# Annual Water & Wastewater Quality Management Systems Update

Public Works Committee PW 50-2020

December 8, 2020

Rachel Whyte, P.Eng. – W-WW Quality Management Specialist







### **Annual Water and Wastewater Quality Management Systems Update**

(Report PW 50-2020)

December 8, 2020

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## Water Quality Management System (Water QMS)

### **Water QMS Activities**

Approved QMS
 Operational Plan
 and QMS accreditation
 are required under the
 Safe Drinking Water Act

 Milestones required to maintain accreditation

Permit to Take Water: source water uptake **Drinking Financial** Water Plan: Works plan for Permit: **Municipal** cost description recovery **Drinking** of assets Water Licence **Approved** Accredited Operational Operating **Authority:** Plan: QMS **QMS** documented implemented **Drinking Water Quality Management System** 



### **Water QMS Internal Audit**

- Completed March 2020
- Findings:
  - 10 non-conformances
  - 7 opportunities for continual improvement
  - 14 best practices for evaluation
- Corrective action plans identified by management and staff; implementation ongoing





### Water QMS External Audit

- Audit completed May-July 2020
  - Off-site document review
  - On-site reaccreditation audits
- Findings:
  - 1 non-conformance (resolved)
  - 8 opportunities for continual improvement



### Water Systems Risk Assessment

- Risk assessment reviews completed for all water systems
- Three high-scoring risks identified: to be addressed through capital projects and adjustments to operating practices
- Critical control points remain unchanged
- Reassessment due in 2021



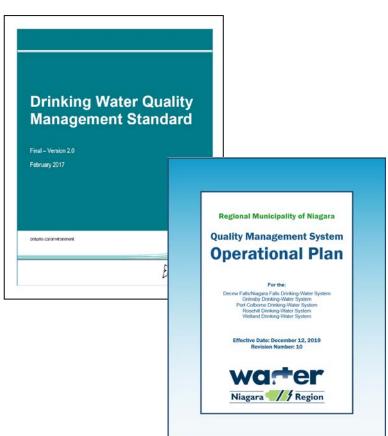
### Water QMS Management Review

- Part 1 completed in May
- Part 2 anticipated in December
- Three action items issued since previous update; resolutions in progress



### Changes Impacting Water QMS/ Operational Plan

- No anticipated changes impacting QMS
- Changes impacting Operational Plan:
  - Minor changes to organizational structure
  - Minor revisions to address opportunities for improvement identified through external audits





# Wastewater Quality Management System (Wastewater QMS)

### Wastewater QMS Internal Audit

- Completed November 2020
- Findings:
  - 9 non-conformances
  - 9 opportunities for continual improvement
- Corrective action plans identified by management and staff; implementation ongoing



### Wastewater Systems Risk Assessment

- Risk assessment reviews completed in 2019 and 2020
  - 2019: 91 high-risk items
  - 2020: 86 high-risk items
- 58 high-scoring risks to be mitigated through capital improvements
- Next full re-assessment in 2021



### Wastewater QMS Management Review

- Part 1 completed in June;
   Part 2 completed in November
- Four action items issued since previous update; resolutions complete or in progress



### Changes Impacting Wastewater QMS/ Operational Plan

- Changes impacting QMS:
  - New standard in development
  - Adoption will be voluntary
- Changes impacting Operational Plan:
  - Minor changes to organizational structure
  - Minor revisions to address opportunities for improvement identified through external audits

### The Regional Municipality of Niagara

### Wastewater Quality Management System Operational Plan

### For the:

Anger Avenue Wastewater System
Baker Road Wastewater System
Crystal Beach Wastewater System
Niagara Falls Wastewater System
Niagara-on-the-Lake Wastewater System
Port Ballousie Wastewater System
Port Weller Wastewater System
Queenston Wastewater System
Seaway Wastewater System
Welland Wastewater System
Welland Wastewater System

Stevensville/Douglastown Lagoon Wastewater System Garner Road <u>Biosolids</u> Handling and Dewatering Facility

> Effective Date: December 12, 2019 Revision Number: 3



Niagara Region

### Questions

Rachel Whyte, P. Eng.

Water and Wastewater Quality Management Specialist

905-980-6000 ext. 3787

rachel.whyte@niagararegion.ca

