
To: Committee of the Whole

Meeting Date: April 10, 2025

From: Laura McDowell
Commissioner of Public Works

Re: **2024 Integrated Management System Memo for Water, Wastewater and Waste Management**

The Integrated Management System update summarizes key strategies to mitigate service delivery risk and demonstrates operational due diligence for water, wastewater and waste management operations. This is companion information to the 2024 Drinking Water Systems Memorandum that supports Council in meeting statutory standard of care requirements under the *Safe Drinking Water Act, 2002*.

Integrated Management System supports Council's standard of care obligations

Regional Councillors have an important role in ensuring York Region's drinking water systems provide safe, high-quality drinking water. Public Works' Integrated Management System (the System) supports Council with operational planning, risk mitigation, regulatory compliance, auditing, emergency preparedness and continual improvement. The System encompasses three standards focusing on quality and environmental management and providing confidence that water, wastewater and waste management services are delivered in accordance with Ontario regulations and established policies and procedures.

Numerous risk mitigation practices are completed through the Integrated Management System

The System provides a multi-pronged approach to identify and mitigate system risks through routine evaluation of emerging challenges and implementation of measures to minimize impacts. Examples of risk mitigation practices conducted in 2024 include:

- Operational senior leadership met quarterly to evaluate emerging risks and track progress on risk mitigation initiatives

- Emergency preparedness testing, which included functional simulations and tabletop exercises for water, wastewater and waste management staff resulted in improvement actions to enhance risk management and emergency response protocols
- Drinking Water Quality Management Standard (DWQMS) risk re-assessment completed evaluating and identifying control measures for system risks related to source water, quality monitoring and cybersecurity
- Facilitated five root cause analysis workshops following minor operational incidents, identifying and initiating 29 improvement actions
- Management review was conducted in April 2024 to assess and confirm the System's adequacy, suitability, roles/responsibilities and effectiveness. Required annually, management review focused on system and regulatory performance, audit results, resources, legal changes, customer feedback, and operational risks.

Continual improvement is essential to the System's success. Improvement initiatives demonstrate real process efficiencies and risk mitigation, which strengthens water, wastewater and waste management service delivery.

Auditing confirms system effectiveness and high level of conformance, demonstrating system maturity

The System offers a systematic method for risk mitigation and continuous improvement, earning recognition from external auditors for its maturity and well-established processes. Water, wastewater, and waste management operations participated in three multi-site external audits, resulting in successful re-registration to International Organization for Standardization (ISO) 14001 Environmental Management Standard with zero non-conformities identified, as well as ongoing certification to ISO 9001 Quality Management Standard and the Ministry of the Environment Conservation and Parks' DWQMS.

Audit programs monitor conformance with internal processes, compliance with regulatory requirements and strengthen system performance by identifying opportunities for continual improvement, resulting in improved operational performance.

Table 1 in Appendix A summarizes the number of audit findings in 2024 by audit type and compares data from 2022 to 2024. Similarly, Table 2 highlights internal audit findings by category for the same period. The number of audit findings has remained consistent year over year, demonstrating a rigorous audit program. To effectively address each audit finding, corrective actions are implemented.

Successful external audits in 2024, including re-registration to ISO 14001, confirmed the System effectively facilitates the delivery of water, wastewater and waste management services and systemically reduces Public Works' operational risk.

For more information on this memo, please contact Laura McDowell, Commissioner of Public Works, at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.



Laura McDowell, P.Eng
Commissioner of Public Works



Erin Mahoney
Chief Administrative Officer

March 24, 2025
#16482789

Appendix A - Integrated Management System Summary of Audit Findings

Table 1
Number of Audit Findings for Water, Wastewater and Waste Management

Audit Type	Number of Audit Findings		
	2022	2023	2024
Internal Proactive Audits	80	67	61
ISO External Audits	0	3	0
Regulatory DWQMS Audits	0	0	0

Table 2
Number of Internal Audit Findings by Category

Category	2022	2023	2024
Asset Tracking and Calibration	11	16	9
Documentation	38	33	26
Process Improvements	9	6	7
Training	8	3	5
Miscellaneous	14	9	14