

Information Report

Title: Environmental Services Compliance Report May 2024

Director: Infrastructure &

Development

Meeting Date:

Wednesday, June 12, 2024

Report Number: Environmental Services-2024-

17

Manager: Environmental Services

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 April 22 to May 21, 2024.

Context and Background Information:

This report includes a summary of annual landfill reporting 2023, an Underwood ministry inspection, Leachate spill follow up, a potable water spill at the Harbour, and a summary of the Kincardine Water Treatment Plant reservoir waterproofing.

Annual Landfill Reports 2023

The 2023 Annual Monitoring reports for the Kincardine Waste Management Center, the Bruce Landfill, and the Ward 1 Valentine Ave inactive landfill were prepared by GHD and submitted to the ministry by the April 30 deadline. Conclusions and highlights from the annual reports were as follows:

Kincardine Waste Management Center- In 2023 a total of 4,144.33 tonnes of waste were accepted at the site. The municipality has programs in place to recycle or divert items such as Bluebox recyclables, E-waste, Steel and scrap metals, tires, Drywall and shingles, clean wood and brush, Styrofoam, mattresses, film plastic, bale wrap, light bulbs, propane tanks, bricks, concrete and batteries. Adjusting for the waste that was received but diverted, the actual amount that was deposited at the site was 3,183.98 tonnes. Based on the most recent survey information and the waste tonnage received to date, it is estimated that the site has greater than 50 years of life remaining. Several recommendations were made in relation to sampling and monitoring changes at the site. These recommendations will be reviewed by staff and shared with GEI consultants for follow-up.

Ward 3 Bruce Landfill-The Landfill was temporarily closed to the public in 2023 to divert staff resources to the Ward 2 Kincardine Waste Management Center in Armow. The site was used to incinerate wind-dried brush and untreated lumber under supervision as required. Since no waste was received in 2023 the waste disposal capacity of 93,197m3 and the projected site life of greater than 59 years did not change from 2022. Recommendations related to the sampling and monitoring program will be reviewed by staff and shared with GEI consultants for follow-up.

Ward 1 Valentine Ave Landfill- The landfill is inactive but still being monitored as per ministry regulations. Monitoring conclusions have been shared with GEI consultants.

Underwood MECP Inspection

The onsite annual inspection for the Underwood Drinking Water System was performed by the Ministry of the Environment, Conservation and Parks on May 7, 2024. No issues were found on site during the inspection. Requested documentation was submitted to the ministry for review. The final inspection report has not been received.

Leachate Spill Follow Up

A Leachate Spill was reported at the Kincardine Waste Management Center on April 14 for Leachate flowing over the landfill cell berm into the groundwater system. The cause was heavy rainstorms with 37.5mm of rain reported in 3 days. It is unknown how much leachate went over the berm to the groundwater cell. The first set of samples indicated leachate contamination with elevated ammonia levels. The groundwater pump was turned off when the spill was discovered so that leachate was not directed to the stormwater pond downstream. Sample results showed no contamination in the downstream Stormwater Pond. The groundwater cell received another 32mm of rain and was still receiving a 5 gallon per minute rate of incoming groundwater diluting the ammonia. The cell was resampled, and the second sample received showed ammonia levels below the limits for the site. The Leachate treatment facility is still operating on one train while aeration parts are being sourced and purchased for replacement on the second train, limiting the amount of Leachate that can be treated in the plant. Bluewater sanitation hauled 195m3 of leachate offsite to the Kincardine Lagoons from April 14 to 29. With permission from the ministry the groundwater pump was turned back on, and the site returned to normal operation on April 29, 2024.

Spill of Potable Water

A spill of Potable Water was reported to the spills action center and the ministry of Health on May 21, 2024. It was noticed by municipal staff that the water meter at the Marina had a broken fitting and was leaking water directly into Lake Huron. It was estimated that approximately 200L of chlorinated water with a residual of 1.58mg/L was spilled. The water was turned off until repairs were made. Under the Municipal Drinking Water Licence for the Kincardine Drinking Water System, potable water from the drinking water system with a chlorine residual greater than 0.02mg/L is required to be reported as a spill if it is leaking direct to a watercourse.

Kincardine Water Treatment Reservoir Waterproofing

The Ministry of the Environment, Conservation and Parks noted a best management practice in the Kincardine DWS inspection report dated November 28, 2023. The best management practice noted that it was 'strongly recommended that the Owner/Operating Authority forthwith assess their reservoir hatch covers and make appropriate modifications to the hatch

covers to ensure that they are functioning appropriately and, in a manner, to mitigate the entry of groundwater into the reservoir.'

Municipal staff investigated options and determined that sealing the outside of the reservoir with a membrane was the best option and the least disruptive for the drinking water system as the reservoir could be left online during the project. The work was tendered and awarded to DJ Peat Roofing and Sheet Metal for installation of a waterproof membrane. The membrane installation consisted of layers of primer, hot asphalt, poly and the membrane product. The grass and dirt were stripped off the top of the reservoir and the area cleaned and prepped. The old hatches were covered over, current access hatches sealed at the bases and product wrapped down all outer sides of the reservoir so no groundwater or surface water seepage can occur. The work was completed between April 22 and May 21. Restoration of the rock garden and the grass above the reservoir followed to restore the site to its original condition.

Consultation Overview:

The Ministry of the Environment, Conservation and Parks performs the annual MECP drinking water inspections; receives the Annual Landfill Reports and spill notifications as required under the Ontario Regulations.

Origin:

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

Attachments: None

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