




CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Hamilton Water Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	December 7, 2020
SUBJECT/REPORT NO:	Wastewater Quality Management System (WWQMS) Operational Plan Summary Report (PW20076) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Cari Vanderperk (905) 546-2424 Ext. 5833 Jesmy D'Cruz (905) 546-2424 Ext. 5833
SUBMITTED BY:	Andrew Grice Director, Hamilton Water Public Works Department
SIGNATURE:	

RECOMMENDATION

- (a) That the Wastewater Quality Management System (WWQMS) Operational Plan Summary Report attached as Appendix "A" to Report PW20076 be approved; and,
- (b) That the Mayor, City Clerk, General Manager of Public Works and Director of Hamilton Water, be authorized and directed to execute the Wastewater Quality Management System Operational Plan Summary Report by signing the Commitment and Endorsement page within the Summary Report, attached as Appendix "A" of Report PW20076.

EXECUTIVE SUMMARY

The Hamilton Water Division has recently developed a Wastewater Quality Management System (WWQMS) as part of the City of Hamilton's (City) efforts to:

- Consistently process wastewater that meets applicable legislative, regulatory and other requirements; and,

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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- Enhance environmental performance through the effective application and continual improvement of the Quality Management System.

As part of the 2019 Water, Wastewater and Stormwater Rate Budget, Council approved the hiring of a Wastewater Compliance Technologist to develop and implement a WWQMS for the City.

The WWQMS is a framework that documents processes, procedures, and responsibilities to effectively and efficiently collect and treat wastewater. Revised processes and procedures will be integrated within the City of Hamilton's Beyond Compliance Operating System (BCOS).

A highly successful staff engagement exercise was undertaken to develop the WWQMS Policy that is referred to by the acronym "CLEAN" and can be found in Section 2.2 of the WWQMS Operational Plan Summary Report attached as Appendix "A" to Report PW20076. In 2019/2020, the team developed the Standard, performed a WWQMS Gap Analysis on the current program, established a WWQMS Working Group, facilitated a Wastewater Compliance Audit completed by a third-party, and developed associated documents including this Operational Plan.

The "Owner" of a wastewater system (City of Hamilton - Mayor and Council) have specific responsibilities under the Environmental Compliance Approvals issued to the City by the province for various wastewater related assets. The Hamilton Water Division acts as the "Operating Authority" for our wastewater systems. Hamilton Water has taken the initiative to develop the WWQMS Operational Plan and all ancillary documentation.

As required by our internal WWQMS Standard, Top Management (General Manager of Public Works and the Director of Hamilton Water) for the WWQMS is seeking Council's endorsement of the first WWQMS Policy and Operational Plan Summary Report, attached as Appendix "A" to Report PW20076.

Alternatives for Consideration – See Page 4

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: All costs to support the Operational Plan were approved as part of the 2020 Water, Wastewater and Stormwater Rate Budget.

Staffing: There are no staffing impacts associated with this report.

Legal: There is currently no legal requirement to have an approved Operational Plan for wastewater.

HISTORICAL BACKGROUND

The implementation of the Wastewater Quality Management System (WWQMS) is a continual improvement action. It is a voluntary system that was developed by Hamilton Water utilizing the combination of the Drinking Water Quality Management Standard and the ISO 14001 Environmental Management Standard as the framework. Apart from the obvious benefit of enhanced environmental protection, the WWQMS is structured so that everyone from top management to the worker will know why this is important for the City, and will help to:

- Ensure continued compliance with legal requirements;
- Have awareness and management of environmental risks;
- Improve cost control measures;
- Ensure higher rate of success when implementing changes;
- Enable quicker improvement of processes;
- Enhance employee engagement in the knowledge that they are working in an environmentally focused organization;
- Demonstrate our commitment to improving the impact of our wastewater on the environment; and,
- Develop credibility with public and ensure transparency by reporting annually.

Council has been discussing the need for greater oversight of the wastewater operations, especially with regards to overflows and by-passes where there could be an impact to the environment and the WWQMS will support this need. The WWQMS provides the City with greater awareness of the requirements and a systematic approach to compliance.

The WWQMS is a companion to our provincially required Drinking Water Quality Management System (DWQMS) that has been successfully implemented and maintained since 2008. The DWQMS has helped us deliver safe, high quality, and consistent supply of drinking water to customers, while always improving the DWQMS, following and complying with applicable legislation and ensuring effective and open communication with the community concerning matters of drinking water quality.

In 2019, Council approved the hiring of a Wastewater Compliance Technologist to develop and implement a WWQMS for the City. Since mid-2019, the Wastewater Compliance Technologist has been working with the WWQMS Working Group and has completed the following tasks:

- Developed the WWQMS Standard for the City of Hamilton;
- Developed and received approval from Top Management for the WWQMS Policy;

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- Developed the WWQMS Operational Plan;
- Revised and/or developed wastewater related procedures and documents;
- Completed a WWQMS Gap Analysis;
- Facilitated a Wastewater Compliance Audit completed by a third-party;
- Completed a Wastewater Assets and Impacts Assessment;
- Developed Wastewater Objectives and Targets with associated Wastewater Programmes and received approval from Top Management; and,
- Facilitated the first full Top Management Review on November 5, 2020.

At this time, it is being requested that Council approve the WWQMS Policy and sign the Commitment and Endorsement by the “Owner” in the WWQMS Operational Plan Summary document.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The WWQMS Operational Plan Summary Report meets the intent of the WWQMS Policy approved by Top Management (General Manager of Public Works and Director of Hamilton Water) on January 27, 2020. At this time, we are requesting Council to approve the WWQMS Policy and commit to and endorse the WWQMS by signing the WWQMS Operational Plan Summary Report.

Of environmental interest, the WWQMS is a sub-system of the Beyond Compliance Operating System (BCOS) which is Hamilton Water’s integrated environmental, health & safety management system. With the implementation of WWQMS, BCOS continues to expand and improve Hamilton Water processes.

RELEVANT CONSULTATION

Following the endorsements of the WWQMS Operational Plan Summary Report, signed copies of the WWQMS Operational Plan Summary Report will be made available to the public on the City’s website, Clerk’s Office, City Hall and the Hamilton Water storefront at 330 Wentworth Street North.

Should the public have any questions, comments, or suggestions, they can contact the WWQMS System Management Representative (Manager, Compliance and Regulations) and their comments will be considered for continual improvement of the WWQMS.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The WWQMS Operational Plan Summary Report is an integrated document for all the Hamilton Wastewater Systems including the Woodward Avenue Wastewater Treatment Plant, Dundas Wastewater Treatment Plant and Wastewater Collection System.

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A full copy of the WWQMS Operational Plan Summary Report is attached as Appendix “A” to Report PW20076. The WWQMS Operational Plan Summary Report provides a concise summary of the entire WWQMS and refers to the more detailed Level III system procedures and records.

It is recommended that the Operational Plan be endorsed by the System Owner and Top Management of the Wastewater System(s) similar to the Drinking Water Quality Management System (DWQMS). As such, Section 3.0 of the Operational Plan Summary Report includes a section entitled Commitment and Endorsement. Space has been allotted for the signatures of the Mayor and City Clerk as signing authority for the Owner, and the General Manager of Public Works and the Director of Hamilton Water as Top Management of the Operating Authority. Signatures will be added after Council endorses the WWQMS Operational Plan Summary Report as evidence of Owner and Operating Authority’s commitment and endorsement.

ALTERNATIVES FOR CONSIDERATION

The Ministry of Environment, Conservation and Parks (MECP) is supporting the Canadian Standards Association (CSA) in the development of a Wastewater Quality Management System Standard. This Standard will be voluntary across Canada. The City is supporting this initiative financially and a staff member is being considered for the Technical Committee responsible for its development. It is anticipated that work will commence on the Standard in 2020/2021.

Staff will continue to monitor the development of the voluntary CSA WWQMS and will consider making changes to the City’s WWQMS as part of continual improvement.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Community Engagement and Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Culture and Diversity

Hamilton is a thriving, vibrant place for arts, culture, and heritage where diversity and inclusivity are embraced and celebrated.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PW20076 - Wastewater Quality Management System
Operational Plan Summary Report