

Information Report

Title: Environmental Services
Compliance Report December 2024

Report Number: Environmental Services-2025-02

Director: Infrastructure &
Development

Manager: Environmental Services

Meeting Date:
Wednesday, January 8, 2025

Executive Summary:

The intent of this report is to inform Council of any compliance related issues and general information from the Environmental Services Department for the period of November 27, 2024, to December 18, 2024

Context and Background Information:

This report includes a summary of drinking water ministry inspections, a spill of chlorinated water to Lake Huron, KWTP SCADA Alarm issues and a wastewater exceedance at the Bruce Energy Center Lagoon site.

MECP Inspection Kincardine DWS and Huronville DS

An on-site ministry inspection for the Kincardine Drinking Water system and the Huronville Distribution system took place on December 4, 2024. There were no issues noted on site during the inspection. All requested documents have been forwarded to the ministry for review. The final report has not yet been received.

Spill of Chlorinated Water

A spill of chlorinated water to Lake Huron from the Kincardine Water Treatment Plant was reported to the Spills Action Center, the local MECP office, the federal ministry office and the Ministry of Health on December 6, 2024. Staff at the treatment plant had been running water to the waste tanks on December 6, 2024, after troubleshooting an issue with the alum system. It was noted in the logbook that the plant had been turned back to auto and stopped running water to waste. Later that day the plant alarmed out with a waste tank high level and upon investigation it was determined the wrong icon was selected on the SCADA computer to turn the plant back to normal operations from wasting. This caused the waste tank to overflow, and chlorinated water was sent to Lake Huron when the plant started back up. Discharges to the Lake are allowed under the Municipal Drinking Water Licence if the chlorine residual in the discharged water is 0.02mg/L of Total chlorine or less and Total Suspended Solids sampling is performed.

Our best practice is to keep de-chlorination pucks in the chamber for overflow events to ensure that chlorine is removed from the water. In this case the volume of water that overflowed when the plant started up was more than a usual discharge event and the de-chlorination pucks were used up by the time the High-Level alarm called out and the operator was able to respond. A chlorine residual of 1.89mg/L of free chlorine was recorded at the end of the event, and it was estimated that 371m³ of water was sent to Lake Huron. As a follow up, the supervisor verified the SCADA program was functioning properly and confirmed with the operator the correct icon that should have been pressed, and to verify the icon turns green. Tank float levels were reviewed, and adjustments were made to the alarm setpoints so staff will be notified sooner if the event were to occur again. The Contingency Plan will be updated to clarify the instructions, and all operators will be made aware of how to properly operate the bypass waste valve through SCADA.

KWTP SCADA Alarm Issues

On December 18, 2024, the on-call operator noticed there were alarms on the SCADA screen that did not call out through the on-call cell phone. The operator verified the cell phone service was working and contacted BMTS to investigate phone line issues. Once BMTS verified no issues on their end, the SCADA provider Datasoft was contacted to troubleshoot the SCADA system. The WIN911 Alarm system app had crashed and needed to be rebooted. Alarms were tested and working again as of midnight December 18. The alarm system was tested on December 19, and the system did not dial out again. Datasoft was contacted to reboot the WIN911 alarm system. The backup communication failure alarm did try to call out to staff, however the alarm was found to be suppressed. This communication failure alarm was reactivated. Staff are following up on this issue and exploring options for more redundancies. Datasoft will be troubleshooting issues with the WIN911 application. The issue was reported to the local Ministry inspector.

Inverhuron Booster Station Alarm Issue

On December 16, 2024, staff were testing the low chlorine alarm at the Inverhuron Booster Station and found the alarm did not call out to the on-call operator. A wire had to be replaced from the dialer unit to the onsite data logger unit. As a best practice the phone line to the site is checked by staff during daily rounds to ensure it is working and alarms are verified annually. The last alarm test verifying the unit was working was July 19, 2023. The data from the site is checked at a minimum of 72 hours by operators and reviewed by the compliance officer monthly. There were no instances of any reportable adverse events on the data. The site is used to monitor the secondary chlorine residual on the distribution system only. There is no treatment at the site. The alarm issue was reported to the local ministry inspector as a courtesy.

Wastewater Exceedance at BEC Lagoons

The Bruce Energy Center Lagoon system had an exceedance for Final Effluent Total Ammonia Nitrogen at the end of November. The allowable monthly limit for the non-freezing period of the year ($T \geq 5$ degrees Celsius from April 15- December 15) is 7.5mg/L. The monthly average for November was 9.05mg/L. The exceedance was reported to the Ministry of the Environment, Conservation and Parks.

Consultation Overview:

The Ministry of the Environment, Conservation and Parks (MECP) performs the annual ministry inspections. Both the MECP and the Ministry of Health and Long-term care receive the spill notifications.

Origin:

The Drinking Water Quality Management System requires relevant aspects of the Quality Management System to be communicated to the Owner of the System.

Attachments: None

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