



August 25, 2017

Dear All,

You are receiving this communication to keep you apprised of the status of the ongoing environmental monitoring activities associated with the closed Waste Management (WM) Landfill property.

Under the new Environmental Compliance Approval (ECA) Conditions set forth in the revised Environmental Monitoring Plan (EMP) dated April 15, 2016 and ordered by the Environmental Review Tribunal (ERT), WM has notified the MOECC District Manager of results from the most recent sampling event conducted as a part of scheduled summer 2017 environmental monitoring event conducted on July 25, 2017.

We are providing, for your information, the notice supplied to MOECC on August 25, 2017. All results outlined in this notice are related to concentration exceedances at upstream and downstream surface water sampling locations on WM property or within the proposed Contaminant Attenuation Zone (CAZ).

All results are generally consistent with historical results and will be evaluated in the fall semi-annual report that will be issued by January 15, 2018.

Regards,

Timothy Haaf
Manager, Richmond Landfill
Waste Management of Canada Corporation

Encl.



MEMORANDUM

DATE: August 25, 2017
TO: James Mahoney, Acting District Manager, Ministry of the Environment and Climate Change (MOECC)
CC: Shawn Trimper, Peter Taylor and Christopher Horne (MOECC)
Tim Haaf, Jim Forney, Chris Prucha and Bill McDonough, (WM)
FROM: François Richard (BluMetric)
PROJECT NO: 170194-02
SUBJECT: Notification of Off-site Exceedances, WM Richmond Landfill, Town of Greater Napanee

This memorandum is provided on behalf of Waste Management of Canada Corporation as required by Conditions 8.7 and 8.8 of Environmental Compliance Approval (ECA) No. A371203 for the Richmond Landfill, Town of Greater Napanee, Ontario. This requirement is outlined in the Environmental Monitoring Plan (EMP) for the site¹, implemented on April 16, 2016 on an interim basis as ordered by the Environmental Review Tribunal (ERT) Order dated December 24, 2015. Conditions 8.7 and 8.8 of the ECA stipulate that monitoring results shall be reported to the MOECC District Manager within 48 hours of the determination of the exceedance (initial data screening) if they meet either of the following conditions, respectively:

- (1) any off-site exceedance of the applicable criteria for groundwater (Reasonable Use Limits (RUL)) or surface water (Provincial Water Quality Objectives (PWQO)), or
- (2) 1,4 dioxane concentrations at or above the detection limit of 1 µg/L at any groundwater well or domestic well at which 1,4 dioxane has not been detected in the past or at any surface water monitoring location.

RESULTS

Surface water sampling was conducted at nine locations on July 25, 2017 after a summer rain event of greater than 25mm (within 24 hrs) following the requirements outlined in the latest EMP for the site.

¹ *Environmental Monitoring Plan, WM Richmond Landfill, Town of Greater Napanee, Ontario, rev. No.05*, prepared by BluMetric Environmental Inc., dated April 2016



The analytical results for samples show the presence of parameters that exceeded their respective PWQO criteria, as summarized in **Table 1**. These include:

- Boron at sampling locations S3, S7, S8R, S19 and S20;
- Iron at sampling locations S6 and S18;
- Phenols at all locations except S19; and
- Phosphorous at locations S2, S3, S5, S6, S7, S18 and S19.

Table 1. WM Richmond Landfill - Summary of PWQO Exceedances from Summer 2017 Surface Water Monitoring Results

Parameter	Units	PWQO*	S2	S3	S5	S6	S7	S8R	S18	S19	S20
Boron	mg/L	0.2		0.024			0.022	0.035		0.056	0.038
Iron	mg/L	0.3				0.33			0.31		
Phenols	mg/L	0.001	0.003	0.0022	0.0016	0.0028	0.0024	0.0016	0.0022		0.0022
Phosphorus	mg/L	0.03	0.047	0.048	0.046	0.046	0.048		0.031	0.039	

**Provincial Water Quality Objectives*

CLOSING

The results from the latest environmental monitoring event are generally consistent with those from previous sampling events, and will be reported as part of the fall semi-annual monitoring report by January 15, 2018 as required by ECA Condition 14.1.

We trust the above information is satisfactory. If you have any questions or need further information regarding the completed work please do not hesitate to contact the undersigned.

Respectfully submitted,

BluMetric Environmental Inc.

Francois Richard, Ph.D. P.Geo.
Senior Hydrogeologist