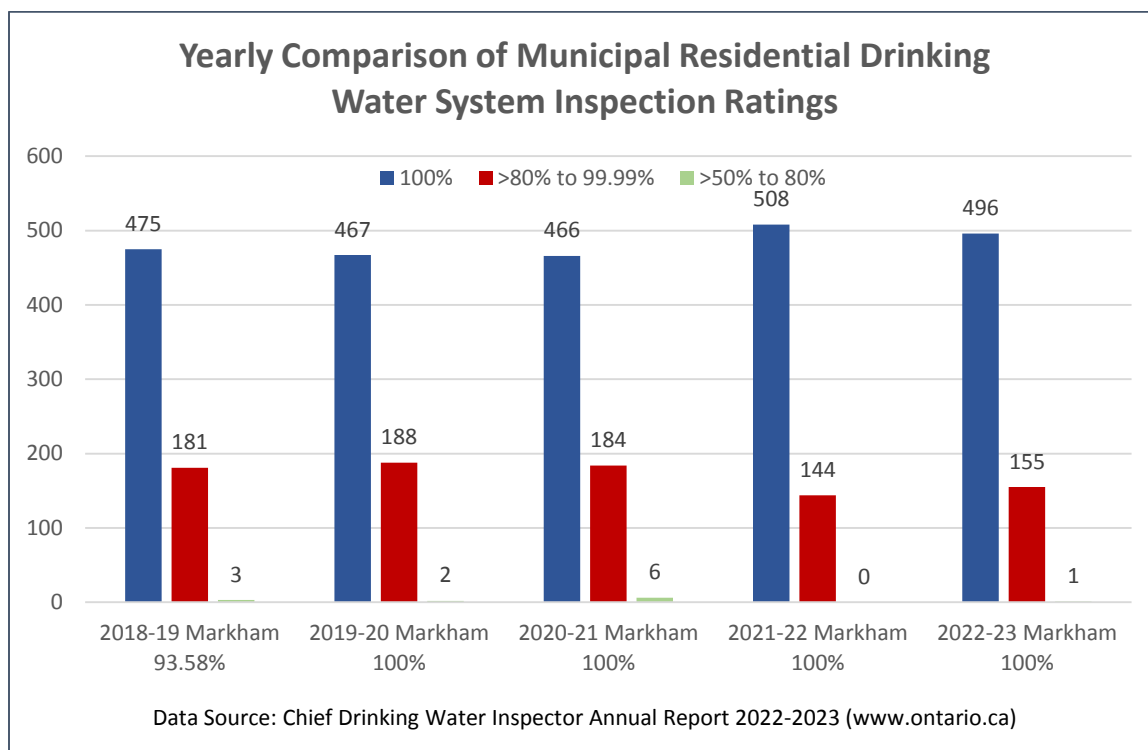
Following the on-site inspection the MECP Inspector provided a detailed list requesting data and documents which were all provided by staff in a timely manner.

During the inspection time period, between January 27, 2023 to January 22, 2024, one (1) incident of regulatory non-compliance was identified. During an Adverse Water Quality Incident (AWQI) all verbal notifications were not immediately provided as per O. Reg. 170/03 Section 16-6. As a result, the City of Markham received an Inspection Summary Rating Record (IRR) of 95.07% for not meeting full compliance with the MECP's Drinking Water Systems Regulation 170/03 during the period covered. This IRR is a quantitative measures the Municipal Residential Drinking Water System's annual inspection and regulated water quality testing performance The MECP's inspection program is an important aspect of the MECP's drinking water safety net and the primary goal is to encourage ongoing improvement of drinking water systems and to work toward the goal of 100% regulatory compliance.

Below is a summary of Markham's MECP Inspection Summary Rating Records over the past five years:



Below is a comparison of Markham's MECP Inspection Rating Records to other municipalities over the last five years. The 2023-2024 Municipal Inspection Ratings will be published by December 2024 by the MECP that will capture our latest rating.



Details of Non-Compliance Identified for the January 27, 2023 to January 22, 2024 Inspection Period

On May 09, 2023, a Category 2 Watermain Break occurred. When an Operator observes that contaminated water may possibly have been directed to users, the watermain break would be categorized as a Category 2 Observation Watermain Break and staff is required to provide immediate verbal notification to the MECP and the local Ministry of Public Health Department (MOH) as an Adverse Water Quality Incident (AWQI). After it was determined the watermain break was to be categorized as a Category 2 Observation Watermain Break, the on-call Supervisor only provided immediate verbal notification of the incident to the MECP and immediate verbal notification was not provided to the MOH by the on-call Supervisor.

On May 10, 2024, upon providing written notification to the MECP and MOH waterworks staff discovered that no immediate verbal notification was provided to the MOH. Staff provided all other notifications as required.

Even though immediate notification was not provided to the MOH, all corrective actions were followed properly and the watermain was repaired the same day; a non-compliance was issued by the MECP for not providing immediate notification to the MOH as required under Ontario Regulation 170/03.

On May 17, 2023 an After Action Review was also conducted to determine the root cause of the incident and determine actions to prevent this non-compliance from reoccurring in the future. Minutes of the meeting were taken and the following actions have been put in place by Waterworks staff with regard to the notification process for Adverse Water Quality Incidents (AWQIs):

1. The Adverse Notification Quick Reference Checklist was modified to clearly identify key agencies and their contact numbers. Previous to this incident the Checklist was used as a guideline to assist with the notification requirements however has now become a mandatory requirement to be filled out by staff reporting any AWQI. Subsequently the SOP16b Response to Adverse Water Quality Test Results was updated to include this checklist as a mandatory requirement to be completed.
2. The Break Sheet was revised to reference clearly indicated a CAT 2 WMB to be reported as an AWQI.
3. A refresher to all Operators to ensure the protocol for WMBs and associated notifications are clear and review the changes made to the Break Sheet.
4. The AWQI notification process was reviewed with all Waterworks Supervisors.

MECP BEST PRACTICE ISSUES AND RECOMMENDATIONS

Recommendations are suggestions that the owner or operating authority should consider implementing in order to advance efforts already in place.

There were no best practice issues or recommendations identified during this inspection period. As a result of the proactive work Waterworks staff completed following the After Action Review, it covered all required actions that the MECP would have issued as a result of the non-compliance incident. The MECP encourages to continually educate and train operators and continue with the after action review process.

FINANCIAL CONSIDERATIONS

Not Applicable

HUMAN RESOURCES CONSIDERATIONS

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

The MECP – Markham Distribution System Drinking Water Inspection Report, January 30, 2024 meets legislative requirements and is consistent with the Building Markham's Future Together; specifically, a Safe, Sustainable & Complete Community through achieving sustainable Infrastructure Management and Quality Services.

BUSINESS UNITS CONSULTED AND AFFECTED:

Not Applicable

The report presented herein, communicates the results of the annual MECP Inspection conducted on January 30, 2024.

The undersigned represent the Top Management of the City of Markham's Drinking Water Distribution system and by signing below the Top management of the Operating Authority have reviewed the MECP Inspection Report.

RECOMMENDED BY:

Eddy Wu, P. Eng.
Director, Environmental Services

Morgan Jones
Commissioner, Community Services

ATTACHMENTS:

Attachment "A" – The MECP - Markham Distribution System – Drinking Water Inspection Report, January 30, 2024.



Attachment 'A'

The Ontario Ministry of the Environment, Conservation and Parks
Markham Distribution System
Drinking Water Inspection Report
January 30, 2024

Dated: April 30, 2024

Ministry of Environment,
Conservation and Parks
*Drinking Water and Environmental
Compliance Division*

Ministère de l'Environnement,
de la Protection de la nature et des Parcs
*Division de la conformité en matière d'eau
potable et d'environnement*



Central Region

Région du Centre

York Durham District Office
230 Westney Road South, 5th Floor
Ajax ON L1S 7J5
Telephone.: 905-427-5600
Toll-Free : 1-800-376-4547
Fax: 905-427-5602

Bureau de district de York Durham
230 route Westney sud, 5e étage
Ajax ON L1S 7J5
Téléphone : 905 427-5600
Sans frais : 1-800-376-4547
Télécopieur : 905 427-5602

File: SI-YO-MA-TO-540
Markham Distribution System

March 1, 2024

City of Markham
101 Town Centre Blvd
Markham, On
L3R 9W3

Attention: Eddy Wu, Director of Environmental Services

**RE: January 30, 2024 Inspection – Markham Distribution System Inspection
Report, # 220004162**

Enclosed is a copy of the inspection report prepared for the Markham Distribution System under the Ministry's focused inspection protocol to assess compliance with Safe Drinking Water Act legislation. The report is based on conditions encountered at the time of inspection, and subsequent follow-up.

“Actions Required” are linked to incidents of non-compliance with regulatory requirements contained within the Act, a regulation, or site-specific approvals, licenses, permits, orders or instructions. Such violations could result in the issuance of mandatory abatement instruments including Orders, tickets, penalties, or referrals to the ministry's Investigations and Enforcement Branch.

“Recommended Actions” convey information that the owner or operating authority should consider implementing in order to advance efforts already in place to address such issues as emergency preparedness, the availability of information to consumers, and conformance with existing and emerging industrial standards. Please note that items which appear as recommended actions do not, in themselves, constitute violations.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates several obligations for individuals who exercise decision-making authority over municipal drinking water

systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "Taking Care of Your Drinking Water: A guide for members of municipal council" found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater.

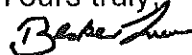
In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (I&E) Secretariat and advice of internal/external risk experts.

The Inspection Summary Rating Record (IRR) provides the Ministry, the system owner and the local Public Health Unit with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspectors' Annual Report.

Please note that due to a change in IT systems, the IRR cannot be generated at the same time as the inspection report. The IRR will be sent separately and prior to any public release (typically within 1-2 month of the completion of the inspection).

I would like to thank the City of Markham staff for the assistance afforded to me during this compliance assessment. If you have any questions or concerns please contact myself or Loralyn Wild, Water Compliance Supervisor, Central Region at (647) 973-1714.

Yours truly,



Blake Turner
Water Inspector | Provincial Officer Badge #1909
Drinking Water and Environmental Compliance Division
Ministry of the Environment Conservation and Parks
289-980-0694

ec:

Helena Frantzke, Water Quality Coordinator, City of Markham
Peter Solymos, Water Quality Supervisor, City of Markham
Don Ford, Senior Manager, Hydrogeology, Toronto and Region Conservation Authority
Demetra Koros, Water Supervisor, Ministry of the Environment Conservation and Parks
York Public Health Inspectors



Ministry of the Environment, Conservation and Parks
Drinking Water Inspection

TABLE OF CONTENTS

1. Drinking Water System Inspection Report

Appendix:

A. Stakeholders Appendix

B. Inspection Rating Record

C. Drinking Water System Components



MARKHAM DISTRIBUTION SYSTEM

Physical Address: 101 TOWN CENTRE BLVD
N, , MARKHAM, ON L3R
9W3

INSPECTION REPORT

System Number: 220004162

Entity: THE CORPORATION OF THE
CITY OF MARKHAM

Inspection Start Date: January 22, 2024

Inspection End Date: February 22, 2024

Inspected By: Blake Turner

Badge #: 1909

Inspected By: Demetra Koros

Badge #: 1568

Ministry of the Environment,
Conservation and Parks

Ministère de l'Environnement, de la
Protection de la nature et des Parcs



(signature)

NON-COMPLIANCE

The following item(s) have been identified as non-compliance, based on a "No" response captured for a legislative question(s). For additional information on each question see the Inspection Details section of the report.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Item	Question	Compliance Response/Corrective Action(s)
NC-1	<p>Question ID: DWMR1104000</p> <p>Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?</p>	<p>All required notifications of adverse water quality incidents were not immediately provided as per O. Reg. 170/03 16-6.</p> <p>Schedule 16-6 of O.Reg. 170/03 requires immediate reporting of Schedule 16-4 observations to be given by speaking in person or by telephone. The immediate report must be given to the medical officer of health, and to the Ministry.</p> <p>Schedule 16-4 of O.Reg. 170/03 requires the system to report other observations, if they believe water directed to users has not been disinfected in accordance with the Procedure for Disinfection of Drinking Water in Ontario.</p> <p>The system reported a watermain break that met the criteria of a Schedule 16-4 reportable observation. The system provided an immediate notification to the Ministry, but failed to notify the medical officer of health immediately after the observation was made.</p> <p>The system provided an updated 16b Response to Adverse Water Quality Test Results SOP, as well as a new notification checklist to be used in adverse water quality incident response. Operators have been trained to use both documents in response to an adverse water quality incident. The proactive work the system has completed suffices all required actions that would be issued. The system is encouraged to continually educate and train operators and continue with the after action review process.</p>

RECOMMENDATIONS

This should not be construed as a confirmation of full conformance with all potential applicable BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	DWMR1001000	Question Type	Information
<p>Legislative Requirement(s): Not Applicable</p> <p>Question: What was the scope of this inspection?</p> <p>Compliance Response(s)/Corrective Action(s)/Observation(s): <p>The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.</p> <p>This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.</p> <p>This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.</p> <p>This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.</p> <p>This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.</p> <p>An unannounced inspection of the Markham Distribution System (the System) commenced on January 22, 2023 with a review of documents followed by a site visit of the operations centre on January 30, 2023. The System serves an estimated population of 356,060. The System is categorized as a Large Municipal Residential System, owned and operated by the City of Markham (the City) and operates under the Drinking Water System (DWS) number 220004162.</p> </p>			

The City receives treated water from the City of Toronto and the Region of Peel. York Region provides water storage, pressure boosting, and acts as a wholesaler for the water to the System. The City of Toronto, Region of Peel and York Region treatment and distribution systems are inspected separately from the Markham Distribution System.

Data was reviewed for the inspection period of January 27, 2023 to January 22, 2024.

Documents reviewed in association with this report included, but were not limited to:

1. MECP Municipal Drinking Water License (MDWL) number 021-101, issue 10 dated May 20, 2021
2. MECP Drinking Water Permit (DWWP) number 021-201, issue 4 dated July 22, 2019

Question ID	DWMR1000000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Does this drinking water system provide primary disinfection?			
Compliance Response(s)/Corrective Action(s)/Observation(s): This drinking water system provides for only secondary disinfection and distribution of water. Primary disinfection is undertaken by another regulated drinking water system which provides treated water to this drinking water system.			

Question ID	DWMR1018000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.			
Schedule A of the DWWP indicates that watermains in the distribution system comprise those set out in the December 2018 "Distribution System Map – Markham Distribution System" document.			

Question ID	DWMR1020000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			

Question:

Is the owner/operating authority able to demonstrate that, when required during the inspection period, Form 1 documents were prepared in accordance with their Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):

The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water Works Permit during the inspection period.

There were nine (9) Form 1 documents (Record of Watermains Authorized as Future Alteration) prepared for the System during the inspection period. These were for the addition of new watermains and watermain replacement.

Question ID	DWWMR1025000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were all parts of the drinking water system that came in contact with drinking water (added, modified, replaced or extended) disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.			
City of Markham staff utilize the Operations and Maintenance (O&M) 4.1.00 Revision 13.0, dated February 26, 2021 for Watermain Repairs and/ or Modifications. Watermain break and commissioning records showed that the disinfection procedures were followed for the inspection period.			

Question ID	DWWMR1027000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Does the owner have evidence indicating that all chemicals and materials which come in contact with water within the drinking water system have met all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.			

Question ID	DWMR1033000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (3); SDWA O. Reg. 170/03 7-2 (4);			
Question: Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The secondary disinfectant residual was measured as required for the large municipal residential distribution system.			
Distribution chlorine residuals are measured by two (2) continuous on-line analysers. Additionally, operations staff collect grab samples using hand-held units when conducting microbiological sampling, weekly dead-end hydrant flushing, and when there are watermain breaks.			

Question ID	DWMR1049000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Do records confirm that disinfectant residuals are routinely checked at the extremities and dead ends of the distribution system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records confirmed that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system.			

Question ID	DWMR1036000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-7 (1);			
Question: Where continuous monitoring equipment is not used for chlorine residual analysis, are samples tested using an acceptable portable device?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Samples for chlorine residual analysis were tested using an acceptable portable device.			

Question ID	DWMR1035000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Question: Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.			
The Standard Operating Procedure (SOP) O&M 5.6.00 Continuous Chlorine Analyzer - Monitoring, last revised October 31, 2022 was provided for review. This procedure details that the Waterworks Supervisors, or back up person, are to review the data results from the continuous chlorine analyzers within 72 hours and sign off on the report. Documentation provided, indicated that test results are examined and reviewed every 72 hours.			

Question ID	DWMR1038000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4;			
Question: Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.			
Two (2) continuous chlorine analyzers are used to monitor the secondary disinfection residual in the system. Results, as well as the date, time, and location of the test are recorded every two minutes.			

Question ID	DWMR1037000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);			
Question: Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?			

Compliance Response(s)/Corrective Action(s)/Observation(s):

All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.

The minimum combined chlorine residual to meet secondary disinfection requirements in the system is 0.25 mg/L. The SOP for Continuous Chlorine Analyzer Monitoring, stipulates the alarm setpoints, there are four set points described in this SOP.. In the event of a combined chlorine residual reading that is ≤ 0.40 mg/L, ≥ 2.10 mg/L, ≤ 0.25 mg/L, or ≥ 3.00 mg/L; or a loss of communication (e.g. loss of power) at either of the continuous analyzers in the system an alarm is sent to the SCADA standby phone, and all Waterworks Supervisor's cell phones.

Question ID	DWMR1040000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Question: Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.			
Certificates of Instrument Performance were provided for review as part of the inspection. ClearTech completed calibration certificates for handheld analyzers. Continuous analyzers for chlorine were last serviced and calibrated on July 21, 2023. Review of chlorine residual records revealed that continuous analyzers are verified by operators every 2-3 days. Adjustments are made to the analyzers as needed.			

Question ID	DWMR1108000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);			
Question: Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Where required continuous monitoring equipment used for the monitoring of chlorine residual			

and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.

Question ID	DWMR1099000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03)?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03). During the inspection review period there were 14 distribution samples that resulted in exceedances of the Ontario Drinking Water Quality Standards.			

Question ID	DWMR1081000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10-2 (1); SDWA O. Reg. 170/03 10-2 (2); SDWA O. Reg. 170/03 10-2 (3);			
Question: For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a large municipal residential system were being met. Schedule 10-2 of O. Reg. 170/03 requires the System to collect at least 100 distribution samples, plus one additional sample for every 10,000 people served by the system, every month with at least three samples taken each week. The system serves a population of 356,060 and collects a total of 136 distribution samples per month. The distribution samples are to be tested for E. Coli and total coliforms. Additionally, 25% of the samples collected are required to be tested heterotrophic plate count.			

Question ID	DWMR1096000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-3 (1);			

Question:

Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?

Compliance Response(s)/Corrective Action(s)/Observation(s):

Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

Question ID	DWMR1086000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-6.1 (1); SDWA O. Reg. 170/03 13-6.1 (2); SDWA O. Reg. 170/03 13-6.1 (3); SDWA O. Reg. 170/03 13-6.1 (4); SDWA O. Reg. 170/03 13-6.1 (5); SDWA O. Reg. 170/03 13-6.1 (6);			
Question: Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. Schedule 13-6 stipulates that one distribution sample is to be taken quarterly, from a point that is likely to have an elevated potential for the formation of haloacetic acids. Review of sample records confirmed that samples were collected at an appropriate location in the distribution system, and on the following dates: February 7, 2023, June 6, 2023, August 30, 2023, and, November 30, 2023.			

Question ID	DWMR1087000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-6 (1); SDWA O. Reg. 170/03 13-6 (2); SDWA O. Reg. 170/03 13-6 (3); SDWA O. Reg. 170/03 13-6 (4); SDWA O. Reg. 170/03 13-6 (5); SDWA O. Reg. 170/03 13-6 (6);			
Question: Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. Schedule 13-6 stipulates that one distribution sample is to be taken quarterly, from a point			

that is likely to have an elevated potential for the formation of trihalomethanes. Review of sample records confirmed that samples were collected at an appropriate location in the distribution system, and on the following dates:

February 7, 2023,

June 6, 2023,

August 30, 2023, and,

November 30, 2023.

Question ID	DWMR1092000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-2;			
Question: Has the owner ensured that water samples are taken at the prescribed location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner ensured that water samples were taken at the prescribed location.			

Question ID	DWMR1094000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.			
The MDWL states that nitrosodimethylamine (NDMA) is to be sampled quarterly from the farthest point in the distribution system.			

Question ID	DWMR1095000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 15.1-10; SDWA O. Reg. 170/03 15.1-4 (1); SDWA O. Reg. 170/03 15.1-5 (1); SDWA O. Reg. 170/03 15.1-5 (10); SDWA O. Reg. 170/03 15.1-5 (11); SDWA O. Reg. 170/03 15.1-5 (12); SDWA O. Reg. 170/03 15.1-5 (2); SDWA O. Reg. 170/03 15.1-5 (3); SDWA O. Reg. 170/03 15.1-5 (4); SDWA O. Reg. 170/03 15.1-5 (5); SDWA O. Reg. 170/03 15.1-5 (6); SDWA O. Reg. 170/03 15.1-5 (7); SDWA O. Reg. 170/03 15.1-5 (8); SDWA O. Reg. 170/03 15.1-5 (9); SDWA O. Reg. 170/03 15.1-7 (1); SDWA O. Reg. 170/03 15.1-7 (2); SDWA O. Reg. 170/03 15.1-7 (3); SDWA O. Reg. 170/03 15.1-7 (4); SDWA O. Reg. 170/03 15.1-9 (1); SDWA O. Reg. 170/03 15.1-9 (2); SDWA O. Reg. 170/03 15.1-9 (3); SDWA O. Reg. 170/03			

15.1-9 | (4); SDWA | O. Reg. 170/03 | 15.1-9 | (5); SDWA | O. Reg. 170/03 | 15.1-9 | (6); SDWA | O. Reg. 170/03 | 15.1-9 | (7); SDWA | O. Reg. 170/03 | 15.1-9 | (8); SDWA | O. Reg. 170/03 | 15.1-9 | (9);

Question:

Have all lead sampling requirements prescribed by Schedule 15.1 of O. Reg. 170/03 been met?

Compliance Response(s)/Corrective Action(s)/Observation(s):

All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.

The system possesses Lead Sample Regulatory Relief under Schedule D of their MDWL. The system has taken the required amount of lead samples as per 1.3 Schedule D of the MDWL.

Question ID	DWMR1098000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13 (1); SDWA O. Reg. 170/03 13 (2); SDWA O. Reg. 170/03 13 (3);			
Question: Has the owner indicated that the required records are kept and will be kept for the required time period?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner indicated that the required records are kept and will be kept for the required time period.			
The owner has a control of records document that outlines the required retention period of prescribed documents. The retention document is in compliance with the requirements outlined in Schedule 13 of O.Reg. 170/03.			

Question ID	DWMR1101000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 17-1; SDWA O. Reg. 170/03 17-10 (1); SDWA O. Reg. 170/03 17-11; SDWA O. Reg. 170/03 17-12; SDWA O. Reg. 170/03 17-13; SDWA O. Reg. 170/03 17-14; SDWA O. Reg. 170/03 17-2; SDWA O. Reg. 170/03 17-3; SDWA O. Reg. 170/03 17-4; SDWA O. Reg. 170/03 17-5; SDWA O. Reg. 170/03 17-6; SDWA O. Reg. 170/03 17-9;			
Question: For LMR Systems, have corrective actions (as per Schedule 17 of O. Reg. 170/03) been taken to address adverse conditions, including any other steps as directed by the Medical Officer of Health?			

Compliance Response(s)/Corrective Action(s)/Observation(s):

Corrective actions (as per Schedule 17), including any other steps that were directed by the Medical Officer of Health, had been taken to address adverse conditions.

During the inspection review period, there were Nineteen (19) adverse water quality incidents (AWQIs) reported.

One (1) AWQI was due to a category 2 watermain break that potentially directed untreated water to users. The break was repaired, the system flushed and disinfection was restored. Samples were taken and met the Ontario Drinking Water Quality Standards (ODWQS).

Four (4) AWQIs were due to a chlorine residual being below the regulatory limit. The residual was restored through flushing.

Fourteen (14) AWQIs were due to test results not meeting the microbiological standards of the Ontario Drinking Water Quality Standards (ODWQS) in the distribution system. Resamples were collected in each incident until two sets met the ODWQS.

Question ID	DWMR1104000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-6 (1); SDWA O. Reg. 170/03 16-6 (2); SDWA O. Reg. 170/03 16-6 (3); SDWA O. Reg. 170/03 16-6 (3.1); SDWA O. Reg. 170/03 16-6 (3.2); SDWA O. Reg. 170/03 16-6 (4); SDWA O. Reg. 170/03 16-6 (5); SDWA O. Reg. 170/03 16-6 (6);			
Question: Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All required notifications of adverse water quality incidents were not immediately provided as per O. Reg. 170/03 16-6.			
Schedule 16-6 of O.Reg. 170/03 requires immediate reporting of Schedule 16-4 observations to be given by speaking in person or by telephone. The immediate report must be given to the medical officer of health, and to the Ministry.			
Schedule 16-4 of O.Reg. 170/03 requires the system to report other observations, if they believe water directed to users has not been disinfected in accordance with the Procedure for Disinfection of Drinking Water in Ontario.			
The system reported a watermain break that met the criteria of a Schedule 16-4 reportable observation. The system provided an immediate notification to the Ministry, but failed to notify the medical officer of health immediately after the observation was made.			

The system provided an updated 16b Response to Adverse Water Quality Test Results SOP, as well as a new notification checklist to be used in adverse water quality incident response. Operators have been trained to use both documents in response to an adverse water quality incident. The proactive work the system has completed suffices all required actions that would be issued. The system is encouraged to continually educate and train operators and continue with the after action review process.

Question ID	DWMR1105000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-7 (1); SDWA O. Reg. 170/03 16-7 (2); SDWA O. Reg. 170/03 16-7 (3); SDWA O. Reg. 170/03 16-7 (4); SDWA O. Reg. 170/03 16-7 (5);			
Question: Were all required written notices of adverse water quality incidents provided as per O. Reg. 170/03 16-7?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All required written notices of adverse water quality incidents were provided as per O. Reg. 170/03 16-7.			

Question ID	DWMR1106000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-9 (1); SDWA O. Reg. 170/03 16-9 (2);			
Question: Were all required written notices of issue resolution provided as per O. Reg. 170/03 16-9?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All required written notices of issue resolution were provided as per O. Reg. 170/03 16-9.			

Question ID	DWMR1110000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 11 (6);			
Question: Was an Annual Report containing the required information prepared by February 28 of the following year?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The Annual Report containing the required information was prepared by February 28th of the following year.			

Question ID	DWMR1056000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Has the donor provided an Annual Report to the owner of this receiver drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The donor provided an Annual Report to the owner of this receiver drinking water system.			

Question ID	DWMR1111000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 22-2 (1); SDWA O. Reg. 170/03 22-2 (2); SDWA O. Reg. 170/03 22-2 (3); SDWA O. Reg. 170/03 22-2 (4);			
Question: Have Summary Reports for municipal council been completed on time, include the required content, and distributed in accordance with the regulatory requirements?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements.			

Question ID	DWMR1045000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Has the owner updated the document describing the distribution components within 12 months of completion of alterations to the system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had up-to-date documents describing the distribution components as required.			

Question ID	DWMR1046000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is there a backflow prevention program, policy and/or bylaw in place that addresses cross			

connections and connections to high hazard facilities?

Compliance Response(s)/Corrective Action(s)/Observation(s):

There was a backflow prevention program, policy and/or bylaw in place.

Question ID	DWMR1053000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is the Owner able to maintain proper pressures in the distribution system and is pressure monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.			

Question ID	DWMR1048000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Has the owner implemented a program for the flushing of watermain as per industry standards?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had implemented a program for the flushing of watermain as per industry standards.			

Question ID	DWMR1050000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is there a program in place for inspecting and exercising valves?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a program in place for inspecting and exercising valves.			

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Question ID	DWMR1051000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is there a program in place for inspecting and operating hydrants?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a program in place for inspecting and operating hydrants.			

Question ID	DWMR1052000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is there a by-law or policy in place limiting access to hydrants?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a by-law or policy in place limiting access to hydrants.			

Question ID	DWMR1058000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Do operators and maintenance personnel have ready access to operations and maintenance manuals?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators and maintenance personnel had ready access to operations and maintenance manuals. Operations and maintenance manuals are accessed via operators field tablets.			

Question ID	DWMR1059000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Do the operations and maintenance manuals contain plans, drawings and process			

descriptions sufficient for the safe and efficient operation of the system?

Compliance Response(s)/Corrective Action(s)/Observation(s):

The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

Maps depicting the City of Markham micro sampling locations, and the Markham water distribution system, including valve and hydrant locations were provided for review as part of the inspection. An overview map of the Markham Distribution System was reviewed, dated January 2024. Operators have access to up-to-date versions of maps via their field tablets.

Question ID	DWMR1060000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.			
Condition 16.0 of Schedule B of the MDWL, lists the items to be included in the operations and maintenance manual.			

Question ID	DWMR1061000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 27 (1); SDWA O. Reg. 128/04 27 (2); SDWA O. Reg. 128/04 27 (3); SDWA O. Reg. 128/04 27 (4); SDWA O. Reg. 128/04 27 (5); SDWA O. Reg. 128/04 27 (6); SDWA O. Reg. 128/04 27 (7);			
Question: Are logbooks properly maintained and contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logbooks were properly maintained and contained the required information.			

Question ID	DWMR1062000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-5;			

Question:

Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?

Compliance Response(s)/Corrective Action(s)/Observation(s):

Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.

Question ID	DWMR1063000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-10 (1);			
Question: For every required operational test and for every required sample, is a record made of the date, time, location, name of the person conducting the test and result of the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.			

Question ID	DWMR1064000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 26 (2);			
Question: Did the operator-in-charge ensure that records were maintained of all adjustments made to the processes within his or her responsibility?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility.			

Question ID	DWMR1065000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 27 (6);			
Question: Are logs and other record keeping mechanisms available for at least five (5) years?			

Compliance Response(s)/Corrective Action(s)/Observation(s):

Logs or other record keeping mechanisms were available for at least five (5) years.

Question ID	DWMR1067000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Are clean-up equipment and materials in place for the clean up of spills?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Clean-up equipment and materials were in place for the clean up of spills.			
Spill kits and clean-up equipment and supplies are located in the the facility operations centre.			

Question ID	DWMR1071000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Has the owner provided security measures to protect components of the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had provided security measures to protect components of the drinking water system.			
The City of Markham has provided multiple forms of security to operations building of the system. The building possess internal and external cameras. Illegal entry and alarms are registered within the building security system. All facility doors are locked internally and a pass key is required for entry to the main entrance of the building.			

Question ID	DWMR1072000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Has the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in their system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner and/or operating authority undertook efforts to promote water conservation and			

reduce water losses in their system.

Question ID	DWMR1073000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1);			
Question: Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The overall responsible operator had been designated for each subsystem.			

Question ID	DWMR1078000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1); SDWA O. Reg. 128/04 23 (2); SDWA O. Reg. 128/04 23 (4); SDWA O. Reg. 128/04 23 (6); SDWA O. Reg. 128/04 23 (7);			
Question: In instances where the overall responsible operator was unable to act, was an adequately certified operator designated to act in place of the overall responsible operator?			
Compliance Response(s)/Corrective Action(s)/Observation(s): An adequately licenced operator was designated to act in place of the overall responsible operator when the overall responsible operator was unable to act.			

Question ID	DWMR1074000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 25 (1);			
Question: Have operators-in-charge been designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators-in-charge had been designated for all subsystems which comprise the drinking water system.			

Question ID	DWMR1075000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 22;			
Question: Do all operators possess the required certification?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All operators possessed the required certification.			

Question ID	DWMR1076000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Do only certified operators make adjustments to the treatment equipment?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Only certified operators made adjustments to the treatment equipment.			



APPENDIX A STAKEHOLDER APPENDIX

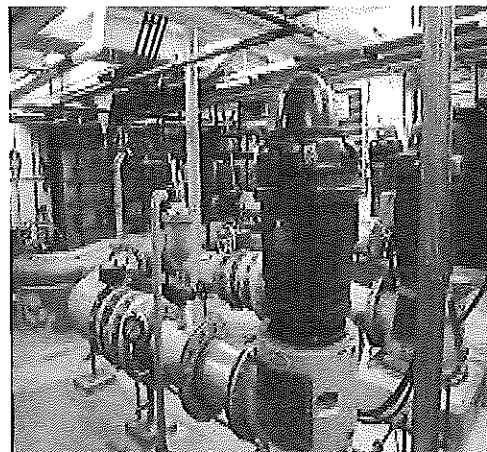
February 2, 2023

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/page/drinking-water



Click on the publication below to access it

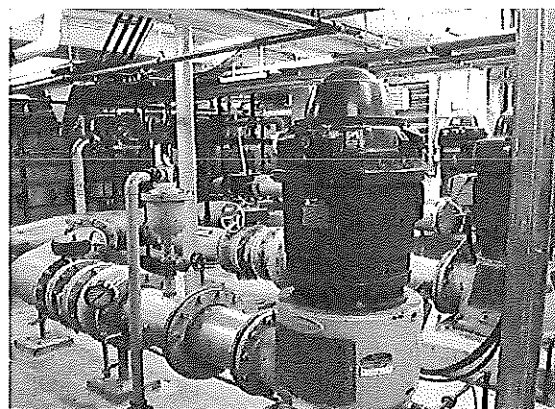
- [Drinking Water System Profile Information Form - 012-2149E](#)
- [Laboratory Services Notification Form – 012-2148E](#)
- [Adverse Test Result Notification Form – 012-4444E](#)
- [Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils](#)
- [Procedure for Disinfection of Drinking Water in Ontario](#)
- [Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids](#)
- [Filtration Processes Technical Bulletin](#)
- [Ultraviolet Disinfection Technical Bulletin](#)
- [Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments](#)
- [Certification Guide for Operators and Water Quality Analysts](#)
- [Training Requirements for Drinking Water Operator](#)
- [Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption](#)
- [Drinking Water System Contact List – 7128E01](#)
- [Ontario's Drinking Water Quality Management Standard - Pocket Guide](#)
- [2020 Watermain Disinfection Procedure](#)
- [List of Licensed Laboratories](#)

2023-02-09

Principaux guides et documents de référence sur les réseaux résidentiels municipaux d'eau potable

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment. Pour accéder à ces documents en ligne, cliquez sur leur titre ci-dessous ou faites une recherche à l'aide de votre navigateur Web.

Communiquez avec le ministère au 1-866-793-2588, ou encore à waterforms@ontario.ca si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site www.ontario.ca/fr/page/eau-potable

Cliquez sur la publication pour y accéder

- [Renseignements sur le profil du réseau d'eau potable - 012-2149F](#)
- [Avis de demande de services de laboratoire – 012-2148F](#)
- [Avis de résultats d'analyse insatisfaisants et de règlement des problèmes – 012-4444F](#)
- [Prendre soin de votre eau potable - Un guide destiné aux membres des conseils municipaux](#)
- [Marche à suivre pour désinfecter l'eau potable en Ontario](#)
- [Stratégies pour minimiser les trihalométhanes et les acides haloacétiques de sous-produits de désinfection](#)
- [Filtration Processes Technical Bulletin \(en anglais seulement\)](#)
- [Ultraviolet Disinfection Technical Bulletin \(en anglais seulement\)](#)
- [Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable](#)
- [Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable](#)
- [Exigences d'exploitant d'eau potable en formation](#)
- [Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption](#)
- [Liste des personnes-ressources du réseau d'eau potable](#)
- [L'eau potable en Ontario - Norme de gestion de la qualité - Guide de poche](#)
- [2020 Watermain Disinfection Procedure \(en anglais seulement\)](#)
- [Laboratoires autorisés](#)



APPENDIX B INSPECTION RATING RECORD

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2023-24)

DWS Name: MARKHAM DISTRIBUTION SYSTEM
DWS Number: 220004162
DWS Owner: THE CORPORATION OF THE CITY OF MARKHAM
Municipal Location: MARKHAM

Regulation: O.REG. 170/03
DWS Category: DW Municipal Residential
Type of Inspection: Detailed
Inspection Date: Jan-22-2024
Ministry Office: York Durham District Office

Maximum Risk Rating: 426

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/49
Distribution System	0/4
Logbooks	0/30
Operations Manuals	0/42
Reporting & Corrective Actions	21/84
Treatment Processes	0/146
Water Quality Monitoring	0/71
Overall - Calculated	21/426

Inspection Risk Rating:	4.93%
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Final Inspection Rating:	95.07%
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Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2023-24)

DWS Name: MARKHAM DISTRIBUTION SYSTEM**DWS Number:** 220004162**DWS Owner Name:** THE CORPORATION OF THE CITY OF MARKHAM**Municipal Location:** MARKHAM**Regulation:** O.REG. 170/03**DWS Category:** DW Municipal Residential**Type of Inspection:** Detailed**Inspection Date:** Jan-22-2024**Ministry Office:** York Durham District Office

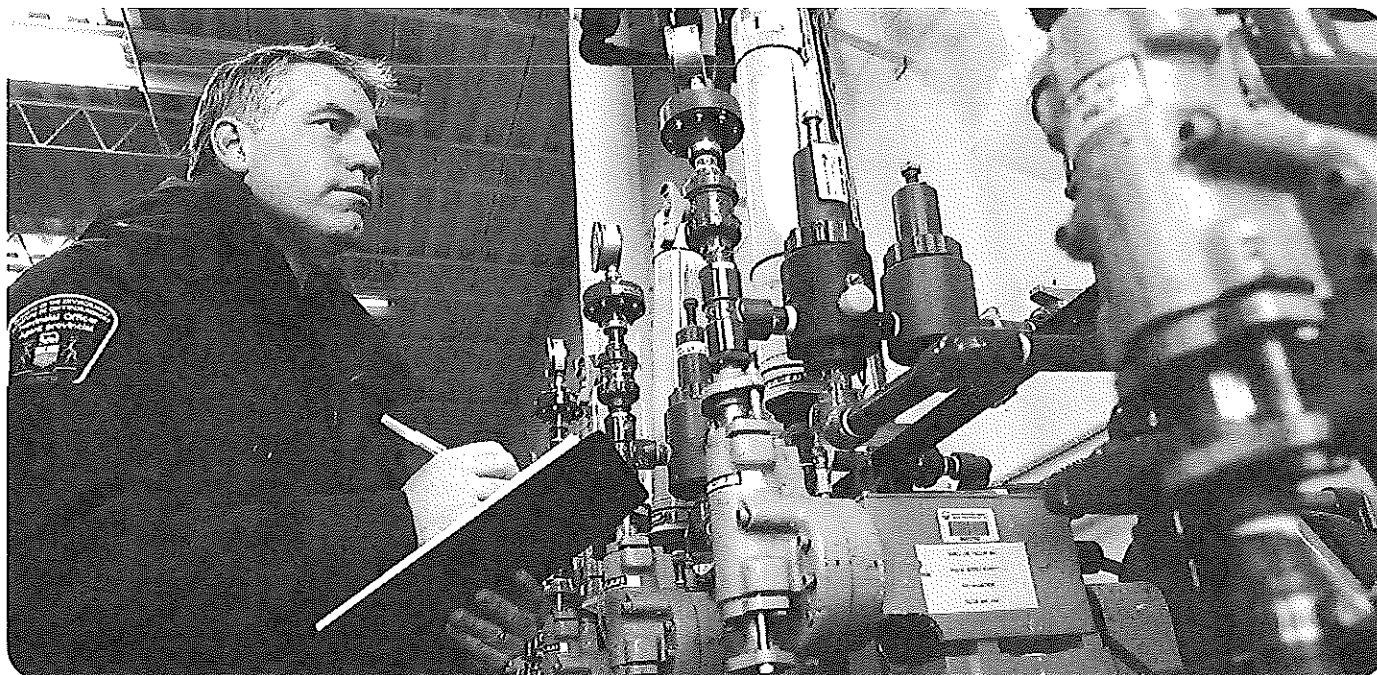
Non-Compliance Question(s)	Non Compliance Risk
Reporting & Corrective Actions	
Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?	21
Overall - Total	21

Maximum Question Rating: 426

Inspection Risk Rating: 4.93%

FINAL INSPECTION RATING: 95.07%

APPLICATION OF THE RISK METHODOLOGY USED FOR MEASURING MUNICIPAL RESIDENTIAL DRINKING WATER SYSTEM INSPECTION RESULTS



The Ministry of the Environment (MOE) has a rigorous and comprehensive inspection program for municipal residential drinking water systems (MRDWS). Its objective is to determine the compliance of MRDWS with requirements under the Safe Drinking Water Act and associated regulations. It is the responsibility of the municipal residential drinking water system owner to ensure their drinking water systems are in compliance with all applicable legal requirements.

This document describes the risk rating methodology, which has been applied to the findings of the Ministry's MRDWS inspection

results since fiscal year 2008-09. The primary goals of this assessment are to encourage ongoing improvement of these systems and to establish a way to measure this progress.

MOE reviews the risk rating methodology every three years.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains 15 inspection modules consisting of approximately 100 regulatory questions. Those protocol questions are also linked to definitive guidance that ministry inspectors use when conducting MRDWS inspections.

ontario.ca/drinkingwater

The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring. The inspection protocol also contains a number of non-regulatory questions.

A team of drinking water specialists in the ministry assessed each of the inspection protocol regulatory questions to determine the risk (not complying with the regulation) to the delivery of safe drinking water. This assessment was based on established provincial risk assessment principles, with each question receiving a risk rating referred to as the Question Risk Rating. Based on the number of areas where a system is deemed to be non-compliant during the inspection, and the significance of these areas to administrative, environmental, and health consequences, a risk-based inspection rating is calculated by the ministry for each drinking water system.

It is important to be aware that an inspection rating less than 100 per cent does not mean the drinking water from the system is unsafe. It shows areas where a system's operation can improve. The ministry works with owners and operators of systems to make sure they know what they need to do to achieve full compliance.

The inspection rating reflects the inspection results of the specific drinking water system for the reporting year. Since the methodology is applied consistently over a period of years, it serves as a comparative measure both provincially and in relation to the individual system. Both the drinking water system and the public are able to track the performance over time, which encourages continuous improvement and allows systems to identify specific areas requiring attention.

The ministry's annual inspection program is an important aspect of our drinking water safety net. The ministry and its partners share a common commitment to excellence and we continue to work toward the goal of 100 per cent regulatory compliance.

Determining Potential to Compromise the Delivery of Safe Water

The risk management approach used for MRDWS is aligned with the Government of Ontario's Risk Management Framework. Risk management is a systematic approach to identifying potential hazards, understanding the likelihood and consequences of the hazards, and taking steps to reduce their risk if necessary and as appropriate.

The Risk Management Framework provides a formula to be used in the determination of risk:

$$\text{RISK} = \text{LIKELIHOOD} \times \text{CONSEQUENCE}$$

(of the consequence)

Every regulatory question in the inspection protocol possesses a likelihood value (L) for an assigned consequence value (C) as described in **Table 1** and **Table 2**.

TABLE 1:

Likelihood of Consequence Occurring	Likelihood Value
0% - 0.99% (Possible but Highly Unlikely)	L = 0
1 - 10% (Unlikely)	L = 1
11 - 49% (Possible)	L = 2
50 - 89% (Likely)	L = 3
90 - 100% (Almost Certain)	L = 4

TABLE 2:

Consequence	Consequence Value
Medium Administrative Consequence	C = 1
Major Administrative Consequence	C = 2
Minor Environmental Consequence	C = 3
Minor Health Consequence	C = 4
Medium Environmental Consequence	C = 5
Major Environmental Consequence	C = 6
Medium Health Consequence	C = 7
Major Health Consequence	C = 8

The consequence values (0 through 8) are selected to align with other risk-based programs and projects currently under development or in use within the ministry as outlined in **Table 2**.

The Question Risk Rating for each regulatory inspection question is derived from an evaluation of every identified consequence and its corresponding likelihood of occurrence:

- All levels of consequence are evaluated for their potential to occur
- Greatest of all the combinations is selected.

The Question Risk Rating quantifies the risk of non-compliance of each question relative to the others. Questions with higher values are those with a potentially more significant impact on drinking water safety and a higher likelihood of occurrence. The highest possible value would be 32 (4×8) and the lowest would be 0 (0×1).

Table 3 presents a sample question showing the risk rating determination process.

TABLE 3:							
Does the Operator in Charge ensure that the equipment and processes are monitored, inspected and evaluated?							
Risk = Likelihood × Consequence							
C=1	C=2	C=3	C=4	C=5	C=6	C=7	C=8
Medium Administrative Consequence	Major Administrative Consequence	Minor Environmental Consequence	Minor Health Consequence	Medium Environmental Consequence	Major Environmental Consequence	Medium Health Consequence	Major Health Consequence
L=4 (Almost Certain)	L=1 (Unlikely)	L=2 (Possible)	L=3 (Likely)	L=3 (Likely)	L=1 (Unlikely)	L=3 (Likely)	L=2 (Possible)
R=4	R=2	R=6	R=12	R=15	R=6	R=21	R=16

Application of the Methodology to Inspection Results

Based on the results of a MRDWS inspection, an overall inspection risk rating is calculated. During an inspection, inspectors answer the questions related to regulatory compliance and input their “yes”, “no” or “not applicable” responses into the Ministry’s Laboratory and Waterworks Inspection System (LWIS) database. A “no” response indicates non-compliance. The maximum number of regulatory questions asked by an inspector varies by: system (i.e., distribution, stand-alone); type of inspection (i.e., focused, detailed); and source type (i.e., groundwater, surface water).

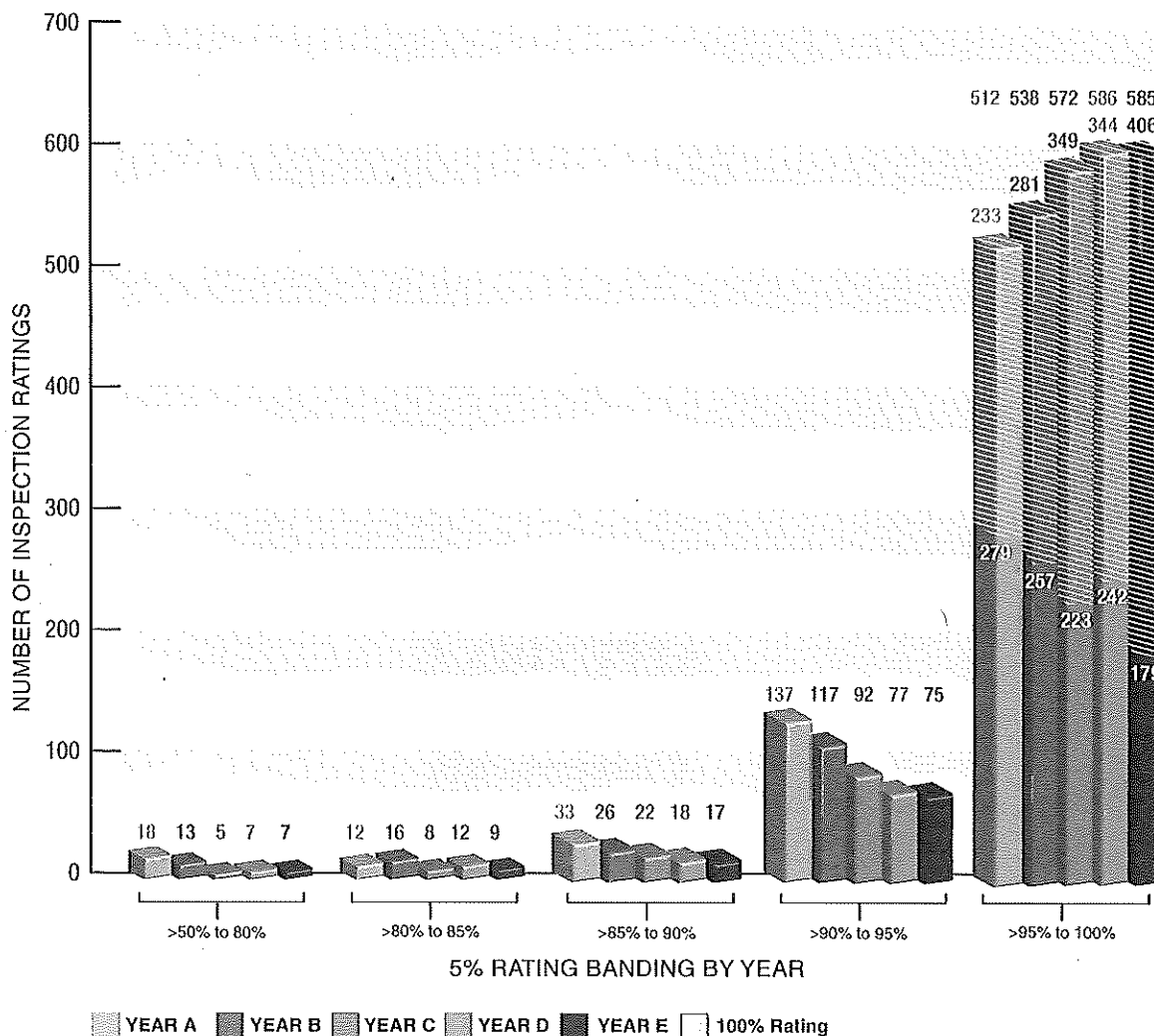
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

Application of the Methodology for Public Reporting

The individual MRDWS Total Inspection Ratings are published with the ministry's Chief Drinking Water Inspector's Annual Report.

Figure 1 presents the distribution of MRDWS ratings for a sample of annual inspections. Individual drinking water systems can compare against all the other inspected facilities over a period of inspection years.

Figure 1: Year Over Year Distribution of MRDWS Ratings



Reporting Results to MRDWS Owners/Operators

A summary of inspection findings for each system is generated in the form of an Inspection Rating Record (IRR). The findings are grouped into the 15 possible modules of the inspection protocol,

which would provide the system owner/operator with information on the areas where they need to improve. The 15 modules are:

- | | | | |
|-------------------------|---------------------------------|--|--|
| 1. Source | 5. Treatment Process Monitoring | 9. Logbooks | 13. Water Quality Monitoring |
| 2. Permit to Take Water | 6. Process Wastewater | 10. Contingency and Emergency Planning | 14. Reporting, Notification and Corrective Actions |
| 3. Capacity Assessment | 7. Distribution System | 11. Consumer Relations | 15. Other Inspection Findings |
| 4. Treatment Processes | 8. Operations Manuals | 12. Certification and Training | |

For further information, please visit www.ontario.ca/drinkingwater



APPENDIX C

Drinking Water System Components

DWS Component Information Report for 220004162

as of 29-FEB-2024

Drinking Water System Profile Information

DWS # 220004162
MOE Assigned Name Markham Distribution System
Category LMRS
Regulation O.REG 170/03
DWS Type Distribution System
Source Type Distribution
Address 101 Town Centre Boulevard North, Markham, Ontario, L3R 9W3, Canada
Region Central Region
District York-Durham District
Municipality Markham
Public Health Unit York Region Health Services Department

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
Markham Operation Office	Other	Other	8100 Warden Ave, Unit: Markham,	<p>The Markham Distribution System is owned and operated by the City of Markham, and receives treated water from the City of Toronto and the Region of Peel. The trunk transmission lines, pumping stations, and water storage facilities located within the City of Markham are owned and operated by the Region of York and the City of Toronto. The Region of York and the City of Toronto measures and monitors the distribution water flows and volumes directed to the City of Markham through the use of 22 flow meters located along the Richmond Hill, Vaughan, Stouffville, Toronto and Markham boundaries.</p> <p>The Markham Distribution System provides potable water to approximately 356,060 residents of Markham and consists of approximately 1,098 km of watermains, 8,873 hydrants, 11,242 valves, 107 sampling stations and 84,330 service connections.</p>