



June 27, 2024

Memorandum

To: Courtenay Hoytfox, Interim CAO, Township of Puslinch

CC: Justine Brotherston, Interim Municipal Clerk, Township of Puslinch

From: Kim Funk, Source Protection Coordinator, Wellington Source Water Protection

Reviewed by: Kyle Davis, Risk Management Official, Wellington Source Water Protection

RE: Ministry Reference Number 1000277837, Environmental Compliance Approval (Waste) (ERO 019-8678), 2374868 Ontario Ltd, 6678 Wellington Road 34, Puslinch

General

1. The following comments are related to the above referenced Environmental Compliance Approval (Waste) (Ministry Reference number 1000277837). This is an application for a new Environmental Compliance Approval (Waste) for a hydrovac soil processing facility.
2. These comments are submitted to the Township of Puslinch for inclusion in their submission to the MECP.
3. These comments are provided in regards to the *Clean Water Act*, Grand River Source Protection Plan and source water protection implementation by Wellington Source Water Protection, a partnership of the Wellington County municipalities. These comments should not be construed as a hydrogeological, engineering, ecological or technical review of the application. These comments are strictly provided in regards to our municipality's role in implementing the *Clean Water Act* and municipal source water protection.
4. We support the Township of Puslinch Council's position and objection to the Waste ECA application as stated in the June 12, 2024 Council Report No. ADM-2024-031. If the approval, however, will proceed then we provide the following comments for Ministry review and consideration.

Summary of Source Protection Vulnerable Areas and Drinking Water Threats

The subject property is located in:

- a) a quality Wellhead Protection Area D, 25-year time of travel, with a vulnerability score of 4 (WHPA-D)
- b) a Chloride Issues Contributing Area (ICA)
- c) a draft quantity Wellhead Protection Area (WHPA-Q)
- d) a Significant Groundwater Recharge Area (SGRA).

Attachments show the relevant mapping. Please note the subject property is not located in a Highly Vulnerable Aquifer (HVA).

5. Based on the location of the subject property within the Wellhead Protection Areas, the following prescribed threats are applicable: sewage – stormwater management, application and storage of road salt, storage of snow, consumptive water taking and reduction of groundwater recharge.
6. We have conducted an initial review of the Environmental Emergency and Contingency Plan and note that the plan incorrectly notes that the municipal contact is the Region of Waterloo and incorrectly notes the local Public Health Unit as Waterloo. Additionally, the plan does not mention the site's location within the source water protection vulnerable areas or local off-site receptors such as private wells / water bodies and the spill response portion of the plan is very short and incomplete. We recommend that the Ministry require through terms and conditions that the correct municipality and Health Unit be listed, and that additional information related to the source protection vulnerable areas and off-site receptors be added in detail. We also recommend that the spill response portion be expanded to fully outline responsible parties (i.e. supervisors, staff), training requirements, spill kit locations including on a map, actions to be taken in the event of a spill, location of off-site or on-site sensitive receptors, posting of relevant information including the Spills Action Centre phone number and a site plan and other information as required by the Ministry.
7. It is understood from the GHD Design & Operations Report dated March 26, 2024, that a sewage ECA will not be required for the stormwater management facility located at this site, as the information provided in support of the waste ECA was determined to be sufficient to cover waste and stormwater management activities. As a sewage ECA will not be required, it is recommended that the Ministry including appropriate terms and conditions to the waste ECA to address drinking water threats related to stormwater facilities.
8. Significant drinking water threat polices related to the Chloride Issues Contributing Area apply to this site, including approved policy WC-MC-3.7 in the Wellington County

Chapter of the Grand River Source Protection Plan. It is therefore recommended that the Ministry consider the policy text referenced below and add terms and conditions to the ECA, where appropriate.

For reference, please see the ECA policy wording WC-MC-3.7 below:

To ensure an Existing or Future Stormwater Management Facility that discharges stormwater ceases to be or never becomes a significant drinking water threat, where this activity is or would be a significant drinking water threat, the MECP shall review and, if necessary, amend Environmental Compliance Approvals to incorporate terms and conditions that, when implemented, will ensure that this activity ceases to be or never becomes a significant drinking water threat.

The terms and conditions may include requirements for regular maintenance, monitoring and inspections conducted by the proponent. For Stormwater Management Facilities located within the WHPA-Q in a Chloride, Sodium or Nitrate ICA, the MECP shall consider conditions which require best management practices to protect water quality and which address how recharge will be maintained and water quality will be protected including consideration of how water quality will be protected from application and storage of winter maintenance materials including Salt. It is requested that the Ministry consider the above recommendations while reviewing this application and add terms and conditions, as appropriate.

9. It is recommended that the MECP consider requiring monitoring of sodium and chloride in the stormwater management pond and the monitoring and supply wells on the property. This information should be collected and reviewed to determine if sodium and / or chloride concentrations are negatively impacting both ground and surface water, with appropriate mitigation measures implemented as necessary. Based on a review of the Design & Operations Report provided in support of this application, sodium or chloride has not been monitored at this property. Given the location of the property within a Chloride ICA and the potential for the importation of salt impacted soils, additional measures may be required to ensure that activities occurring on the property cease to be and / or never become a significant drinking water threat. We request that the Ministry consider what additional measures may be required to address this concern and add those measures as terms and conditions to the ECA.
10. We support and encourage the proposed use of a low permeability liner system for the processing area, the temporary pond, the drainage swale, and the final pond, as discussed in the GHD Design & Operations Report. We note that installation and maintenance of

this liner should be included as a term and condition of the Environmental Compliance Approval and would be one measure towards implementing policy WC-MC-3.7.

11. We note that in the GHD Design & Operations Report that low levels of SAR and EC soil exceedances are detected within the soil processed at the site and used for pit rehabilitation. We note the site is within a Chloride Issue Contributing Area and a Significant Groundwater Recharge Area. We recommend that the Ministry review whether the continued use of SAR and EC impacted soils within a Significant Groundwater Recharge Area and Chloride ICA will contribute, in the medium or long term, to elevated levels of sodium or chloride in the groundwater, thereby potentially worsening the quality of the groundwater for private or municipal drinking water uses. If the Ministry's review concludes that there are appropriate management measures to mitigate this concern, then we recommend that these management measures be added as terms and conditions to the ECA.
12. Although significant drinking water threat polices related to the WHPA-Q do not currently apply to this site, approved policy WC-MC-23.2 in the Wellington County Chapter of the Grand River Source Protection Plan will apply in the future to this site once the draft WHPA-Q is approved. It is therefore recommended that the Ministry consider the policy text referenced below and add terms and conditions to the ECA, where appropriate.

For reference, please see the ECA policy wording WC-MC-23.2 below:

To ensure that any Recharge Reducing Activity never becomes a significant drinking water threat, where this activity would be a significant drinking water threat as prescribed by the CWA, the MECP should, during any pre-submission consultation for Environmental Compliance Approvals for Stormwater Management Facilities and / or Sewage Works, encourage design and implementation measures for the maintenance of groundwater recharge functions including but not limited to LID, minimizing impervious surfaces and lot level infiltration. The MECP shall issue Environmental Compliance Approvals for Stormwater Management Facilities and / or Sewage Works that, where appropriate, incorporate conditions that address groundwater recharge considerations. In addition, the MECP, where appropriate, shall consider incorporating conditions in the Environmental Compliance Approvals to address the proper functioning of groundwater recharge measures including, but not limited to, conditions requiring or related to operations, inspection and maintenance of the Stormwater Management Facilities and / or Sewage Works, groundwater or surface water monitoring related to groundwater recharge, and documentation including manuals and maintenance records. For

Stormwater Management Facilities and / or Sewage Works located within the WHPA-Q in a Chloride, Sodium or Nitrate ICA, the MECP shall consider conditions that require best management practices that address how recharge will be maintained and water quality will be protected from application and storage of winter maintenance materials including Salt.

13. It is understood from the GHD Design & Operations Report that up to 50,000L of water per day is removed from the supply well(s) to fill hydrovac trucks prior to their exiting the property. It is recommended that the Ministry consider requiring a flow meter be installed on the supply well(s) or an alternate means of capturing the amount of water consumed per day. This information should be collected and reviewed to determine if consumptive water taking is occurring that may impact the City of Guelph's WHPA-Q and ensure that a Permit to Take Water is not required for the operations at this property. It is recommended that, upon request, the data be shared with Wellington Source Water Protection staff for review and to be incorporated into the City of Guelph's Tier 3 model. This information will also be useful in evaluating potential impacts to neighbouring private wells as noted in the Township hydrogeologist comments.
14. Based on our review of the information, this site will require a Risk Management Plan for winter maintenance activities as required by policies WC-CW-12.2, WC-CW-13.2.2 and WC-CW-14.5 in the Wellington County Chapter of the Grand River Source Protection Plan. If a Site Plan application proceeds, the Risk Management Plan will be negotiated at that stage.
15. We defer to the Township of Puslinch's Hydrogeologist for an in-depth review and analysis of the potential impacts to groundwater and any recommendations they may have to protect groundwater.
16. We request that a draft of the Environmental Compliance Approval be provided to the Township of Puslinch for their review prior to issuance by the Ministry and that the Township's comments be considered and incorporated into the final approval document.

It is requested that the Ministry consider the above recommendations while reviewing this ECA application and add terms and conditions, as appropriate.



Sincerely,

Digitally signed by Kim Funk
Date: 2024-06-27 08:33:04:00

Kim Funk, Source Protection Coordinator

519-846-9691 ext 283

kfunk@centrewellington.ca

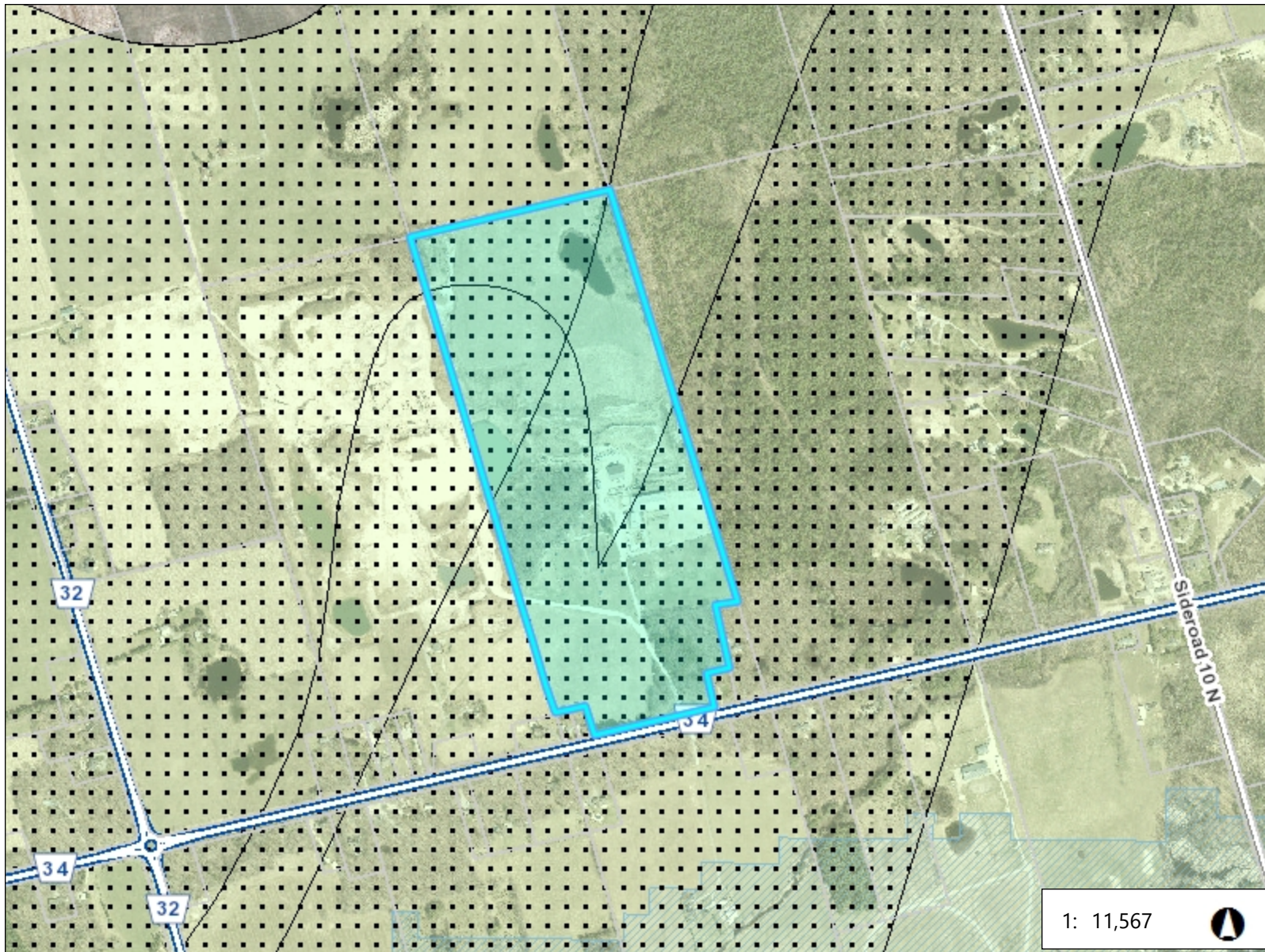
27 Jun 2024

Kyle Davis, Risk Management Official

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Attachments – WHPA Maps



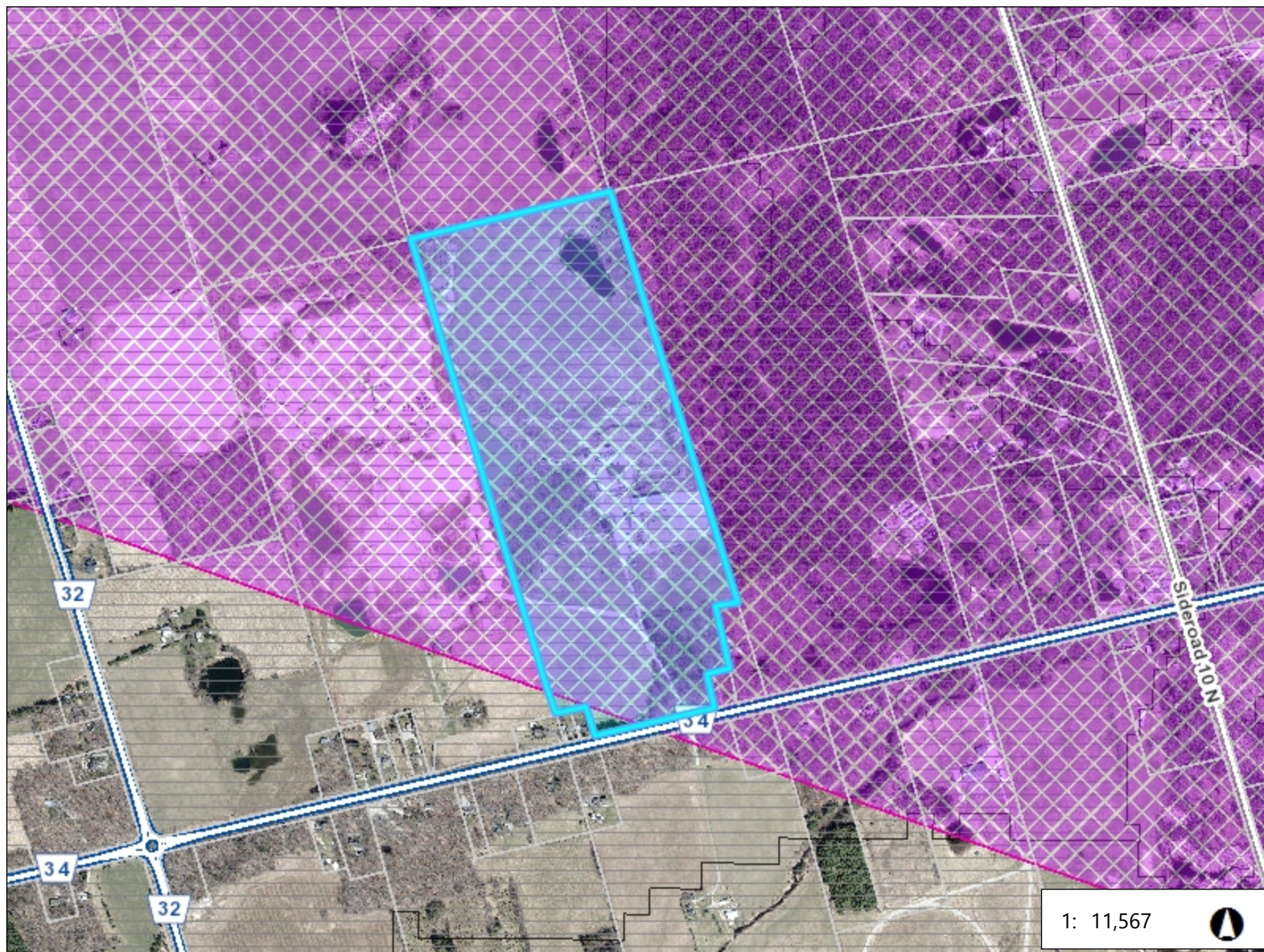
Legend

- Parcels
- Roads**
 - Local Road
 - County Road
 - Highway
- Well Locations**
 - Existing
 - Proposed
- Issue Contributing Area**
 - Chloride
 - Nitrate
 - Sodium
 - TCE
- Wellhead Protection Area**
 - A
 - B
 - C
 - D
- Vulnerability Score**
 - 10
 - 8, D; 8; 8, C
 - 2, 4, 6 (A, B or C)
 - 2,4,6, D; 2,4, D; 2, 4, 6 (D); 4, D; 6,
- HVA
- RoadsLookup

1: 11,567

0.6 0 0.29 0.6 Kilometers

Notes



Legend

- Parcels
- Roads**
 - Local Road
 - County Road
 - Highway
- Well Locations**
 - Existing
 - Proposed
- WHPA Q1_Q2_Boundary
- WHPA Q1_Q2
 - Approved
 - Draft
- SGRA
- RoadsLookup

0.6 0 0.29 0.6 Kilometers



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

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THIS IS NOT SURVEY DATA. Parcels - Teranet 2002, Wellington County 2022

Notes