



August 31, 2016

Dear All,

You are receiving this communication to keep you apprised of the status of the ongoing environmental monitoring activities and hydrogeological investigations 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 2016 environmental monitoring event conducted on August 15, 2016. We are providing, for your information, the notice supplied to MOECC on August 26, 2016. All results outlined in this notice are related to concentration exceedances at surface water sampling locations on WM property (location S3) or within the proposed Contaminant Attenuation Zone (CAZ) (locations S18 and S20).

All results will be evaluated in the fall semi-annual report that will be issued by January 15, 2016.

Regards,

Timothy Haaf
Manager, Richmond Landfill
Waste Management of Canada Corporation

Encl.

MEMORANDUM

DATE: August 26, 2016
TO: James D. Mahoney Acting District Manager, Ministry of the Environment and Climate Change (MOECC)
CC: Kyle Stephenson, Peter Taylor, Victor Castro and Chris Raffael (MOECC)
Tim Haaf, Jim Forney, Chris Prucha and Bill McDonough, (WM)
FROM: Philip Tibble (BluMetric)
PROJECT NO: 160061-00-02
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 Condition 8.7 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. Condition 8.7 of the ECA requires that any off-site exceedance of the applicable criteria for surface water (Provincial Water Quality Objectives (PWQO)) be reported to the MOECC District Manager within 48 hours following completion of the initial data screening.

RESULTS

Surface water sampling was conducted at locations S3, S18 and S20 on August 15, 2016 after a summer rain event of greater than 25mm (within 24 hrs) following the requirements outlined in the latest EMP for the site.

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

- Location S3: Phosphorus and Iron;
- Location S18: Phosphorus, Iron and field pH; and
- Location S20: Phosphorus, Iron, Unionized Ammonia, Cobalt, Copper and Zinc.

¹ *Environmental Monitoring Plan, WM Richmond Landfill, Town of Greater Napanee, Ontario, rev. No.05*, prepared by BluMetric Environmental Inc., dated August 2015

CLOSING

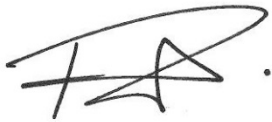
The elevated iron and phosphorous results at location S3 are consistent with results from previous sampling events. Locations S18 and S20 were incorporated into the monitoring program starting in the spring of 2016 and as such, a limited set of previous results is available. Elevated iron and phosphorus at S18 and S20 is consistent with the spring 2016 sampling event. For location S20, unionized ammonia, cobalt, copper and zinc exceeded respective PWQO criteria for the August 15 sample but did not exceed PWQO criteria in the spring 2016 samples

It is also worth noting that the rain event came after an extended drought period and despite greater than 25 mm of precipitation occurring in a 24 hour period some surface water locations were dry and could not be sampled. Location S20 is a dugout pond and the water level was noted to be extremely low with no observed inflow or outflow.

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.



Philip Tibble, M.Sc., P.Geo.
Senior Hydrogeologist

Encl.

Table 1. WM Richmond Landfill - Summary of PWQO Exceedances from Summer 2016 Surface Water Monitoring Results

Parameter	Units	PWQO*	S3 2016-08-15	S18 2016-08-15	S20 2016-08-15
Ammonia (unionized)	mg/L	0.02			0.035
Cobalt	mg/L	0.0009			0.0038
Copper	mg/L	0.005			0.01
Iron	mg/L	0.3	0.92	1.4	7.6
pH (Field)	unitless	6.5-8.5		6.42	
Phosphorus	mg/L	0.03	0.099	0.11	0.25
Zinc	mg/L	0.02			0.022

**Provincial Water Quality Objectives*