



Meeting Date: November 24, 2021

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Report No: PWE 44- 2021

Subject: Melrose Drinking Water System 2021 Annual Inspection Summary

Recommendation:

THAT Report PWE 44-2021, re: 2021 Ministry of Environment, Conservation & Parks (MECP) Annual Inspection Report for the Melrose Water System be received for information.

Purpose:

To advise Council of the 2021 MECP Annual inspection findings at the Melrose Water System.

Background:

Under the Safe Drinking Water Act, 2002 (SDWA) Section 81 the MECP undertakes annual inspections of Municipal Drinking Water Systems (DWS). Inspections cover operational and process details, as well as the system condition and maintenance practices. The 2021 inspection was announced by the MECP and was performed on-site June 16, 2021 and finalized on September 21, 2021.

Analysis:

The Drinking Water System Inspection Report is typically broken in to two (2) sections:

- Non-compliance based upon a “No” response captured for a legislative or best practice (BMP) question, and
- Inspection Details related to questions that were assessed during the drinking water inspection Summary of Recommendation and Best Practice Issues.

Non-compliance with Regulatory Requirements and Actions Required

Over the inspection period two (2) non-compliance with regulatory requirements were identified. The non-compliances were related to the treatment processes of the facility and have been addressed. Standard Operating Procedures and Operators Log Sheets have been updated and the latest copies of the AWWA are also on file.

Question Group: Treatment Processes

Question ID	MRDW1038000	
Question	Question Type	Legislative Requirement
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?	Legislative	SDWA O. Reg. 170/03 6-5 (1)1-4
Observation/Corrective Action(s)		
<p>Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was not performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and/or was not recording data with the prescribed format.</p> <p>Generally stated, the Owner / Operating Authority provided online data including readings of free chlorine, well flow rates, distribution flow rates, reservoir depth, turbidity and pressure. The aforementioned data was provided in one minute time intervals to corresponding with the polling rate of the equipment.</p> <p>It should be noted on August 5, 2020, 52 minutes of online data was lost from the SCADA recording system. The lost data is understood to be the result of a manual adjustment to the PLC clock which resulted in data that could not be recovered.</p> <p>Corrective Action:</p> <p>From herein, the Owner / Operating Authority shall ensure that all continuous monitoring data is measured and recorded as prescribed by the minimum requirements presented within Table 6 of Ontario Regulation 170/03. Compliance with this requirement will be assessed during the next inspection of the water system.</p>		

Question ID	MRDW1025000		
Question	Question Type	Legislative Requirement	

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?	Legislative	SDWA 31 (1)
Observation/Corrective Action(s)		
<p>All parts of the drinking water system were not disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.</p> <p>Drinking Water Works Permit #052-203 - Section 2.3 stipulates minimum requirements related to disinfection of parts associated with the drinking water system. Generally stated, all parts of the drinking water system that come in contact with the drinking water shall be disinfected in accordance with a procedure approved by the Director or in or in accordance with the applicable provisions of the following documents:</p> <ul style="list-style-type: none"> a) The ministry's Watermain Disinfection Procedure, effective December 30, 2016; b) AWWA C652 – Standard for Disinfection of Water-Storage Facilities; c) AWWA C653 – Standard for Disinfection of Water d) AWWA C654 – Standard for Disinfection of Wells. <p>As part of this inspection the Owner / Operating Authority provided two disinfection records related to High Lift Pump #1 within the Treatment Plant. The records associated with this pump indicate maintenance was completed on the pump and the disinfection of the pump followed the procedures presented within AWWA C653-03. However, these forms and supplemental information provided by the Operating Authority did not consistently include the concentration of sodium hypochlorite used in the spray application, the contact time given for the sodium hypochlorite to disinfect the pump, or that verification bacteriological samples for total coliform were collected for testing.</p> <p>Corrective Action: From herein, the Owner / Operating Authority shall ensure that all procedures prescribed by Section 2.3 of Drinking Water Works Permit #052-203 are met with as related to the disinfection of the water system. Compliance with this requirement will be assessed during the next inspection of the water system.</p>		

Inspection Details

The inspection Details related to questions that were assessed during the drinking water inspection Summary of Recommendation and Best Practice Issues are identified in the attached inspection report.

The MECP inspection objective is to determine the drinking water system compliance with the Safe Drinking Water Act and associated regulations. Based upon the results of the inspection an overall inspection rating is calculated and the Melrose Drinking Water System received a 90.07% Inspection Rating.

Financial Implications:

None

Strategic Plan:

This matter aligns with following strategic priorities:

Responsive Municipal Government

Sustainable Infrastructure and Services

Attachments:

Melrose Drinking Water System Inspection Report

Melrose Drinking Water System – Inspection Summary Rating Record (Reporting Year 2021-2022).