

25 February 2022

Ministry of Environment Conservation and Parks
Client Services and Permissions Branch
135 St Clair Ave West
1st Floor
Toronto, ON
M4V 1P5
Canada

Sir/Madam,

These comments are in response to ERO number 019-4955 and ERO number 019-0864, both of which apply to the Richmond landfill located in the Town of Greater Napanee.

It is noted that this landfill has been closed for more than a decade and yet it remains out of compliance with Ontario laws and regulations. These applications appear to be an attempt to address the outstanding compliance matters.

I have tracked developments at the Richmond landfill for over two decades. There is a long history of failures by both the site owner and the MECP regulators to protect the environment and neighbours from the impacts of the landfill.

These applications are direct fallout from the ERT decision dated 14 April 2016. The decision directed the site owner to implement a series of measures aimed at bringing the site into compliance. Re-reading that decision today reminded me how long this effort has taken. There appears to be no sense of urgency on the part of the site owner or the MECP regulators to achieve that goal.

I have also read the report prepared by Mr. Wilf Ruland (P.Geo) dated 23 February 2022. This report concludes that these latest applications fail to address the outstanding risks identified by the ERT decision. In fact on one key proposal he finds that the proposed Hydraulic Control System, which includes a plan to dump the un-treated effluent onto the surface, to be potentially worse than the status quo. His advice is "Under no circumstances should the MECP Approvals Branch approve the proposed dumping of HCS effluent into stormwater Pond No. 3."

These proposals do not appear to be a serious attempt to address the very real risks identified by the ERT decision. This process has taken far too long. Mr. Ruland points out that he and the CCCTE are again forced to do the job of the site owner and the MECP who are actually responsible. This approach must end.

I have appended my comments on specific details of the applications to this letter.

It goes without saying that I strongly object to the approval of these inadequate applications and that I fully expect MECP Client Services and Permissions Branch to emphatically reject these applications. **Further, I urge the ministry to direct MECP Eastern Region staff to make bringing this site into compliance its highest priority.**

A handwritten signature in black ink, appearing to read "Ian Munro". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ian Munro
5 Carscallen Drive
Napanea, ON
K7R 3H6

(613) 354-1828

Comments on Specific Details of the Richmond Landfill Applications

ERO number 019-0864 (EMP and HCS) <https://ero.ontario.ca/notice/019-4864>

Mr. Kyle Stephenson (MECP hydrogeologist) prepared a memo dated 11 August 2021 which indicates that he “considers the groundwater impacts at the site to be reasonably delineated”. The ERT decision directed WM to delineate the plume at this site. The decision document does not define “reasonable delineation” therefore I don’t accept that delineation has been completed. I accept Mr. Stephenson’s point that this site is highly complex and presents significant challenges to achieving the goal of delineation. This demonstrates the clear failure of the MOE to allow a landfill in such an unsuitable location. Having said that, delineation **is a requirement of the ERT decision** and it has NOT been achieved.

Mr. Ruland’s most recent report notes that several monitoring wells included in the current EMP for the landfill have been removed from the proposed replacement EMP. He further notes that there is no rationale offered for removing these wells. I agree with his recommendation that the site owner provide a rationale for any significant reduction in the scope of the long-term EMP as compared to previous versions.

The application claims (page 4 section 2 Project Information) that it is intended to establish a Contaminant Attenuation Zone (CAZ) for the WM Richmond landfill (the site), and update the Environmental Monitoring Plan (EMP) for the site. Figure 1 shows properties proposed to be included in the CAZ. The figure does not indicate the contaminant plume for which the CAZ is being established. If the plume footprint were superimposed on this figure it would be apparent it is NOT fully contained by the zone boundaries. It seems completely illogical to consider approving a CAZ when it is clearly not achieving the goal of bringing the site into compliance. I am aware that the site owner is proposing a Hydraulic Control System (HCS) in an attempt to address this glaring fact (and I will discuss that in more detail below) but the HCS proposal has NOT been shown to be effective. **Rejection of the proposed CAZ is clearly necessary until these matters have been addressed.**

The application addendum dated 7 January 2022 contains a conceptual design for a Hydraulic Control System (HCS). As I understand the current situation, the HCS is being proposed because the CAZ cannot be extended to include contaminated property south and east of the landfill. The site owner has chosen to explore this option despite the complexity of the site and against the advice of experts who have warned of serious risks.

My assessment of the work reported in attachment C of this document is that **it is not and never was a serious attempt to address the migration of contaminants off the landfill property.** I reached that conclusion because of the following points:

1. The document reports essentially no testing of any kind on the impacted private property.
2. The testing that was performed did not include any monitoring of contaminant levels found in monitoring wells either during the pumping or afterwards.

3. There is no assessment of any impact of the pumping tests on the potential for upwelling of saline groundwater.
4. The pumping tests lasted a mere 57 hours whereas the system (were it ever to be approved and installed) would likely be required to operate for decades. As Mr. Ruland pointed out in his report, it is a near certainty that groundwater conditions in this area will change significantly over time (precipitation, drought, saline upwelling, etc.) and this proposal does not discuss how any of these changes could impact the proposed system.

Based on these glaring omissions it is clear the HCS proposal cannot be approved.

ERO number 019-0864 (EMP and HCS) <https://ero.ontario.ca/notice/019-4864>

ERO number 019-4955 is an application to amend ECA no. 1688-8HZNJG to permit the dumping of contaminated groundwater generated by the HCS into stormwater pond no. 3 south of the landfill footprint.

The details of this proposal support my conclusion that the HCS is not a serious proposal. Among its more obvious flaws are:

1. The testing identified that Boron was present in quantities that exceed Ontario PWQO and anything seen in the raw leachate from the landfill. No explanation is provided and no investigation is proposed. In any case, this contaminated water must NOT be deposited to surface water and allowed to flow onto neighbouring private lands.
2. Extracting contaminated water from the aquifer and dumping it on the surface is not addressing the fundamental problem. Effectively what this would accomplish is to switch the threat from a contaminated groundwater flow to the south-east to a surface water flow to the west. **This would expose a completely different collection of receptors (including private homes and active farms) to the risks.**
3. As Mr. Ruland points out, dumping the expected quantities of contaminants into surface water bodies would never be approved if the source were the leachate chambers at the base of a landfill so why would this contamination, which has effectively the same source, be acceptable for surface water discharge?