

January 31, 2020

Waste Management Richmond Landfill 1271 Beechwood Road Napanee, ON K7R 3L1

Waste Management of Canada Corporation ("Waste Management") response to Provincial Officer's Order 3623-BL33DW ("POO")

Incident Report 5065-BKVRAQ

In response to requirements in the POO, listed below are the items requiring a response on January 31, 2020. The MECP identified requirements are in *italics* followed by Waste Management's response in normal text.

Item #1 – Compliance Date January 31, 2020

Short Term Action Plan

i) Additional site staffing to monitor the leachate collection system during prolonged adverse weather events:

When site staff are not available during such events, a knowledgeable consultant or contractor will be available to monitor the leachate sumps to ensure that the necessary steps are taken to avoid having them overflow. Until such time as an automated control system that has automatic alarms to notify off-site staff is in place for the leachate collection system, site staff will record sump leachate levels on a daily basis Monday through Friday. Sutcliffe is available to haul leachate to Napanee on Saturday and Sunday when it is necessary.

ii) Provision of additional equipment to safely handle and transport leachate on-site to the adjacent leachate storage lagoon in emergency circumstances:

Currently the only feasible way to get leachate to the storage lagoon is by pumping the leachate through a pipe. This pipe is above ground and freezes in the winter. When the lagoon was constructed there was a gravel road connecting the lagoon to Derseronto Road. The base of the old road is still in place to some degree and allows trucks to reach the lagoon during times of the year when the

field is dry to remove leachate from the lagoon. Waste Management will evaluate the feasibility of restoring the road to the lagoon to a roadway that can be used year around. Until the road is upgraded it can only be used to transport leachate when weather conditions allow.

In the short-term Waste Management is renting two frac tanks, a pump, and hoses to be placed near the front sump. This equipment will provide 150 m3 of leachate storage to be used in emergencies when nothing else is available. The two frac tanks, pump and hoses are on-site as of Friday, January 31.

As part of our longer term plans Waste Management is submitting an ECA application to be able to bury the pipe to the lagoon so that it can be used all year and pump leachate both to the lagoon from the landfill and back to the leachate storage tank on the south side of the landfill for removal from the site to an approved WWTP. As directed by the MECP, Waste Management will not be using the leachate lagoon until its use is approved by the MECP.

iii) Contracting of approved waste haulers capable of responding and transporting/disposing of landfill leachate to Ministry-approved facilities:

Tomlinson Environmental, an MECP approved waste hauler, out of Kingston has been contracted as an additional hauler to remove leachate from the Richmond Landfill. They have been on-site and removing leachate since January 20, 2020. They will haul the leachate to the Kingston Ravensview WWTP or to Napanee. They will haul leachate as necessary to maintain capacity in the landfill for rainfall events. Ravensview is available Monday through Friday from 8:30 AM to 3:30 PM.

Sutcliffe Septic Tank Pumping has been hauling leachate from the landfill to Napanee since the leachate collection system was installed. They are located just to the east of the landfill. They will continue hauling leachate from the landfill to Napanee as our primary leachate hauler. They will haul up to 8 loads a day. Each load is about 15 m3. Napanee is available daily and on weekends, with advance notice, except when they must shut us off due to high flows into their treatment plant.

iv) Provision of additional training to Waste Management site staff on provincial spills reporting and relevant waste management legislation including requirements of all Environmental Compliance Approvals issued for the site:

Waste Management on-site staff that are associated with the landfill will be retrained on all aspects of provincial spill reporting and relevant waste management legislation including requirements of all ECA's issued for the site. In addition, all contractors working on the landfill site will be required to have the

same training. Employees will be required to be retrained by February 7, 2020 and all contractors working on the landfill site will be required to be trained before starting work on the site.

Longer Term Measures to manage, assess, and reduce leachate volumes produced at the Site

i) Submission of applications for amendments to the Environmental Compliance Approval for the site to include any additional works to the existing leachate collection system that may be advisable such as permanent infrastructure to convey leachate from collection system to on-site storage lagoon and installation of overflow/reserve leachate storage tanks:

Waste Management has MECP approval for installation of the leachate system upgrade and the installation of a leachate storage tank. This work is anticipated to be completed by the end of 2020. In addition, WSP has been retained by Waste Management to prepare an ECA application and construction plans for a permanent buried pipe to convey leachate from the landfill to the lagoon and back. WSP has also been retained to prepare an ECA application and design and construction plans for a second underground storage tank to increase the on-site storage, if is determined that is necessary. WSP has targeted April 15, 2020 as the date to submit the ECA application for these two items.

ii) Formal assessment of landfill infiltration including an evaluation of the existing landfill cap by a third party qualifies person to assess for settlement, shear or tension cracks, landfill gas or other indications of compromised integrity:

BluMetric has been retained by Waste Management to evaluate the integrity of the existing landfill cap. The evaluation will include an examination of infiltration of precipitation into the landfill. This evaluation will occur after the spring thaw once the cap has dried out. BluMetric has committed to have the evaluation completed by June 15, 2020.

If you have any additional comments or questions, please let me know.

Bill McDonough
Senior Project Manager
wmcdonou@wm.com

Waste Management

8039 Zion Line

Watford ON NOM 2S0

Cell: 226 280-1795