



November 14, 2024

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) Richmond Landfill property.

Under the Environmental Compliance Approval conditions for the facility, WM has notified the Ministry of Environment, Conservation and Parks (MECP) District Manager of results from the most recent sampling event. This work was conducted between October 22 and 24, 2024, as a part of the scheduled fall 2024 semi-annual environmental monitoring event.

We are providing, for your information, the notice supplied to MECP on November 14, 2024. All results outlined in this notice are related to concentration exceedances at locations within the proposed Contaminant Attenuation Zone, as well as one location on the property to the east of the southern part of the eastern landfill property boundary. These results are generally similar to the historical exceedances observed at these locations for the parameters listed.

These results will be evaluated in the fall semi-annual report that will be issued by January 15, 2025.

Regards,

Noah Wayt
Manager, Richmond Landfill
Waste Management of Canada Corporation

Encl.



MEMORANDUM

DATE: November 14, 2024

PROJECT NO: 240160-04

TO: Cathy Chisholm, District Manager, (MECP)

CC: David Arnott (MECP), Chris Prucha, Noah Wayt and Chad Moose (WM)

FROM: François Richard and Madeleine Corriveau (BluMetric)

SUBJECT: Notification of Exceedances, WM Richmond Landfill Town of Greater Napanee

This memorandum is provided on behalf of Waste Management of Canada Corporation (WM) as required by Conditions 8.11 and 8.12 of Environmental Compliance Approval (ECA) No. A371203 for the Richmond Landfill, Town of Greater Napanee, Ontario, dated March 19, 2021. Conditions 8.11 and 8.12 of the ECA stipulate that monitoring results shall be reported to the MECP District Manager within 48 hours of the determination of the exceedance (initial data screening) if they meet one of the following conditions:

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

RESULTS

The groundwater sampling was completed as part of the fall semi-annual monitoring event between October 22 and 24, 2024, following the requirements outlined in the latest EMP for the site. No surface water samples were collected during the fall semi-annual monitoring event as all locations were dry.

There were no exceedances in groundwater observed from the shallow flow zone off-site monitoring location M114-2, except for total dissolved solids (TDS) with a concentration of 475 mg/L, above the RUL of 452 mg/L.

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The analytical results for samples from off-site intermediate bedrock groundwater flow zone monitoring locations showed the presence of parameters that exceeded their respective RUL, as summarized in **Table 1**. These results are generally similar to the historical exceedances observed at these locations for the parameters listed, and include:

- One or several non-health-based parameters (alkalinity, chloride, dissolved organic carbon, iron, manganese, sodium and/or total dissolved solids) at locations M64-2, M114-1, M121, M123, M167, M168, M178R-2, M178R-3, M178R-4, M179, M185-1, M186, M187 and M192.
- 1,4-dioxane at monitoring wells M64-2, M114-1, M123, M167, M178R-2, M178R-3, M178R-4, M186 and M192.
- BTEX Compounds (benzene, ethylbenzene, toluene and total xylenes) at monitoring well M121.

This was the first time that 1,4-dioxane was detected at monitoring well M186. Verification re-sampling of monitoring well M186 for 1,4-dioxane and alkalinity is being scheduled.

CLOSING

The results from the latest environmental monitoring event will be reported as part of the spring semi-annual monitoring report by January 15, 2025, 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.



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Encl.

Ref.: Richmond Landfill Exceedance Notification-Draft.docx

Table 1: Summary of Off-Site RUL Exceedances from Fall 2024 Groundwater Monitoring Results

General and Inorganic Parameters								Volatile Organic Compounds (VOCs)				
Parameter	Alkalinity	Chloride	Dissolved Organic Carbon	Iron	Manganese	Sodium	Total Dissolved Solids	1,4-Dioxane	Benzene	Ethylbenzene	Toluene	Total Xylenes
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RUL*	400	132	3.5	0.18	0.032	106	465	0.001	0.0014	0.0013	0.0121	0.15
M64-2							525	0.0031				
M114-1	490	150	5.4	10	0.45		780	0.0068				
M121	520	1300				960	2580		0.36	0.019	0.013	0.19
M123	440		4.2		0.037		540	0.0054				
M167	440	400				250	1190	0.0037				
M168	490	230	3.7			200	980					
M178R-2			3.9	0.91	0.064		490	0.0039				
M178R-3			4.1	0.85	0.062		525	0.0045				
M178R-4			4.3		0.036		525	0.0051				
M179				0.21	0.033		490					
M185-1					0.041		495					
M186		1100			0.04	830	2420	0.0081				
M187							655					
M192	670	280	3.8			340	1220	0.0083				
M64-2							525	0.0031				

*RUL: Reasonable Use Limit