



## MEMORANDUM

**DATE:** March 30, 2023  
**TO:** Trevor Dagalys, District Manager, Ministry of the Environment, Conservation and Parks (MECP)  
**CC:** Craig Dobiech (MECP)  
Chris Prucha, Noah Wayt and Chad Moose (WMCC)  
**FROM:** François Richard (BluMetric)  
**PROJECT NO:** 230130-03  
**SUBJECT:** Notification of On-Site Leachate Release, WM Richmond Landfill, Town of Greater Napanee  
**Ref: MECP Spill Action Centre Reference Number: 1-33QFLL**

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This memorandum is provided on behalf of Waste Management of Canada Corporation (WMCC) in relation to a recent leachate release to surface that has occurred on site. This notice is issued as required by Condition 9.6(a) from the site Environmental Compliance Approval (ECA No. A371203 dated March 19, 2021), in accordance with the procedures set out in the Public Notification Plan (PNP) dated November 2020.

### BACKGROUND

The Richmond Landfill is located at 1271 Beechwood Road, Napanee, and has been closed since June 30, 2011. Landfill leachate is collected from two collection points (South Chamber (PS1) and North Chamber (PS2)) located along the perimeter of the waste mound (see **Figure 1**). Leachate is directed to an on-site 3,000 m<sup>3</sup> holding tank and hauled off-site for treatment at the Napanee Wastewater Treatment Plant (WWTP). On occasions when the WWTP is at capacity and cannot accept leachate from the site in sufficient volumes, leachate is hauled to the Cobourg WWTP, which has imposed limits in terms of daily leachate volumes available to WM. Until recently, leachate was also hauled to the Kingston Utilities Ravensview WWTP for treatment; however, the facility informed WM that they are no longer able to accept leachate from the Richmond landfill because of operational concerns.

Despite several unsuccessful attempts over the past several weeks by WMCC to secure additional disposal options, two temporary 80 m<sup>3</sup> emergency holding tanks (“frac tanks”) were rented and mobilized to site on Friday, March 24, 2023. One of the tanks was put into use at approximately

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5:00 PM on March 24, 2023. The frac tanks were positioned close to the PS3 building load out chamber (near the South Chamber leachate sump (PS1)) and used to temporarily store leachate pumped from pumping station PS3 in order to provide additional storage capacity in the on-site above ground storage tank (AST).

## LEACHATE RELEASE

Upon arrival on-site at 8:30 AM on Monday March 27, 2023, BluMetric field personnel observed moisture originating under the in use temporary frac tank. Closer examination revealed a small drip leak on the under belly of the tank. The location of the release is shown on **Figure 1**. Upon discovery and as discussed further below, BluMetric personnel immediately implemented initial corrective actions to stop the release by coordinating with the leachate hauler to transfer leachate from the damaged frac tank to another frac tank already on-site.

Once the release was stopped, BluMetric personnel investigated the area and was able to confirm that the release was limited to the asphalt surface and gravel area immediately adjacent to the temporary frac tanks. The release did not leave the site or enter any stormwater feature. The impacted area was determined based on visual inspection of the rust-colored stains to be relatively limited in lateral extent (approximately 20 m<sup>2</sup>). Photo documentation of area of the release is provided as **Attachment A**. Based upon the remaining volume in the tank at the time of discovery, it is estimated that approximately 8.9 m<sup>3</sup> of leachate leaked onto the ground.

## INITIAL ACTION PLAN

As discussed above and to mitigate the active release, corrective action measures were undertaken immediately upon discovery by BluMetric personnel. A vacuum truck was mobilized to the site and utilized to transfer leachate from the defective tank into a second emergency frac tank. This was completed by approximately 11:00 AM. Meanwhile, the release was reported through the MECP Spills Action Centre, and the Kingston District Office was notified. As follow-up, MECP Environmental Officer, Craig Dobiech, mobilized to the site at approximately 1:15 PM, to investigate the release.

The area affected is limited and contained. Initial cleanup was completed manually on March 27, 2023, by scooping visually impacted gravel. A local contractor was contacted and visited the site on March 28, 2023, to assess the affected area to determine the proper cleanup activities, scheduled to take place on Thursday March 30, 2023. Since the release is limited to one area, the top layer of visually impacted gravel and soils will be stripped, consolidated into a pile onto a polyethylene sheet and covered with tarps, tested and then disposed of at an approved facility. Once the affected

gravel and soils have been removed, the area will be graded, and new gravel will be laid down to bring this area back to the original grade and condition.

To reduce the potential of any future issues with the use of frac tanks for additional leachate storage, the following measures will be followed:

- All rental frac tanks will be thoroughly inspected upon delivery for any damage, punctures, or degradation before the unit is offload or filled;
- Once the unit filling process begins, site staff will continuously monitoring all visible surfaces of the tank and the surrounding area adjacent to the tank for any visible issues or maladies; and
- Upon completion of filling of the tank, the tank surface and surrounding ground surface will be continuously monitored for one-hour following complete filling of the tank to verify no unforeseen issues occur.

While there is no evidence that the released leachate entered into the storm water drainage system, a sample was collected on March 29, 2023, from Stormwater Pond 3, located south of the location of the release. Additionally, groundwater samples will be collected from nearby monitoring wells included in the environmental monitoring plan (EMP) during the planned upcoming spring sampling event, scheduled to take place in late April or early May, and will be compared against historical results to evaluate potential impacts to groundwater from the release. The cleanup and sampling results will be summarized and provided to the MECP within approximately two weeks after the laboratory results have been received.

## CLOSING

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

Encl.

**FIGURE**





**LEGEND**

- Leachate Pumping Station
- Release Point
- Property Boundary
- Waterbody
- Building
- Hydro Tower
- Road
- Watercourse
- Overhead Power Line
- Waterbody
- Topographic Contours (1 masl)**
- Major Contour
- Minor Contour

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REV.	DESCRIPTION	YY/MM/DD	BY	CHK

**REFERENCES**  
 PROPRIETARY INFORMATION MAY NOT BE REPRODUCED OR DIVULGED WITHOUT PRIOR WRITTEN CONSENT OF BLUMETRIC ENVIRONMENTAL INC. DO NOT SCALE DRAWING.  
 THIS DRAWING MAY HAVE BEEN REDUCED. ALL SCALE NOTATIONS INDICATED ARE BASED ON 8.5"X11" FORMAT DRAWINGS.

**1:4,000**

**CLIENT**

**WASTE MANAGEMENT**

**PROJECT**

**WASTE MANAGEMENT RICHMOND LANDFILL LEACHATE RELEASE INVESTIGATION**

**TITLE**

**SITE PLAN AND MARCH 2023 RELEASE LOCATION**

The Tower - The Woolen Mill,  
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 Kingston, Ontario, K7K 1Z7  
 Tel: 613-531-2725  
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<b>PROJECT #</b> 230130-06		<b>DATE</b> March 30, 2023	
<b>DRAWN</b> GM	<b>CHECKED</b> FR	<b>FIG NO.</b> 01	<b>REV</b> 0



**PHOTOGRAPHS**  
March 27, 2023



Photograph 1 (March 27, 2023). Frac tank showing evidence of leakage (rust coloured staining on ground).



Photograph 2 (March 27, 2023). Frac tank showing evidence of leakage (rust coloured staining on ground).





**Photograph 3 (March 27, 2023).** Evidence of leakage following tank removal.



**Photograph 4 (March 27, 2023).** Evidence of leakage following tank removal.





**Photograph 5 (March 27, 2023).** Evidence of leakage following tank removal.